WATER-QUALITY DATA FOR THE SANTA CLARA-CALLEGUAS HYDROLOGIC UNIT, VENTURA COUNTY, CALIFORNIA, OCTOBER 1989 THROUGH DECEMBER 1993

By John A. Izbicki, Peter Martin, Jill N. Densmore, *and* Dennis A. Clark

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Conversion Factors

Multiply	By	To obtain
cubic foot per second (ft^3/s)	28.32	liter per second
foot (ft)	0.3048	meter
gallon (gal)	3.785	liter
mile (mi)	1.609	kilometer
square mile (mi^2)	2.590	square kilometer

Temperature is given in degrees Celsius (°C), which can be converted to degrees Fahrenheit (°F) by the following equation:

$$°F=1.8(°C)+32$$

Vertical Datum

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Water-Quality Information

Chemical concentration is given in milligrams per liter (mg/L) or micrograms per liter (µg/L). One thousand micrograms per liter is equal to 1 milligram per liter. Milligrams and micrograms per liter are units expressing the mass of the solute per unit volume (liter) of solution. Milligrams per liter is equivalent to "parts per million" and micrograms per liter is equivalent to "parts per billion" for the concentrations normally found in most ground water. At the high dissolved-solids concentrations found in seawater and some brines, the mass of a liter of solution is greater than 1 kilogram, and "milligrams per liter" and "parts per million," a mass-to-mass ratio, are not equivalent.

Abbreviations

L, liter
µm, micrometer
µS/cm, microsiemens per centimeter at 25 degrees Celsius
mL, milliliter
pg/kg, picograms per kilogram

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Abstract

More than 700 water samples were collected from 232 wells and 34 surface-water sites in the Santa Clara-Calleguas Hydrologic Unit, Ventura County, California, from October 1989 through December 1993 as part of the U.S. Geological Survey's Southern California Regional Aquifer-System Analysis study. Most samples were analyzed for major ions, nutrients, selected trace elements, oxygen-18, and deuterium. Selected samples were analyzed for one or more of the following isotopes: carbon-13/12, carbon-14, strontium-87/86, sulfur-34/32, and tritium. Other samples were analyzed for one or more of the following dissolved gases: hydrogen, methane, oxygen, and freon-11. Location of sampling sites is shown on maps and the results are presented in tables.

INTRODUCTION

The Regional Aquifer-System Analysis (RASA) Program of the U.S. Geological Survey began in 1978. The purpose of this program is to define the regional hydrology and geology and to establish a framework of background information on geology, hydrology, and geochemistry of the Nation's inportant aquifer systems (Sun, 1986). This information is needed to develop an improved understanding of ground-water flow systems and to support better management of ground-water resources. Twenty-eight regional aquifer systems have been identified and studied nationwide as part of this program.

The 75,000-mi^2 southern California study area contains 89 hydrologic units or drainage basins rather than a single regional aquifer system. For the purpose of the RASA study, these basins were grouped into coastal and desert basins, and a representative basin was selected from each group for intensive study. The Santa Clara-Calleguas Hydrologic Unit was selected as the coastal study basin and the Mojave Hydrologic Unit was selected as the desert study basin (fig. 1).

The Santa Clara-Calleguas Hydrologic Unit, about 60 mi northwest of Los Angeles, was selected for intensive study because it contains a large, complex aquifer system affected by many of the hydrologic problems and issues found in coastal basins throughout southern California. These problems and issues include ground-water overdraft, ground-water contamination, seawater intrusion, quantity and distribution of recharge, interaquifer flow, and conjunctive use of ground water and surface water.

The Santa Clara-Calleguas Hydrologic Unit includes 2,010 mi^2 and has a Mediterranean climate characterized by warm summers and cool, wet winters. This study focused on the water-bearing deposits of the part of the Santa Clara-Calleguas Hydrologic Unit in Ventura County. Although most of the area has rugged topography, about 310 mi^2 consists of relatively flat-lying valley-floor (fig. 2) and coastal-plain areas (fig. 3) underlain by water-bearing deposits that are more than 1,000 ft thick in places. The area is drained by the Santa Clara River and Calleguas Creek, both of which discharge to the Pacific Ocean.

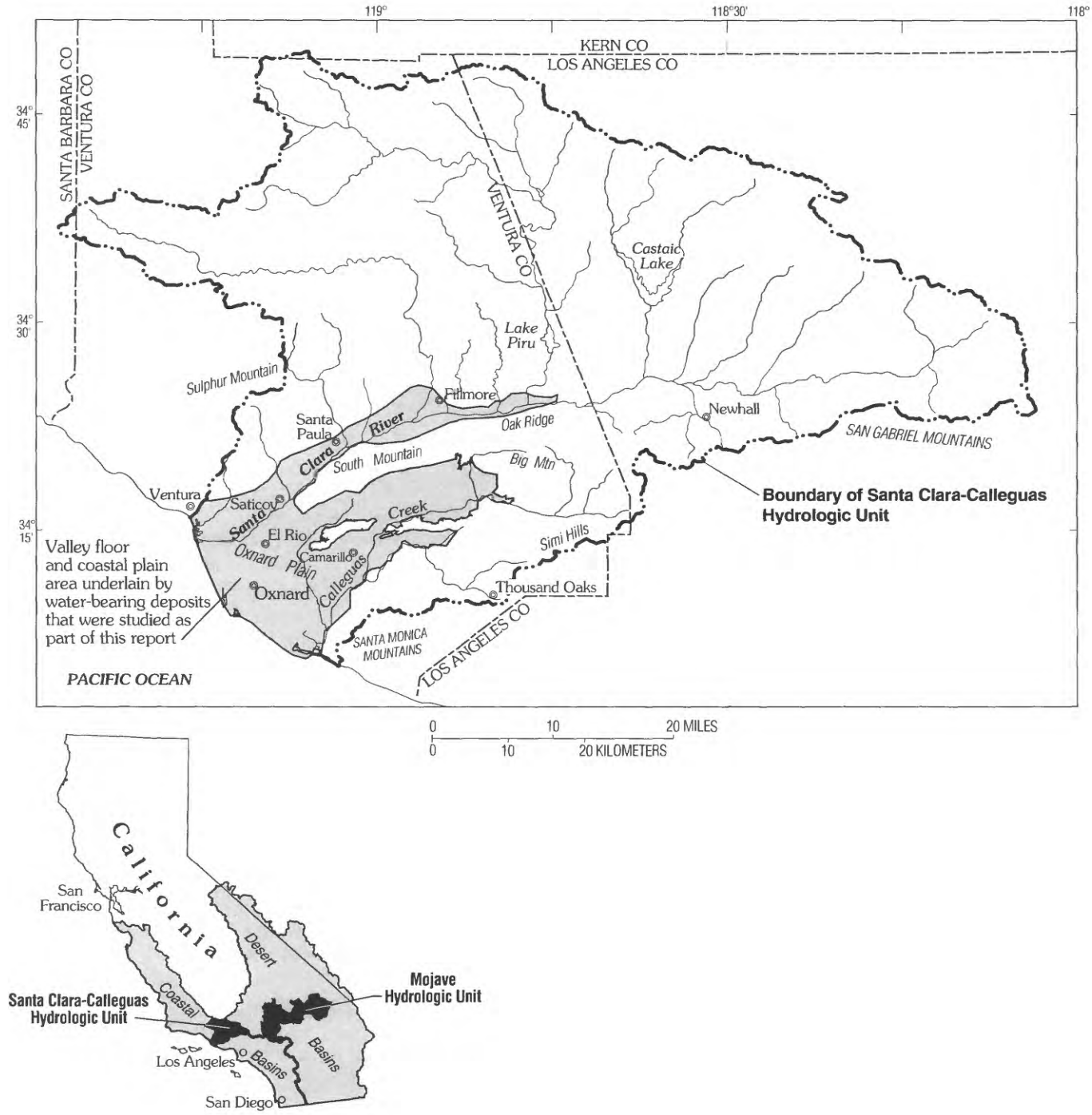


Figure 1. Santa Clara-Calleguas Hydrologic Unit and ground-water basin, Ventura County, California.

Figure 2. Santa Clara River valley, June 1992, looking east from Santa Paula, Ventura County, California (Photograph courtesy of WP Photographic Services, Ventura, California).

This report presents water-quality data collected in the Ventura County part of the Santa Clara-Calleguas Hydrologic Unit between October 1989 and December 1993. These data were collected as part of the Southern California Regional Aquifer-System Analysis study and as part of cooperative studies funded by the U.S. Geological Survey and United Water Conservation District, Fox Canyon Ground Water Management Agency, Calleguas Municipal Water District, Metropolitan Water District, and the Channel Islands Beach Community Services District. Additional funds for sampling and analyses were provided by the United States Navy, Pacific Missile Test Center.

The authors thank LaVern Hoffman and John Turner of the County of Ventura Public Works Agency; James Gross, Greg Middleton, Peter Delpozzo, and Jamie Labor of United Water Conservation District; and Lee Miller of Pleasant Valley County Water District for their assistance in site selection and sample collection. The authors also thank the following U.S. Geological Survey personnel who performed various analyses: Robert Michel, Reston, Va. (tritium); Thomas Bullen, Menlo Park, Calif. (strontium isotopes); Francis Chapelle, Columbia, S.C. (dissolved methane and hydrogen gas); and Eurbiades Busenberg and Neil Plummer, Reston, Va. (chlorofluorocarbons).

Figure 3. Oxnard Plain, June 1992, looking north from Point Mugu, Ventura County, California (Photograph courtesy of WP Photographic Services, Ventura, California).

SITE-NUMBERING SYSTEM

Each ground-water and surface-water site at which data were collected was assigned a unique identification number. Ground-water sites include both wells and agricultural drains. Wells are assigned numbers according to their location in the rectangular system for the subdivision of public lands. Identification consists of the township number, north or south; the range number, east or west; and the section number. Each section is divided into sixteen 40-acre tracts lettered consecutively (except I and O), beginning with "A" in the northeast corner of the section and progressing in a sinusoidal manner to "R" in the southeast corner. Within the 40-acre tract, wells are sequentially numbered in the order they are inventoried. The final letter refers to the base line and meridian. In California, there are three base lines and meridians; Humboldt (H), Mount Diablo (M), and San Bernardino (S). All wells in the study area are referenced to the San Bernardino base line and meridian (S). Well numbers consist of 15 characters and follow the format 001S021W08L005S. In this report, well numbers are abbreviated and written 1S/21W-8L5. The well-numbering system is shown in figure 4. Drains are numbered (and abbreviated in this report) in a similar manner; however, the 40-acre subdivision is not identified and the number is preceded by the word DRAIN—for example, DRAIN 1N/21W-32-1 S. In addition to this formal designation, wells drilled as part of this study were assigned a designation and number indicating the site and depth of the well, in feet—for example, CM-1 220.

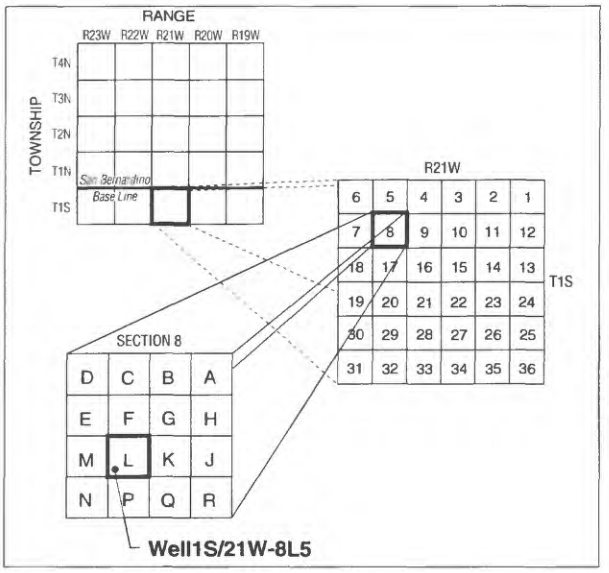


Figure 4. Well-Numbering System.

Ground-water sites also are assigned site-identification numbers according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote degrees, minutes, and seconds of latitude; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify different sites within a 1-square-second grid. This station number, once assigned, has no locational significance. This means that if an error was made in the field location of a site and that error resulted in an incorrect calculation of latitude and longitude, the identification number associated with that site will not be changed after the error is discovered. However, the latitude and longitude associated with that site will be updated in the U.S. Geological Survey's computerized National Water Information System (NWIS) and the U.S. Environmental Protection Agency's STORET system if an error is discovered.

Surface-water sites that have continuous-record stream-gaging stations operated by the U.S. Geological Survey are assigned numbers in a downstream direction along the mainstream. All sites on a tributary entering upstream from a mainstream site are assigned lower numbers than the mainstream site, and a station on a tributary that enters between two mainstream sites is assigned a number between the two mainstream site numbers. The complete eight-digit number for each site, such as 11108500, includes the two-digit part number "11" and the six-digit downstream order number "108500." The two-digit part number designates an area whose boundaries coincide with large natural drainages; for example, part number "11" designates the Pacific slope basins in California. Surface-water sites that do not have continuous-record stream-gaging stations operated by the U.S. Geological Survey are assigned identification numbers according to the grid system of latitude and longitude in a manner similar to that for ground-water sites.

DATA COLLECTION

More than 700 water samples were collected from 232 ground-water sites (fig. 5) and 34 surface-water sites (fig. 6) in the Santa Clara-Calleguas Hydrologic Unit, Ventura County, California, from October 1989 through December 1993 as part of the U.S. Geological Survey's Southern California Regional Aquifer-System Analysis study. Most of these samples were collected by U.S. Geological Survey personnel. Some samples that were analyzed for only a few constituents, primarily chloride, were collected by United Water Conservation District personnel trained in U.S. Geological Survey sample-collection and sample-handling procedures. All samples were collected, handled, and preserved according to standard U.S. Geological Survey field procedures and analyzed in U.S. Geological Survey laboratories.

Sample Collection

Water samples were collected from wells installed as part of this study, from existing wells, and from agricultural drains. Wells installed as part of this study were screened over short intervals, and water from these wells is from a single water-bearing unit. Prior to sampling, water-level measurements were made and at least three well-casing volumes of water were removed from the well using a portable pump. Specific conductance and temperature of water from wells were monitored during purging, and the sample was collected after the specific conductance and temperature had stabilized. Wells installed as part of this study were sampled more than once to determine potential changes in water quality related to the use of drilling muds during well construction and to evaluate real changes in ground-water quality over time.

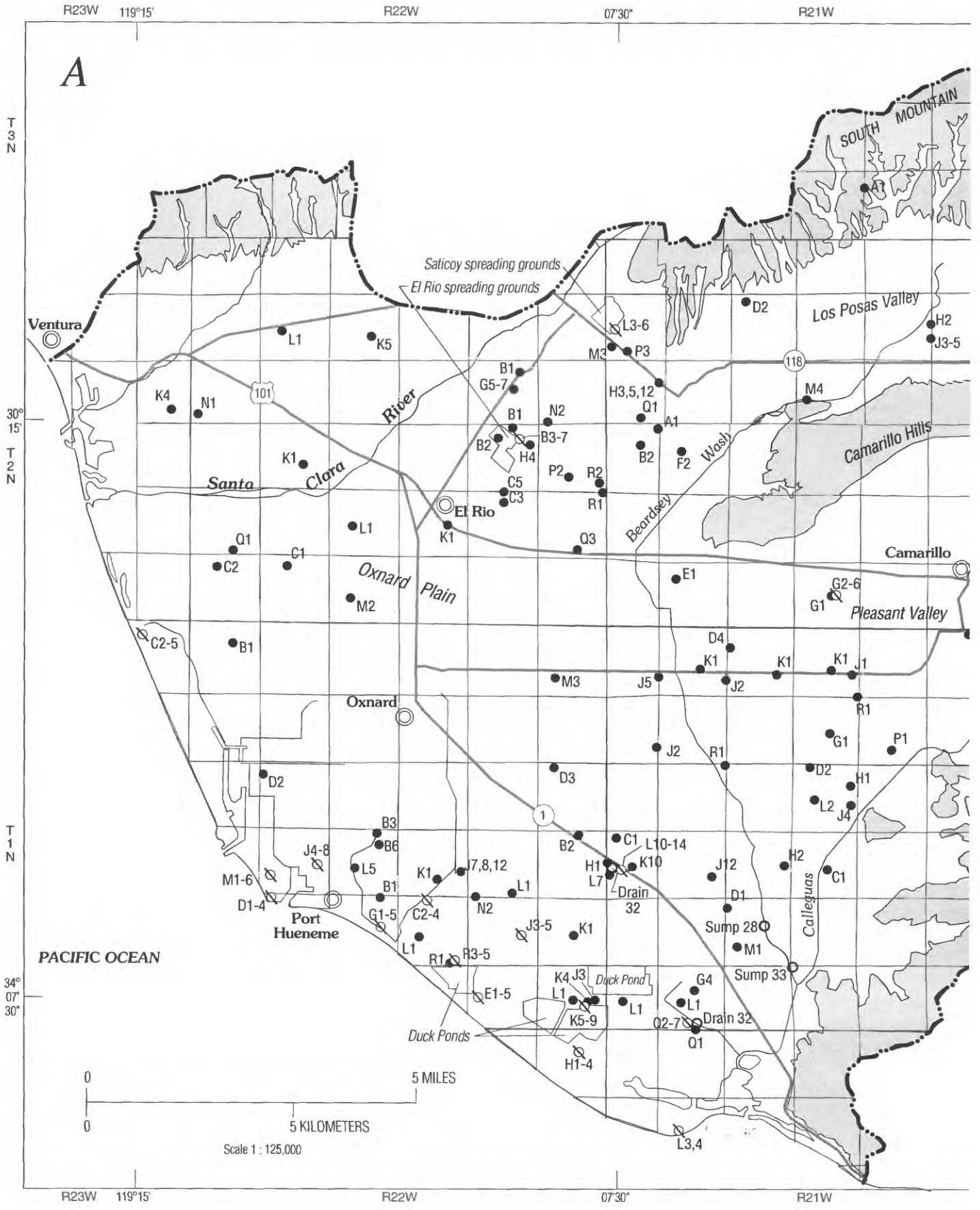
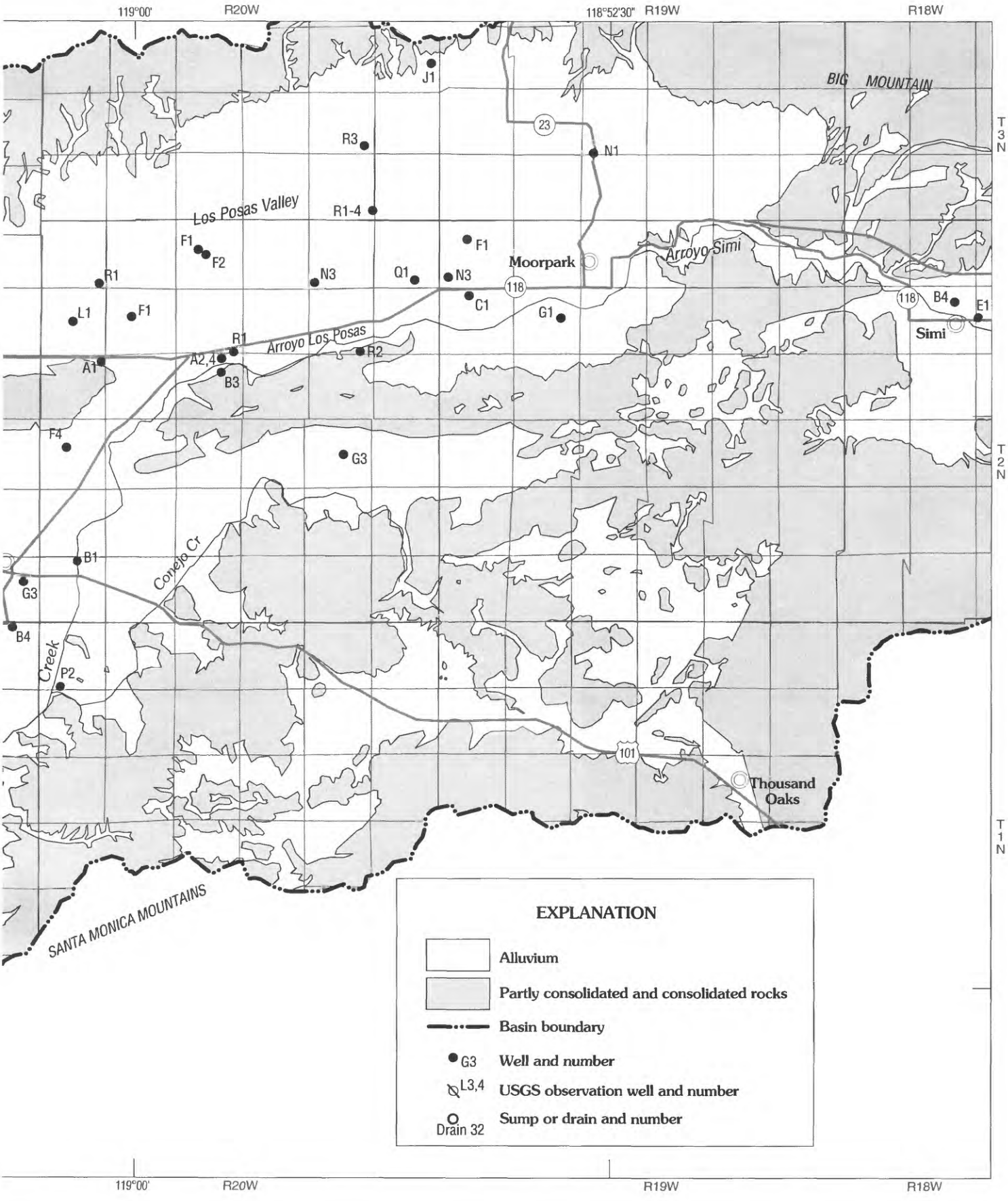


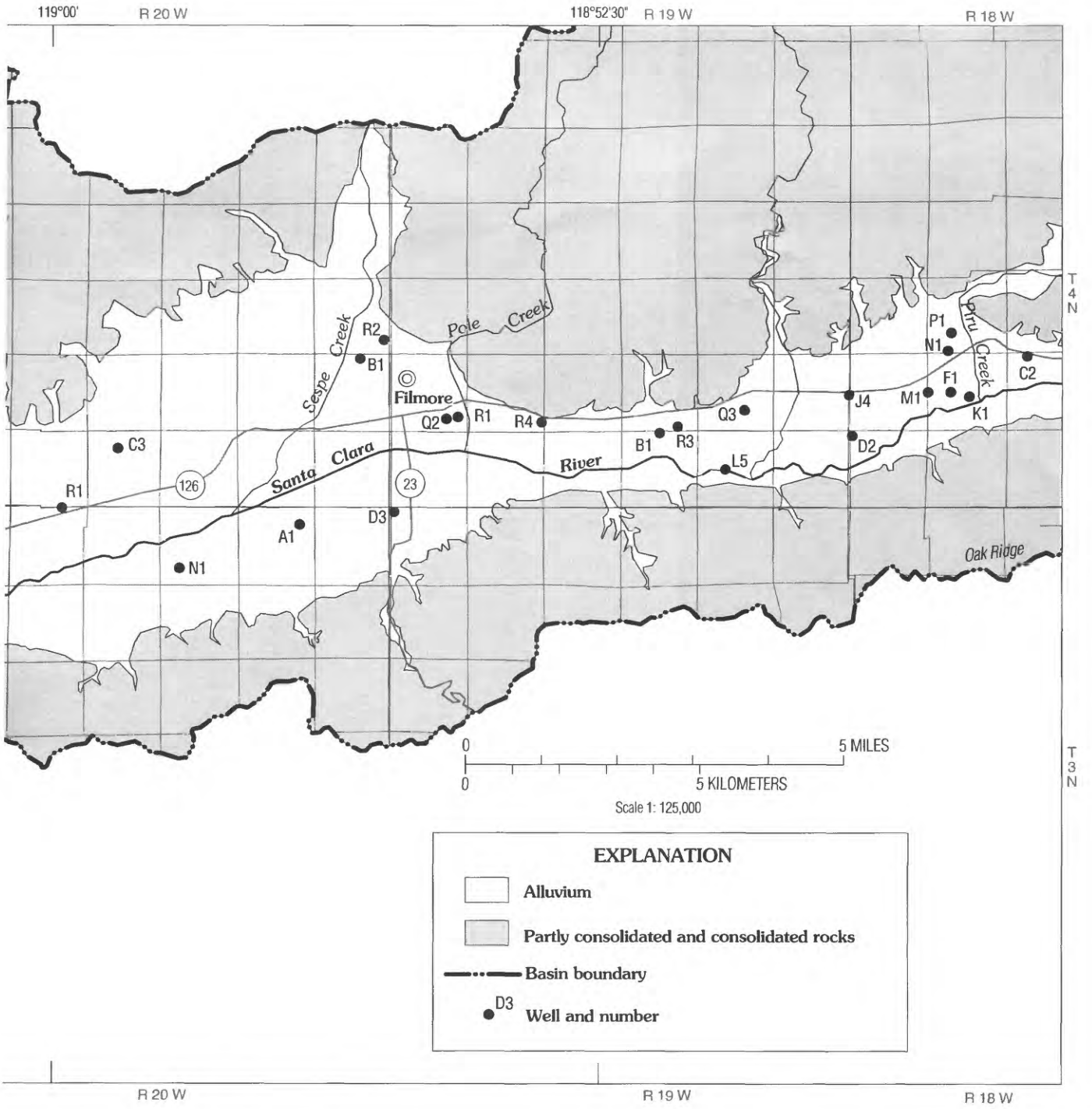
Figure 5. Location of ground-water sampling sites, Ventura County, California. *A*, Oxnard Plain, Pleasant Valley,



and Los Posas Valley; *B*, Santa Clara River valley from near Los Angeles/Ventura County line downstream to Saticoy.

Figure 5.--*Continued.*

Existing wells sampled as part of this study were primarily production wells designed for agricultural or municipal supply. Many of these wells are screened over several water-bearing units, and water from these wells is a mixture of water from those units. Most of the existing wells have permanently installed pumps. Prior to sampling each well, several casing volumes of water were removed. Specific conductance and temperature of water from wells were monitored during purging, and the sample was collected after the specific conductance and temperature had stabilized. Samples from agricultural drains are grab samples from the drain discharge.



Surface-water samples intended for complete chemical and isotopic analyses were collected using the equal-width-increment method (Guy and Norman, 1970). These samples were collected using a DH-48 sampler that was painted with a nonmetallic white epoxy paint and equipped with a Teflon nozzle. Grab samples were collected if water was to be analyzed for only a small number of constituents and if the sample site was believed to be well mixed. Discharge measurements were made

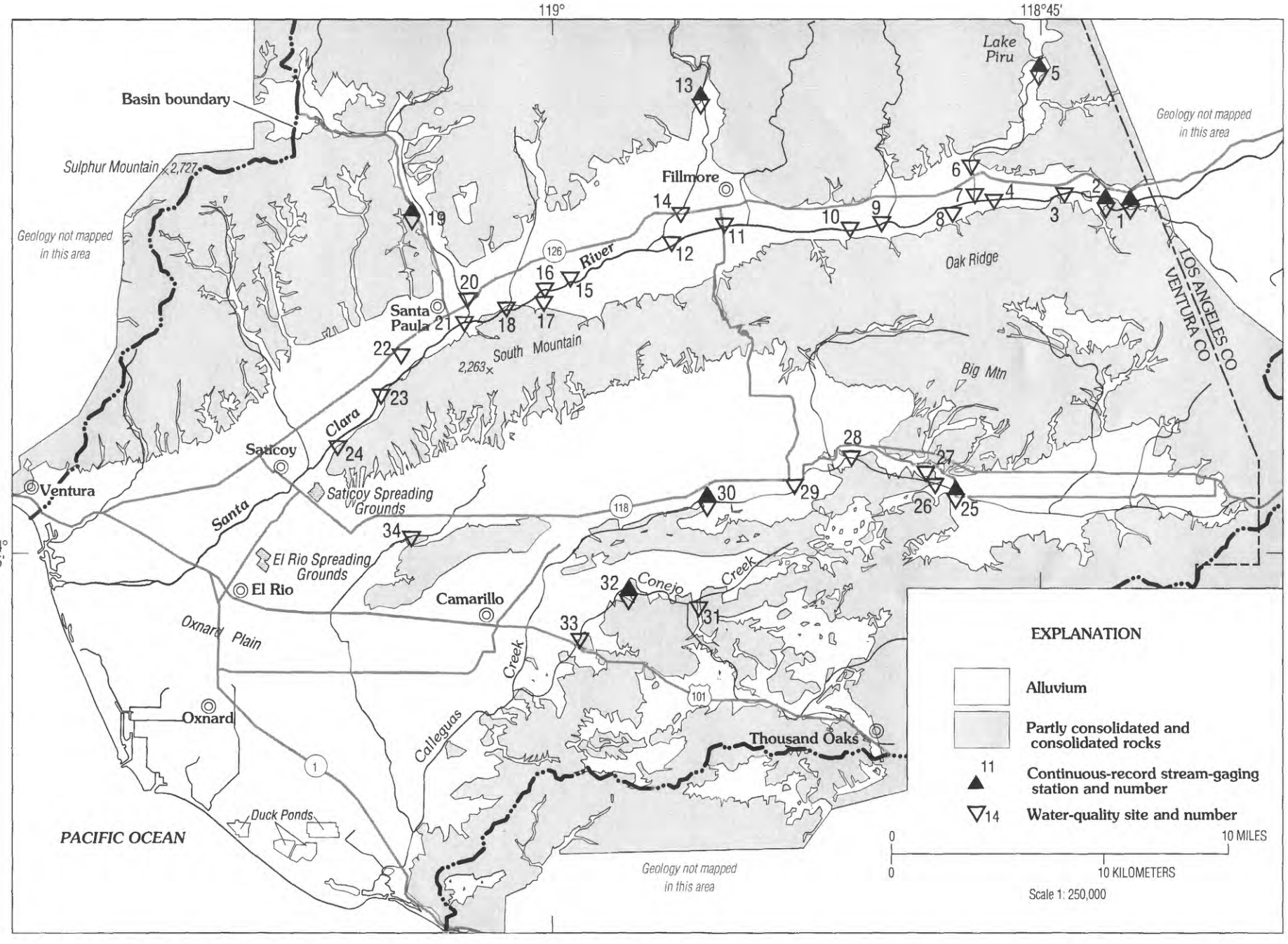


Figure 6. Location of surface-water sampling sites, Ventura County, California.

at the time the sample was collected using guidelines outlined by Carter and Davidian (1968). Purge logs, discharge measurements, and other information related to sample collection are on file at the U.S. Geological Survey office in San Diego.

Field Measurements

Water- and air-temperature measurements were made using hand-held mercury-filled thermometers that have a full-scale accuracy of 0.5°C and have been calibrated with an American Society for Testing and Materials standard laboratory thermometer. Portable meters were used for field measurements of pH, alkalinity, and specific conductance using methods described by Fishman and Friedman (1989). Dissolved-oxygen measurements were done using Winkler titration (Fishman and Friedman, 1989). All instruments were calibrated in the field prior to sample collection. Instrument logs and calibration data are on file at the U.S. Geological Survey office in San Diego.

Sample Handling, Preservation, and Analysis

Care was taken to ensure that water-quality analyses done as part of the Southern California Regional Aquifer-System Analysis study represent the quality of water as it was collected in the field. Different techniques were used for the collection of ground-water and surface-water samples; however, field determinations, sample handling, preservation, and laboratory analytical techniques were similar for both types of samples. Special procedures were used for the collection, handling, and preservation of samples intended for analyses of isotopes and certain dissolved gases.

Most samples were pressure filtered in the field through membrane filters having a pore size of 0.45 µm. Samples for aluminum were pressure filtered through membrane filters having a pore size of 0.1 µm. Samples intended for analysis of pH, specific conductance, and laboratory alkalinity were not filtered. Conventional polyethylene bottles were used as sample containers—except opaque polyethylene bottles were used for nutrient samples, which were preserved with mercuric chloride and chilled to 4.0°C. Samples for cation analyses were preserved by acidifying the sample to a pH less than 2.0 with nitric acid. All bottles were rinsed three times prior to use. Samples were shipped to the U.S. Geological Survey laboratory in Arvada, Colo., for analysis using methods described by Fishman and Friedman (1989).

Samples intended for analysis of the stable isotopes of oxygen and hydrogen were collected in 125-mL borosilicate glass bottles. The water was not filtered (except surface-water samples) and the bottle was sealed with tape. The samples were shipped to the U.S. Geological Survey laboratory in Reston, Va., for analysis by mass spectrometry (Thatcher and others, 1977).

Samples intended for analysis of tritium were collected in 1-L borosilicate glass bottles. The bottle was bottom-filled and allowed to overflow to several times the bottle volume. The water was not filtered and the bottle was sealed with tape. The samples were shipped to the U.S. Geological Survey laboratory in Reston, Va., for analysis by liquid scintillation (Thatcher and others, 1977) with electrolytic enrichment (Ostlund and Warner, 1962).

Samples to be analyzed for carbon-13 were collected in 1-L borosilicate glass bottles in the same manner as was tritium. However, a small amount of the sample (about 100 mL) then was discarded and the remaining water was preserved with 100 mL of carbon-dioxide-free ammoniacal strontium chloride. Samples to be analyzed for carbon-14 were collected in a 22-gal nitrogen-filled, stainless-steel vessel. The pH of the sample water was adjusted to pH>11.0 using carbon-dioxide-free sodium hydroxide, and bicarbonate was precipitated as strontium carbonate by supersaturating the sample with strontium chloride. The strontium carbonate precipitate was allowed to settle into a 1-L polyethylene bottle at the bottom of the stainless-steel vessel. Carbon-13/12 and carbon-14 sample bottles were sealed with tape and shipped to the U.S. Geological Survey laboratory in Arvada, Colo., for analysis. Carbon-13 analyses were done by mass spectrometry (Thatcher and others, 1977), and carbon-14 analyses were done by liquid scintillation (Thatcher and others, 1977).

Samples intended for analysis of strontium-87/86 were collected in 500-mL polyethylene bottles. Samples were pressure filtered (pore size 0.45 µm) in the field and preserved by acidifying the sample to a pH <2.0 with nitric acid. The samples were shipped to the U.S. Geological Survey laboratory in Menlo Park, Calif., for analysis by mass spectrometry (Thatcher and others, 1977).

Samples intended for analysis of sulfur-34/32 were collected in four 1-L borosilicate glass bottles. The water was pressure filtered in the field (pore size 0.45 μm) and preserved with mercuric chloride. The samples were shipped to the U.S. Geological Survey laboratory in Arvarda, Colo., for analysis by mass spectrometry (Thatcher and others, 1977).

Samples for methane and hydrogen gas were collected by pumping the sample water through a gas-sampling tube. If the water was degassing, the gas was allowed to accumulate in the tube and two samples of gas were collected in a syringe. In most cases, a small amount of nitrogen gas was injected into the tube and allowed to equilibrate with the sample water for 15 minutes, and a sample of gas then was collected in a syringe. The remaining nitrogen gas was allowed to equilibrate for another 5 minutes before a second sample was collected. Both samples were analyzed within 20 minutes using a field gas chromatograph with a reduction-gas detector (Chapelle and McMahon, 1991).

Samples of water for chlorofluorocarbon-11 analysis were collected using a Bennett sample pump equipped with copper tubing for the discharge line. The samples were sealed in 62-mL borosilicate glass ampules by welding, without exposing the sample to the atmosphere, using techniques and equipment described by Busenberg and Plummer (1992). Five replicate samples were collected at each site. These samples were shipped to the U.S. Geological Survey laboratory in Reston, Va., for analysis using a purge-and-trap gas chromatography procedure with an electron-capture detector (Bullister and Weiss, 1988; Busenberg and Plummer, 1992).

DATA PRESENTATION

The data collected during this study are given in tables 1 through 4 (at the back of this report). The location of sampling sites is shown in figure 5 (ground-water sites) and figure 6 (surface-water sites).

Water-quality data for ground-water sites are given in tables 1, 2, and 3. Table 1 contains data on physical properties, major ions, nutrients, selected trace elements, deuterium, and oxygen-18. Table 2 contains data on tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86. Table 3 contains data on dissolved hydrogen, methane, freon-11, and oxygen.

Water-quality data for surface-water sites are given in table 4. Table 4 contains data on discharge, physical properties, major ions, nutrients, selected trace elements, deuterium, and oxygen-18.

Errors in the data discovered after publication are corrected and appropriate updates are made to the Water-Quality file in the U.S. Geological Survey's computerized National Water Information System (NWIS). Updates are transferred monthly to the U.S. Environmental Protection Agency's STORET system. Users of the data presented in this report are encouraged to obtain all data from the appropriate computer file to ensure access to the most recent updates.

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Thatcher, L.L., Janzer, V.J., and Edwards, K.W., 1977, Methods for determination of radioactive substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A5, 95 p.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93

[All data were analyzed at U.S. Geological Survey laboratories. Location of sites shown in figure 5. Analysis for each sample is shown on one line on five consecutive pages. Numbering systems for sites are explained in text. **Agency collecting sample**: USGS, U.S. Geological Survey; UWCD, United Water Conservation District. ft, feet; µS/cm, microsiemens per centimeter at 25 degrees Celsius; °C, degrees Celsius; mg/L, milligrams per liter; µg/L, micrograms per liter. <, actual value is less than value shown; --, no data]

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µS/cm)
1N/20W-6P2		341129119011201	08-28-91	1200	USGS	--	460	100	1,320
1N/21W-1B4		341217119015701	08-23-90	1000	USGS	--	1,150	120	1,490
1N/21W-3J1		341145119034601	08-07-91	1500	USGS	--	1,126	59.7	--
1N/21W-3K1		341148119040601	02-27-91	0800	USGS	--	1,453	59	1,770
			08-05-91	1430	USGS	--			--
1N/21W-3R1		341128119034101	03-12-91	1315	USGS	--	1,033	55	1,890
			08-05-91	1600	USGS	--			--
			08-25-92	0815	USGS	--			--
1N/21W-4D4		341206119054101	02-27-91	0950	USGS	--	1,380	56	1,180
			08-05-91	1700	USGS	--			--
1N/21W-4K1		341146119045701	02-27-91	0900	USGS	--	1,390	51	1,300
			08-08-91	1200	USGS	--			--
			12-17-91	0900	USGS	--			1,270
1N/21W-6J5		341143119064801	02-21-91	0900	USGS	--	1,312	44	970
			08-06-91	1645	USGS	--			--
1N/21W-7J2		341048119065001	02-20-91	1430	USGS	--	1,300	33	1,290
			08-06-91	1700	USGS	--			--
1N/21W-8R1		341034119054501	02-27-91	1040	USGS	--	1,400	28	1,190
			08-07-91	0930	USGS	--			--
			12-17-91	1300	USGS	--			1,130
1N/21W-10G1		341059119040601	03-12-91	1100	USGS	--	1,035	39	1,120
			08-06-91	0930	USGS	--			--
			08-25-92	0915	USGS	--			--
1N/21W-11P1		341046119030801	02-26-91	1530	USGS	--	843	51	1,710
			08-07-91	1630	USGS	--			--
1N/21W-15D2		341032119042501	03-12-91	1000	USGS	--	1,225	30	1,100
1N/21W-15H1		341018119034701	08-22-90	1830	USGS	--	181	34	4,820
1N/21W-15J4		341003119034701	02-26-91	1240	USGS	--	883	30	1,140
			08-08-91	1030	USGS	--			--
1N/21W-15L2		341007119042101	08-08-91	0930	USGS	--	904	27	--
1N/21W-19C1		340937119072801	08-15-90	1700	USGS	--	220	26.3	2,500
1N/21W-19K10		340915119071301	08-15-90	1430	USGS	--	226	18	1,170
1N/21W-19L7		340913119073101	02-26-91	0845	USGS	--	525	20	1,550
1N/21W-19L10	SCE 414	340914119073301	06-12-91	1800	USGS	95.63	414	21	1,190
			12-04-91	1030	USGS	115.43	414	21	1,190

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/20W-6P2	08-28-91	1,330	8.2	8.1	--	--	450	67	68	98
1N/21W-1B4	08-23-90	1,500	8.1	7.7	--	27.0	380	48	63	160
1N/21W-3J1	08-07-91	1,690	--	--	--	--	--	--	--	--
1N/21W-3K1	02-27-91	1,750	7.6	7.7	--	23.0	410	110	33	220
	08-05-91	1,760	--	--	--	--	--	--	--	--
1N/21W-3R1	03-12-91	1,940	7.2	7.6	--	22.5	780	210	61	150
	08-05-91	1,900	--	--	--	--	--	--	--	--
	08-25-92	1,760	--	--	--	--	--	--	--	--
1N/21W-4D4	02-27-91	1,180	8.0	7.7	--	25.0	300	77	25	140
	08-05-91	1,210	--	--	--	--	--	--	--	--
1N/21W-4K1	02-27-91	1,270	7.7	7.6	--	24.0	360	97	28	140
	08-08-91	880	--	--	--	--	--	--	--	--
	12-17-91	1,320	--	--	14.5	24.5	--	--	--	--
1N/21W-6J5	02-21-91	971	7.7	7.6	--	25.0	260	64	25	110
	08-06-91	950	--	--	--	--	--	--	--	--
1N/21W-7J2	02-20-91	1,170	7.8	7.9	--	22.0	370	94	32	130
	08-06-91	1,150	--	--	--	--	--	--	--	--
1N/21W-8R1	02-27-91	1,160	7.7	8.0	--	26.0	310	80	27	130
	08-07-91	1,300	--	--	--	--	--	--	--	--
	12-17-91	1,140	--	--	20.0	25.0	--	--	--	--
1N/21W-10G1	03-12-91	1,130	7.4	7.9	--	22.0	450	120	36	87
	08-06-91	1,490	--	--	--	--	--	--	--	--
	08-25-92	1,500	--	--	--	--	--	--	--	--
1N/21W-11P1	02-26-91	1,710	7.3	7.6	--	22.0	590	150	52	140
	08-07-91	1,790	--	--	--	--	--	--	--	--
1N/21W-15D2	03-12-91	1,110	7.5	7.8	--	22.0	420	110	34	93
1N/21W-15H1	08-22-90	4,810	7.7	7.7	--	19.5	2,000	510	170	330
1N/21W-15J4	02-26-91	1,120	7.7	7.8	--	24.0	370	81	41	99
	08-08-91	1,320	--	--	--	--	--	--	--	--
1N/21W-15L2	08-08-91	1,210	--	--	--	--	--	--	--	--
1N/21W-19C1	08-15-90	2,540	7.2	7.3	24.5	19.0	990	270	76	130
1N/21W-19K10	08-15-90	1,140	7.6	7.7	24.5	19.5	450	120	35	86
1N/21W-19L7	02-26-91	1,550	7.4	7.8	--	19.5	620	170	47	98
1N/21W-19L10	06-12-91	1,190	7.6	7.8	20.0	20.0	450	120	35	96
	12-04-91	--	--	--	20.0	20.0	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/20W-6P2	08-28-91	3.9	356	363	41	210	0.10	.75	0.097	67
1N/21W-1B4	08-23-90	9.3	--	325	120	210	.30	.72	.150	88
1N/21W-3J1	08-07-91	--	--	--	--	86	--	.66	.070	--
1N/21W-3K1	02-27-91	5.7	--	308	260	210	.30	1.2	.280	39
	08-05-91	--	--	--	--	230	--	--	--	
1N/21W-3R1	03-12-91	4.6	[1]260	243	560	220	.20	.11	.083	41
	08-05-91	--	--	--	--	250	--	--	--	
	08-25-92	--	--	--	320	200	--	--	.160	--
1N/21W-4D4	02-27-91	6.7	[2]250	257	260	93	.30	.46	.140	42
	08-05-91	--	--	--	--	110	--	--	--	
1N/21W-4K1	02-27-91	4.7	--	244	330	110	.40	.48	.075	39
	08-08-91	--	--	--	--	50	--	--	--	
	12-17-91	--	--	--	--	100	--	.35	.090	--
1N/21W-6J5	02-21-91	5.3	[3]250	250	210	46	.30	.20	.084	39
	08-06-91	--	--	--	--	42	--	--	--	
1N/21W-7J2	02-20-91	7.1	[3]221	220	360	36	.20	.17	.044	38
	08-06-91	--	--	--	--	61	--	--	--	
1N/21W-8R1	02-27-91	5.6	[2]250	238	280	88	.40	.41	.098	42
	08-07-91	--	--	--	--	74	--	--	--	
	12-17-91	--	--	--	--	80	--	.36	.100	--
1N/21W-10G1	03-12-91	2.8	[1]211	210	280	92	.30	.39	.074	41
	08-06-91	--	--	--	--	150	--	--	--	
	08-25-92	--	--	--	300	150	--	--	.074	--
1N/21W-11P1	02-26-91	4.0	--	218	410	210	.30	.79	.140	38
	08-07-91	--	--	--	--	210	--	.83	.091	--
1N/21W-15D2	03-12-91	2.9	--	222	280	81	.30	.35	.077	40
1N/21W-15H1	08-22-90	5.7	[2]294	283	1,000	990	.40	3.7	.091	39
1N/21W-15J4	02-26-91	2.8	[2]240	240	200	120	.20	.36	.120	41
	08-08-91	--	--	--	--	160	--	.46	.120	--
1N/21W-15L2	08-08-91	--	--	--	--	110	--	.42	.700	--
1N/21W-19C1	08-15-90	6.3	[3]180	179	350	550	.40	2.0	.049	36
1N/21W-19K10	08-15-90	4.7	[3]240	241	330	44	.70	.24	.055	35
1N/21W-19L7	02-26-91	4.6	[2]208	206	380	180	.40	.59	.051	34
1N/21W-19L10	06-12-91	4.7	[3]210	212	350	55	.40	.27	.039	35
	12-04-91		--	--	--	--	46	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/20W-6P2	08-28-91	792	778	0.010	0.730	0.050	<0.20	0.070	0.09	<10
1N/21W-1B4	08-23-90	894	914	--	<.100	.180	.20	.040	.06	--
1N/21W-3J1	08-07-91	--	--	--	--	--	--	--	--	--
1N/21W-3K1	02-27-91	1,090	1,080	.040	3.60	.400	.90	.030	.06	<10
	08-05-91	--	--	--	--	--	--	--	--	
1N/21W-3R1	03-12-91	1,360	1,410	.020	.610	.030	<.20	.020	.06	<10
	08-05-91	--	--	--	--	--	--	--	--	
	08-25-92	--	--	--	--	--	--	--	--	
1N/21W-4D4	02-27-91	774	802	<.010	.210	.810	1.0	.030	.06	<10
	08-05-91	--	--	--	--	--	--	--	--	
1N/21W-4K1	02-27-91	852	903	<.010	.300	.210	.30	.030	.09	<10
	08-08-91	--	--	--	--	--	--	--	--	
	12-17-91	--	--	--	--	--	--	--	--	
1N/21W-6J5	02-21-91	622	652	.010	<.050	.520	.60	.030	.09	<10
	08-06-91	--	--	--	--	--	--	--	--	
1N/21W-7J2	02-20-91	972	832	<.010	<.100	.820	.90	.060	.09	<10
	08-06-91	--	--	--	--	--	--	--	--	
1N/21W-8R1	02-27-91	764	806	<.010	.200	.430	.60	.020	.06	<10
	08-07-91	--	--	--	--	--	--	--	--	
	12-17-91	--	--	--	--	--	--	--	--	
1N/21W-10G1	03-12-91	764	790	.010	<.050	.020	.30	.020	.06	20
	08-06-91	--	--	--	--	--	--	--	--	
	08-25-92	--	--	--	--	--	--	--	--	
1N/21W-11P1	02-26-91	1140	1,140	<.010	.200	.130	.20	.020	.03	<10
	08-07-91	--	--	--	--	--	--	--	--	
1N/21W-15D2	03-12-91	752	781	<.010	.055	.040	<.20	.020	.03	20
1N/21W-15H1	08-22-90	3,490	3,230	--	<.100	.370	.50	.030	.06	--
1N/21W-15J4	02-26-91	764	732	<.010	.200	.120	.30	.030	.06	<10
	08-08-91	--	--	--	--	--	--	--	--	
1N/21W-15L2	08-08-91	--	--	--	--	--	--	--	--	--
1N/21W-19C1	08-15-90	1,520	1,530	--	<.100	.270	.40	.070	.06	--
1N/21W-19K10	08-15-90	812	803	--	<.100	.470	.70	.030	.09	--
1N/21W-19L7	02-26-91	1,060	1,040	<.010	<.050	.280	.20	.020	.06	10
1N/21W-19L10	06-12-91	830	826	<.010	<.050	.260	.30	.030	.15	--
	12-04-91	--	--	--	--	--	--	--	--	

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/20W-6P2	08-28-91	30	160	12	11	300	360	-42.5	-6.25
1N/21W-1B4	08-23-90	140	390	28	--	21	--	-39.0	-5.85
1N/21W-3J1	08-07-91	--	600	--	50	--	1,200	--	--
1N/21W-3K1	02-27-91	40	690	27	--	18	1,000	-43.5	-6.85
	08-05-91	--	--	--	50	--	980	--	--
1N/21W-3R1	03-12-91	57	440	51	--	19	1,900	-39.5	-6.15
	08-05-91	--	--	--	50	--	1,600	--	--
	08-25-92	--	--	--	--	--	--	-43.0	-6.60
1N/21W-4D4	02-27-91	61	450	89	--	42	760	-44.0	-6.80
	08-05-91	--	--	--	50	--	710	--	--
1N/21W-4K1	02-27-91	47	440	32	--	49	870	-41.5	-6.70
	08-08-91	--	--	--	30	--	790	--	--
	12-17-91	--	--	--	--	--	--	-42.5	-6.60
1N/21W-6J5	02-21-91	74	440	78	--	15	790	-46.5	-7.15
	08-06-91	--	--	--	40	--	720	--	--
1N/21W-7J2	02-20-91	100	420	14	--	100	1,200	-50.0	-7.75
	08-06-91	--	--	--	40	--	1,100	--	--
1N/21W-8R1	02-27-91	60	400	38	--	34	830	-43.5	-6.90
	08-07-91	--	--	--	50	--	840	--	--
	12-17-91	--	--	--	--	--	--	-45.0	-6.95
1N/21W-10G1	03-12-91	41	270	16	--	72	1,100	-42.0	-6.50
	08-06-91	--	--	--	40	--	1,100	--	--
	08-25-92	--	--	--	--	--	--	-43.5	-6.70
1N/21W-11P1	02-26-91	78	420	91	--	230	1,200	-40.0	-6.25
	08-07-91	--	420	--	30	--	1,200	--	--
1N/21W-15D2	03-12-91	42	310	160	--	120	1,000	-42.0	-6.50
1N/21W-15H1	08-22-90	<100	660	640	--	1,500	--	-39.5	-5.75
1N/21W-15J4	02-26-91	79	270	43	--	140	560	-42.5	-6.55
	08-08-91	--	340	--	20	--	740	--	--
1N/21W-15L2	08-08-91	--	340	--	40	--	950	--	--
1N/21W-19C1	08-15-90	<100	720	1100	--	820	2,300	-51.5	-7.50
1N/21W-19K10	08-15-90	25	680	460	--	390	1,000	-52.0	-7.65
1N/21W-19L7	02-26-91	34	620	77	--	480	1,300	-51.0	-7.60
1N/21W-19L10	06-12-91	29	630	220	45	230	1,000	-52.5	-7.70
	12-04-91	--	--	--	--	--	--	-51.5	-7.60

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µS/cm)
1N/21W-19L10	SCE 414	340914119073301	03-16-92	0814	UWCD	70.40	414	21	--
			07-09-92	1705	USGS	70.43			1,160
			08-26-92	1002	UWCD	98.95			1,130
			03-22-93	1530	UWCD	47.80			1,120
			06-22-93	0807	UWCD	57.92			1,140
			09-21-93	1355	UWCD	79.51			1,100
1N/21W-19L11	SCE 320	340914119073302	06-12-91	1000	USGS	56.53	320	21	1,490
			12-04-91	1250	USGS	64.99			1,190
			03-16-92	0925	UWCD	44.50			--
			07-09-92	1400	USGS	41.89			1,200
			08-26-92	1030	UWCD	50.45			1,170
			03-22-93	1615	UWCD	21.92			1,160
			06-22-93	0836	UWCD	27.85			1,170
			09-21-93	1424	UWCD	37.01			1,140
1N/21W-19L12	SCE 220	340914119073303	06-12-91	1730	USGS	41.00	220	21	2,460
			12-04-91	1500	USGS	46.26			2,040
			03-16-92	0940	UWCD	31.80			--
			07-09-92	1735	USGS	32.97			1,600
			08-26-92	1048	UWCD	36.64			1,390
			09-30-92	1530	USGS	33.53			1,280
			03-22-93	1633	UWCD	11.40			1,190
			06-22-93	0903	UWCD	14.87			1,180
			09-21-93	1451	UWCD	20.03			1,130
1N/21W-19L13	SCE 130	340914119073304	06-12-91	1600	USGS	38.51	130	21	1,230
			12-04-91	1615	USGS	42.28			1,140
			03-16-92	1000	UWCD	30.60			--
			07-09-92	1620	USGS	31.75			1,140
			08-26-92	1102	UWCD	34.13			1,120
			03-22-93	1649	UWCD	11.40			1,120
			06-22-93	0920	UWCD	14.80			1,130
			09-21-93	1505	UWCD	20.25			1,090
1N/21W-19L14	SCE 38	340914119073305	06-13-91	0900	USGS	8.39	38	21	8,820
			12-04-91	1730	USGS	8.31			10,300
			03-16-92	1025	UWCD	7.10			--
			07-09-92	1745	USGS	8.46			10,800

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/21W-19L10	03-16-92	--	--	--	22.0	19.0	--	--	--	--
	07-09-92	1,180	--	--	25.0	22.0	--	--	--	--
	08-26-92	1,120	--	--	23.0	20.5	--	--	--	--
	03-22-93	1,130	--	--	--	19.5	--	--	--	--
	06-22-93	1,130	--	--	--	20.0	--	--	--	--
	09-21-93	1,140	--	--	--	20.5	--	--	--	--
1N/21W-19L11	06-12-91	1,490	7.6	7.6	17.5	19.5	580	160	43	90
	12-04-91	--	--	--	23.5	20.0	--	--	--	--
	03-16-92	--	--	--	22.0	20.0	--	--	--	--
	07-09-92	1,220	--	--	25.5	20.0	--	--	--	--
	08-26-92	1,160	--	--	24.0	20.5	--	--	--	--
	03-22-93	1,160	--	--	--	19.5	--	--	--	--
	06-22-93	1,160	--	--	--	20.5	--	--	--	--
	09-21-93	1,180	--	--	--	20.0	--	--	--	--
1N/21W-19L12	06-12-91	2,480	7.3	7.5	18.5	19.5	1,000	270	78	130
	12-04-91	--	--	--	19.0	20.0	--	--	--	--
	03-16-92	--	--	--	23.0	19.5	--	--	--	--
	07-09-92	1,660	--	--	25.0	21.0	--	--	--	--
	08-26-92	1,410	--	--	24.0	20.5	--	--	--	--
	09-30-92	1,300	7.4	--	--	20.0	--	--	--	--
	03-22-93	1,200	--	--	--	19.5	--	--	--	--
	06-22-93	1,170	--	--	--	20.0	--	--	--	--
	09-21-93	1,170	--	--	--	20.0	--	--	--	--
1N/21W-19L13	06-12-91	1,200	8.0	8.0	19.5	20.0	400	110	30	110
	12-04-91	--	--	--	15.0	19.0	--	--	--	--
	03-16-92	--	--	--	24.0	19.5	--	--	--	--
	07-09-92	1,170	--	--	25.5	19.5	--	--	--	--
	08-26-92	1,110	--	--	24.0	19.5	--	--	--	--
	03-22-93	1,120	--	--	--	18.5	--	--	--	--
	06-22-93	1,120	--	--	--	19.5	--	--	--	--
	09-21-93	1,140	--	--	--	19.0	--	--	--	--
1N/21W-19L14	06-13-91	9,530	7.3	7.4	17.5	19.0	3,500	1,000	250	950
	12-04-91	--	--	--	15.0	19.0	--	--	--	--
	03-16-92	--	--	--	24.0	18.5	--	--	--	--
	07-09-92	11,100	--	--	25.5	19.0	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/21W-19L10	03-16-92	--	--	--	--	48	--	--	--	--
	07-09-92	--	--	--	--	43	--	--	--	--
	08-26-92	--	--	--	--	39	--	--	--	--
	03-22-93	--	--	--	--	39	--	--	--	--
	06-22-93	--	--	--	--	37	--	--	--	--
	09-21-93	--	--	--	--	41	--	--	--	--
1N/21W-19L11	06-12-91	3.7	[3]210	216	360	150	0.30	0.57	0.046	34
	12-04-91	--	--	--	--	40	--	--	--	--
	03-16-92	--	--	--	--	39	--	--	--	--
	07-09-92	--	--	--	--	40	--	--	--	--
	08-26-92	--	--	--	--	40	--	--	--	--
	03-22-93	--	--	--	--	37	--	--	--	--
	06-22-93	--	--	--	--	38	--	--	--	--
	09-21-93	--	--	--	--	38	--	--	--	--
1N/21W-19L12	06-12-91	6.2	[3]190	193	400	470	.50	1.8	.050	34
	12-04-91	--	--	--	--	330	--	--	--	--
	03-16-92	--	--	--	--	490	--	--	--	--
	07-09-92	--	--	--	--	190	--	--	--	--
	08-26-92	--	--	--	--	130	--	--	--	--
	09-30-92	--	--	--	--	83	--	--	--	--
	03-22-93	--	--	--	--	60	--	--	--	--
	06-22-93	--	--	--	--	50	--	--	--	--
	09-21-93	--	--	--	--	45	--	--	--	--
1N/21W-19L13	06-12-91	5.5	[3]240	240	350	45	.60	.25	.069	33
	12-04-91	--	--	--	--	43	--	--	--	--
	03-16-92	--	--	--	--	--	43	--	--	--
	07-09-92	--	--	--	--	46	--	--	--	--
	08-26-92	--	--	--	--	41	--	--	--	--
	03-22-93	--	--	--	--	41	--	--	--	--
	06-22-93	--	--	--	--	40	--	--	--	--
	09-21-93	--	--	--	--	42	--	--	--	--
1N/21W-19L14	06-13-91	14	[3]250	255	2,500	2,300	.80	6.9	.780	25
	12-04-91	--	--	--	--	2,300	--	--	--	--
	03-16-92	--	--	--	--	2,300	--	--	--	--
	07-09-92	--	--	--	--	2,300	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/21W-19L10	03-16-92	--	--	--	--	--	--	--	--	--
	07-09-92	--	--	--	--	--	--	--	--	
	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1N/21W-19L11	06-12-91	1,000	977	<0.010	0.360	0.630	1.0	0.260	0.40	
	12-04-91	--	--	--	--	--	--	--	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	07-09-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1N/21W-19L12	06-12-91	1,730	1,510	.020	.062	.310	.40	.200	.67	
	12-04-91	--	--	--	--	--	--	--	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	07-09-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	09-30-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1N/21W-19L13	06-12-91	830	832	<.010	<.050	.700	.80	.320	.92	
	12-04-91	--	--	--	--	--	--	--	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	07-09-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1N/21W-19L14	06-13-91	7,430	7220	.070	.091	3.10	4.0	.180	.61	
	12-04-91	--	--	--	--	--	--	--	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	07-09-92	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/21W-19L10	03-16-92	--	--	--	--	--	--	-51.0	-7.70
	07-09-92	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1N/21W-19L11	06-12-91	46	660	390	35	460	1,300	-52.0	-7.60
	12-04-91	--	--	--	--	--	--	-51.5	-7.60
	03-16-92	--	--	--	--	--	--	-51.0	-7.65
	07-09-92	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1N/21W-19L12	06-12-91	<100	670	140	50	760	2,200	-52.0	-7.60
	12-04-91	--	--	--	--	--	--	-50.5	-7.65
	03-16-92	--	--	--	--	--	--	-50.5	-7.50
	07-09-92	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	-51.5	-7.75
	09-30-92	--	--	--	--	--	--	-51.5	-7.65
	03-22-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1N/21W-19L13	06-12-91	22	660	94	29	280	1,100	-53.0	-7.75
	12-04-91	--	--	--	--	--	--	-51.0	-7.65
	03-16-92	--	--	--	--	--	--	-51.5	-7.70
	07-09-92	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1N/21W-19L14	06-13-91	<100	3,400	140	40	1,900	6,900	-48.5	-7.10
	12-04-91	--	--	--	--	--	--	-47.5	-6.90
	03-16-92	--	--	--	--	--	--	-47.0	-6.90
	07-09-92	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/21W-19L14	SCE 38	340914119073305	08-26-92	1118	UWCD	8.60	38	21	10,900
			03-22-93	1703	UWCD	5.87			8,560
			06-22-93	1000	UWCD	--			10,300
			09-21-93	1521	UWCD	8.00			8,750
DRAIN									
1N/21W-19-1		340915119073101	05-21-91	0800	USGS	--		20	--
1N/21W-21H2		340916119045001	02-27-91	1140	USGS	--	1,010	18	1,250
1N/21W-22C1		340912119040901	03-12-91	0845	USGS	--	1,035	21	930
			08-06-91	1000	USGS	--			--
			12-18-91	1300	USGS	--			1,610
1N/21W-28D1		340842119054301	03-12-91	0800	USGS	--	960	15	1,100
			08-06-91	1330	USGS	--			--
1N/21W-28M1		340812119053301	03-11-91	1340	USGS	--	810	9	1,900
SUMP									
1N/21W-28-1		340829119050901	09-06-90	1230	USGS	--		12	5,450
1N/21W-31L1		340729119072101	04-05-91	1045	USGS	--	1,000	10	943
1N/21W-32G4		340738119061401	08-22-90	1300	USGS	--	156	10	1,440
1N/21W-32L1		340729119062701	03-12-91	1600	USGS	--	300	8	3,330
1N/21W-32Q1		340707119061301	03-12-91	1745	USGS	--	526	7	14,700
1N/21W-32Q2	Q2 970	340712119062001	06-25-91	1330	USGS	96.38	970	10	9,150
			08-06-91	1745	USGS	95.19			--
			12-18-91	1300	USGS	112.69			11,400
1N/21W-32Q3	Q2 840	340712119062002	06-25-91	1200	USGS	93.65	840	10	2,020
			08-07-91	1100	USGS	93.95			--
1N/21W-32Q4	Q2 640	340712119062003	06-25-91	1650	USGS	95.20	640	10	6,500
			08-07-91	1245	USGS	94.96			--
1N/21W-32Q5	Q2 370	340712119062004	06-25-91	1915	USGS	21.17	370	10	5,740
			08-07-91	1415	USGS	88.90			--
			02-06-92	1210	USGS	86.12			6,340
			08-26-92	0746	UWCD	86.38			7,390
			03-22-93	1310	UWCD	44.25			5,090
			06-21-93	1120	UWCD	52.75			6,050
			09-21-93	1015	UWCD	71.03			6,320
1N/21W-32Q6	Q2 220	340712119062005	06-26-91	1915	USGS	25.00	220	10	1,500
			08-06-91	1800	USGS	22.02			--
			02-06-92	1235	USGS	23.62			1,210
			08-26-92	0824	UWCD	23.73			1,310

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/21W-19L14	08-26-92	10,500	--	--	25.0	19.5	--	--	--	--
	03-22-93	11,000	--	--	--	18.0	--	--	--	--
	06-22-93	10,100	--	--	--	20.0	--	--	--	--
	09-21-93	10,300	--	--	--	19.0	--	--	--	--
DRAIN										
1N/21W-19-1	05-21-91	4,630	--	7.6	--	--	2,400	610	210	290
1N/21W-21H2	02-27-91	1,220	7.8	7.9	--	25.0	330	73	35	140
1N/21W-22C1	03-12-91	909	7.9	8.0	--	23.0	270	53	33	100
	08-06-91	1,660	--	--	--	--	--	--	--	--
	12-18-91	1,640	--	7.9	20.5	26.0	340	59	46	210
1N/21W-28D1	03-12-91	1,100	7.9	7.9	--	21.0	350	82	34	110
	08-06-91	1,120	--	--	--	--	--	--	--	--
1N/21W-28M1	03-11-91	1,890	8.1	7.6	--	26.0	300	52	40	280
SUMP										
1N/21W-28-1	09-06-90	5,380	7.4	7.4	24.0	21.0	1,900	450	180	620
1N/21W-31L1	04-05-91	1,100	7.2	7.9	--	18.0	330	81	30	97
1N/21W-32G4	08-22-90	1,430	8.1	8.0	--	20.5	460	91	57	110
1N/21W-32L1	03-12-91	3,330	7.5	7.7	--	17.5	740	170	76	450
1N/21W-32Q1	03-12-91	14,500	7.6	7.5	--	21.5	4,100	1,000	390	1,500
1N/21W-32Q2	06-25-91	9,490	7.9	7.6	--	23.5	270	38	42	2000
	08-06-91	7,500	--	--	--	--	--	--	--	--
	12-18-91	11,600	8.0	7.7	18.0	24.0	380	51	60	2,200
1N/21W-32Q3	06-25-91	1,970	7.7	8.1	--	24.0	270	51	35	320
	08-07-91	1,910	--	--	--	--	--	--	--	--
1N/21W-32Q4	06-25-91	6,010	7.4	7.3	--	22.5	1,700	340	200	560
	08-07-91	5,100	--	--	--	--	--	--	--	--
1N/21W-32Q5	06-25-91	6,600	7.3	7.6	--	21.0	1,600	380	160	370
	08-07-91	7,500	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	13.0	21.0	--	--	--	--
	08-26-92	6,940	--	--	20.0	21.0	--	--	--	--
	03-22-93	5,680	--	--	--	21.0	--	--	--	--
	06-21-93	6,180	--	--	--	23.0	--	--	--	--
	09-21-93	7,090	--	--	--	22.0	--	--	--	--
1N/21W-32Q6	06-26-91	1,540	7.6	--	--	20.5	490	130	39	140
	08-06-91	1,360	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	13.0	20.0	--	--	--	--
	08-26-92	1,300	--	--	21.0	20.5	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/21W-19L14	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	2,500	--	--	--	--
	06-22-93	--	--	--	--	2,500	--	--	--	--
	09-21-93	--	--	--	--	2,700	--	--	--	--
DRAIN										
1N/21W-19-1	05-21-91	3.5	--	299	1,800	310	0.60	2.4	0.087	42
1N/21W-21H2	02-27-91	4.9	[2]259	249	290	100	.30	.46	.120	43
1N/21W-22C1	03-12-91	3.4	[1]264	256	140	69	.20	.25	.140	42
	08-06-91	--	--	--	--	260	--	--	--	--
	12-18-91	7.4	--	302	220	210	.40	1.0	.290	59
1N/21W-28D1	03-12-91	5.9	[1]218	207	320	53	.20	.27	.073	41
	08-06-91	--	--	--	--	54	--	--	--	--
1N/21W-28M1	03-11-91	11	--	215	230	290	.30	1.5	.400	54
SUMP										
1N/21W-28-1	09-06-90	90	349	344	1,600	430	.90	2.4	.066	35
1N/21W-31L1	04-05-91	5.6	--	253	180	130	.20	.60	.210	42
1N/21W-32G4	08-22-90	5.1	--	180	310	170	.50	.82	.099	22
1N/21W-32L1	03-12-91	16	--	260	520	660	.40	2.0	.130	31
1N/21W-32Q1	03-12-91	18	--	172	810	4,600	.70	17	.170	32
1N/21W-32Q2	06-25-91	37	377	341	68	3,000	1.0	11	1.4	13
	08-06-91	--	--	--	--	3,000	--	--	--	--
	12-18-91	46	339	332	140	3,400	2.0	12	1.3	15
1N/21W-32Q3	06-25-91	9.6	385	280	240	340	.40	1.4	.440	51
	08-07-91	--	--	--	--	390	--	--	--	--
1N/21W-32Q4	06-25-91	14	305	244	350	1,800	.40	6.6	.630	48
	08-07-91	--	--	--	--	1,400	--	--	--	--
1N/21W-32Q5	06-25-91	9.0	[3]220	217	430	1,500	.20	4.2	.010	39
	08-07-91	--	--	--	--	1,900	--	--	--	--
	02-06-92	--	--	--	--	1,800	--	--	--	--
	08-26-92	--	--	--	--	2,100	--	--	--	--
	03-22-93	--	--	--	--	1,600	--	--	--	--
	06-21-93	--	--	--	--	1,800	--	--	--	--
	09-21-93	--	--	--	--	2,100	--	--	--	--
1N/21W-32Q6	06-26-91	5.8	[3]220	219	400	150	.40	.52	.052	36
	08-06-91	--	--	--	--	48	--	--	--	--
	02-06-92	--	--	--	--	80	--	--	--	--
	08-26-92	--	--	--	--	100	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/21W-19L14	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
DRAIN										
1N/21W-19-1	05-21-91	4,280	3,460	--	--	--	--	--	--	--
1N/21W-21H2	02-27-91	776	845	0.010	0.200	0.400	0.60	0.020	0.06	<10
1N/21W-22C1	03-12-91	557	601	.010	<.050	.170	<.20	.030	.09	<10
	08-06-91	--	--	--	--	--	--	--	--	--
	12-18-91	870	997	<.010	<.050	.440	.50	.040	.12	--
1N/21W-28D1	03-12-91	714	779	.010	<.050	.640	.70	.020	.06	150
	08-06-91	--	--	--	--	--	--	--	--	--
1N/21W-28M1	03-11-91	1,150	1,090	<.010	<.050	1.40	1.5	.030	.06	<10
SUMP										
1N/21W-28-1	09-06-90	3,370	4,370	--	170	.020	1.8	.180	.52	30
1N/21W-31L1	04-05-91	668	720	<.010	<.050	.960	1.5	.030	--	--
1N/21W-32G4	08-22-90	906	879	--	<.100	.140	<.20	.010	--	--
1N/21W-32L1	03-12-91	2,060	2,090	.010	<.050	1.90	2.2	.020	.06	<10
1N/21W-32Q1	03-12-91	9,230	8,490	<.010	<.050	2.20	2.4	<.010	--	<10
1N/21W-32Q2	06-25-91	5,040	5,430	<.010	<.050	3.00	2.9	1.00	.92	330
	08-06-91	--	--	--	--	--	--	--	--	--
	12-18-91	8,920	6,140	.010	<.050	4.10	4.6	.560	1.5	--
1N/21W-32Q3	06-25-91	1,180	1,220	<.010	<.050	1.60	18	.580	1.1	20
	08-07-91	--	--	--	--	--	--	--	--	--
1N/21W-32Q4	06-25-91	3,740	3,480	<.010	<.050	1.80	2.1	1.70	.89	40
	08-07-91	--	--	--	--	--	--	--	--	--
1N/21W-32Q5	06-25-91	3,400	3,030	.020	<.050	1.20	1.1	1.20	3.7	--
	08-07-91	--	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1N/21W-32Q6	06-26-91	1,020	1,040	.030	.066	.520	.50	.870	2.4	--
	08-06-91	--	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/21W-19L14	08-26-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
DRAIN									
1N/21W-19-1	05-21-91	<100	2,500	10	60	20	7800	-41.5	-6.25
1N/21W-21H2	02-27-91	43	460	19	--	21	890	-45.5	-6.95
1N/21W-22C1	03-12-91	57	320	56	--	65	560	-44.5	-6.80
	08-06-91	--	--	--	30	--	790	--	--
	12-18-91	87	690	41	39	21	790	-43.0	-6.70
1N/21W-28D1	03-12-91	35	410	42	--	27	1,000	-49.0	-7.30
	08-06-91	--	--	--	40	--	990	--	--
1N/21W-28M1	03-11-91	100	830	59	--	17	1,100	-44.5	-6.90
SUMP									
1N/21W-28-1	09-06-90	<100	3,100	40	--	40	--	-38.5	-5.65
1N/21W-31L1	04-05-91	84	450	28	--	130	--	-47.0	-7.10
1N/21W-32G4	08-22-90	43	630	360	--	170	--	-49.5	-7.55
1N/21W-32L1	03-12-91	<100	940	160	--	750	1,400	-50.5	-7.45
1N/21W-32Q1	03-12-91	300	440	30	--	3,200	8,900	-39.5	-5.90
1N/21W-32Q2	06-25-91	600	3,600	180	150	110	1,500	-45.5	-6.80
	08-06-91	--	--	--	--	--	--	--	--
	12-18-91	600	650	20	170	80	2,200	-43.5	-6.45
1N/21W-32Q3	06-25-91	120	880	59	68	21	910	-44.0	-6.90
	08-07-91	--	--	--	--	--	--	--	--
1N/21W-32Q4	06-25-91	<100	840	160	130	80	5,100	-41.5	-6.90
	08-07-91	--	--	--	--	--	--	--	--
1N/21W-32Q5	06-25-91	200	380	<10	60	1,300	4,200	-44.5	-6.90
	08-07-91	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	-45.5	-6.90
	08-26-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	
1N/21W-32Q6	06-26-91	31	600	48	45	300	1,100	-50.5	-7.70
	08-06-91	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	-50.0	-7.50
	08-26-92	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/21W-32Q6	Q2 220	340712119062005	03-22-93	1340	UWCD	7.37	220	10	1,290
			06-21-93	1159	UWCD	10.40			1,260
			09-21-93	1044	UWCD	17.40			1,180
1N/21W-32Q7	Q2 285	340712119062006	06-25-91	1500	USGS	63.30	285	10	4,580
			08-07-91	1700	USGS	66.09			--
			02-06-92	1254	USGS	59.10			4,190
			08-26-92	0849	UWCD	58.04			4,340
			03-22-93	1400	UWCD	28.45			4,270
			06-21-93	1204	UWCD	21.60			4,570
			09-21-93	0950	UWCD	50.14			4,360
DRAIN									
1N/21W-32-1		340711119061201	06-19-91	1000	USGS	--		8	35,000
SUMP									
1N/21W-33-1		340756119044201	07-11-90	0900	USGS	--		10	5,400
1N/22W-1M3		341142119082601	08-06-91	1430	USGS	--	1,500	53	--
1N/22W-13D3		341032119082701	08-06-91	1200	USGS	--	1,220	41	--
1N/22W-17D2		341026119126001	08-21-90	1430	USGS	--	244	12	1,960
1N/22W-20J4	A1 930	340916119120901	05-30-91	1630	USGS	46.61	930	10	1,240
			08-04-92	1255	USGS	32.06			1,190
			11-26-92	1300	USGS	32.45			1,180
			02-06-93	1425	USGS	19.58			1,190
			05-06-93	1430	USGS	--			1,230
			08-17-93	1730	USGS	15.47			1,150
1N/22W-20J5	A1 680	340916119120902	05-30-91	1555	USGS	38.16	680	10	--
			08-04-92	1440	USGS	24.58			1,140
			11-26-92	1745	USGS	22.48			1,140
			02-06-93	1155	USGS	10.85			1,160
			05-06-93	1340	USGS	--			1,150
			08-18-93	0957	USGS	7.99			1,120
1N/22W-20J6	A1 425	340916119120903	05-30-91	1830	USGS	29.89	425	10	1,130
			08-04-92	1950	USGS	18.92			1,050
			11-27-92	2220	USGS	19.45			1,010
			02-06-93	1600	USGS	9.69			1,060
			03-24-93	0700	UWCD	5.41			1,050
			05-06-93	1600	USGS	--			1,030
			06-23-93	1200	UWCD	4.45			989
			08-18-93	1208	USGS	2.12			1,030

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/21W-32Q6	03-22-93	1,280	--	--	--	20.5	--	--	--	--
	06-21-93	1,220	--	--	--	21.5	--	--	--	--
	09-21-93	1,230	--	--	--	21.0	--	--	--	--
1N/21W-32Q7	06-25-91	4,500	7.5	7.7	--	22.5	1,400	350	130	380
	08-07-91	4,600	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	13.0	21.0	--	--	--	--
	08-26-92	4,430	--	--	22.0	22.0	--	--	--	--
	03-22-93	4,920	--	--	--	21.5	--	--	--	--
	06-21-93	4,740	--	--	--	22.0	--	--	--	--
	09-21-93	4,900	--	--	--	21.5	--	--	--	--
DRAIN										
1N/21W-32-1	06-19-91	34,300	--	7.7	--	23.0	4,800	550	840	6,900
SUMP										
1N/21W-33-1	07-11-90	5,130	7.3	7.3	22.5	18.5	1,800	510	130	460
1N/22W-1M3	08-06-91	1,170	--	--	--	--	--	--	--	--
1N/22W-13D3	08-06-91	1,200	--	--	--	--	--	--	--	--
1N/22W-17D2	08-21-90	1,960	7.5	7.6	--	17.5	810	210	69	110
1N/22W-20J4	05-30-91	1,230	8.6	8.5	--	19.0	400	110	30	130
	08-04-92	1,200	--	--	22.5	20.5	--	--	--	--
	11-26-92	1,170	--	--	21.0	21.0	--	--	--	--
	02-06-93	1,170	--	--	17.0	21.0	--	--	--	--
	05-06-93	1,170	--	--	18.0	21.0	--	--	--	--
	08-17-93	1,160	--	--	--	20.5	--	--	--	--
1N/22W-20J5	05-30-91	1,160	7.9	8.0	--	19.5	430	120	32	100
	08-04-92	1,150	--	--	26.0	20.0	--	--	--	--
	11-26-92	1,050	--	--	17.0	20.5	--	--	--	--
	02-06-93	1,140	--	--	16.0	20.0	--	--	--	--
	05-06-93	1,140	--	--	19.0	20.0	--	--	--	--
	08-18-93	1,130	--	--	--	20.0	--	--	--	--
1N/22W-20J6	05-30-91	1,090	8.9	8.1	--	18.5	250	49	30	120
	08-04-92	--	--	--	21.5	19.0	--	--	--	--
	11-27-92	999	--	--	11.0	19.0	--	--	--	--
	02-06-93	1,010	--	--	17.0	20.0	--	--	--	--
	03-24-93	1,020	--	--	--	18.0	--	--	--	--
	05-06-93	996	--	--	18.0	19.0	--	--	--	--
	06-23-93	1,010	--	--	--	19.5	--	--	--	--
	08-18-93	1,030	--	--	--	21.5	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/21W-32Q6	03-22-93	--	--	--	--	95	--	--	--	--
	06-21-93	--	--	--	--	67	--	--	--	--
	09-21-93	--	--	--	--	68	--	--	--	--
1N/21W-32Q7	06-25-91	9.3	221	211	370	1,300	0.30	4.6	0.110	35
	08-07-91	--	--	--	--	1,100	--	--	--	--
	02-06-92	--	--	--	--	830	--	--	--	--
	08-26-92	--	--	--	--	670	--	--	--	--
	03-22-93	--	--	--	--	1,300	--	--	--	--
	06-21-93	--	--	--	--	1,700	--	--	--	--
	09-21-93	--	--	--	--	1,300	--	--	--	--
DRAIN										
1N/21W-32-1	06-19-91	300	--	1340	1800	11,000	3.3	42	.910	21
SUMP										
1N/21W-33-1	07-11-90	4.5	422	418	1200	490	.90	2.4	.110	39
1N/22W-1M3	08-06-91	--	--	--	--	38	--	.27	.056	--
1N/22W-13D3	08-06-91	--	--	--	--	39	--	.28	.050	--
1N/22W-17D2	08-21-90	5.8	[2]216	213	610	140	.50	.83	.058	29
1N/22W-20J4	05-30-91	10	241	243	420	45	.20	.24	.054	33
	08-04-92	--	--	--	--	46	--	--	--	--
	11-26-92	--	--	--	--	40	--	--	--	--
	02-06-93	--	--	--	--	41	--	--	--	--
	05-06-93	--	--	--	--	41	--	--	--	--
	08-17-93	--	--	--	--	36	--	--	--	--
1N/22W-20J5	05-30-91	6.0	216	210	390	38	.40	.20	.035	36
	08-04-92	--	--	--	--	39	--	--	--	--
	11-26-92	--	--	--	--	36	--	--	--	--
	02-06-93	--	--	--	--	37	--	--	--	--
	05-06-93	--	--	--	--	37	--	--	--	--
	08-18-93	--	--	--	--	38	--	--	--	--
1N/22W-20J6	05-30-91	39	295	250	230	33	<.10	.16	.088	31
	08-04-92	--	--	--	--	--	--	--	--	--
	11-27-92	--	--	--	--	38	--	--	--	--
	02-06-93	--	--	--	--	40	--	--	--	--
	03-24-93	--	--	--	--	38	--	--	--	--
	05-06-93	--	--	--	--	38	--	--	--	--
	06-23-93	--	--	--	--	37	--	--	--	--
	08-18-93	--	--	--	--	35	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/21W-32Q6	03-22-93	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1N/21W-32Q7	06-25-91	2,930	2,710	<0.010	<0.050	1.00	1.1	0.100	0.28	20
	08-07-91	--	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
DRAIN SUMP 1N/21W-32-1	06-19-91	24,700	22,300	.010	<.050	6.80	4.2	2.00	5.8	--
1N/21W-33-1	07-11-90	4,010	3,710	--	140	.030	.20	.040	.09	--
1N/22W-1M3	08-06-91	--	--	--	--	--	--	--	--	--
1N/22W-13D3	08-06-91	--	--	--	--	--	--	--	--	--
1N/22W-17D2	08-21-90	1,500	1,310	--	.400	<.010	.30	.040	.06	--
1N/22W-20J4	05-30-91	872	927	<.010	<.050	.200	1.2	.680	1.3	--
	08-04-92	--	--	--	--	--	--	--	--	--
	11-26-92	--	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--	--
	08-17-93	--	--	--	--	--	--	--	--	--
1N/22W-20J5	05-30-91	854	852	.020	<.050	.460	.70	.270	.83	--
	08-04-92	--	--	--	--	--	--	--	--	--
	11-26-92	--	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--	--
1N/22W-20J6	05-30-91	692	683	--	--	--	--	--	--	--
	08-04-92	--	--	--	--	--	--	--	--	--
	11-27-92	--	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/21W-32Q6	03-22-93	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1N/21W-32Q7	06-25-91	310	370	290	60	240	3,500	-44.0	-6.60
	08-07-91	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
DRAIN SUMP 1N/21W-32-1	06-19-91	100	5,800	30	60	850	8,400	-39.0	-5.90
1N/21W-33-1	07-11-90	<100	1,800	40	--	30	--	-34.5	-5.15
1N/22W-1M3	08-06-91	--	530	--	30	--	1,000	--	--
1N/22W-13D3	08-06-91	--	510	--	40	--	1,100	--	--
1N/22W-17D2	08-21-90	30	720	28	--	59	--	-51.5	-7.45
1N/22W-20J4	05-30-91	40	560	14	40	100	1,000	-50.0	-7.65
	08-04-92	--	--	--	--	--	--	-50.5	-7.50
	11-26-92	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--
	08-17-93	--	--	--	--	--	--	--	--
1N/22W-20J5	05-30-91	29	630	60	40	140	960	-51.0	-7.65
	08-04-92	--	--	--	--	--	--	-52.0	-7.65
	11-26-92	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--
1N/22W-20J6	05-30-91	140	500	41	17	33	610	-51.5	-7.65
	08-04-92	--	--	--	--	--	--	-51.0	-7.45
	11-27-92	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-20J6	A1 425	340916119120903	09-30-93	1121	UWCD	5.80	425	10	1,060
1N/22W-20J7	A1 320	340916119120904	05-30-91	1900	USGS	25.35	320	10	1,250
			02-04-92	1415	USGS	28.70			1,010
			08-05-92	0845	USGS	15.87			1,130
			11-26-92	1525	USGS	12.28			1,110
			02-06-93	1700	USGS	2.97			1,140
			03-24-93	0817	UWCD	0.33			1,120
			05-06-93	1500	USGS	--			1,130
			08-18-93	1429	USGS	-2.02			1,060
			09-30-93	1152	UWCD	2.30			1,150
1N/22W-20J8	A1 195	340916119120905	05-31-91	0930	USGS	25.64	195	10	7,900
			02-04-92	1330	USGS	21.30			11,600
			08-03-92	1935	USGS	13.39			10,200
			09-29-92	1400	USGS	14.05			9,360
			11-26-92	1245	USGS	10.28			10,300
			02-06-93	1740	USGS	1.35			14,100
			03-24-93	0845	UWCD	1.12			15,300
			05-06-93	1545	USGS	-1.00			17,300
			06-23-93	1315	UWCD	--			16,700
			08-18-93	1328	USGS	-1.17			14,300
			09-30-93	1211	UWCD	0.90			15,200
1N/22W-20M1	A2 940	340907119125201	11-13-91	1645	USGS	50.96	940	14	1,350
			08-05-92	1515	USGS	39.18			1,240
			11-27-92	1220	USGS	35.43			1,190
			02-13-93	1215	USGS	25.25			1,190
			05-07-93	1500	USGS	18.77			1,210
			08-18-93	1841	USGS	20.37			1,130
1N/22W-20M2	A2 740	340907119125202	11-07-91	1330	USGS	36.82	740	14	1,330
			04-30-92	1330	USGS	38.44			1,130
			08-05-92	1715	USGS	28.24			1,130
			11-27-92	1445	USGS	24.75			1,140
			02-13-93	1305	USGS	16.41			1,120
			05-07-93	1245	USGS	11.12			1,150
			08-19-93	1049	USGS	12.05			1,070
1N/22W-20M3	A2 560	340907119125203	11-06-91	1615	USGS	36.82	560	14	1,290

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-20J6	09-30-93	1,050	--	--	--	19.0	--	--	--	--
1N/22W-20J7	05-30-91	1,220	8.1	8.1	--	17.0	330	87	28	150
	02-04-92	--	--	--	23.0	19.0	--	--	--	--
	08-05-92	1,150	--	--	22.0	18.5	--	--	--	--
	11-26-92	1,110	--	--	20.5	19.0	--	--	--	--
	02-06-93	1,130	--	--	15.0	19.0	--	--	--	--
	03-24-93	1,110	--	--	--	18.0	--	--	--	--
	05-06-93	1,120	--	--	19.0	18.5	--	--	--	--
	08-18-93	1,120	--	--	--	19.5	--	--	--	--
	09-30-93	1,140	--	--	--	18.5	--	--	--	--
1N/22W-20J8	05-31-91	7,690	8.0	7.9	--	17.5	1,000	190	130	1,300
	02-04-92	--	--	--	24.5	19.0	--	--	--	--
	08-03-92	10,300	7.5	--	--	19.0	--	--	--	--
	09-29-92	9,960	7.6	--	23.0	19.5	--	--	--	--
	11-26-92	10,500	--	--	21.0	19.5	--	--	--	--
	02-06-93	14,200	--	--	15.0	19.0	--	--	--	--
	03-24-93	17,100	--	--	--	18.0	--	--	--	--
	05-06-93	17,000	--	--	18.0	18.5	--	--	--	--
	06-23-93	17,200	--	--	--	19.0	--	--	--	--
	08-18-93	16,500	--	--	--	19.0	--	--	--	--
	09-30-93	16,800	--	--	--	19.0	--	--	--	--
1N/22W-20M1	11-13-91	1,400	7.8	7.7	27.0	21.0	400	110	29	140
	08-05-92	1,240	--	--	25.0	20.0	--	--	--	--
	11-27-92	1,200	--	--	18.0	20.5	--	--	--	--
	02-13-93	1,200	--	--	15.5	20.0	--	--	--	--
	05-07-93	1,200	--	--	17.0	19.5	--	--	--	--
	08-18-93	1,210	--	--	--	20.5	--	--	--	--
1N/22W-20M2	11-07-91	1,290	7.2	7.6	20.5	20.0	390	110	27	140
	04-30-92	--	--	--	19.0	19.0	--	--	--	--
	08-05-92	1,150	--	--	21.0	19.5	--	--	--	--
	11-27-92	1,140	--	--	21.0	20.0	--	--	--	--
	02-13-93	1,130	--	--	16.5	19.5	--	--	--	--
	05-07-93	1,140	--	--	17.0	20.0	--	--	--	--
	08-19-93	1,140	--	--	--	20.0	--	--	--	--
1N/22W-20M3	11-06-91	1,270	7.1	7.4	19.5	20.0	380	99	31	130

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-20J6	09-30-93	--	--	--	--	38	--	--	--	--
1N/22W-20J7	05-30-91	13	233	231	390	50	0.30	0.27	0.049	34
	02-04-92	--	--	--	--	40	--	--	--	--
	08-05-92	--	--	--	--	47	--	--	--	--
	11-26-92	--	--	--	--	36	--	--	--	--
	02-06-93	--	--	--	--	38	--	--	--	--
	03-24-93	--	--	--	--	36	--	--	--	--
	05-06-93	--	--	--	--	37	--	--	--	--
	08-18-93	--	--	--	--	39	--	--	--	--
	09-30-93	--	--	--	--	34	--	--	--	--
1N/22W-20J8	05-31-91	24	193	198	1,100	1,800	.10	7.5	.060	26
	02-04-92	--	--	--	--	3,200	--	--	--	--
	08-03-92	--	--	--	--	3,200	--	--	--	--
	09-29-92	--	--	--	--	2,900	--	--	--	--
	11-26-92	--	--	--	--	3,000	--	--	--	--
	02-06-93	--	--	--	--	4,800	--	--	--	--
	03-24-93	--	--	--	--	5,200	--	--	--	--
	05-06-93	--	--	--	--	5,100	--	--	--	--
	06-23-93	--	--	--	--	5,800	--	--	--	--
	08-18-93	--	--	--	--	5,400	--	--	--	--
	09-30-93	--	--	--	--	5,800	--	--	--	--
1N/22W-20M1	11-13-91	7.9	182	227	370	63	.40	.35	.055	36
	08-05-92	--	--	--	--	54	--	--	--	--
	11-27-92	--	--	--	--	42	--	--	--	--
	02-13-93	--	--	--	--	45	--	--	--	--
	05-07-93	--	--	--	--	41	--	--	--	--
	08-18-93	--	--	--	--	41	--	--	--	--
1N/22W-20M2	11-07-91	6.8	213	215	390	69	.50	.29	.034	31
	04-30-92	--	--	--	--	41	--	--	--	--
	08-05-92	--	--	--	--	39	--	--	--	--
	11-27-92	--	--	--	--	36	--	--	--	--
	02-13-93	--	--	--	--	37	--	--	--	--
	05-07-93	--	--	--	--	37	--	--	--	--
	08-19-93	--	--	--	--	38	--	--	--	--
1N/22W-20M3	11-06-91	6.0	205	216	300	70	.70	.30	.039	34

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-20J6	09-30-93	--	--	--	--	--	--	--	--	
1N/22W-20J7	05-30-91	922	900	<0.010	<0.050	1.80	2.8	2.90	4.3	
	02-04-92	--	--	--	--	--	--	--	--	
	08-05-92	--	--	--	--	--	--	--	--	
	11-26-92	--	--	--	--	--	--	--	--	
	02-06-93	--	--	--	--	--	--	--	--	
	03-24-93	--	--	--	--	--	--	--	--	
	05-06-93	--	--	--	--	--	--	--	--	
	08-18-93	--	--	--	--	--	--	--	--	
	09-30-93	--	--	--	--	--	--	--	--	
1N/22W-20J8	05-31-91	4,950	4,700	--	--	--	--	--	--	
	02-04-92	--	--	--	--	--	--	--	--	
	08-03-92	--	--	--	--	--	--	--	--	
	09-29-92	--	--	--	--	--	--	--	--	
	11-26-92	--	--	--	--	--	--	--	--	
	02-06-93	--	--	--	--	--	--	--	--	
	03-24-93	--	--	--	--	--	--	--	--	
	05-06-93	--	--	--	--	--	--	--	--	
	06-23-93	--	--	--	--	--	--	--	--	
	08-18-93	--	--	--	--	--	--	--	--	
	09-30-93	--	--	--	--	--	--	--	--	
1N/22W-20M1	11-13-91	974	896	<.010	<.050	.410	.50	.580	1.0	
	08-05-92	--	--	--	--	--	--	--	--	
	11-27-92	--	--	--	--	--	--	--	--	
	02-13-93	--	--	--	--	--	--	--	--	
	05-07-93	--	--	--	--	--	--	--	--	
	08-18-93	--	--	--	--	--	--	--	--	
1N/22W-20M2	11-07-91	882	906	.010	<.050	.280	.30	.290	.58	
	04-30-92	--	--	--	--	--	--	--	--	
	08-05-92	--	--	--	--	--	--	--	--	
	11-27-92	--	--	--	--	--	--	--	--	
	02-13-93	--	--	--	--	--	--	--	--	
	05-07-93	--	--	--	--	--	--	--	--	
	08-19-93	--	--	--	--	--	--	--	--	
1N/22W-20M3	11-06-91	872	806	.020	<.050	.090	<.20	3.70	3.4	

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-20J6	09-30-93	--	--	--	--	--	--	--	--
1N/22W-20J7	05-30-91	41	660	860	36	89	860	-52.5	-7.70
	02-04-92	--	--	--	--	--	--	-51.5	-7.65
	08-05-92	--	--	--	--	--	--	-51.5	-7.65
	11-26-92	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-20J8	05-31-91	<100	1,100	<10	70	40	2,400	-45.0	-6.80
	02-04-92	--	--	--	--	--	--	-40.5	-6.20
	08-03-92	--	--	--	--	--	--	-42.5	-6.35
	09-29-92	--	--	--	--	--	--	-43.0	-6.55
	11-26-92	--	--	--	--	--	--	--	--
	02-06-93	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--
	05-06-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-20M1	11-13-91	36	590	140	47	190	1,000	-51.5	-7.50
	08-05-92	--	--	--	--	--	--	-50.0	-7.50
	11-27-92	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--
	08-18-93	--	--	--	--	--	--	--	--
1N/22W-20M2	11-07-91	31	630	21	44	220	930	-52.0	-7.60
	04-30-92	--	--	--	--	--	--	-52.0	-7.35
	08-05-92	--	--	--	--	--	--	-51.0	-7.70
	11-27-92	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--
1N/22W-20M3	11-06-91	18	660	290	42	100	890	-54.0	-7.75

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-20M3	A2 560	340907119125203	04-30-92	1330	USGS	33.99	560	14	1,130
			08-05-92	1900	USGS	25.91			1,100
			11-27-92	1605	USGS	21.50			1,100
			02-13-93	1455	USGS	13.21			1,090
			05-07-93	1340	USGS	8.67			1,110
			08-19-93	1200	USGS	9.23			1,040
1N/22W-20M4	A2 320	340907119125204	11-12-91	1630	USGS	--	320	14	1,180
			02-04-92	1140	USGS	27.40			1,200
			08-05-92	1825	USGS	20.20			1,210
			11-27-92	1920	USGS	15.68			1,210
			02-13-93	1525	USGS	9.18			1,230
			03-24-93	0915	UWCD	6.94			1,270
			05-07-93	1420	USGS	6.70			1,260
			08-19-93	1249	USGS	6.27			1,150
			09-30-93	0837	UWCD	10.05			1,190
1N/22W-20M5	A2 170	340907119125301	11-07-91	1700	USGS	17.90	170	14	20,400
			02-04-92	1045	USGS	26.40			24,400
			08-05-92	1205	USGS	19.76			28,200
			09-29-92	1010	USGS	18.04			26,900
			11-27-92	1755	USGS	15.40			25,400
			02-13-93	1245	USGS	8.92			12,800
			03-24-93	0937	UWCD	5.78			12,900
			05-07-93	1615	USGS	6.62			14,300
			08-19-93	1357	USGS	5.82			13,300
			09-30-93	0905	UWCD	8.95			13,100
1N/22W-20M6	A2 70	340907119125302	11-13-91	1820	USGS	13.93	70	14	21,500
			02-03-92	1747	USGS	16.40			24,800
			08-06-92	1010	USGS	13.46			24,300
			11-27-92	1815	USGS	13.22			27,100
			02-13-93	1700	USGS	12.07			24,200
			03-24-93	0954	UWCD	33.15			20,600
			05-07-93	1705	USGS	12.52			25,200
			08-19-93	1431	USGS	13.18			23,200
			09-30-93	1008	UWCD	16.02			25,400
1N/22W-21B3		340938119111301	12-13-90	1100	USGS	--	950	13.3	1,770

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-20M3	04-30-92	--	--	--	19.0	19.0	--	--	--	--
	08-05-92	1,130	--	--	23.0	19.0	--	--	--	--
	11-27-92	1,110	--	--	17.0	19.5	--	--	--	--
	02-13-93	1,100	--	--	17.5	19.0	--	--	--	--
	05-07-93	1,110	--	--	18.0	19.0	--	--	--	--
	08-19-93	1,110	--	--	--	20.0	--	--	--	--
1,N/22W-20M4	11-12-91	1,190	7.2	7.6	--	19.0	400	110	30	110
	02-04-92	--	--	--	23.0	18.5	--	--	--	--
	08-05-92	1,250	--	--	20.5	18.5	--	--	--	--
	11-27-92	1,270	--	--	11.5	18.0	--	--	--	--
	02-13-93	1,250	--	--	17.5	18.0	--	--	--	--
	03-24-93	1,270	--	--	--	18.0	--	--	--	--
	05-07-93	1,250	--	--	17.0	18.5	--	--	--	--
	08-19-93	1,220	--	--	--	19.0	--	--	--	--
	09-30-93	1,220	--	--	--	18.5	--	--	--	--
1N/22W-20M5	11-07-91	20,800	7.1	7.2	--	19.0	3,600	680	460	3,300
	02-04-92	--	--	--	23.0	18.0	--	--	--	--
	08-05-92	28,000	--	--	23.5	19.0	--	--	--	--
	09-29-92	27,500	6.9	--	22.5	18.5	--	--	--	--
	11-27-92	26,100	--	--	15.5	19.0	--	--	--	--
	02-13-93	13,200	--	--	16.5	18.5	--	--	--	--
	03-24-93	13,800	--	--	--	18.0	--	--	--	--
	05-07-93	14,200	--	--	18.0	18.5	--	--	--	--
	08-19-93	13,600	--	--	--	19.0	--	--	--	--
	09-30-93	13,600	--	--	--	18.5	--	--	--	--
1N/22W-20M6	11-13-91	21,500	7.2	7.0	19.0	20.0	3,500	440	570	3,500
	02-03-92	--	--	--	24.0	19.5	--	--	--	--
	08-06-92	24,500	--	--	27.5	19.5	--	--	--	--
	11-27-92	28,800	--	--	11.5	20.0	--	--	--	--
	02-13-93	25,000	--	--	15.0	16.5	--	--	--	--
	03-24-93	23,100	--	--	--	18.5	--	--	--	--
	05-07-93	24,900	--	--	18.5	19.0	--	--	--	--
	08-19-93	25,400	--	--	--	19.0	--	--	--	--
	09-30-93	27,800	--	--	--	19.0	--	--	--	--
1N/22W-21B3	12-13-90	1,730	7.8	7.7	--	20.0	630	180	45	130

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-20M3	04-30-92	--	--	--	--	41	--	--	--	--
	08-05-92	--	--	--	--	44	--	--	--	--
	11-27-92	--	--	--	--	41	--	--	--	--
	02-13-93	--	--	--	--	39	--	--	--	--
	05-07-93	--	--	--	--	39	--	--	--	--
	08-19-93	--	--	--	--	39	--	--	--	--
1N/22W-20M4	11-12-91	5.2	[3]170	215	390	48	0.50	0.23	0.033	35
	02-04-92	--	--	--	--	52	--	--	--	--
	08-05-92	--	--	--	--	69	--	--	--	--
	11-27-92	--	--	--	--	90	--	--	--	--
	02-13-93	--	--	--	--	82	--	--	--	--
	03-24-93	--	--	--	--	91	--	--	--	--
	05-07-93	--	--	--	--	80	--	--	--	--
	08-19-93	--	--	--	--	67	--	--	--	--
	09-30-93	--	--	--	--	64	--	--	--	--
1N/22W-20M5	11-07-91	58	221	214	1200	6,500	1.6	24	.075	26
	02-04-92	--	--	--	--	8,200	--	--	--	--
	08-05-92	--	--	--	--	9,900	--	--	--	--
	09-29-92	--	--	--	--	9,900	--	--	--	--
	11-27-92	--	--	--	--	9,400	--	--	--	--
	02-13-93	--	--	--	--	4,300	--	--	--	--
	03-24-93	--	--	--	--	3,700	--	--	--	--
	05-07-93	--	--	--	--	4,000	--	--	--	--
	08-19-93	--	--	--	--	4,200	--	--	--	--
	09-30-93	--	--	--	--	4,400	--	--	--	--
1N/22W-20M6	11-13-91	98	209	247	1300	7,600	2.8	22	.130	28
	02-03-92	--	--	--	--	7,000	--	--	--	--
	08-06-92	--	--	--	--	8,200	--	--	--	--
	11-27-92	--	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	7,700	--	--	--	--
	03-24-93	--	--	--	--	6,700	--	--	--	--
	05-07-93	--	--	--	--	7,700	--	--	--	--
	08-19-93	--	--	--	--	9,200	--	--	--	--
	09-30-93	--	--	--	--	9,700	--	--	--	--
1N/22W-21B3	12-13-90	5.6	[2]202	156	400	230	.30	.84	.038	38

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-20M3	04-30-92	--	--	--	--	--	--	--	--	--
	08-05-92	--	--	--	--	--	--	--	--	--
	11-27-92	--	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--	--
1N/22W-20M4	11-12-91	826	862	0.010	<0.050	0.380	0.50	0.650	1.8	--
	02-04-92	--	--	--	--	--	--	--	--	--
	08-05-92	--	--	--	--	--	--	--	--	--
	11-27-92	--	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--	--
1N/22W-20M5	11-07-91	13,800	12,400	<.020	<.050	4.50	1.3	.030	.09	--
	02-04-92	--	--	--	--	--	--	--	--	--
	08-05-92	--	--	--	--	--	--	--	--	--
	09-29-92	--	--	--	--	--	--	--	--	--
	11-27-92	--	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--	--
1N/22W-20M6	11-13-91	13,800	13,700	.010	<.050	3.20	1.1	.260	.09	--
	02-03-92	--	--	--	--	--	--	--	--	--
	08-06-92	--	--	--	--	--	--	--	--	--
	11-27-92	--	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--	--
1N/22W-21B3	12-13-90	1,150	1,150	<.010	<.100	.080	.50	.020	.12	10

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-20M3	04-30-92	--	--	--	--	--	--	-51.0	-7.75
	08-05-92	--	--	--	--	--	--	-52.0	-7.70
	11-27-92	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--
1N/22W-20M4	11-12-91	27	690	330	42	150	840	-51.0	-7.65
	02-04-92	--	--	--	--	--	--	-50.5	-7.65
	08-05-92	--	--	--	--	--	--	-52.0	-7.70
	11-27-92	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-20M5	11-07-91	300	1,700	760	90	1,300	7,700	-33.0	-4.90
	02-04-92	--	--	--	--	--	--	-30.0	-4.65
	08-05-92	--	--	--	--	--	--	-26.5	-4.25
	09-29-92	--	--	--	--	--	--	-27.5	-4.20
	11-27-92	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-20M6	11-13-91	200	1,900	6,200	70	990	5,500	-30.0	-4.55
	02-03-92	--	--	--	--	--	--	-26.5	-4.05
	08-06-92	--	--	--	--	--	--	-28.0	-4.15
	11-27-92	--	--	--	--	--	--	--	--
	02-13-93	--	--	--	--	--	--	--	--
	03-24-93	--	--	--	--	--	--	--	--
	05-07-93	--	--	--	--	--	--	--	--
	08-19-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-21B3	12-13-90	42	610	380	--	330	--	-50.5	-7.65

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-21B3		340938119111301	02-28-91	1600	USGS	--	950	13.3	2,060
1N/22W-21B6		340932119111101	12-13-90	1000	USGS	--	1,200	17	1,610
			02-28-91	1605	USGS	--			1,240
1N/22W-21L5		340914119113401	08-21-90	1030	USGS	--	72.8	8	3,380
1N/22W-22J7		340911119095601	07-25-90	0850	USGS	--	120	20	1,400
1N/22W-22J8		340911119095602	08-16-90	1400	USGS	--	239	80	1,180
1N/22W-22J12		340907119055801	07-23-90	1500	USGS	--	58.5	20	2,150
1N/22W-22K1		340903119101601	10-07-91	0930	UWCD	--	206	16	--
1N/22W-23N2		340851119094001	10-28-91	1100	UWCD	--	240	16	--
1N/22W-23Q2		340820119103401	07-10-91	1530	USGS	5.00	20	10	--
1N/22W-24B2		340937119080301	11-04-91	1135	UWCD	--	394	29	--
1N/22W-24H1		340918119073601	08-14-90	1730	USGS	--	188	23	1,160
1N/22W-25K1		340821119080701	08-14-90	1400	USGS	--	285	13	1,950
1N/22W-26J3	SWIFT 350	340821119085701	10-29-90	1630	USGS	38.16	350	13	1,160
			06-13-91	1635	USGS	48.99			1,140
			08-26-92	1315	UWCD	38.50			1,110
			03-23-93	0837	UWCD	16.60			1,240
			06-22-93	1253	UWCD	22.85			1,030
			09-22-93	0910	UWCD	--			--
1N/22W-26J4	SWIFT 205	340821119085702	09-28-90	0930	USGS	--	205	13	4,050
			06-13-91	1540	USGS	32.62			4,140
			12-05-91	1100	USGS	36.39			4,510
			03-16-92	1620	UWCD	26.70			--
			08-07-92	1145	USGS	24.34			5,060
			08-26-92	1322	UWCD	31.36			6,090
			09-30-92	1630	USGS	25.61			5,510
			03-23-93	0840	UWCD	6.74			5,060
			06-22-93	1208	UWCD	10.61			4,610
			09-22-93	0929	UWCD	6.30			--
1N/22W-26J5	SWIFT 65	340821119085703	09-28-90	1030	USGS	12.44	65	13	1,430
			06-13-91	1445	USGS	9.70			1,400
			03-16-92	1530	UWCD	12.00			--
			08-26-92	1425	UWCD	13.38			1,420
			03-23-93	0910	UWCD	7.71			1,500
			06-22-93	1232	UWCD	11.49			1,350

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-21B3	02-28-91	2,050	--	--	15.0	20.0	--	--	--	--
1N/22W-21B6	12-13-90	1,590	7.8	7.8	--	17.5	660	170	58	110
	02-28-91	1,230	--	--	15.0	22.0	--	--	--	--
1N/22W-21L5	08-21-90	3,410	7.5	7.6	--	18.5	640	150	65	480
1N/22W-22J7	07-25-90	1,390	7.4	7.6	21.5	19.0	560	150	44	89
1N/22W-22J8	08-16-90	1,130	7.8	7.8	--	19.0	440	130	28	82
1N/22W-22J12	07-23-90	2,050	8.0	7.8	24.5	20.0	990	270	77	120
1N/22W-22K1	10-07-91	2,780	--	--	--	--	--	--	--	--
1N/22W-23N2	10-28-91	1,380	--	--	--	--	--	--	--	--
1N/22W-23Q2	07-10-91	47,200	6.7	6.6	19.0	17.5	7,300	1,300	980	8,000
1N/22W-24B2	11-04-91	1,820	--	--	--	--	--	--	--	--
1N/22W-24H1	08-14-90	1,120	8.0	7.9	22.5	22.5	420	110	36	81
1N/22W-25K1	08-14-90	1,970	7.6	7.5	21.5	19.0	760	200	62	120
1N/22W-26J3	10-29-90	1,120	7.1	7.7	--	19.5	440	120	34	82
	06-13-91	1,140	7.7	7.7	22.5	20.5	440	120	34	80
	08-26-92	1,110	--	--	25.0	20.5	--	--	--	--
	03-23-93	1,110	--	--	--	19.0	--	--	--	--
	06-22-93	1,120	--	--	--	22.0	--	--	--	--
	09-22-93	1,130	--	--	--	--	--	--	--	--
1N/22W-26J4	09-28-90	4,130	7.3	7.2	--	20.0	1,400	360	110	310
	06-13-91	4,320	7.2	7.2	21.0	20.0	1,600	420	130	290
	12-05-91	--	--	--	19.0	19.5	--	--	--	--
	03-16-92	--	--	--	22.0	19.5	--	--	--	--
	08-07-92	5,310	--	--	28.0	19.5	--	--	--	--
	08-26-92	5,630	--	--	24.0	20.5	--	--	--	--
	09-30-92	5,810	7.0	--	19.0	20.0	--	--	--	--
	03-23-93	5,980	--	--	--	18.5	--	--	--	--
	06-22-93	5,610	--	--	--	20.0	--	--	--	--
	09-22-93	5,040	--	--	--	--	--	--	--	--
1N/22W-26J5	09-28-90	1,390	9.7	9.1	--	20.5	360	88	33	200
	06-13-91	1,420	8.5	8.4	21.5	19.5	360	93	30	170
	03-16-92	--	--	--	19.0	22.0	--	--	--	--
	08-26-92	1,450	--	--	25.0	20.5	--	--	--	--
	03-23-93	1,490	--	--	--	18.5	--	--	--	--
	06-22-93	1,560	--	--	--	19.5	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-21B3	02-28-91	--	--	--	--	370	--	--	--	--
1N/22W-21B6	12-13-90	5.1	[2]239	244	480	66	0.60	0.44	0.008	27
	02-28-91	--	--	--	--	61	--	.29	.055	--
1N/22W-21L5	08-21-90	7.6	[3]230	228	670	520	.60	<.010	.050	29
1N/22W-22J7	07-25-90	4.6	221	224	350	120	.30	.50	.072	35
1N/22W-22J8	08-16-90	4.9	218	218	340	48	.60	.20	.036	34
1N/22W-22J12	07-23-90	6.0	291	274	770	100	<.10	.46	.072	33
1N/22W-22K1	10-07-91	--	--	--	--	790	--	--	--	--
1N/22W-23N2	10-28-91	--	--	--	--	59	--	--	--	--
1N/22W-23Q2	07-10-91	1,600	250	165	2,100	19,000	8.8	87	.830	14
1N/22W-24B2	11-04-91	--	--	--	--	270	--	--	--	--
1N/22W-24H1	08-14-90	4.2	247	236	330	39	.80	.24	.058	35
1N/22W-25K1	08-14-90	5.7	247	236	360	300	.60	1.1	.052	36
1N/22W-26J3	10-29-90	4.2	[1]218	221	360	37	.50	.21	.037	34
	06-13-91	4.0	[3]220	223	340	49	.60	.23	.040	37
	08-26-92	--	--	--	--	38	--	--	--	--
	03-23-93	--	--	--	--	38	--	--	--	--
	06-22-93	--	--	--	--	45	--	--	--	--
	09-22-93	--	--	--	--	38	--	--	--	--
1N/22W-26J4	09-28-90	12	206	204	480	1,000	<.10	3.6	.061	37
	06-13-91	11	[3]210	206	470	1,100	.50	4.0	.072	36
	12-05-91	--	--	--	--	1,400	--	--	--	--
	03-16-92	--	--	--	--	1,300	--	--	--	--
	08-07-92	--	--	--	--	1,400	--	--	--	--
	08-26-92	--	--	--	--	1,600	--	--	--	--
	09-30-92	--	--	--	--	1,600	--	--	--	--
	03-23-93	--	--	--	--	1,600	--	--	--	--
	06-22-93	--	--	--	--	1,600	--	--	--	--
	09-22-93	--	--	--	--	1,300	--	--	--	--
1N/22W-26J5	09-28-90	19	289	152	460	62	<.10	.32	.120	30
	06-13-91	18	[3]300	298	390	58	.30	.28	.140	40
	03-16-92	--	--	--	--	61	--	--	--	--
	08-26-92	--	--	--	--	56	--	--	--	--
	03-23-93	--	--	--	--	95	--	--	--	--
	06-22-93	--	--	--	--	130	--	--	--	--

See footnote at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-21B3	02-28-91	--	--	--	--	--	--	--	--	--
1N/22W-21B6	12-13-90	1,170	1,090	<0.010	6.80	0.080	0.50	0.040	0.15	<10
	02-28-91	--	--	--	--	--	--	--	--	--
1N/22W-21L5	08-21-90	2,230	2,060	--	.400	.010	<.20	.050	.09	--
1N/22W-22J7	07-25-90	936	930	--	<.100	.130	<.20	.020	.06	--
1N/22W-22J8	08-16-90	798	802	--	<.100	.580	.70	.010	.03	--
1N/22W-22J12	07-23-90	1,640	1,550	--	<.100	4.10	4.1	<.100	--	--
1N/22W-22K1	10-07-91	--	--	--	--	--	--	--	--	--
1N/22W-23N2	10-28-91	--	--	--	--	--	--	--	--	--
1N/22W-23Q2	07-10-91	34,500	33,300	--	--	--	--	--	--	--
1N/22W-24B2	11-04-91	--	--	--	--	--	--	--	--	--
1N/22W-24H1	08-14-90	790	781	--	.100	.460	.80	.020	.09	--
1N/22W-25K1	08-14-90	1,120	1,230	--	<.100	.360	.50	.020	.06	--
1N/22W-26J3	10-29-90	788	805	<.010	<.100	.180	.20	.030	.09	10
	06-13-91	800	801	<.010	<.050	.170	.20	.040	.12	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-26J4	09-28-90	3,140	2,450	<.010	<.100	.610	.80	2.10	4.3	10
	06-13-91	2,780	2,610	<.010	<.050	.880	.90	4.00	13	--
	12-05-91	--	--	--	--	--	--	--	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	08-07-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	09-30-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-26J5	09-28-90	890	1,070	.020	<.100	.730	.90	.140	.46	10
	06-13-91	958	984	<.010	<.050	.890	1.8	.800	2.5	--
	03-16-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93-*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-21B3	02-28-91	--	--	--	--	--	--	-51.0	-7.55
1N/22W-21B6	12-13-90	28	780	<3	--	<1	--	-50.0	-7.15
	02-28-91	--	520	--	--	--	--	-51.0	-7.60
1N/22W-21L5	08-21-90	100	910	60	--	240	--	-47.5	-7.20
1N/22W-22J7	07-25-90	<100	720	1,400	--	260	--	-38.5	-5.95
1N/22W-22J8	08-16-90	49	660	10	--	260	1,300	-52.0	-7.70
1N/22W-22J12	07-23-90	<100	790	70	--	830	--	-50.0	-7.55
1N/22W-22K1	10-07-91	--	--	--	--	--	--	-49.5	-7.10
1N/22W-23N2	10-28-91	--	--	--	--	--	--	-52.5	-7.70
1N/22W-23Q2	07-10-91	200	1,500	33,000	630	8,400	20,000	-31.5	-4.60
1N/22W-24B2	11-04-91	--	--	--	--	--	--	-50.0	-7.55
1N/22W-24H1	08-14-90	23	690	15	--	400	960	-53.0	-7.75
1N/22W-25K1	08-14-90	100	670	1,100	--	680	1,700	-52.5	-7.60
1N/22W-26J3	10-29-90	33	660	170	--	230	960	-50.0	-7.75
	06-13-91	32	630	300	37	240	960	-52.0	-7.55
	08-26-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-26J4	09-28-90	<100	700	230	--	900	3,400	-50.0	-7.40
	06-13-91	100	720	770	70	980	3,900	-50.5	-7.45
	12-05-91	--	--	--	--	--	--	-50.5	-7.40
	03-16-92	--	--	--	--	--	--	-49.0	-7.40
	08-07-92	--	--	--	--	--	--	-48.5	-7.25
	08-26-92	--	--	--	--	--	--	-48.5	-7.35
	09-30-92	--	--	--	--	--	--	-48.0	-7.25
	03-23-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-26J5	09-28-90	32	780	8	--	29	1,200	-51.0	-7.65
	06-13-91	35	880	20	17	43	1,200	-51.5	-7.65
	03-16-92	--	--	--	--	--	--	-51.0	-7.60
	08-26-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-26J5	SWIFT 65	340821119085703	09-22-93	0952	UWCD	11.73	65	13	--
1N/22W-27C2	SW 295	340848119102601	10-30-90	1200	USGS	25.25	295	11	855
			07-24-91	1600	USGS	30.46			850
			02-06-92	1540	USGS	28.78			858
			08-27-92	0901	UWCD	25.61			894
			03-23-93	1251	UWCD	4.93			920
			06-23-93	0910	UWCD	5.50			870
			09-22-93	1332	UWCD	11.05			--
1N/22W-27C3	SW 195	340848119102602	10-30-90	1400	USGS	29.25	195	11	9,750
			07-24-91	1700	USGS	24.26			--
			02-06-92	1557	USGS	22.50			8,740
			08-07-92	0845	USGS	16.92			8,860
			08-27-92	0433	UWCD	19.93			9,080
			09-29-92	1500	USGS	16.46			8,510
			03-23-93	1313	UWCD	2.00			--
			06-23-93	0936	UWCD	2.30			9,390
			09-22-93	1349	UWCD	4.97			--
1N/22W-27C4	SW 65	340848119102603	10-31-90	0830	USGS	8.45	65	11	3,720
			07-24-91	1520	USGS	6.66			3,680
			02-06-92	1619	USGS	6.36			3,850
			08-27-92	0949	UWCD	7.87			3,860
			03-23-93	1325	UWCD	3.81			3,480
			06-23-93	0953	UWCD	5.70			3,380
			09-22-93	1401	UWCD	6.21			--
1N/22W-27L1		340853119090601	07-10-91	1020	USGS	--	25	17	4,500
1N/22W-27R1		340728119095701	06-22-93	1508	UWCD	--	266	6.1	--
1N/22W-27R3	CM7 350	340800119095901	11-01-90	1415	USGS	62.01	350	10	1,360
			06-26-91	1150	USGS	52.00			1,120
			03-16-92	1450	UWCD	34.80			--
			08-27-92	1032	UWCD	43.00			1,120
			03-23-93	1127	UWCD	13.00			1,120
			04-28-93	0821	UWCD	13.77			939
			06-22-93	1416	UWCD	18.58			986
			09-22-93	1219	UWCD	32.50			--
1N/22W-27R4	CM7 190	340800119095902	11-01-90	1500	USGS	--	190	10	1,690

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-26J5	09-22-93	30	--	--	--	--	--	--	--	--
1N/22W-27C2	10-30-90	840	8.0	7.6	--	20.5	170	40	16	110
	07-24-91	847	8.1	7.7	23.0	19.5	190	46	18	100
	02-06-92	--	--	--	14.0	19.0	--	--	--	--
	08-27-92	893	--	--	25.0	20.0	--	--	--	--
	03-23-93	894	--	--	--	18.0	--	--	--	--
	06-23-93	885	--	--	--	19.0	--	--	--	--
	09-22-93	970	--	--	--	--	--	--	--	--
1N/22W-27C3	10-30-90	9,640	7.0	7.1	--	21.0	2,000	490	180	1,400
	07-24-91	9,250	7.0	7.3	22.0	19.0	1,900	480	170	1,300
	02-06-92	--	--	--	14.0	19.0	--	--	--	--
	08-07-92	8,970	--	--	20.5	18.5	--	--	--	--
	08-27-92	8,840	--	--	25.0	19.5	--	--	--	--
	09-29-92	8,920	7.0	--	21.0	19.0	--	--	--	--
	09-23-93	8,980	--	--	--	18.0	--	--	--	--
	06-23-93	9,020	--	--	--	19.0	--	--	--	--
	09-22-93	9,220	--	--	--	--	--	--	--	--
1N/22W-27C4	10-31-90	3,710	7.4	7.1	--	18.0	1,600	430	120	270
	07-24-91	3,820	7.4	7.4	24.5	20.0	1,700	470	130	260
	02-06-92	--	--	--	14.0	18.0	--	--	--	--
	08-27-92	3,950	--	--	25.0	19.5	--	--	--	--
	03-23-93	3,900	--	--	--	18.0	--	--	--	--
	06-23-93	3,790	--	--	--	19.5	--	--	--	--
	09-22-93	4,040	--	--	--	--	--	--	--	--
1N/22W-27L1	07-10-91	4,520	7.2	7.4	19.0	17.0	2,000	530	170	420
1N/22W-27R1	06-22-93	1,410	--	--	--	--	--	--	--	--
1N/22W-27R3	11-01-90	1,300	7.8	7.7	--	20.0	370	98	29	130
	06-26-91	1,140	7.7	7.8	--	20.5	440	120	33	91
	03-16-92	--	--	--	22.0	19.5	--	--	--	--
	08-27-92	1,110	--	--	24.0	20.5	--	--	--	--
	03-23-93	1,120	--	--	--	19.0	--	--	--	--
	04-28-93	1,100	--	--	--	18.0	--	--	--	--
	06-22-93	1,100	--	--	--	20.0	--	--	--	--
	09-22-93	1,130	--	--	--	--	--	--	--	--
1N/22W-27R4	11-01-90	1,670	7.0	7.6	--	19.0	430	110	38	180

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-26J5	09-22-93	--	--	--	--	110	--	--	--	--
1N/22W-27C2	10-30-90	14	[2]248	295	73	36	0.50	0.14	0.037	34
	07-24-91	14	[1]350	317	83	37	.40	.16	.041	35
	02-06-92	--	--	--	--	39	--	--	--	--
	08-27-92	--	--	--	--	42	--	--	--	--
	03-23-93	--	--	--	--	37	--	--	--	--
	06-23-93	--	--	--	--	34	--	--	--	--
	09-22-93	--	--	--	--	57	--	--	--	--
1N/22W-27C3	10-30-90	19	[2]225	208	770	2,700	.50	9.3	.089	30
	07-24-91	20	260	207	880	2,800	.70	7.7	.073	31
	02-06-92	--	--	--	--	2,500	--	--	--	--
	08-07-92	--	--	--	--	2,600	--	--	--	--
	08-27-92	--	--	--	--	2,500	--	--	--	--
	09-29-92	--	--	--	--	2,500	--	--	--	--
	03-23-93	--	--	--	--	2,500	--	--	--	--
	06-23-93	--	--	--	--	2,800	--	--	--	--
	09-22-93	--	--	--	--	2,500	--	--	--	--
1N/22W-27C4	10-31-90	15	[2]300	271	1,300	450	.70	1.5	.130	31
	07-24-91	12	289	264	1,600	500	.40	1.3	.130	31
	02-06-92	--	--	--	--	510	--	--	--	--
	08-27-92	--	--	--	--	500	--	--	--	--
	03-23-93	--	--	--	--	310	--	--	--	--
	06-23-93	--	--	--	--	540	--	--	--	--
	09-22-93	--	--	--	--	1,600	--	--	--	--
1N/22W-27L1	07-10-91	8.6	276	274	2,100	200	.60	6.9	.092	23
1N/22W-27R1	06-22-93	--	--	--	--	190	--	--	--	--
1N/22W-27R3	11-01-90	6.5	[1]185	216	350	76	.40	.31	.031	35
	06-26-91	4.7	211	215	380	40	.50	.19	.033	36
	03-16-92	--	--	--	--	36	--	--	--	--
	08-27-92	--	--	--	--	39	--	--	--	--
	03-23-93	--	--	--	--	35	--	--	--	--
	04-28-93	--	--	--	--	35	--	--	--	--
	06-22-93	--	--	--	--	34	--	--	--	--
	09-22-93	--	--	--	--	34	--	--	--	--
1N/22W-27R4	11-01-90	7.3	[2]222	214	380	180	.50	.54	.043	32

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-26J5	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27C2	10-30-90	494	541	<0.010	<0.100	4.70	4.9	0.240	0.74	20
	07-24-91	517	532	<.010	.075	4.30	4.2	.210	.67	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27C3	10-30-90	5,680	5,750	<.010	<.100	1.40	1.7	4.70	3.4	30
	07-24-91	6,370	5,820	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-07-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--
	09-29-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27C4	10-31-90	2,780	2,810	<.010	<.100	3.40	3.9	1.20	2.2	20
	07-24-91	2,980	3,180	<.010	.078	3.20	3.8	.100	.15	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27L1	07-10-91	4,270	3,720	.020	19.0	.960	1.7	.020	.09	--
1N/22W-27R1	06-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27R3	11-01-90	920	861	<.010	<.100	.510	.50	.080	.28	<10
	06-26-91	788	837	<.010	<.050	.450	.50	.060	.12	--
	03-16-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	04-28-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27R4	11-01-90	1,070	1,070	<.010	<.100	.350	.50	.820	2.3	<10

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-26J5	09-22-93	--	--	--	--	--	--	--	--
1N/22W-27C2	10-30-90	170	730	40	--	47	460	-49.5	-7.75
	07-24-91	170	730	45	15	49	510	-53.5	-7.70
	02-06-92	--	--	--	--	--	--	-51.5	-7.70
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-27C3	10-30-90	100	1,000	320	--	1,300	5,200	-42.0	-6.35
	07-24-91	<100	1,100	970	100	1,300	4,500	-43.5	-6.40
	02-06-92	--	--	--	--	--	--	-42.0	-6.45
	08-07-92	--	--	--	--	--	--	-43.5	-6.45
	08-27-92	--	--	--	--	--	--	--	--
	09-29-92	--	--	--	--	--	--	-42.0	-6.40
	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-27C4	10-31-90	100	990	1,600	--	1,300	4,000	-51.0	-7.65
	07-24-91	<100	990	4,100	20	1,400	4,000	-52.0	-7.45
	02-06-92	--	--	--	--	--	--	-50.0	-7.50
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-27L1	07-10-91	100	2,800	450	60	670	6,400	-41.5	-6.35
1N/22W-27R1	06-22-93	--	--	--	--	--	--	--	--
1N/22W-27R3	11-01-90	41	690	34	--	270	830	-53.0	-7.85
	06-26-91	40	660	280	40	330	940	-51.5	-7.70
	03-16-92	--	--	--	--	--	--	-51.0	-7.70
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	04-28-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-27R4	11-01-90	29	700	330	--	250	1100	-51.5	-7.65

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-27R4	CM7 190	340800119095902	06-25-91	1245	USGS	20.00	190	10	2,500
			12-05-91	1900	USGS	20.69			2,010
			03-16-92	1507	UWCD	15.70			--
			08-27-92	1059	UWCD	15.72			1,560
			03-23-93	1115	UWCD	-2.10			1,550
			04-28-93	0842	UWCD	--			1,250
			06-22-93	1421	UWCD	.40			1,370
			09-22-93	1242	UWCD	2.81			--
1N/22W-27R5	CM7 110	340800119095903	11-01-90	1545	USGS	--	110	10	62,000
			06-26-91	1320	USGS	--			54,800
			03-16-92	1527	UWCD	10.30			--
			08-27-92	1120	UWCD	10.83			65,300
			03-23-93	1210	UWCD	4.47			--
			04-28-93	0902	UWCD	1.68			14,300
			06-22-93	1454	UWCD	3.78			13,800
			09-22-93	1256	UWCD	4.77			--
1N/22W-28B1		340850119111001	11-04-91	0955	UWCD	--	230	10	--
1N/22W-28G1	CM4 1395	340827119110901	12-13-89	2130	USGS	84.51	1,395	5	960
			03-22-90	1400	USGS	42.45			920
			12-13-90	1815	USGS	58.73			910
			05-15-91	1920	USGS	50.18			870
1N/22W-28G2	CM4 1095	340827119110902	12-14-89	1930	USGS	49.15	1,095	5	930
			03-22-90	1730	USGS	44.74			1,070
			12-13-90	1900	USGS	63.75			1,050
			05-15-91	2100	USGS	52.98			1,030
1N/22W-28G3	CM4 760	340827119110903	12-14-89	1330	USGS	36.10	760	5	1,160
			04-03-90	1200	USGS	30.43			1,180
			12-13-90	2100	USGS	43.46			1,020
			05-14-91	1700	USGS	37.25			1,000
1N/22W-28G4	CM4 275	340827119110904	12-14-89	1015	USGS	17.20	275	5	13,700
			03-22-90	1915	USGS	15.20			17,100
			10-18-90	1600	USGS	.0			17,600
			05-14-91	1825	USGS	20.48			17,000
			02-04-92	1750	USGS	19.50			16,400
			08-27-92	0743	UWCD	18.31			16,100

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-27R4	06-25-91	2,750	7.5	7.6	--	20.5	610	130	68	340
	12-05-91	--	--	--	10.5	18.5	--	--	--	--
	03-16-92	--	--	--	22.0	18.5	--	--	--	--
	08-27-92	1,620	--	--	26.0	19.5	--	--	--	--
	03-23-93	1,580	--	--	--	18.5	--	--	--	--
	04-28-93	1,560	--	--	--	--	--	--	--	--
	06-22-93	1,610	--	--	--	19.0	--	--	--	--
	09-22-93	1,700	--	--	--	--	--	--	--	--
1N/22W-27R5	11-01-90	59,300	6.6	6.7	--	18.5	9,400	1,100	1,600	12,000
	06-26-91	63,100	6.9	6.8	--	20.0	9,900	1,000	1,800	13,000
	03-16-92	--	--	--	22.0	18.0	--	--	--	--
	08-27-92	60,800	--	--	27.0	20.0	--	--	--	--
	03-23-93	17,600	--	--	--	17.5	--	--	--	--
	04-28-93	17,000	--	--	--	19.0	--	--	--	--
	06-22-93	16,500	--	--	--	18.5	--	--	--	--
	09-22-93	16,600	--	--	--	--	--	--	--	--
1N/22W-28B1	11-04-91	4,290	--	--	--	--	--	--	--	--
1N/22W-28G1	12-13-89	960	--	8.3	--	22.0	200	33	28	130
	03-22-90	900	8.0	8.0	--	20.5	220	36	32	110
	12-13-90	868	8.0	7.8	--	20.0	220	36	32	110
	05-15-91	893	7.9	7.9	18.0	20.0	230	37	33	110
1N/22W-28G2	12-14-89	962	--	8.3	--	21.0	220	54	21	120
	03-22-90	1,050	7.9	8.0	--	19.5	280	65	28	120
	12-13-90	1,030	7.9	7.9	--	19.5	290	69	28	110
	05-15-91	1,030	7.8	7.8	16.0	20.0	300	70	29	110
1N/22W-28G3	12-14-89	1,130	--	8.5	--	20.0	71	14	8.7	210
	04-03-90	1,160	8.3	8.2	--	19.5	73	14	9.3	200
	12-13-90	989	8.3	7.4	--	18.5	68	14	8.0	170
	05-14-91	1,020	8.1	8.1	16.0	19.5	66	14	7.5	180
1N/22W-28G4	12-14-89	13,700	--	7.5	--	18.0	4,800	1,300	370	1,400
	03-22-90	16,600	7.2	7.0	--	18.0	5,400	1,500	400	1,700
	10-18-90	17,800	7.2	7.0	--	18.5	4,000	1,000	360	2,400
	05-14-91	18,000	7.1	7.0	16.0	18.5	3,800	930	350	2,600
	02-04-92	--	--	--	21.0	18.0	--	--	--	--
	08-27-92	16,000	--	--	20.0	18.0	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-27R4	06-25-91	7.9	211	209	490	460	0.70	1.8	0.050	33
	12-05-91	--	--	--	--	310	--	--	--	--
	03-16-92	--	--	--	--	390	--	--	--	--
	08-27-92	--	--	--	--	170	--	--	--	--
	03-23-93	--	--	--	--	180	--	--	--	--
	04-28-93	--	--	--	--	160	--	--	--	--
	06-22-93	--	--	--	--	180	--	--	--	--
	09-22-93	--	--	--	--	220	--	--	--	--
1N/22-W27R5	11-01-90	170	[1]430	331	5,700	22,000	.10	75	.340	19
	06-26-91	210	428	358	7,400	23,000	1.9	75	.360	20
	03-16-92	--	--	--	--	24,000	--	--	--	--
	08-27-92	--	--	--	--	23,000	--	--	--	--
	03-23-93	--	--	--	--	5,500	--	--	--	--
	04-28-93	--	--	--	--	5,200	--	--	--	--
	06-22-93	--	--	--	--	7,100	--	--	--	--
	09-22-93	--	--	--	--	250	--	--	--	--
1N/22W-28B1	11-04-91	--	--	--	--	950	--	--	--	--
1N/22W-28G1	12-13-89	8.2	--	287	140	56	.30	--	--	40
	03-22-90	8.6	[3]280	284	130	47	.20	.16	.087	41
	12-13-90	7.0	[2]286	283	130	49	.30	.19	.085	44
	05-15-91	6.7	[2]282	292	120	53	.20	.20	.087	41
1N/22W-28G2	12-14-89	9.7	--	347	110	43	.10	.22	.059	61
	03-22-90	11	[3]240	238	260	39	.30	.20	.057	42
	12-13-90	8.0	[2]237	251	260	40	.20	.19	.053	45
	05-15-91	8.2	[2]239	241	260	38	.20	.18	.062	42
1N/22W-28G3	12-14-89	27	--	406	110	54	.20	--	--	39
	04-03-90	31	[3]390	342	130	59	.20	.18	.091	35
	12-13-90	30	[2]402	322	65	44	.20	.15	.045	38
	05-14-91	30	[2]399	394	75	41	.10	.16	.045	38
1N/22W-28G4	12-14-89	22	--	211	940	4,900	.20	17	.190	32
	03-22-90	29	[3]230	210	1000	5,300	<.10	21	.140	34
	10-18-90	28	[2]229	195	1000	6,200	.50	21	.110	31
	05-14-91	28	[2]226	220	1100	6,300	.80	22	.095	31
	02-04-92	--	--	--	--	4,800	--	--	--	--
	08-27-92	--	--	--	--	5,200	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-27R4	06-25-91	1,590	1,660	<0.010	<0.050	0.400	0.80	0.430	1.2	--
	12-05-91	--	--	--	--	--	--	--	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	04-28-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-27R5	11-01-90	47,300	43,000	<.010	<.100	8.60	7.7	.080	.15	20
	06-26-91	51,000	46,800	<.010	<.050	8.20	8.6	.070	--	--
	03-16-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	04-28-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-28B1	11-04-91	--	--	--	--	--	--	--	--	--
1N/22W-28G1	12-13-89	572	609	--	<.100	.710	.90	.030	.12	--
	03-22-90	570	577	--	<.100	.920	1.0	.040	.12	--
	12-13-90	527	582	<.010	<.100	.800	1.1	.040	.09	<10
	05-15-91	557	573	<.010	<.050	1.10	1.4	.020	.09	--
1N/22W-28G2	12-14-89	623	636	--	<.100	5.50	6.5	.480	1.2	--
	03-22-90	726	713	--	<.100	1.90	1.7	.450	1.3	--
	12-13-90	668	705	<.010	<.100	.800	2.2	.170	.49	20
	05-15-91	694	706	<.010	<.050	2.30	2.9	.270	.83	--
1N/22W-28G3	12-14-89	680	726	--	<.100	11.0	15	1.90	4.0	--
	04-03-90	699	701	--	<.100	11.0	10	3.40	2.1	--
	12-13-90	587	634	.020	<.100	12.0	12	2.40	7.4	20
	05-14-91	616	626	--	--	--	--	--	--	--
1N/22W-28G4	12-14-89	10,700	9,120	--	<.100	4.10	4.4	.030	.03	--
	03-22-90	13,500	10,100	--	<.100	4.00	3.7	.020	.06	--
	10-18-90	12,000	11,200	<.010	<.100	4.10	2.4	.030	1.5	--
	05-14-91	12,000	11,500	<.010	<.050	3.60	4.0	.030	.06	--
	02-04-92	--	--	--	--	--	--	--	--	--
	08-27-92	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-27R4	06-25-91	<100	760	630	40	360	1,500	-51.0	-7.60
	12-05-91	--	--	--	--	--	--	-50.5	-7.55
	03-16-92	--	--	--	--	--	--	-50.5	-7.60
	08-27-92	--	--	--	--	--	--	-53.5	-7.70
	03-23-93	--	--	--	--	--	--	--	--
	04-28-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-27R5	11-01-90	700	7,700	28,000	--	7,700	19,000	-35.5	-4.95
	06-26-91	<100	8,500	31,000	120	5,900	17,000	-33.0	-4.70
	03-16-92	--	--	--	--	--	--	-32.5	-4.60
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	04-28-93	--	--	--	--	--	--	-47.1	-6.95
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-28B1	11-04-91	--	--	--	--	--	--	-47.0	-6.95
1N/22W-28G1	12-13-89	65	350	27	--	19	--	--	--
	03-22-90	60	330	97	--	25	--	-49.5	-7.40
	12-13-90	61	320	110	--	22	--	-48.0	-7.30
	05-15-91	64	320	120	69	18	920	-46.0	-7.30
1N/22W-28G2	12-14-89	150	500	61	--	18	--	--	--
	03-22-90	79	380	58	--	35	--	-53.0	-7.85
	12-13-90	70	390	150	--	34	--	-52.5	-7.80
	05-15-91	77	390	160	58	39	980	-52.5	-7.85
1N/22W-28G3	12-14-89	53	740	240	--	8	--	--	--
	04-03-90	45	680	53	--	23	--	-53.5	-7.75
	12-13-90	45	660	65	--	38	--	-54.0	-7.70
	05-14-91	51	710	88	10	36	180	--	--
1N/22W-28G4	12-14-89	<100	840	90	--	2,100	--	--	--
	03-22-90	<100	990	7,400	--	2,700	--	-40.9	-6.10
	10-18-90	<100	1,300	6,000	--	1,800	--	-36.5	-5.45
	05-14-91	200	1,500	5,700	130	1,800	8,300	--	--
	02-04-92	--	--	--	--	--	--	-38.0	-5.70
	08-27-92	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-28G4	CM4 275	340827119110904	03-23-93	1415	UWCD	0.69	275	5	13,000
			06-23-93	1039	UWCD	.50			14,900
			09-30-93	1341	UWCD	1.64			13,500
1N/22W-28G5	CM4 200	340827119110905	12-14-89	2130	USGS	16.70	200	5	7,870
			03-22-90	1515	USGS	15.66			9,150
			10-18-90	1700	USGS	23.43			10,600
			05-14-91	1505	USGS	20.47			11,000
			02-04-92	1825	USGS	19.90			9,280
			08-27-92	0824	UWCD	17.31			8,060
			03-23-93	1441	UWCD	.20			7,230
			06-23-93	1053	UWCD	.10			9,560
			09-30-93	1356	UWCD	2.19			9,350
1N/22W-29D1	CM2 870	340845119125401	11-12-89	1730	USGS	27.24	870	7	1,220
			05-13-91	1420	USGS	32.34			1,180
			01-08-92	1205	USGS	32.89			1,180
			08-06-92	1545	USGS	21.97			1,180
			11-21-92	1200	USGS	20.04			1,200
			02-07-93	1200	USGS	9.32			1,210
			05-08-93	1200	USGS	5.77			1,210
			08-20-93	1023	USGS	7.56			1,130
1N/22W-29D2	CM2 760	340845119125402	11-14-89	1415	USGS	23.63	760	7	19,000
			05-04-90	1715	USGS	29.18			20,100
			05-13-91	1650	USGS	37.44			18,000
			06-26-91	1150	USGS	32.00			19,800
			01-08-92	1500	USGS	37.58			20,100
			05-13-92	1210	USGS	28.48			18,000
			08-06-92	1820	USGS	27.21			18,800
			09-28-92	1430	USGS	26.17			18,100
			11-21-92	1427	USGS	26.61			19,800
			02-07-93	1415	USGS	14.48			18,100
			05-08-93	0940	USGS	10.75			18,200
			08-20-93	1411	USGS	--			16,800
1N/22W-29D3	CM2 520	340845119125403	11-12-89	1430	USGS	21.35	520	7	1,170
			05-13-91	2015	USGS	27.00			2,700
			01-08-92	1735	USGS	27.57			4,990

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-28G4	03-23-93	15,500	--	--	--	18.0	--	--	--	--
	06-23-93	15,300	--	--	--	19.0	--	--	--	--
	09-30-93	15,200	--	--	--	19.5	--	--	--	--
1N/22W-28G5	12-14-89	7,690	--	8.0	--	17.5	1,000	230	110	1,500
	03-22-90	9,020	7.4	7.4	--	18.0	1,100	260	120	1,600
	10-18-90	10,600	7.4	7.3	--	18.0	1,300	290	140	1,800
	05-14-91	11,200	7.2	7.3	16.0	18.5	1,500	350	160	1,900
	02-04-92	--	--	--	21.0	18.0	--	--	--	--
	08-27-92	8,050	--	--	20.0	18.0	--	--	--	--
	03-23-93	8,110	--	--	--	18.0	--	--	--	--
	06-23-93	9,300	--	--	--	18.5	--	--	--	--
	09-30-93	10,000	--	--	--	19.0	--	--	--	--
1N/22W-29D1	11-12-89	1,300	8.0	8.0	--	18.0	380	88	38	120
	05-13-91	1,180	7.8	7.9	27.5	19.0	410	98	41	97
	01-08-92	--	--	--	19.5	16.5	--	--	--	--
	08-06-92	1,190	--	--	22.0	19.0	--	--	--	--
	11-21-92	1,160	--	--	21.0	19.5	--	--	--	--
	02-07-93	1,190	--	--	15.0	20.0	--	--	--	--
	05-08-93	1,190	--	--	19.0	18.5	--	--	--	--
	08-20-93	1,190	--	--	--	20.5	--	--	--	--
1N/22W-29D2	11-14-89	19,200	7.4	7.3	--	18.5	4,500	1,200	360	2,700
	05-04-90	19,800	7.3	7.2	--	18.0	4,700	1,200	410	2,700
	05-13-91	19,500	7.2	7.1	25.0	18.5	4,400	1,100	390	2,700
	06-26-91	21,000	7.3	7.2	--	18.5	4,400	1,100	410	3,100
	01-08-92	--	--	--	19.5	19.0	--	--	--	--
	05-13-92	--	--	--	--	18.5	--	--	--	--
	08-06-92	19,200	--	--	23.5	19.5	--	--	--	--
	09-28-92	19,000	7.2	--	--	19.0	--	--	--	--
	11-21-92	19,200	--	--	18.0	19.5	--	--	--	--
	02-07-93	18,600	--	--	15.5	19.5	--	--	--	--
	05-08-93	17,900	--	--	20.0	19.5	--	--	--	--
	08-20-93	17,200	--	--	--	20.0	--	--	--	--
1N/22W-29D3	11-12-89	1,210	8.1	7.9	--	18.0	390	100	33	120
	05-13-91	2,730	7.3	7.4	15.0	17.5	1,100	300	92	120
	01-08-92	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-28G4	03-23-93	--	--	--	--	3,700	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	5,600	--	--	--	--
1N/22W-28G5	12-14-89	12	--	241	840	2,200	0.70	7.9	0.056	29
	03-22-90	16	[3]230	233	810	2,600	.50	8.5	.082	31
	10-18-90	16	[2]228	232	1,000	3,100	1.6	11	.090	29
	05-14-91	18	[2]219	229	790	3,600	.70	12	.066	28
	02-04-92	--	--	--	--	2,600	--	--	--	--
	08-27-92	--	--	--	--	2,200	--	--	--	--
	03-23-93	--	--	--	--	2,000	--	--	--	--
	06-23-93	--	--	--	--	2,700	--	--	--	--
	09-30-93	--	--	--	--	2,600	--	--	--	--
1N/22W-29D1	11-12-89	10	[3]200	205	420	51	.30	.29	.055	33
	05-13-91	12	[2]199	189	370	39	.20	.23	.054	35
	01-08-92	--	--	--	--	42	--	--	--	--
	08-06-92	--	--	--	--	51	--	--	--	--
	11-21-92	--	--	--	--	39	--	--	--	--
	02-07-93	--	--	--	--	41	--	--	--	--
	05-08-93	--	--	--	--	42	--	--	--	--
	08-20-93	--	--	--	--	43	--	--	--	--
1N/22W-29D2	11-14-89	28	[3]200	193	1,200	6,700	.10	22	--	32
	05-04-90	20	[3]200	193	1,100	6,900	<.10	24	--	31
	05-13-91	28	[2]203	192	1,200	7,000	.50	24	.099	32
	06-26-91	31	197	180	1,100	7,100	1.0	24	.100	31
	01-08-92	--	--	--	--	6,300	--	--	--	--
	05-13-92	--	--	--	--	6,200	--	--	--	--
	08-06-92	--	--	--	--	6,100	--	--	--	--
	09-28-92	--	--	--	--	6,100	--	--	--	--
	11-21-92	--	--	--	--	6,100	--	--	--	--
	02-07-93	--	--	--	--	6,600	--	--	--	--
	05-08-93	--	--	--	--	5,500	--	--	--	--
	08-20-93	--	--	--	--	5,700	--	--	--	--
1N/22W-29D3	11-12-89	5.3	--	220	380	49	.70	.25	.035	34
	05-13-91	6.7	[2]183	180	360	610	.40	2.4	.043	34
	01-08-92	--	--	--	--	1,500	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-28G4	03-23-93	--	--	--	--	--	--	--	--	
	06-23-93	--	--	--	--	--	--	--	--	
	09-30-93	--	--	--	--	--	--	--	--	
1N/22W-28G5	12-14-89	5,180	5,080	--	<0.100	0.240	0.40	0.180	0.34	
	03-22-90	5,970	5,590	--	<.100	.190	.40	.190	.55	
	10-18-90	6,410	6,530	<0.010	.100	.170	.30	.160	--	
	05-14-91	7,190	7,000	<.010	<.050	.160	.20	.120	.40	
	02-04-92	--	--	--	--	--	--	--	--	
	08-27-92	--	--	--	--	--	--	--	--	
	03-23-93	--	--	--	--	--	--	--	--	
	06-23-93	--	--	--	--	--	--	--	--	
	09-30-93	--	--	--	--	--	--	--	--	
1N/22W-29D1	11-12-89	880	888	--	<.100	2.50	2.4	.130	.34	
	05-13-91	818	817	<.010	<.050	2.80	2.7	.040	.12	
	01-08-92	--	--	--	--	--	--	--	--	
	08-06-92	--	--	--	--	--	--	--	--	
	11-21-92	--	--	--	--	--	--	--	--	
	02-07-93	--	--	--	--	--	--	--	--	
	05-08-93	--	--	--	--	--	--	--	--	
	08-20-93	--	--	--	--	--	--	--	--	
1N/22W-29D2	11-14-89	12,700	12,400	--	<.100	2.60	2.4	.310	.12	
	05-04-90	15,100	12,500	--	<.100	2.30	2.4	<.010	.06	
	05-13-91	13,800	12,600	<.010	<.050	2.30	2.7	.060	.18	
	06-26-91	14,400	13,000	<.010	<.050	2.20	2.7	.040	.06	
	01-08-92	--	--	--	--	--	--	--	--	
	05-13-92	--	--	--	--	--	--	--	--	
	08-06-92	--	--	--	--	--	--	--	--	
	09-28-92	--	--	--	--	--	--	--	--	
	11-21-92	--	--	--	--	--	--	--	--	
	02-07-93	--	--	--	--	--	--	--	--	
	05-08-93	--	--	--	--	--	--	--	--	
	08-20-93	--	--	--	--	--	--	--	--	
1N/22W-29D3	11-12-89	843	856	--	<.100	.170	.50	.950	1.3	
	05-13-91	1,810	1,640	<.010	<.050	.210	.40	.040	.09	
	01-08-92	--	--	--	--	--	--	--	--	

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-28G4	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-28G5	12-14-89	<100	1,400	30	--	610	--	--	--
	03-22-90	<100	1,400	60	--	780	--	-44.5	-6.45
	10-18-90	<100	1,400	30	--	940	--	-41.0	-6.20
	05-14-91	<100	1,500	60	110	960	3,900	--	--
	02-04-92	--	--	--	--	--	--	-42.5	-6.40
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-30-93	--	--	--	--	--	--	--	--
1N/22W-29D1	11-12-89	32	410	68	--	69	--	-50.5	-7.40
	05-13-91	37	390	190	57	78	1,000	-48.0	-7.50
	01-08-92	--	--	--	--	--	--	-50.5	-7.45
	08-06-92	--	--	--	--	--	--	-50.5	-7.40
	11-21-92	--	--	--	--	--	--	--	--
	02-07-93	--	--	--	--	--	--	--	--
	05-08-93	--	--	--	--	--	--	--	--
	08-20-93	--	--	--	--	--	--	--	--
1N/22W-29D2	11-14-89	500	980	4,200	--	2,500	--	-34.4	-5.15
	05-04-90	100	1,000	4,400	--	2,500	--	-33.0	-5.10
	05-13-91	300	1,000	4,300	110	2,200	11,000	-34.5	-5.15
	06-26-91	400	1,100	4,300	120	2,400	11,000	-34.0	-5.00
	01-08-92	--	--	--	--	--	--	-34.0	-5.10
	05-13-92	--	--	--	--	--	--	-35.5	-5.25
	08-06-92	--	--	--	--	--	--	-37.0	-5.20
	09-28-92	--	--	--	--	--	--	-35.0	-5.15
	11-21-92	--	--	--	--	--	--	--	--
	02-07-93	--	--	--	--	--	--	--	--
	05-08-93	--	--	--	--	--	--	--	--
	08-20-93	--	--	--	--	--	--	--	--
1N/22W-29D3	11-12-89	28	640	6	--	47	--	-52.5	-7.60
	05-13-91	200	680	1,700	50	300	2,500	-49.5	-7.60
	01-08-92	--	--	--	--	--	--	-49.5	-7.35

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-29D3	CM2 520	340845119125403	02-19-92	1130	USGS	23.86	520	7	5,800
			05-12-92	1605	USGS	20.73			6,640
			08-06-92	1800	USGS	19.18			7,710
			09-28-92	1900	USGS	17.80			7,530
			11-21-92	1511	USGS	16.11			8,240
			02-12-93	1735	USGS	8.70			8,360
			05-08-93	1035	USGS	4.02			8,320
			08-20-93	1220	USGS	5.59			7,660
1N/22W-29D4	CM2 280	340845119125404	11-14-89	1130	USGS	6.62	280	7	1,360
			05-13-91	2105	USGS	20.19			1,700
			01-08-92	1315	USGS	17.49			1,780
			08-06-92	1325	USGS	14.00			1,730
			09-28-92	1800	USGS	12.20			1,750
			11-21-92	1600	USGS	12.76			1,260
			02-12-93	1815	USGS	4.31			1,730
			05-08-93	1115	USGS	.97			1,800
			08-20-93	1059	USGS	2.74			1,720
1N/22W-35E1	CM5 1200	340732119093801	03-20-90	1330	USGS	46.44	1200	6	1,060
			12-11-90	1430	USGS	65.20			1,040
			04-29-92	1300	USGS	43.03			990
1N/22W-35E2	CM5 940	340732119093802	03-20-90	1700	USGS	50.06	940	6	1,100
			12-11-90	1800	USGS	72.91			1,010
			04-29-92	1600	USGS	44.54			975
1N/22W-35E3	CM5 470	340732119093803	03-21-90	1100	USGS	53.69	470	6	710
			12-11-90	1300	USGS	81.44			635
			04-29-92	1410	USGS	45.15			636
1N/22W-35E4	CM5 320	340732119093804	03-21-90	1400	USGS	36.89	320	6	970
			12-11-90	1515	USGS	54.64			850
			03-16-92	1255	UWCD	33.20			--
			04-29-92	1500	USGS	29.13			907
			08-27-92	1247	UWCD	43.01			930
			03-23-93	0944	UWCD	11.87			933
			06-23-93	0740	UWCD	--			943
			09-22-93	1057	UWCD	32.20			--
1N/22W-35E5	CM5 220	340732119093805	03-21-90	1545	USGS	17.31	220	6	1,130

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-29D3	02-19-92	--	--	--	17.0	18.0	--	--	--	--
	05-12-92	--	--	--	--	18.5	--	--	--	--
	08-06-92	8,180	--	--	23.5	18.5	--	--	--	--
	09-28-92	7,990	7.2	--	17.0	19.0	--	--	--	--
	11-21-92	8,300	--	--	18.0	19.5	--	--	--	--
	02-12-93	8,750	--	--	13.0	18.0	--	--	--	--
	05-08-93	8,230	--	--	20.0	18.5	--	--	--	--
	08-20-93	8,330	--	--	--	19.5	--	--	--	--
1N/22W-29D4	11-14-89	1,400	8.0	7.9	--	17.5	470	130	36	120
	05-13-91	1,720	7.6	7.7	15.0	17.5	650	180	49	110
	01-08-92	--	--	--	19.5	17.0	--	--	--	--
	08-06-92	1,800	--	--	22.0	17.5	--	--	--	--
	09-28-92	1,830	7.7	--	18.5	17.5	--	--	--	--
	11-21-92	--	--	--	20.0	18.5	--	--	--	--
	02-12-93	1,750	--	--	13.0	17.0	--	--	--	--
	05-08-93	1,790	--	--	19.0	17.0	--	--	--	--
	08-20-93	1,870	--	--	--	18.0	--	--	--	--
1N/22W-35E1	03-20-90	1,030	8.1	8.1	--	20.5	160	31	21	150
	12-11-90	999	8.1	7.3	--	20.5	170	32	22	130
	04-29-92	999	8.1	7.9	21.5	23.0	180	35	23	130
1N/22W-35E2	03-20-90	1,080	8.4	8.1	--	20.0	220	42	28	150
	12-11-90	999	8.1	7.8	--	20.0	260	50	33	110
	04-29-92	979	8.2	8.0	21.0	20.0	280	54	34	100
1N/22W-35E3	03-21-90	697	8.6	8.4	--	19.5	130	31	12	110
	12-11-90	631	8.2	7.7	--	19.5	150	38	13	81
	04-29-92	641	8.1	7.8	21.0	20.5	160	42	14	79
1N/22W-35E4	03-21-90	973	9.1	8.4	--	18.5	210	58	16	140
	12-11-90	859	8.1	7.5	--	19.5	280	78	21	83
	03-16-92	--	--	--	22.0	20.0	--	--	--	--
	04-29-92	895	8.1	8.4	21.0	20.5	320	90	24	75
	08-27-92	952	--	--	25.0	20.0	--	--	--	--
	03-23-93	934	--	--	--	19.0	--	--	--	--
	06-23-93	965	--	--	--	20.0	--	--	--	--
	09-22-93	994	--	--	--	--	--	--	--	--
1N/22W-35E5	03-21-90	1,110	9.1	8.8	--	18.5	280	78	21	140

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-29D3	02-19-92	--	--	--	--	1,700	--	--	--	--
	05-12-92	--	--	--	--	2,000	--	--	--	--
	08-06-92	--	--	--	--	2,500	--	--	--	--
	09-28-92	--	--	--	--	2,500	--	--	--	--
	11-21-92	--	--	--	--	2,500	--	--	--	--
	02-12-93	--	--	--	--	2,800	--	--	--	--
	05-08-93	--	--	--	--	2,400	--	--	--	--
	08-20-93	--	--	--	--	2,500	--	--	--	--
1N/22W-29D4	11-14-89	5.8	[3]230	213	380	120	0.50	0.48	0.034	35
	05-13-91	6.2	[2]213	209	370	240	.40	.95	.034	35
	01-08-92	--	--	--	--	260	--	--	--	--
	08-06-92	--	--	--	--	260	--	--	--	--
	09-28-92	--	--	--	--	250	--	--	--	--
	11-21-92	--	--	--	--	250	--	--	--	--
	02-12-93	--	--	--	--	260	--	--	--	--
	05-08-93	--	--	--	--	250	--	--	--	--
	08-20-93	--	--	--	--	250	--	--	--	--
1N/22W-35E1	03-20-90	15	[3]220	202	170	90	.20	.44	.100	41
	12-11-90	13	[2]217	195	170	93	.20	.41	.110	44
	04-29-92	14	208	197	160	93	.20	.40	.110	39
1N/22W-35E2	03-20-90	7.7	[3]230	231	250	48	.30	.22	.077	37
	12-11-90	7.0	[2]243	244	230	42	.20	.20	.067	41
	04-29-92	7.1	232	235	220	45	.30	.21	.071	36
1N/22W-35E3	03-21-90	5.7	[3]280	269	34	48	.40	.22	.052	40
	12-11-90	4.8	[2]282	286	4.1	43	.20	.21	.051	44
	04-29-92	5.0	[3]280	289	32	25	.20	.22	.057	37
1N/22W-35E4	03-21-90	7.0	[3]300	253	200	44	.40	.18	.027	50
	12-11-90	4.7	[2]353	299	130	38	.80	.16	.030	43
	03-16-92	--	--	--	--	36	--	--	--	--
	04-29-92	5.0	316	279	170	39	.50	.17	.034	37
	08-27-92	--	--	--	--	40	--	--	--	--
	03-23-93	--	--	--	--	38	--	--	--	--
	06-23-93	--	--	--	--	34	--	--	--	--
	09-22-93	--	--	--	--	32	--	--	--	--
1N/22W-35E5	03-21-90	6.2	[3]230	218	280	66	.40	.27	.051	50

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-29D3	02-19-92	--	--	--	--	--	--	--	--	--
	05-12-92	--	--	--	--	--	--	--	--	--
	08-06-92	--	--	--	--	--	--	--	--	--
	09-28-92	--	--	--	--	--	--	--	--	--
	11-21-92	--	--	--	--	--	--	--	--	--
	02-12-93	--	--	--	--	--	--	--	--	--
	05-08-93	--	--	--	--	--	--	--	--	--
	08-20-93	--	--	--	--	--	--	--	--	--
1N/22W-29D4	11-14-89	971	958	--	<0.100	0.690	0.80	0.070	0.25	--
	05-13-91	1,150	1,120	<0.010	<.050	.760	1.0	.110	.28	--
	01-08-92	--	--	--	--	--	--	--	--	--
	08-06-92	--	--	--	--	--	--	--	--	--
	09-28-92	--	--	--	--	--	--	--	--	--
	11-21-92	--	--	--	--	--	--	--	--	--
	02-12-93	--	--	--	--	--	--	--	--	--
	05-08-93	--	--	--	--	--	--	--	--	--
	08-20-93	--	--	--	--	--	--	--	--	--
1N/22W-35E1	03-20-90	641	644	--	<.100	2.40	2.6	.050	.18	--
	12-11-90	593	639	<.010	<.100	2.60	3.0	.070	.21	<10
	04-29-92	600	618	<.010	<.050	2.90	3.0	.070	.18	--
1N/22W-35E2	03-20-90	733	704	--	<.100	.660	.80	.660	1.3	--
	12-11-90	642	662	<.010	<.100	.630	.60	.640	2.0	20
	04-29-92	626	641	<.010	<.050	1.00	1.1	.240	.71	--
1N/22W-35E3	03-21-90	442	445	--	<.100	.140	.20	.720	1.3	--
	12-11-90	363	399	<.010	<.100	.110	.30	.200	.61	<10
	04-29-92	370	410	<.010	<.050	.570	.60	.090	.28	--
1N/22W-35E4	03-21-90	668	670	--	<.100	.620	.90	.640	1.0	--
	12-11-90	542	613	<.010	<.100	.560	.50	.470	1.3	<10
	03-16-92	--	--	--	--	--	--	--	--	--
	04-29-92	590	611	<.010	<.050	.530	.60	.130	.40	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-35E5	03-21-90	802	774	--	<.100	.370	.60	.410	.61	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-29D3	02-19-92	--	--	--	--	--	--	-50.0	-7.35
	05-12-92	--	--	--	--	--	--	-48.5	-7.25
	08-06-92	--	--	--	--	--	--	-48.0	-7.05
	09-28-92	--	--	--	--	--	--	-47.5	-7.05
	11-21-92	--	--	--	--	--	--	--	--
	02-12-93	--	--	--	--	--	--	--	--
	05-08-93	--	--	--	--	--	--	--	--
	08-20-93	--	--	--	--	--	--	--	--
1N/22W-29D4	11-14-89	38	640	280	--	180	--	-52.0	-7.55
	05-13-91	49	660	810	43	250	1,400	-51.0	-7.65
	01-08-92	--	--	--	--	--	--	-51.5	-7.55
	08-06-92	--	--	--	--	--	--	-51.5	-7.55
	09-28-92	--	--	--	--	--	--	-51.0	-7.65
	11-21-92	--	--	--	--	--	--	--	--
	02-12-93	--	--	--	--	--	--	--	--
	05-08-93	--	--	--	--	--	--	--	--
	08-20-93	--	--	--	--	--	--	--	--
1N/22W-35E1	03-20-90	86	410	10	--	37	--	-46.0	-6.95
	12-11-90	92	410	18	--	62	--	-44.0	-6.95
	04-29-92	93	390	34	--	63	550	-47.0	-6.95
1N/22W-35E2	03-20-90	61	350	8	--	14	--	-50.5	-7.45
	12-11-90	57	330	37	--	49	--	-49.0	-7.35
	04-29-92	58	330	45	--	59	860	-51.5	-7.35
1N/22W-35E3	03-21-90	23	460	22	--	20	--	-51.0	-7.55
	12-11-90	37	470	58	--	65	--	-49.0	-7.65
	04-29-92	39	440	130	--	93	430	-50.0	-7.45
1N/22W-35E4	03-21-90	99	600	12	--	28	--	-51.5	-7.60
	12-11-90	130	670	26	--	76	--	-51.5	-7.70
	03-16-92	--	--	--	--	--	--	-51.5	-7.60
	04-29-92	170	660	15	--	90	920	-51.0	-7.65
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-35E5	03-21-90	49	580	6	--	32	--	-53.0	-7.75

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-35E5	CM5 220	340732119093805	12-11-90	1645	USGS	26.20	220	6	1,140
			03-16-92	1305	UWCD	16.50			--
			04-29-92	1610	USGS	12.07			1,110
			08-27-92	1210	UWCD	20.91			1,110
			03-23-93	1025	UWCD	-.6			1,110
			06-23-93	0815	UWCD	2.44			1,070
			09-22-93	1128	UWCD	8.11			--
1N/22W-36J3		340730119074701	01-11-90	1545	USGS	--	541	7	1,470
1N/22W-36K4		340729119075401	01-11-90	1500	USGS	--	715	7	2,020
			12-12-90	1630	USGS	--			2,930
			08-08-91	1330	USGS	--			--
1N/22W-36K5	DP 720	340727119075601	09-25-90	1100	USGS	127.58	720	7	5,760
			12-12-90	1400	USGS	124.98			7,980
			05-13-91	1425	USGS	81.02			4,090
			05-22-91	1630	USGS	81.02			4,090
			08-08-91	1500	USGS	--			--
1N/22W-36K6	DP 580	340727119075602	09-25-90	1130	USGS	126.19	580	7	2,150
			12-12-90	1730	USGS	124.05			2,070
			05-23-91	1400	USGS	79.96			2,370
			08-08-91	1530	USGS	--			--
1N/22W-36K7	DP 450	340727119075603	09-25-90	1300	USGS	124.41	450	7	4,440
			12-12-90	1900	USGS	121.15			4,920
			05-22-91	2040	USGS	79.31			4,260
1N/22W-36K8	DP 330	340727119075604	09-25-90	1400	USGS	62.49	330	7	1,420
			12-12-90	1500	USGS	59.25			1,140
			05-23-91	1200	USGS	45.90			1,120
			03-16-92	1140	UWCD	35.50			--
			08-26-92	1202	UWCD	45.03			1,110
			03-23-93	0715	UWCD	15.65			1,100
			06-22-93	1050	UWCD	--			977
			09-22-93	0754	UWCD	36.67			1,080
1N/22W-36K9	DP 195	340727119075605	09-25-90	1415	USGS	34.81	195	7	3,620
			12-12-90	1700	USGS	32.32			3,490
			05-23-91	1530	USGS	25.69			3,390
			08-08-91	1700	USGS	--			--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-35E5	12-11-90	1,110	8.8	8.4	--	19.0	280	82	19	130
	03-16-92	--	--	--	22.0	19.0	--	--	--	--
	04-29-92	1,120	8.1	7.9	21.5	20.0	400	110	30	92
	08-27-92	1,120	--	--	26.0	20.0	--	--	--	--
	03-23-93	1,100	--	--	--	18.5	--	--	--	--
	06-23-93	1,110	--	--	--	20.0	--	--	--	--
	09-22-93	1,130	--	--	--	--	--	--	--	--
1N/22W-36J3	01-11-90	1,540	7.8	7.8	--	21.5	440	110	39	130
1N/22W-36K4	01-11-90	2,250	7.8	7.8	--	21.0	710	180	64	170
	12-12-90	3,000	7.7	--	--	21.5	--	--	--	--
	08-08-91	2,560	--	--	--	--	--	--	--	--
1N/22W-36K5	09-25-90	5,800	7.2	7.2	--	22.0	2,100	520	190	300
	12-12-90	7,940	7.3	7.2	--	20.5	3,100	760	300	300
	05-13-91	--	7.5	--	20.0	21.0	--	--	--	--
	05-22-91	4,140	7.5	7.4	20.0	--	1,600	390	140	190
	08-08-91	4,900	--	--	--	--	--	--	--	--
1N/22W-36K6	09-25-90	2,160	8.0	7.6	--	21.5	680	170	61	170
	12-12-90	2,100	7.7	7.5	--	20.0	670	170	60	150
	05-23-91	2,350	7.5	7.6	16.0	20.0	750	190	66	190
	08-08-91	2,700	--	--	--	--	--	--	--	--
1N/22W-36K7	09-25-90	4,490	7.4	7.4	--	21.5	970	250	82	450
	12-12-90	4,800	7.5	7.3	--	19.5	1,000	270	81	540
	05-22-91	4,470	7.3	7.5	15.0	20.0	1,000	260	94	500
1N/22W-36K8	09-25-90	1,260	7.5	7.6	--	21.0	380	100	32	130
	12-12-90	1,120	7.6	7.7	--	19.5	390	100	33	90
	05-23-91	1,110	7.5	7.7	19.0	20.5	410	110	33	84
	03-16-92	--	--	--	22.0	20.0	--	--	--	--
	08-26-92	1,100	--	--	24.0	21.0	--	--	--	--
	03-23-93	1,100	--	--	--	19.0	--	--	--	--
	06-22-93	1,090	--	--	--	20.5	--	--	--	--
	09-22-93	1,110	--	--	--	19.5	--	--	--	--
1N/22W-36K9	09-25-90	3,700	7.3	7.3	--	20.0	1,000	280	80	350
	12-12-90	3,500	7.3	7.4	--	18.5	960	260	76	330
	05-23-91	3,390	7.3	7.4	19.0	19.5	930	250	73	340
	08-08-91	3,200	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-35E5	12-11-90	6.3	[2]221	215	280	64	0.40	0.25	0.049	48
	03-16-92	--	--	--	--	68	--	--	--	--
	04-29-92	8.5	230	243	260	67	.50	.28	.053	35
	08-27-92	--	--	--	--	68	--	--	--	--
	03-23-93	--	--	--	--	63	--	--	--	--
	06-23-93	--	--	--	--	62	--	--	--	--
	09-22-93	--	--	--	--	64	--	--	--	--
1N/22W-36J3	01-11-90	6.0	[3]280	273	120	260	.30	1.9	.610	41
1N/22W-36K4	01-11-90	11	[3]240	222	180	490	.30	2.5	1.1	43
	12-12-90	--	--	--	130	780	.40	4.4	1.7	--
	08-08-91	--	--	--	--	620	--	--	--	--
1N/22W-36K5	09-25-90	20	216	223	47	1,900	<.10	12	4.1	40
	12-12-90	22	[1]198	199	6.1	2,500	.20	16	5.6	38
	05-13-91	--	235	--	--	--	--	--	--	--
	05-22-91	16	235	235	39	1,200	.20	7.3	2.5	40
	08-08-91	--	--	--	--	1,400	--	--	--	--
1N/22W-36K6	09-25-90	10	251	234	170	460	<.10	2.7	.940	42
	12-12-90	9.0	[2]215	228	140	470	.30	2.6	.980	44
	05-23-91	9.4	[3]240	244	180	570	.30	3.1	1.1	40
	08-08-91	--	--	--	--	680	--	--	--	--
1N/22W-36K7	09-25-90	15	277	286	25	1,200	<.10	8.0	2.9	44
	12-12-90	15	[2]290	294	1.9	1,500	.50	8.6	3.1	45
	05-22-91	15	288	292	1.4	1,400	.20	7.8	2.6	42
1N/22W-36K8	09-25-90	7.0	225	229	360	68	<.10	.33	.076	39
	12-12-90	6.0	--	223	340	41	.40	.19	.040	39
	05-23-91	6.4	--	226	350	40	.40	.18	.039	37
	03-16-92	--	--	--	--	38	--	--	--	--
	08-26-92	--	--	--	--	38	--	--	--	--
	03-23-93	--	--	--	--	36	--	--	--	--
	06-22-93	--	--	--	--	35	--	--	--	--
	09-22-93	--	--	--	--	37	--	--	--	--
1N/22W-36K9	09-25-90	11	268	272	230	900	<.10	3.1	.110	35
	12-12-90	9.1	[2]281	275	220	830	.30	3.2	.086	38
	05-23-91	1.8	278	280	210	880	.40	3.0	.073	36
	08-08-91	--	--	--	--	780	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-35E5	12-11-90	744	766	<0.010	<0.100	0.180	0.50	0.890	2.6	30
	03-16-92	--	--	--	--	--	--	--	--	--
	04-29-92	760	753	<.010	<.050	.710	.80	.360	1.1	--
	08-27-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-36J3	01-11-90	939	875	--	<.100	1.30	1.4	.020	.09	--
1N/22W-36K4	01-11-90	1,380	1,280	--	<.100	1.60	1.7	.020	.09	--
	12-12-90	--	--	--	--	--	--	--	--	--
	08-08-91	--	--	--	--	--	--	--	--	--
1N/22W-36K5	09-25-90	4,330	3,170	<.010	<.100	2.90	3.7	<.030	.03	30
	12-12-90	4,860	4,080	.010	<.100	4.10	3.9	<.010	.12	20
	05-13-91	--	--	--	--	--	--	--	--	--
	05-22-91	2,510	2,180	.010	<.050	2.70	2.5	.020	.03	10
	08-08-91	--	--	--	--	--	--	--	--	--
1N/22W-36K6	09-25-90	1,380	1,240	<.010	<.100	1.20	1.2	.410	1.3	20
	12-12-90	1,220	1,180	<.010	<.100	1.40	1.3	.160	.43	<10
	05-23-91	1,440	1,400	<.010	<.050	1.40	1.6	.190	.58	20
	08-08-91	--	--	--	--	--	--	--	--	--
1N/22W-36K7	09-25-90	2,540	2,250	<.010	<.100	2.10	2.5	.230	.58	20
	12-12-90	2,730	2,640	<.010	<.100	2.50	2.5	.020	.06	20
	05-22-91	2,880	2,510	<.010	.055	2.30	2.0	.030	.06	10
1N/22W-36K8	09-25-90	862	881	<.010	<.100	.530	.70	1.90	4.6	<10
	12-12-90	770	787	<.010	<.100	.690	.70	.900	2.7	20
	05-23-91	778	801	<.010	<.050	.650	.80	.620	1.9	<10
	03-16-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-36K9	09-25-90	2,650	2,060	<.010	<.100	1.40	1.9	.820	1.7	<10
	12-12-90	2,140	1,940	<.010	<.100	1.50	1.5	.590	1.6	20
	05-23-91	2,140	1,970	<.010	<.050	1.50	1.7	.270	.83	10
	08-08-91	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-35E5	12-11-90	39	580	8	--	27	--	-53.0	-7.70
	03-16-92	--	--	--	--	--	--	-50.5	-7.65
	04-29-92	54	620	210	--	270	970	-52.5	-7.70
	08-27-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-23-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-36J3	01-11-90	90	620	17	--	150	--	-48.5	-7.30
1N/22W-36K4	01-11-90	100	640	230	--	250	--	-48.5	-7.35
	12-12-90	--	660	--	--	--	--	--	--
	08-08-91	--	--	--	--	--	--	--	--
1N/22W-36K5	09-25-90	400	660	520	--	720	5,000	-44.5	-6.95
	12-12-90	1100	660	1,600	--	1,200	--	-43.5	-6.75
	05-13-91	--	--	--	--	--	--	--	--
	05-22-91	300	640	850	110	540	4,600	-45.5	-7.00
	08-08-91	--	--	--	--	--	--	--	--
1N/22W-36K6	09-25-90	<100	620	130	--	280	1,700	-50.5	-7.45
	12-12-90	100	610	170	--	270	--	-50.0	-7.45
	05-23-91	<100	660	440	80	310	1,900	-49.5	-7.30
	08-08-91	--	--	--	--	--	--	--	--
1N/22W-36K7	09-25-90	200	1,000	690	--	20	2,700	-44.5	-7.00
	12-12-90	400	1,100	780	--	300	--	-45.5	-6.95
	05-22-91	200	980	780	100	260	3,100	-45.0	-6.95
1N/22W-36K8	09-25-90	42	640	200	--	300	990	-52.0	-7.70
	12-12-90	44	630	170	--	290	--	-51.5	-7.70
	05-23-91	46	640	200	31	310	940	-51.0	-7.65
	03-16-92	--	--	--	--	--	--	-50.5	-7.60
	08-26-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-36K9	09-25-90	<100	650	120	--	990	2,400	-50.0	-7.60
	12-12-90	<100	700	120	--	930	--	-52.0	-7.55
	05-23-91	<100	710	120	50	830	2,300	--	--
	08-08-91	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1N/22W-36K9	DP 195	340727119075605	03-16-92	1145	UWCD	19.70	195	7	--
			08-26-92	1241	UWCD	33.46			3,410
			03-23-93	0740	UWCD	5.36			3,860
			06-22-93	1131	UWCD	9.65			3,900
			09-22-93	0837	UWCD	23.35			3,630
1N/22W-36L1		340730119080901	08-21-90	1700	USGS	--	284	6.9	2,580
1N/23W-1C2	CM3 1490	341215119145501	12-12-89	1900	USGS	43.57	1490	10	840
			12-04-90	1315	USGS	58.43			830
			01-09-92	1215	USGS	55.20			814
1N23W-1C3	CM3 1065	341215119145502	12-15-89	1900	USGS	36.32	1065	10	1,230
			03-23-90	1230	USGS	36.85			1,290
			12-04-90	1830	USGS	48.00			1,280
			01-07-92	1820	USGS	41.63			1,260
1N23W-1C4	CM3 695	341215119145503	12-15-89	1700	USGS	44.00	695	10	1,270
			03-23-90	1600	USGS	34.07			1,240
			12-04-90	1515	USGS	43.61			1,210
			01-07-92	1535	USGS	35.31			1,140
1N/23W-1C5	CM3 145	341215119145504	12-15-89	1830	USGS	120.52	145	10	1,250
			03-23-90	1730	USGS	13.38			1,200
			12-04-90	1000	USGS	14.38			1,200
			01-07-92	1330	USGS	21.69			1,150
1S/21W-8L3	CM1 565	340544119062901	10-19-89	1845	USGS	100.00	565	10	2,390
			06-05-90	1330	USGS	101.85			2,320
			07-18-91	1630	USGS	81.23			2,920
			08-06-91	1530	USGS	84.99			--
			02-06-92	1035	USGS	85.07			3,200
			08-25-92	1052	UWCD	78.70			3,350
			03-22-93	1100	UWCD	45.15			3,430
			06-21-93	0924	UWCD	54.50			3,810
			09-21-93	0812	UWCD	70.78			3,810
1S/21W-8L4	CM1 220	340544119062902	10-19-89	1930	USGS	25.00	220	10	35,500
			06-05-90	1515	USGS	22.88			42,400
			07-18-91	1300	USGS	18.05			39,600
			08-06-91	1100	USGS	--			--
			02-06-92	0945	USGS	21.71			41,000

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1N/22W-36K9	03-16-92	--	--	--	22.0	19.0	--	--	--	--
	08-26-92	3,490	--	--	24.0	20.0	--	--	--	--
	03-23-93	4,270	--	--	--	18.0	--	--	--	--
	06-22-93	4,700	--	--	--	19.5	--	--	--	--
	09-22-93	3,900	--	--	--	19.0	--	--	--	--
1N/22W-36L1	08-21-90	2,580	7.7	7.4	--	19.0	670	170	59	260
1N/23W-1C2	12-12-89	845	8.1	8.1	--	19.0	150	45	9.8	120
	12-04-90	827	8.1	8.0	--	19.0	160	48	9.9	120
	01-09-92	830	7.9	8.0	18.5	20.0	160	50	9.7	120
1N/23W-1C3	12-15-89	1,290	8.2	8.1	--	20.0	460	130	32	110
	03-23-90	1,250	7.8	7.9	--	18.5	470	130	36	100
	12-04-90	1,260	7.7	7.9	--	18.5	470	130	36	97
	01-07-92	1,250	7.7	7.8	19.0	--	490	140	35	91
1N/23W-1C4	12-15-89	--	--	--	--	17.5	--	--	--	--
	03-23-90	1,190	8.0	8.1	--	18.5	350	93	28	130
	12-04-90	1,160	7.9	7.9	--	18.5	350	93	29	120
	01-07-92	1,140	7.6	7.8	11.5	19.5	400	110	31	97
1N/23W-1C5	12-15-89	1,260	--	8.1	--	18.0	460	130	32	100
	03-23-90	1,180	8.6	8.4	--	18.0	300	82	23	150
	12-04-90	1,160	8.4	8.1	--	18.0	330	92	24	130
	01-07-92	1,150	7.8	7.9	14.5	18.0	390	110	29	99
1S/21W-8L3	10-19-89	2,400	7.7	8.5	--	20.0	380	72	48	340
	06-05-90	2,390	7.8	7.6	--	21.0	410	77	53	320
	07-18-91	2,830	7.6	7.9	20.5	22.0	540	100	70	360
	08-06-91	2,850	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	14.0	23.0	--	--	--	--
	08-25-92	3,510	--	--	24.0	21.0	--	--	--	--
	03-22-93	3,680	--	--	--	21.0	--	--	--	--
	06-21-93	3,940	--	--	--	23.0	--	--	--	--
	09-21-93	4,130	--	--	--	23.5	--	--	--	--
1S/21W-8L4	10-19-89	39,800	7.4	7.1	--	18.5	5,400	510	1,000	8,200
	06-05-90	39,600	7.3	6.9	--	19.5	5,600	580	1,000	7,500
	07-18-91	40,000	7.3	7.6	20.5	19.0	5,500	560	1,000	8,200
	08-06-91	--	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	17.0	17.5	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1N/22W-36K9	03-16-92	--	--	--	--	1,100	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	1,000	--	--	--	--
	06-22-93	--	--	--	--	1,400	--	--	--	--
	09-22-93	--	--	--	--	1,000	--	--	--	--
1N/22W-36L1	08-21-90	5.1	[2]339	328	84	550	0.70	2.3	0.083	33
1N/23W-1C2	12-12-89	4.0	[3]240	219	160	42	.30	.30	.063	25
	12-04-90	3.6	[2]217	217	110	38	.30	.26	.063	25
	01-09-92	4.0	220	225	160	40	.40	.26	.079	27
1N/23W-1C3	12-15-89	5.0	[3]230	224	420	49	.40	.31	.058	36
	03-23-90	6.1	[3]220	227	400	44	.30	.29	.061	36
	12-04-90	5.4	[2]228	233	420	39	.20	.29	.059	35
	01-07-92	5.6	220	231	440	43	.40	.29	.061	39
1N/23W-1C4	12-15-89	--	--	252	400	50	.60	--	--	29
	03-23-90	5.5	[3]230	212	360	43	.60	.22	.035	30
	12-04-90	4.9	[2]208	213	340	37	.50	.21	.033	30
	01-07-92	5.2	200	212	280	30	.60	.22	.035	33
1N/23W-1C5	12-15-89	4.9	--	224	420	46	.40	.29	.052	36
	03-23-90	6.8	[3]260	250	310	45	.60	.20	.045	35
	12-04-90	5.8	[2]232	273	310	45	.80	.20	.047	37
	01-07-92	5.8	208	239	310	41	.60	.20	.054	38
1S/21W-8L3	10-19-89	4.0	--	246	45	520	.30	2.0	.490	44
	06-05-90	11	[3]330	268	110	570	.20	2.3	.710	45
	07-18-91	13	325	223	110	760	.40	2.2	.580	44
	08-06-91	--	--	--	--	680	--	--	--	--
	02-06-92	--	--	--	--	880	--	--	--	--
	08-25-92	--	--	--	--	1,000	--	--	--	--
	03-22-93	--	--	--	--	990	--	--	--	--
	06-21-93	--	--	--	--	1,200	--	--	--	--
	09-21-93	--	--	--	--	1,200	--	--	--	--
1S/21W-8L4	10-19-89	200	--	157	2,100	15,000	.10	53	.120	28
	06-05-90	200	[3]170	153	2,300	16,000	<.10	52	.280	30
	07-18-91	230	165	154	2,100	16,000	2.2	51	.190	29
	08-06-91	--	--	--	--	12,000	--	--	--	--
	02-06-92	--	--	--	--	13,000	--	--	--	--

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1N/22W-36K9	03-16-92	--	--	--	--	--	--	--	--	--
	08-26-92	--	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--	--
1N/22W-36L1	08-21-90	1,570	1,370	--	<0.100	1.30	1.2	0.030	0.09	--
1N/23W-1C2	12-12-89	536	539	--	<.100	.420	1.1	.060	.15	--
	12-04-90	519	487	<0.010	<.100	.580	.60	.040	.06	20
	01-09-92	446	548	<.010	<.050	.540	.60	.030	.09	--
1N/23W-1C3	12-15-89	925	919	--	<.100	.220	.50	.170	.46	--
	03-23-90	972	891	--	<.100	.330	.50	.250	.83	--
	12-04-90	954	903	<.010	<.100	.270	.20	.210	.71	10
	01-07-92	809	934	.010	<.050	.300	.40	.050	.15	--
1N/23W-1C4	12-15-89	--	--	--	--	--	--	--	--	--
	03-23-90	735	821	--	<.100	.120	.30	1.30	3.1	--
	12-04-90	818	784	.010	<.100	.140	.20	.930	2.8	10
	01-07-92	746	717	<.010	<.050	.110	<.20	.630	1.9	--
1N/23W-1C5	12-15-89	932	906	--	<.100	.400	.50	.120	.37	--
	03-23-90	836	804	--	<.100	.050	.50	.240	.74	--
	12-04-90	806	786	<.010	<.100	.150	.30	.180	.52	10
	01-07-92	733	779	<.010	.050	.650	.70	.110	.40	--
1S/21W-8L3	10-19-89	1,290	1,230	--	<.100	1.80	1.7	.050	.15	--
	06-05-90	1,370	1,350	--	<.100	2.00	1.9	.040	.18	--
	07-18-91	1,640	1,600	<.010	.087	1.80	2.2	.060	.12	--
	08-06-91	--	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--	--
	08-25-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1S/21W-8L4	10-19-89	26,900	27,200	--	<.100	4.00	3.3	.060	.03	--
	06-05-90	28,300	27,800	--	<.100	2.90	3.5	.020	.06	--
	07-18-91	28,400	28,300	.010	<.050	3.40	3.4	.020	--	--
	08-06-91	--	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	--	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1N/22W-36K9	03-16-92	--	--	--	--	--	--	-50.5	-7.50
	08-26-92	--	--	--	--	--	--	--	--
	03-23-93	--	--	--	--	--	--	--	--
	06-22-93	--	--	--	--	--	--	--	--
	09-22-93	--	--	--	--	--	--	--	--
1N/22W-36L1	08-21-90	300	610	2,100	--	650	--	-51.5	-7.60
1N/23W-1C2	12-12-89	40	430	17	--	66	--	-61.9	-8.80
	12-04-90	47	430	85	--	71	480	-62.5	-8.85
	01-09-92	45	440	68	--	67	--	-61.0	-8.80
1N/23W-1C3	12-15-89	38	530	4	--	150	--	--	--
	03-23-90	31	540	190	--	160	--	-50.5	-7.55
	12-04-90	28	560	140	--	170	990	-49.0	-7.45
	01-07-92	28	530	210	--	180	--	-49.5	-7.45
1N/23W-1C4	12-15-89	--	600	--	--	--	--	--	--
	03-23-90	20	600	32	--	83	--	-54.5	-7.75
	12-04-90	21	600	130	--	100	740	-53.0	-7.75
	01-07-92	22	630	170	--	120	--	-52.0	-7.55
1N/23W-1C5	12-15-89	39	510	4	--	170	--	--	--
	03-23-90	36	590	10	--	110	--	-53.0	-7.70
	12-04-90	38	610	8	--	130	1,000	-52.5	-7.65
	01-07-92	38	630	8	--	140	--	-51.5	-7.60
1S/21W-8L3	10-19-89	<100	830	80	--	30	--	-47.4	-6.95
	06-05-90	<100	850	<10	--	20	--	-43.5	-6.85
	07-18-91	200	770	50	100	10	2,000	-45.5	-6.85
	08-06-91	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	-44.5	-6.85
	08-25-92	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1S/21W-8L4	10-19-89	<100	3,000	5,700	--	600	--	-11.5	-2.00
	06-05-90	200	3,200	7,000	--	660	--	-11.0	-1.95
	07-18-91	<100	3,200	6,600	140	530	9,500	-11.0	-1.85
	08-06-91	--	--	--	--	--	--	--	--
	02-06-92	--	--	--	--	--	--	-9.5	-1.80

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
1S/21W-8L4	CM1 220	340544119062902	08-25-92	1325	UWCD	23.00	220	10	42,300
			09-30-92	1100	USGS	21.18			39,800
			03-22-93	1210	UWCD	14.22			34,600
			06-21-93	1024	UWCD	18.30			39,100
			09-21-93	0858	UWCD	21.61			36,700
1S/22W-1H1	CM6 550	340650119080201	10-31-90	1330	USGS	--	550	3	4,700
			08-07-91	1800	USGS	65.45			--
			01-22-92	1230	USGS	77.54			1,420
1S/22W-1H2	CM6 400	340650119080202	11-01-90	0930	USGS	--	400	3	1,870
			06-12-91	1115	USGS	--			1,770
			08-08-91	0930	USGS	54.47			--
			01-22-92	1715	USGS	49.28			1,850
1S/22W-1H3	CM6 330	340650119080203	11-01-90	1000	USGS	--	330	3	2,110
			06-11-91	1555	USGS	40.45			2,370
			01-22-92	1820	USGS	37.67			2,280
			06-21-93	1340	UWCD	19.85			2,860
			09-21-93	1142	UWCD	37.38			2,970
1S/22W-1H4	CM6 200	340650119080204	11-01-90	1100	USGS	--	200	3	6,670
			06-11-91	1500	USGS	18.49			6,500
			08-07-91	1830	USGS	28.26			--
			01-22-92	1910	USGS	18.32			5,820
			10-06-92	1110	USGS	17.10			5,970
			06-21-93	1307	UWCD	6.80			5,440
			09-21-93	1215	UWCD	15.50			6,100
2N/18W-8B4		341632118470201	05-23-90	0930	USGS	--	300	758	2,390
2N/18W-9E1		341620118464001	09-05-90	1830	USGS	--			2,030
2N/19W-6F1		341711118544301	07-22-93	0830	USGS	--	550	610	1,550
2N/19W-6N3		341652118550101	07-20-93	1530	USGS	--	132	442	2,040
2N/19W-7C1		341640118544301	07-21-93	0830	USGS	--	176	442	1,820
2N/19W-8G1		341621118531601	06-12-90	1430	USGS	--	282	500	1,650
2N/20W-1Q1		341652118553101	07-22-93	1015	USGS	--	157	445	1,990
2N/20W-2N3		341657118570801	07-20-93	1030	USGS	--	1,248	525	642
2N/20W-4F1		341713118590001	07-09-92	0820	USGS	--	1,008	481	671
2N/20W-4F2		341710118585401	07-09-92	0915	USGS	--	1,000	450	541
			08-10-92	1730	USGS	--			535
2N/20W-6R1		341647119003501	07-08-92	1615	USGS	--	1,515	459	784

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
1S/21W-8L4	08-25-92	40,500	--	--	25.0	20.5	--	--	--	--
	09-30-92	40,700	7.3	--	23.5	18.5	--	--	--	--
	03-22-93	40,900	--	--	--	18.5	--	--	--	--
	06-21-93	41,200	--	--	--	19.0	--	--	--	--
	09-21-93	43,100	--	--	--	19.0	--	--	--	--
1S/22W-1H1	10-31-90	4,640	7.8	7.4	--	22.5	260	40	39	930
	08-07-91	1,650	--	--	--	--	--	--	--	--
	01-22-92	1,450	8.1	8.0	20.5	19.0	41	7.4	5.4	320
1S/22W-1H2	11-01-90	1,860	8.1	7.5	--	20.0	190	46	18	300
	06-12-91	1,800	8.1	7.7	19.0	21.0	200	45	20	280
	08-08-91	1,630	--	--	--	--	--	--	--	--
	01-22-92	--	--	--	--	--	--	--	--	--
1S/22W-1H3	11-01-90	2,080	7.5	7.5	--	20.5	610	150	56	190
	06-11-91	2,420	7.4	7.6	16.5	20.0	810	200	74	170
	01-22-92	--	--	--	--	--	--	--	--	--
	06-21-93	3,350	--	--	--	21.0	--	--	--	--
	09-21-93	3,220	--	--	--	20.5	--	--	--	--
1S/22W-1H4	11-01-90	6,580	7.2	7.4	--	22.0	1,700	450	150	600
	06-11-91	6,600	7.3	7.4	20.0	20.0	1,800	460	160	650
	08-07-91	5,800	--	--	--	--	--	--	--	--
	01-22-92	--	--	--	--	--	--	--	--	--
	10-06-92	6,180	7.0	--	20.5	20.0	--	--	--	--
	06-21-93	6,730	--	--	--	20.5	--	--	--	--
	09-21-93	6,900	--	--	--	19.5	--	--	--	--
2N/18W-8B4	05-23-90	2,320	7.0	7.3	20.5	22.0	920	230	85	200
2N/18W-9E1	09-05-90	2,030	7.5	7.5	25.0	22.0	780	190	75	160
2N/19W-6F1	07-22-93	1,560	7.3	8.1	--	20.0	470	120	42	160
2N/19W-6N3	07-20-93	2,060	7.3	7.5	27.0	22.5	650	180	48	220
2N/19W-7C1	07-21-93	1,830	7.1	7.4	23.0	19.5	560	160	40	190
2N/19W-8G1	06-12-90	1,590	7.6	7.6	22.0	18.0	480	130	37	160
2N/20W-1Q1	07-22-93	1,990	7.4	7.6	24.0	20.0	700	180	61	180
2N/20W-2N3	07-20-93	645	7.6	7.8	23.0	24.0	240	71	14	43
2N/20W-4F1	07-09-92	685	7.7	7.6	24.0	23.5	270	78	19	37
2N/20W-4F2	07-09-92	565	7.9	7.9	24.0	23.0	210	62	14	33
	08-10-92	560	7.6	8.0	22.5	23.0	230	67	15	34
2N/20W-6R1	07-08-92	806	7.6	7.6	28.5	26.0	280	71	25	58

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
1S/21W-8L4	08-25-92	--	--	--	--	14,000	--	--	--	--
	09-30-92	--	--	--	--	14,000	--	--	--	--
	03-22-93	--	--	--	--	8,400	--	--	--	--
	06-21-93	--	--	--	--	13,000	--	--	--	--
	09-21-93	--	--	--	--	17,000	--	--	--	--
1S/22W-1H1	10-31-90	36	[1]620	550	360	1,000	0.40	4.0	0.016	35
	08-07-91	--	--	--	--	130	--	--	--	--
	01-22-92	14	--	701	13	66	.40	.52	.009	39
1S/22W-1H2	11-01-90	9.1	[3]340	272	120	380	.20	1.9	.540	42
	06-12-91	9.1	336	271	95	340	.40	1.8	.620	42
	08-08-91	--	--	--	--	330	--	--	--	--
	01-22-92	--	--	--	--	410	--	--	--	--
1S/22W-1H3	11-01-90	9.4	[1]238	220	290	380	.40	1.5	.100	38
	06-11-91	9.4	213	218	260	480	.30	2.0	.200	37
	01-22-92	--	--	--	--	460	--	--	--	--
	06-21-93	--	--	--	--	1,800	--	--	--	--
	09-21-93	--	--	--	--	710	--	--	--	--
1S/22W-1H4	11-01-90	23	[1]268	224	380	1,800	<.10	6.4	.120	33
	06-11-91	25	236	232	490	1,900	.50	6.8	.100	33
	08-07-91	--	--	--	--	1,400	--	--	--	--
	01-22-92	--	--	--	--	1,800	--	--	--	--
	10-06-92	--	--	--	--	1,800	--	--	--	--
	06-21-93	--	--	--	--	2,000	--	--	--	--
	09-21-93	--	--	--	--	1,800	--	--	--	--
2N/18W-8B4	05-23-90	5.1	[2]293	290	880	150	.30	.85	.048	45
2N/18W-9E1	09-05-90	4.0	250	245	720	110	.90	.65	.029	43
2N/19W-6F1	07-22-93	3.0	204	205	410	140	.50	.42	.074	34
2N/19W-6N3	07-20-93	3.4	276	268	580	150	.40	.050	.023	37
2N/19W-7C1	07-21-93	2.9	264	250	490	140	.40	.030	.029	34
2N/19W-8G1	06-12-90	2.6	190	195	430	150	.40	.39	.066	36
2N/20W-1Q1	07-22-93	3.0	244	242	580	160	.30	.070	.020	39
2N/20W-2N3	07-20-93	3.1	170	170	140	19	.30	.14	.025	35
2N/20W-4F1	07-09-92	3.8	168	177	160	16	.40	.070	.012	32
2N/20W-4F2	07-09-92	2.9	155	162	110	16	.30	.070	.014	33
	08-10-92	2.6	166	165	100	14	.30	.070	.014	33
2N/20W-6R1	07-08-92	4.8	215	217	170	22	.40	.080	.004	33

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
1S/21W-8L4	08-25-92	--	--	--	--	--	--	--	--	--
	09-30-92	--	--	--	--	--	--	--	--	--
	03-22-93	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1S/22W-1H1	10-31-90	2,820	2,830	0.040	<0.100	6.40	9.9	1.0	3.4	180
	08-07-91	--	--	--	--	--	--	--	--	--
	01-22-92	1,020	906	.030	.068	4.50	6.9	4.80	12	--
1S/22W-1H2	11-01-90	1,000	1,130	<.010	<.100	1.70	1.7	.710	1.9	30
	06-12-91	990	1,000	<.010	<.050	1.40	2.0	.280	.80	--
	08-08-91	--	--	--	--	--	--	--	--	--
	01-22-92	--	--	--	--	--	--	--	--	--
1S/22W-1H3	11-01-90	1,270	1,260	<.010	<.100	.900	.90	1.30	2.4	10
	06-11-91	1,540	1,370	<.010	<.050	.910	1.2	.670	2.1	--
	01-22-92	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
1S/22W-1H4	11-01-90	4,220	3,620	<.010	<.100	1.70	1.6	.660	1.4	20
	06-11-91	4,120	3,880	.010	<.050	1.50	1.6	.860	2.4	--
	08-07-91	--	--	--	--	--	--	--	--	--
	01-22-92	--	--	--	--	--	--	--	--	--
	10-06-92	--	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--	--
2N/18W-8B4	05-23-90	1,830	1,790	--	4.50	<.010	.50	.030	.06	--
2N/18W-9E1	09-05-90	1,560	1,470	--	4.90	.040	.50	.030	.06	20
2N/19W-6F1	07-22-93	1,090	1,040	.020	2.30	.020	<.20	.010	.09	--
2N/19W-6N3	07-20-93	1,520	1,440	.020	14.0	.020	<.20	.010	.06	--
2N/19W-7C1	07-21-93	1,320	1,270	.020	13.0	.010	.20	.020	.09	--
2N/19W-8G1	06-12-90	1,120	1,060	<.010	2.00	<.010	.30	.030	.021	--
2N/20W-1Q1	07-22-93	1,470	1,400	.020	11.0	.020	<.20	.010	.09	--
2N/20W-2N3	07-20-93	436	429	.020	.230	.220	.20	.030	.09	--
2N/20W-4F1	07-09-92	432	454	<.010	<.050	.450	.40	.020	.09	--
2N/20W-4F2	07-09-92	361	370	<.010	.064	.350	.30	<.010	.09	--
	08-10-92	375	367	<.010	.170	.360	.40	.020	.09	--
2N/20W-6R1	07-08-92	509	517	<.010	<.050	1.50	1.4	<.010	--	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1S/21W-8L4	08-25-92	--	--	--	--	--	--	--	--
	09-30-92	--	--	--	--	--	--	-9.5	-1.75
	03-22-93	--	--	--	--	--	--	--	--
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1S/22W-1H1	10-31-90	100	1,600	3,000	--	220	1,100	-50.5	-7.60
	08-07-91	--	--	--	--	--	--	--	--
	01-22-92	38	1,500	420	19	44	180	-53.5	-7.80
1S/22W-1H2	11-01-90	48	820	60	--	23	600	-50.5	-7.40
	06-12-91	37	790	40	49	17	580	-49.5	-7.35
	08-08-91	--	--	--	--	--	--	--	--
	01-22-92	--	--	--	--	--	--	-47.0	-7.30
1S/22W-1H3	11-01-90	100	600	140	--	480	1,800	-50.5	-7.55
	06-11-91	100	580	310	50	580	2,200	-50.0	-7.55
	01-22-92	--	--	--	--	--	--	-49.0	-7.40
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
1S/22W-1H4	11-01-90	300	720	900	--	1,400	4,800	-48.0	-7.30
	06-11-91	100	740	750	80	1,300	4,600	-49.0	-7.25
	08-07-91	--	--	--	--	--	--	--	--
	01-22-92	--	--	--	--	--	--	-48.5	-7.20
	10-06-92	--	--	--	--	--	--	-49.0	-7.35
	06-21-93	--	--	--	--	--	--	--	--
	09-21-93	--	--	--	--	--	--	--	--
2N/18W-8B4	05-23-90	<100	1,200	40	--	50	--	-41.5	-6.65
2N/18W-9E1	09-05-90	<100	910	20	--	<10	--	-43.5	-6.75
2N/19W-6F1	07-22-93	22	800	<3	--	<1	--	-55.4	-7.67
2N/19W-6N3	07-20-93	<100	1,100	60	--	<10	--	-51.7	-7.16
2N/19W-7C1	07-21-93	17	1,000	<3	--	<1	--	-55.0	-7.41
2N/19W-8G1	06-12-90	14	930	6	--	3	--	-60.0	-7.90
2N/20W-1Q1	07-22-93	27	970	6	--	<1	--	-51.1	-7.12
2N/20W-2N3	07-20-93	62	140	<3	--	<1	--	-42.9	-6.72
2N/20W-4F1	07-09-92	52	90	330	--	210	--	-43.0	-6.75
2N/20W-4F2	07-09-92	48	80	28	--	150	--	-43.5	-6.85
	08-10-92	46	80	63	--	150	320	-45.0	-6.80
2N/20W-6R1	07-08-92	58	140	<3	--	110	--	-43.0	-6.75

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
2N/20W-7L1		341617119010001	07-23-92	0800	USGS	--	1,567	410	567
			08-11-92	0900	USGS	--	--		546
2N/20W-8F1		341622119000401	05-24-90	1045	USGS	--	1,442	430	495
2N/20W-9R1		341554118582701	05-22-90	1500	USGS	--	783	309	2,350
2N/20W-11R2		341554118562601	07-19-91	1030	USGS	--	500	438	1,120
2N/20W-16A2	TKS 280	341549118583801	12-06-90	1415	USGS	106.89	280	285	1,920
			09-04-91	1530	USGS	97.56			2,150
2N/20W-16A3	TKS 180	341549118583802	12-06-90	1500	USGS	78.84	180	285	1,420
			09-05-91	1200	USGS	56.34			1,600
2N/20W-16A4	TKS 100	341549118583803	11-02-90	1115	USGS	--	100	285	1,590
			09-04-91	1245	USGS	45.59			1,600
2N/20W-16B3		341539118584001	06-25-91	0830	USGS	--	600	291	2,900
			08-08-91	1430	USGS	--			--
2N/20W-18A1		341546119003201	06-12-90	1645	USGS	--	1,240	370	508
2N/20W-19F4		341438119010501	08-07-91	1300	USGS	--	759	205	--
2N/20W-23G3		341433118564201	09-04-91	1230	USGS	235.00	920	305	--
2N/20W-31B1		341309119005601	07-25-90	1300	USGS	--	237	155	2,980
2N/21W-7L3	SAT 700	341608119072901	09-27-90	1100	USGS	194.87	700	142	1,620
			11-27-90	1030	USGS	145.20			1,750
			04-04-91	1610	USGS	96.79			1,500
			12-10-91	1520	USGS	139.57			1,710
			05-12-92	1255	UWCD	95.35			1,580
2N/21W-7L4	SAT 540	341608119072902	09-27-90	1130	USGS	176.14	540	142	1,460
			11-28-90	0830	USGS	147.90			1,660
			04-03-91	1845	USGS	76.35			1,520
			12-10-91	1800	USGS	136.33			1,690
			05-12-92	1700	UWCD	85.48			1,630
2N/21W-7L5	SAT 310	341608119072903	09-27-90	1200	USGS	136.19	310	142	1,810
			11-27-90	1730	USGS	135.29			1,400
			04-04-91	1900	USGS	37.35			1,240
			12-10-91	1800	USGS	116.39			1,670
			05-12-92	1515	UWCD	37.38			1,590
2N/21W-7L6	SAT 155	341608119072904	04-03-91	1515	USGS	4.01	155	142	1,200

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
2N/20W-7L1	07-23-92	564	7.7	7.8	--	25.0	230	67	16	33
	08-11-92	560	7.6	8.0	27.0	25.0	230	64	16	33
2N/20W-8F1	05-24-90	486	8.0	7.9	23.0	24.0	190	55	12	31
2N/20W-9R1	05-22-90	2,220	7.3	7.5	24.5	22.0	720	190	59	230
2N/20W-11R2	07-19-91	1,100	8.0	7.7	23.5	18.5	220	51	23	160
2N/20W-16A2	12-06-90	1,890	7.5	7.6	--	20.5	550	140	47	210
	09-04-91	2,070	7.6	7.4	19.5	19.5	750	190	68	180
2N/20W-16A3	12-06-90	1,420	7.3	7.6	--	18.5	500	130	42	130
	09-05-91	1,640	7.5	7.4	25.0	18.5	610	160	52	140
2N/20W-16A4	11-02-90	1,600	7.9	8.0	--	19.5	320	89	23	190
	09-04-91	1,620	7.5	7.5	25.5	18.0	620	170	48	130
2N/20W-16B3	06-25-91	2,720	7.5	7.5	--	22.0	790	150	100	310
	08-08-91	2,800	--	--	--	--	--	--	--	--
2N/20W-18A1	06-12-90	494	7.9	7.9	25.0	24.5	180	53	12	35
2N/20W-19F4	08-07-91	871	--	--	--	--	--	--	--	--
2N/20W-23G3	09-04-91	1,120	7.8	7.6	--	--	290	42	45	120
2N/20W-31B1	07-25-90	2,990	7.8	7.5	25.0	19.5	1,100	290	91	260
2N/21W-7L3	09-27-90	1,750	7.6	7.5	--	17.5	610	150	56	170
	11-27-90	1,760	7.6	7.5	16.5	17.5	630	150	62	160
	04-04-91	1,600	7.3	7.4	23.0	18.0	630	150	61	150
	12-10-91	1,700	7.3	7.4	--	19.5	610	150	58	140
	05-12-92	1,600	--	7.5	32.0	18.5	590	150	53	130
2N/21W-7L4	09-27-90	1,840	7.5	7.6	--	17.0	560	120	63	200
	11-28-90	1,740	--	7.6	16.5	16.0	630	130	73	160
	04-03-91	1,720	7.4	7.6	19.5	17.5	650	140	72	150
	12-10-91	1,690	7.6	7.6	19.0	18.0	630	140	69	140
	05-12-92	1,640	7.6	7.6	24.0	18.0	600	130	67	140
2N/21W-7L5	09-27-90	1,480	7.6	7.5	--	18.0	470	120	42	140
	11-27-90	1,400	7.6	7.6	16.5	16.0	590	150	51	100
	04-04-91	1,450	7.3	7.5	19.5	17.5	610	160	52	94
	12-10-91	1,660	7.4	7.4	17.5	17.0	690	180	59	110
	05-12-92	1,610	7.4	7.5	29.0	32.0	660	170	57	110
2N/21W-7L6	04-03-91	1,330	7.4	7.6	24.0	17.5	460	120	40	110

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
2N/20W-7L1	07-23-92	2.8	173	177	100	14	0.30	0.060	0.010	30
	08-11-92	2.7	184	177	98	14	.40	.060	.010	31
2N/20W-8F1	05-24-90	2.0	[1]158	157	83	14	.40	.050	.012	30
2N/20W-9R1	05-22-90	5.6	[1]244	225	960	220	.30	.65	.120	36
2N/20W-11R2	07-19-91	4.8	300	307	160	73	.40	.25	.012	31
2N/20W-16A2	12-06-90	6.4	[2]269	268	600	93	<.10	.47	.032	30
	09-04-91	6.9	344	299	730	130	.40	.97	.022	26
2N/20W-16A3	12-06-90	3.9	[2]237	331	450	55	.60	.23	.007	33
	09-05-91	4.4	332	268	620	68	.30	.31	.016	27
2N/20W-16A4	11-02-90	11	[3]212	197	420	110	.20	.40	.021	26
	09-04-91	4.3	207	203	550	130	.50	.47	.014	22
2N/20W-16B3	06-25-91	13	231	222	890	330	.40	1.2	.180	66
	08-08-91	--	--	--	--	360	--	--	--	--
2N/20W-18A1	06-12-90	2.1	156	155	98	11	.50	.070	.012	30
2N/20W-19F4	08-07-91	--	--	--	--	51	--	.26	.044	--
2N/20W-23G3	09-04-91	3.1	274	288	33	170	.30	.45	.200	72
2N/20W-31B1	07-25-90	7.0	247	243	970	220	<.10	1.2	.018	33
2N/21W-7L3	09-27-90	11	270	276	590	70	<.10	.48	.069	33
	11-27-90	11	272	264	640	69	.40	.40	.067	32
	04-04-91	9.4	249	267	560	69	.40	.47	.073	32
	12-10-91	10	288	269	550	66	.40	.42	.069	34
	05-12-92	9.8	256	244	520	60	.50	.40	.064	33
2N/21W-7L4	09-27-90	12	307	301	620	72	<.10	.47	.059	37
	11-28-90	9.4	267	267	640	70	.20	.38	.055	35
	04-03-91	8.8	259	269	640	68	.20	.45	.063	36
	12-10-91	9.1	268	265	590	73	.20	.44	.058	38
	05-12-92	8.7	245	246	520	62	.10	.45	.052	37
2N/21W-7L5	09-27-90	7.3	225	221	500	60	.20	.32	.026	28
	11-27-90	4.9	--	216	500	53	.60	.29	.021	24
	04-04-91	4.6	223	220	510	58	.60	.32	.024	25
	12-10-91	5.2	256	254	470	62	<.10	.48	.045	26
	05-12-92	5.3	245	237	520	66	.70	.44	.041	26
2N/21W-7L6	04-03-91	5.0	190	190	420	55	.70	.25	.023	22

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
2N/20W-7L1	07-23-92	353	371	<0.010	<0.050	0.660	0.80	<0.010	0.03	--
	08-11-92	368	367	<.010	.110	.710	.80	<.010	.03	--
2N/20W-8F1	05-24-90	316	325	--	<.100	.180	.60	.020	.06	--
2N/20W-9R1	05-22-90	1,700	1,850	--	.600	.230	.60	.030	.12	--
2N/20W-11R2	07-19-91	698	720	.070	7.10	.050	.50	.020	--	--
2N/20W-16A2	12-06-90	1,380	1,300	<.010	<.100	.210	.20	4.90	12	30
	09-04-91	1,530	1,520	<.010	<.050	.200	.40	4.20	12	--
2N/20W-16A3	12-06-90	1,030	1,020	.010	5.10	.200	.50	3.90	3.1	40
	09-05-91	1,200	1,240	<.010	<.050	.140	.30	2.10	2.9	--
2N/20W-16A4	11-02-90	974	1,020	<.010	<.100	.190	.30	6.30	16	20
	09-04-91	1,140	1,180	<.010	<.050	.050	.40	2.20	5.5	--
2N/20W-16B3	06-25-91	1,950	2,000	<.010	<.050	1.10	13	.040	.09	20
	08-08-91	--	--	--	--	--	--	--	--	--
2N/20W-18A1	06-12-90	315	336	--	.200	.240	<.20	.020	.06	--
2N/20W-19F4	08-07-91	--	--	--	--	--	--	--	--	--
2N/20W-23G3	09-04-91	648	660	.020	.160	<.010	<.20	.040	.06	<10
2N/20W-31B1	07-25-90	2,060	2,020	--	<11.0	.090	<1.0	<.010	--	--
2N/21W-7L3	09-27-90	1,290	1,250	<.010	<.100	1.90	2.6	.040	.09	<10
	11-27-90	1,290	1,290	<.010	<.100	2.40	2.5	<.010	--	<10
	04-04-91	1,280	1,190	.020	<.050	1.70	2.5	.020	--	--
	12-10-91	1,370	1,180	<.010	<.050	2.30	2.3	.020	.06	--
	05-12-92	1,180	1,110	<.010	<.050	2.10	2.2	.030	.06	--
2N/21W-7L4	09-27-90	1,320	1,320	<.010	<.100	1.70	1.8	.890	2.7	<10
	11-28-90	1,270	1,280	<.010	<.100	1.40	2.0	.640	1.9	<10
	04-03-91	1,260	1,270	<.010	<.050	1.10	2.2	.210	.58	--
	12-10-91	1,310	1,220	<.010	<.050	1.90	1.9	.160	.25	--
	05-12-92	1,200	1,120	<.010	<.050	1.80	1.9	.040	.18	--
2N/21W-7L5	09-27-90	1,140	1,040	<.010	<.100	.090	.70	2.30	4.0	40
	11-27-90	980	1,020	<.010	<.100	.070	.20	.530	1.5	20
	04-04-91	1,040	1,040	<.010	<.050	.040	<.20	.140	.40	--
	12-10-91	1,140	1,070	<.010	<.050	<.010	<.20	.130	--	--
	05-12-92	1,210	1,100	<.010	<.050	.020	<.20	.040	.21	--
2N/21W-7L6	04-03-91	914	897	<.010	2.50	<.010	.30	.050	.09	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
2N/20W-7L1	07-23-92	51	60	150	--	110	--	-44.0	-6.70
	08-11-92	50	60	4	--	110	360	-42.5	-6.75
2N/20W-8F1	05-24-90	62	60	40	--	100	--	-41.5	-6.75
2N/20W-9R1	05-22-90	<100	840	60	--	70	--	-46.5	-6.75
2N/20W-11R2	07-19-91	10	340	12	17	7	520	-41.5	-6.45
2N/20W-16A2	12-06-90	24	470	40	--	150	1,600	-44.0	-6.75
	09-04-91	<100	490	40	--	190	--	-45.5	-6.95
2N/20W-16A3	12-06-90	8	410	280	--	300	1,300	-45.0	-7.10
	09-05-91	12	510	35	--	250	--	-45.0	-6.90
2N/20W-16A4	11-02-90	28	500	12	--	59	1,600	-45.5	-6.70
	09-04-91	28	550	670	--	160	--	-53.0	-7.25
2N/20W-16B3	06-25-91	<100	1,100	360	70	60	2,400	-42.5	-6.60
	08-08-91	--	--	--	--	--	--	--	--
2N/20W-18A1	06-12-90	64	80	7	--	42	--	-42.5	-6.75
2N/20W-19F4	08-07-91	--	210	--	40	--	690	--	--
2N/20W-23G3	09-04-91	16	210	45	--	43	--	-39.0	-5.60
2N/20W-31B1	07-25-90	23	960	12	--	51	--	-52.0	-7.65
2N/21W-7L3	09-27-90	21	740	620	--	100	1,100	-49.0	-7.40
	11-27-90	16	730	71	--	96	1,200	-52.5	-7.30
	04-04-91	15	720	860	--	97	--	-51.0	-7.35
	12-10-91	12	750	1000	--	80	--	-48.5	-7.30
	05-12-92	11	770	890	--	82	--	-48.0	-7.30
2N/21W-7L4	09-27-90	21	390	490	--	88	1,400	-46.5	-7.25
	11-28-90	24	340	540	--	140	1,600	-48.0	-7.25
	04-03-91	21	330	730	--	100	--	-50.0	-7.40
	12-10-91	21	350	700	--	100	--	-50.0	-7.40
	05-12-92	18	340	910	--	84	--	-47.5	-7.40
2N/21W-7L5	09-27-90	16	680	150	--	93	1,200	-51.0	-7.40
	11-27-90	24	690	350	--	91	1,400	-51.5	-7.45
	04-04-91	23	690	390	--	73	--	-50.5	-7.35
	12-10-91	25	740	590	--	76	--	-46.0	-6.90
	05-12-92	25	770	520	--	68	--	-49.5	-7.15
2N/21W-7L6	04-03-91	20	740	8	--	<1	--	-61.5	-8.80

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
2N/21W-7L6		341608119072904	12-10-91	1500	USGS	114.93	155	142	1,630
			05-12-92	1315	UWCD	24.13			971
2N/21W-7P3		341557119071801	02-25-91	0900	USGS	--	1,000	139	1,410
2N/21W-9D2		341631119053401	04-30-93	1415	USGS	--	1,036	373	881
2N/21W-11H2		341619119023201	08-11-92	1400	USGS	--	460	412	1,510
2N/21W-11J3	LP 1078	341607119023301	08-27-91	1530	USGS	457.10	1,078	378	829
			07-21-92	1800	USGS	452.07			809
2N/21W-11J5	LP 380	341607119023303	02-08-91	1200	USGS	245.00	380	378	935
			08-20-91	1800	USGS	233.40			899
2N/21W-15M4		341520119043001	08-24-90	1230	USGS	--	1,044	263	1,260
			07-21-92	1000	USGS	--			1,130
2N/21W-18H3		341532119064601	02-27-91	0940	USGS	--	168	118	1,930
			04-30-93	1312	USGS	38.91			1,780
2N/21W-18H5		341533119065001	04-30-93	1340	USGS	--	122	114	1,590
2N/21W-18H12		341532119064801	02-27-91	0900	USGS	--	1,300	118	1,360
			04-30-93	1325	USGS	73.29			1,410
2N/21W-19B2		341445119070601	03-01-91	1100	USGS	--	137	100	2,280
2N/21W-20F2		341439119062801	02-20-91	1100	USGS	--	950	110	1,280
2N/21W-32E1		341259119063301	02-20-91	1730	USGS	--	1,271	59	1,180
			08-07-91	1315	USGS	--			--
2N/21W-34G1		341246119040601	08-03-90	1800	USGS	--	1,483	87	1,720
			03-12-91	1400	USGS	--			1,630
			08-06-91	0900	USGS	--			--
2N/21W-34G2	PV 998	341246119040201	08-03-90	1130	USGS	251.24	998	90	1,630
			08-05-91	1530	USGS	--			1,580
			05-14-92	1530	USGS	211.18			1,800
			08-17-93	1330	USGS	205.91			1,880
2N/21W-34G3	PV 860	341246119040202	08-03-90	1430	USGS	251.99	860	90	1,670
			08-05-91	1230	USGS	--			1,650
			05-15-92	1230	USGS	211.02			1,570
			08-17-93	1610	USGS	205.41			1,630
2N/21W-34G4	PV 380	341246119040203	08-03-90	1630	USGS	211.79	380	90	1,200
			08-05-91	1800	USGS	--			960
			05-14-92	1830	USGS	177.30			922
			08-18-93	1815	USGS	168.54			921

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
2N/21W-7L6	12-10-91	1,630	7.6	7.6	19.0	16.0	670	170	59	100
	05-12-92	972	7.6	7.7	29.0	18.0	380	96	33	73
2N/21W-7P3	02-25-91	1,390	7.6	7.8	15.0	18.0	540	140	46	100
2N/21W-9D2	04-30-93	880	--	--	--	23.0	--	--	--	--
2N/21W-11H2	08-11-92	1,570	7.3	7.7	28.0	20.0	680	190	50	74
2N/21W-11J3	08-27-91	821	7.4	7.5	--	23.5	240	58	22	87
	07-21-92	799	7.4	7.6	25.0	21.0	310	79	27	54
2N/21W-11J5	02-08-91	920	7.6	7.9	21.0	--	310	80	26	74
	08-20-91	901	7.8	7.7	20.5	21.0	320	84	27	65
2N/21W-15M4	08-24-90	1,220	7.7	7.8	--	22.5	380	97	34	110
	07-21-92	1,150	7.6	7.7	25.0	23.0	370	95	32	110
2N/21W-18H3	02-27-91	1,910	7.3	7.6	14.0	19.0	830	210	73	110
	04-30-93	1,770	--	--	--	19.0	--	--	--	--
2N/21W-18H5	04-30-93	1,580	--	--	--	18.0	--	--	--	--
2N/21W-18H12	02-27-91	1,370	7.6	7.7	13.0	24.5	470	120	42	120
	04-30-93	1,410	--	--	--	23.5	--	--	--	--
2N/21W-19B2	03-01-91	2,240	--	8.0	14.5	18.0	880	220	81	170
2N/21W-20F2	02-20-91	1,280	7.6	7.9	--	22.0	460	120	39	110
2N/21W-32E1	02-20-91	1,160	7.7	7.8	--	24.5	360	86	35	110
	08-07-91	1,100	--	--	--	--	--	--	--	--
2N/21W-34G1	08-03-90	1,760	7.8	7.7	--	24.0	360	93	32	250
	03-12-91	1,750	7.6	7.8	--	22.0	340	87	30	240
	08-06-91	1,740	--	--	--	--	--	--	--	--
2N/21W-34G2	08-03-90	1,630	7.7	7.8	--	23.5	440	110	40	200
	08-05-91	1,590	7.4	7.7	21.0	23.0	440	110	41	170
	05-14-92	1,830	7.6	7.7	23.0	22.5	720	200	54	150
	08-17-93	1,890	7.3	7.4	26.5	23.5	760	210	57	140
2N/21W-34G3	08-03-90	1,650	7.8	7.9	--	23.5	420	110	35	210
	08-05-91	1,610	7.6	7.7	29.0	25.5	460	120	38	180
	05-15-92	1,600	7.5	7.7	23.0	22.0	460	120	38	180
	08-17-93	1,660	7.5	8.0	--	22.5	490	130	40	180
2N/21W-34G4	08-03-90	1,150	8.6	8.4	--	23.0	260	67	23	160
	08-05-91	944	7.9	7.9	23.0	21.5	290	72	26	95
	05-14-92	927	7.7	7.9	23.0	21.5	310	82	26	75
	08-18-93	916	7.7	8.0	--	21.0	330	86	27	76

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
2N/21W-7L6	12-10-91	5.0	227	235	540	84	0.60	0.49	0.015	21
	05-12-92	3.3	166	170	310	24	.70	.13	.008	20
2N/21W-7P3	02-25-91	4.8	[2]223	221	480	53	.50	.29	.033	25
2N/21W-9D2	04-30-93	--	--	--	--	55	--	--	.073	--
2N/21W-11H2	08-11-92	2.5	175	177	370	120	.30	.95	.021	42
2N/21W-11J3	08-27-91	7.0	236	249	160	21	.30	.080	.036	30
	07-21-92	5.0	236	241	160	23	.20	.090	.033	35
2N/21W-11J5	02-08-91	3.7	[2]232	229	130	58	.30	.27	.077	39
	08-20-91	2.7	223	225	150	62	.30	.31	.071	39
2N/21W-15M4	08-24-90	5.0	--	245	300	66	.60	.33	.100	27
	07-21-92	4.9	246	242	280	62	.10	.29	.067	30
2N/21W-18H3	02-27-91	5.1	[2]248	245	400	120	.50	1.0	.027	34
	04-30-93	--	--	--	--	70	--	--	.014	--
2N/21W-18H5	04-30-93	--	--	--	--	66	--	--	.012	--
2N/21W-18H12	02-27-91	4.8	[1]239	199	460	56	.40	.32	.061	28
	04-30-93	--	--	--	--	54	--	--	.038	--
2N/21W-19B2	03-01-91	6.6	--	159	750	190	.40	1.3	.024	27
2N/21W-20F2	02-20-91	5.6	[3]200	205	430	50	.30	.30	.063	30
2N/21W-32E1	02-20-91	5.9	[3]240	237	340	47	.20	.20	.074	39
	08-07-91	--	--	--	--	42	--	--	--	--
2N/21W-34G1	08-03-90	6.6	[3]320	311	340	180	.40	.19	.028	41
	03-12-91	6.8	[1]328	314	350	190	.40	.96	.230	40
	08-06-91	--	--	--	--	200	--	--	--	--
2N/21W-34G2	08-03-90	7.2	[3]250	247	440	120	.40	.14	.020	40
	08-05-91	5.6	[3]246	240	470	120	.30	.72	.058	39
	05-14-92	5.9	227	222	560	120	.30	.62	.038	32
	08-17-93	5.1	192	217	690	130	.20	.54	.039	29
2N/21W-34G3	08-03-90	6.3	[3]240	248	460	120	.40	2.3	.074	37
	08-05-91	6.0	[3]230	240	490	110	.30	.50	.060	37
	05-15-92	5.3	234	234	400	110	.30	.48	.059	38
	08-17-93	4.9	219	234	490	120	.40	.26	.038	40
2N/21W-34G4	08-03-90	5.5	[3]230	233	260	73	.70	.34	.079	32
	08-05-91	4.6	[3]210	210	230	50	.30	.22	.051	32
	05-14-92	3.6	197	201	220	51	.40	.020	.052	34
	08-18-93	3.7	191	188	220	50	.40	.21	.052	36

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
2N/21W-7L6	12-10-91	1,190	1,130	<0.010	2.00	<0.010	<0.20	0.040	0.15	--
	05-12-92	688	668	<.010	1.10	.020	<.20	.040	.12	--
2N/21W-7P3	02-25-91	1,040	985	<.010	<.050	.200	.50	<.010	--	20
2N/21W-9D2	04-30-93	--	--	--	--	--	--	--	--	--
2N/21W-11H2	08-11-92	1,190	1,130	<.010	38.0	<.010	<.20	<.010	.06	--
2N/21W-11J3	08-27-91	548	555	<.010	<.050	.480	.60	9.40	19	--
	07-21-92	519	533	<.010	<.050	.480	.50	2.20	4.0	--
2N/21W-11J5	02-08-91	599	582	.010	6.20	<.010	.30	2.50	2.9	<10
	08-20-91	583	598	<.010	6.70	.010	.40	.810	2.5	--
2N/21W-15M4	08-24-90	818	803	--	3.00	.190	.50	.030	.03	--
	07-21-92	760	767	<.010	1.50	.240	.30	<.010	.06	--
2N/21W-18H3	02-27-91	1,440	1,170	<.010	16.0	<.010	.90	.050	.09	--
	04-30-93	--	--	--	--	--	--	--	--	--
2N/21W-18H5	04-30-93	--	--	--	--	--	--	--	--	--
2N/21W-18H12	02-27-91	972	974	<.010	<.050	.340	.80	.030	--	--
	04-30-93	--	--	--	--	--	--	--	--	--
2N/21W-19B2	03-01-91	1,690	1,630	.020	2.0	.090	1.0	.050	.09	--
2N/21W-20F2	02-20-91	912	925	<.010	3.30	.320	.50	.030	.06	10
2N/21W-32E1	02-20-91	774	808	<.010	<.100	.650	.70	.040	.09	<10
	08-07-91	--	--	--	--	--	--	--	--	--
2N/21W-34G1	08-03-90	1,130	1,130	--	<.100	1.00	1.2	.030	.06	--
	03-12-91	1,100	1,150	.020	<.050	1.00	1.2	.040	.09	<10
	08-06-91	--	--	--	--	--	--	--	--	--
2N/21W-34G2	08-03-90	1,110	1,110	--	<.100	.400	.90	.050	.09	--
	08-05-91	1,040	1,100	<.010	<.050	.410	.50	.030	.09	20
	05-14-92	1,350	1,260	.050	.780	.020	<.20	.240	.34	--
	08-17-93	1,440	1,400	.130	.910	.030	<.20	.060	.28	--
2N/21W-34G3	08-03-90	1,130	1,130	--	<.100	.280	1.1	.310	.46	--
	08-05-91	1,090	1,130	<.010	<.050	.270	.40	.250	.71	<10
	05-15-92	1,110	1,030	<.010	<.050	.270	.30	.190	.64	--
	08-17-93	1,150	1,150	<.010	<.050	.290	.30	.050	.18	--
2N/21W-34G4	08-03-90	760	764	--	.200	.040	.30	.640	.92	--
	08-05-91	617	640	<.010	<.050	.050	<.20	.820	2.5	10
	05-14-92	622	614	.010	<.050	<.010	<.20	.430	1.3	--
	08-18-93	613	614	.010	--	.030	.20	.160	.58	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
2N/21W-7L6	12-10-91	27	670	4	--	<1	--	-50.5	-7.45
	05-12-92	14	460	11	--	1	--	-56.0	-8.65
2N/21W-7P3	02-25-91	--	720	750	--	110	--	-50.0	-7.35
2N/21W-9D2	04-30-93	--	210	--	--	--	--	-40.2	-6.19
2N/21W-11H2	08-11-92	33	170	9	--	2	1,400	-40.0	-6.15
2N/21W-11J3	08-27-91	16	140	170	--	150	--	-41.0	-6.70
	07-21-92	32	120	200	--	130	--	-42.0	-6.50
2N/21W-11J5	02-08-91	4	190	21	--	38	1,000	-39.5	-6.15
	08-20-91	14	190	3	--	4	--	-39.5	-6.05
2N/21W-15M4	08-24-90	50	340	19	--	47	--	-43.5	-6.90
	07-21-92	48	340	9	--	54	--	-44.0	-6.75
2N/21W-18H3	02-27-91	35	420	14	--	<1	--	-40.0	-6.20
	04-30-93	--	580	--	--	--	--	-52.0	-7.65
2N/21W-18H5	04-30-93	--	600	--	--	--	--	-52.6	-7.69
2N/21W-18H12	02-27-91	27	640	570	--	110	--	-49.0	-7.35
	04-30-93	--	680	--	--	--	--	-51.9	-7.45
2N/21W-19B2	03-01-91	<100	870	30	--	100	--	-43.0	-6.60
2N/21W-20F2	02-20-91	25	610	35	--	120	1,200	-50.5	-7.60
2N/21W-32E1	02-20-91	40	370	72	--	34	1,100	-47.5	-7.25
	08-07-91	--	--	--	50	--	1,000	--	--
2N/21W-34G1	08-03-90	35	770	130	--	31	--	-41.5	-6.75
	03-12-91	34	760	130	--	34	830	-43.5	-6.75
	08-06-91	--	--	--	--	--	--	--	--
2N/21W-34G2	08-03-90	32	560	11	--	100	--	-42.5	-6.55
	08-05-91	18	550	40	41	44	1,000	-42.0	-6.55
	05-14-92	42	530	8	--	81	--	-40.0	-6.35
	08-17-93	40	540	<3	--	64	1,600	-40.3	-6.33
2N/21W-34G3	08-03-90	23	590	99	--	53	--	-42.5	-6.55
	08-05-91	23	660	140	41	78	970	-42.0	-6.55
	05-15-92	23	660	190	--	79	--	-40.5	-6.60
	08-17-93	24	700	180	--	82	1,000	-41.5	-6.60
2N/21W-34G4	08-03-90	26	260	6	--	30	--	-42.4	-6.60
	08-05-91	23	250	17	32	43	790	-43.0	-6.65
	05-14-92	27	240	18	--	31	--	-41.0	-6.65
	08-18-93	29	250	<3	--	35	880	-42.4	-6.66

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
2N/21W-34G5	PV 190	341246119040204	08-03-90	1845	USGS	147.96	190	90	1,740
			08-05-91	1100	USGS	--		--	1,750
			05-14-92	1700	USGS	121.14		--	1,720
			08-19-93	1250	USGS	111.90		--	1,720
2N/21W-34G6	PV 436	341246119040205	05-15-92	0915	USGS	210.40	436	90	919
			08-19-93	1750	USGS	342.25	1,000	228	884
2N/21W-36G3		341253119014601	08-07-91	1730	USGS	--	1,060	140	--
2N/22W-8L1		341612119124401	07-23-91	1055	USGS	--	1,775	228	1,960
2N/22W-9K5		341608119112101	09-06-90	1430	USGS	--	1,455	241	1,490
2N/22W-13N2		341502119083301	02-25-91	1430	USGS	--	1,220	115	1,180
			08-07-91	1230	USGS	--			--
2N/22W-14G5		341527119090401	02-21-91	1330	USGS	--	250	110	1,900
2N/22W-14G6		341527119090402	02-21-91	1430	USGS	--	190	110	1,710
2N/22W-14G7		341527119090403	02-19-91	1615	USGS	--	170	110	1,780
2N/22W-18N1		341507119140301	07-23-91	1610	USGS	--	1,200	80.9	1,260
2N/22W-20K1		341429119122301	07-23-91	0915	USGS	--	870	50	1,420
2N/22W-23B1		341451119090301	07-12-90	1145	USGS	--	277	109	1,720
2N/22W-23B3	SG 1250	341449119090101	11-28-90	1518	USGS	--	1,250	107	945
			12-11-91	1631	USGS	230.19			907
2N/22W-23B4	SG 1150	341449119090102	11-28-90	1930	USGS	--	1,150	107	1,160
			12-12-91	1455	USGS	225.90			1,130
2N/22W-23B5	SG 870	341449119090103	12-05-90	1700	USGS	231.82	870	107	1,450
			12-12-91	1700	USGS	205.74			1,360
			05-13-92	1100	UWCD	161.25			1,380
2N/22W-23B6	SG 500	341449119090104	12-05-90	1900	USGS	144.89	500	107	1,490
			12-11-91	1255	USGS	128.13			1,410
			05-13-92	1615	UWCD	96.48			1,430
2N/22W-23B7	SG 300	341449119090105	12-05-90	1430	USGS	141.56	300	107	1,490
			12-11-91	1115	USGS	126.01			1,530
			05-13-92	1850	UWCD	94.06			1,550
2N/22W-23H4		341444119085301	07-12-90	1020	USGS	--	1,410	107	1,380
			08-06-91	1100	USGS	--			--
2N/22W-24P2		341419119081401	02-25-91	1630	USGS	--	1,283	95	1,390
2N/22W-24R2		341414119074401	02-25-91	1130	USGS	--	200	87	2,340
2N/22W-25Q3		341322119080601	06-19-92	1030	USGS	--	280	72	1,530
2N/22W-26C3		341402119091401	07-12-90	1445	USGS	--	240	95	2,870
			06-19-92	0930	USGS	--			1,020

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
2N/21W-34G5	08-03-90	1,740	7.6	7.6	--	21.0	650	180	48	130
	08-05-91	1,700	7.9	8.0	25.5	24.0	630	180	44	120
	05-14-92	1,740	7.4	7.6	23.0	21.5	680	190	49	120
	08-19-93	1,720	7.3	7.8	23.5	21.0	710	200	50	120
2N/21W-34G6	05-15-92	924	8.2	8.0	23.0	21.0	160	40	15	140
	08-19-93	863	8.2	8.1	--	22.0	170	40	16	140
2N/21W-36G3	08-07-91	1,400	--	--	--	--	--	--	--	--
2N/22W-8L1	07-23-91	1,960	7.4	7.7	18.0	19.5	760	200	62	190
2N/22W-9K5	09-06-90	1,490	7.7	7.8	--	27.0	390	120	22	160
2N/22W-13N2	02-25-91	1,150	7.8	7.9	22.5	21.5	430	120	32	88
	08-07-91	1,160	--	--	--	--	--	--	--	--
2N/22W-14G5	02-21-91	1,900	7.5	7.8	--	18.0	610	160	51	200
2N/22W-14G6	02-21-91	1,710	7.5	7.7	--	17.5	590	150	52	150
2N/22W-14G7	02-19-91	1,770	7.8	7.7	--	17.5	580	150	49	150
2N/22W-18N1	07-23-91	1,530	7.6	7.5	21.5	22.5	560	150	44	140
2N/22W-20K1	07-23-91	1,440	8.0	7.7	18.0	18.0	530	140	44	110
2N/22W-23B1	07-12-90	1,640	7.6	7.5	31.0	17.5	630	160	56	120
2N/22W-23B3	11-28-90	961	7.8	7.9	20.5	19.0	160	42	14	150
	12-11-91	910	7.8	7.6	15.5	21.0	170	45	14	130
2N/22W-23B4	11-28-90	1,180	8.1	8.0	13.0	17.5	360	97	29	130
	12-12-91	1,150	7.9	7.7	--	21.0	420	120	30	94
2N/22W-23B5	12-05-90	1,430	8.0	8.0	--	17.5	510	140	38	120
	12-12-91	1,400	7.6	7.7	11.5	17.0	530	150	38	120
	05-13-92	1,400	--	7.8	--	18.5	530	150	38	120
2N/22W-23B6	12-05-90	1,490	7.6	7.7	--	17.5	560	140	50	130
	12-11-91	1,450	7.4	7.5	25.0	19.0	580	150	50	110
	05-13-92	1,440	7.6	7.5	24.0	18.0	570	150	48	110
2N/22W-23B7	12-05-90	1,440	7.4	7.7	--	18.5	550	140	48	110
	12-11-91	1,540	7.5	7.5	--	18.5	660	170	56	100
	05-13-92	1,580	7.5	7.5	24.0	18.0	680	180	57	100
2N/22W-23H4	07-12-90	1,360	7.7	7.7	26.0	20.0	500	140	36	110
	08-06-91	1,480	--	--	--	--	--	--	--	--
2N/22W-24P2	02-25-91	1,370	7.6	7.9	18.5	18.0	540	140	46	100
2N/22W-24R2	02-25-91	2,280	7.4	7.5	18.5	18.0	940	240	83	200
2N/22W-25Q3	06-19-92	1,570	7.5	7.4	21.5	18.0	640	170	53	110
2N/22W-26C3	07-12-90	2,580	7.5	7.4	31.0	19.0	1,300	330	110	140
	06-19-92	1,190	7.8	7.5	19.5	18.0	490	130	41	83

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
2N/21W-34G5	08-03-90	5.3	[3]200	204	450	120	0.30	0.77	0.022	38
	08-05-91	5.7	[3]190	179	500	120	.20	.68	.011	37
	05-14-92	4.4	188	196	470	120	.20	.69	.010	39
	08-19-93	4.4	179	184	530	130	.30	.62	.005	41
2N/21W-34G6	05-15-92	8.7	401	397	34	50	.20	.080	.120	23
	08-19-93	8.7	342	328	29	44	.10	.090	.110	25
2N/21W-36G3	08-07-91	--	--	--	--	160	--	.41	.080	--
2N/22W-8L1	07-23-91	6.0	[3]290	297	710	90	.60	.57	.110	34
2N/22W-9K5	09-06-90	4.1	180	181	480	64	.20	.76	.075	160
2N/22W-13N2	02-25-91	4.0	[1]204	205	400	43	.30	.23	.061	29
	08-07-91	--	--	--	--	37	--	--	--	--
2N/22W-14G5	02-21-91	6.9	[3]290	286	660	76	.60	.52	.018	28
2N/22W-14G6	02-21-91	5.9	[3]250	250	590	66	.50	.53	.031	27
2N/22W-14G7	02-19-91	5.7	[1]210	216	850	74	.60	.59	.031	26
2N/22W-18N1	07-23-91	5.1	295	355	490	72	.40	.65	.120	37
2N/22W-20K1	07-23-91	4.8	274	224	510	56	.50	.43	.013	30
2N/22W-23B1	07-12-90	5.0	273	236	550	71	.50	.52	.021	27
2N/22W-23B3	11-28-90	4.4	275	287	68	100	.40	.68	.230	33
	12-11-91	3.6	285	287	48	110	.40	1.0	.310	36
2N/22W-23B4	11-28-90	5.6	222	221	350	64	.40	.10	.150	30
	12-12-91	3.7	200	207	310	54	.30	.44	.160	33
2N/22W-23B5	12-05-90	4.7	[3]246	256	480	49	.30	.38	.064	28
	12-12-91	4.5	226	246	430	56	.40	.38	.065	29
	05-13-92	4.6	243	237	420	51	.40	.37	.062	29
2N/22W-23B6	12-05-90	4.9	[2]241	248	500	45	.10	.60	.016	31
	12-11-91	5.3	252	243	500	49	.70	.63	.007	33
	05-13-92	5.0	242	236	430	48	.60	.53	.008	31
2N/22W-23B7	12-05-90	4.9	[2]217	279	480	55	.40	.40	.013	29
	12-11-91	5.4	212	229	530	69	.50	.73	.010	31
	05-13-92	5.0	237	232	480	65	.50	.83	.009	29
2N/22W-23H4	07-12-90	4.0	239	231	420	48	.30	.35	.059	29
	08-06-91	--	--	--	--	43	--	--	--	--
2N/22W-24P2	02-25-91	4.4	[1]217	217	490	46	.60	.39	.018	30
2N/22W-24R2	02-25-91	6.4	[2]284	218	1,000	92	.60	1.2	.058	26
2N/22W-25Q3	06-19-92	5.1	229	230	550	55	.70	.38	.008	29
2N/22W-26C3	07-12-90	6.2	303	302	1,000	78	.50	1.9	.037	29
	06-19-92	4.3	218	207	380	35	.70	.45	.006	33

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
2N/21W-34G5	08-03-90	1,280	1,150	--	13.0	0.030	0.70	0.210	0.34	--
	08-05-91	1,230	1,180	0.020	14.0	.010	.60	.230	.71	10
	05-14-92	1,280	1,170	<.010	14.0	.020	<.20	.050	.15	--
	08-19-93	1,180	1,260	<.010	15.0	.020	<.20	.010	.09	--
2N/21W-34G6	05-15-92	554	556	<.010	<.050	1.20	1.4	1.60	4.6	--
	08-19-93	526	505	<.010	<.050	.590	.60	.960	3.1	--
2N/21W-36G3	08-07-91	--	--	--	--	--	--	--	--	--
2N/22W-8L1	07-23-91	1,510	1,490	.020	3.00	.170	.30	.030	.09	--
2N/22W-9K5	09-06-90	1,080	1,120	--	<.100	.520	.60	.010	.03	--
2N/22W-13N2	02-25-91	816	840	.010	<.050	.290	.40	.500	.61	<10
	08-07-91	--	--	--	--	--	--	--	--	--
2N/22W-14G5	02-21-91	1,380	1,370	.040	2.40	.030	<.20	.150	.46	<10
2N/22W-14G6	02-21-91	1,260	1,200	.020	1.80	.020	<.20	.910	2.9	10
2N/22W-14G7	02-19-91	1,330	1,450	.040	2.90	.020	.20	1.20	3.4	10
2N/22W-18N1	07-23-91	1,120	1,160	<.010	.170	.170	.30	.040	.09	--
2N/22W-20K1	07-23-91	1,040	1,040	.010	2.30	<.010	<.20	.020	.03	--
2N/22W-23B1	07-12-90	1,230	1,150	--	3.90	.030	.40	.070	.18	--
2N/22W-23B3	11-28-90	563	586	<.010	<.100	--	.90	.110	.25	<10
	12-11-91	583	562	<.010	<.050	.440	.50	.040	.12	--
2N/22W-23B4	11-28-90	786	842	<.010	<.100	.370	.50	.400	1.0	<10
	12-12-91	1,000	771	<.010	<.050	.280	.30	.070	.21	--
2N/22W-23B5	12-05-90	1,090	1,010	<.010	<.100	.200	<.20	.290	.43	10
	12-12-91	1,020	978	<.010	<.050	.160	<.20	.260	.58	--
	05-13-92	1,010	957	<.010	<.050	.170	<.20	.140	.46	--
2N/22W-23B6	12-05-90	1,110	1,070	.020	4.30	.020	.30	.690	1.1	20
	12-11-91	1,270	1,060	<.010	4.00	<.010	<.20	.180	.49	--
	05-13-92	1,050	980	<.010	3.20	<.010	<.20	.190	.55	--
2N/22W-23B7	12-05-90	1,070	1,010	<.010	3.10	.030	<.20	.320	.58	30
	12-11-91	1,230	1,130	<.010	6.80	<.010	<.20	.240	.74	--
	05-13-92	1,180	1,090	<.010	7.10	.010	<.20	.150	.52	--
2N/22W-23H4	07-12-90	976	928	--	<.100	.130	<.20	.020	--	--
	08-06-91	--	--	--	--	--	--	--	--	--
2N/22W-24P2	02-25-91	1,030	997	<.010	1.60	<.010	.40	.040	.06	--
2N/22W-24R2	02-25-91	1,890	1,830	.020	2.70	.020	.80	.020	--	20
2N/22W-25Q3	06-19-92	1,180	1,140	<.010	5.20	.020	<.20	.070	.09	--
2N/22W-26C3	07-12-90	2,200	1,980	--	24.0	.020	.30	.030	.18	--
	06-19-92	892	858	<.010	5.60	.040	<.20	.020	.12	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
2N/21W-34G5	08-03-90	32	390	5	--	7	--	--	--
	08-05-91	75	430	<3	45	8	1,600	-40.0	-6.15
	05-14-92	41	430	6	--	8	--	-39.0	-6.15
	08-19-93	35	460	<3	--	2	1,400	-40.9	-6.26
2N/21W-34G6	05-15-92	57	900	42	--	63	--	-47.0	-7.10
	08-19-93	51	870	6	--	48	400	-46.3	-7.11
2N/21W-36G3	08-07-91	--	340	--	40	--	1,000	--	--
2N/22W-8L1	07-23-91	23	660	780	100	470	1,400	-44.0	-6.85
2N/22W-9K5	09-06-90	39	480	43	--	190	--	-52.5	-7.60
2N/22W-13N2	02-25-91	25	540	180	--	110	--	-49.5	-7.65
	08-07-91	--	--	--	30	--	1,200	--	--
2N/22W-14G5	02-21-91	22	670	8	--	10	1,500	-49.5	-7.45
2N/22W-14G6	02-21-91	20	710	8	--	6	1,400	-48.0	-7.30
2N/22W-14G7	02-19-91	24	690	11	--	10	1,300	-45.5	-6.95
2N/22W-18N1	07-23-91	23	620	220	60	200	1,200	-46.5	-7.00
2N/22W-20K1	07-23-91	18	670	3	50	15	1,200	-49.5	-7.45
2N/22W-23B1	07-12-90	28	800	6	--	<1	--	-48.5	-6.95
2N/22W-23B3	11-28-90	61	690	28	--	39	490	-57.0	-8.45
	12-11-90	54	690	54	--	37	--	-58.0	-8.55
2N/22W-23B4	11-28-90	36	520	9	--	110	1,000	-54.0	-7.90
	12-12-91	40	500	110	--	160	--	-52.5	-7.85
2N/22W-23B5	12-05-90	26	540	150	--	170	1,200	-49.0	-7.45
	12-12-91	26	530	260	--	190	--	-47.5	-7.35
	05-13-92	26	540	240	--	190	--	-47.5	-7.40
2N/22W-23B6	12-05-90	20	730	10	--	7	1,300	-49.0	-7.25
	12-11-91	19	720	<3	--	<1	--	-50.5	-7.45
	05-13-92	19	720	3	--	2	--	-50.5	-7.50
2N/22W-23B7	12-05-90	23	680	11	--	6	1,300	-49.0	-7.20
	12-11-91	24	760	<3	--	1	--	-50.0	-7.20
	05-13-92	25	730	510	--	5	--	-50.0	-7.40
2N/22W-23H4	07-12-90	28	530	390	--	200	--	-49.0	-7.40
	08-06-91	--	--	--	40	--	1,200	--	--
2N/22W-24P2	02-25-91	18	730	8	--	3	1,300	-51.0	-7.50
2N/22W-24R2	02-25-91	<100	1,200	200	--	100	--	-48.0	-7.05
2N/22W-25Q3	06-19-92	16	840	16	--	<1	1,400	-51.0	-7.50
2N/22W-26C3	07-12-90	<100	1,000	30	--	20	--	-48.0	-6.95
	06-19-92	19	680	<3	--	<1	1,100	-54.5	-8.30

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
2N/22W-26C5		341407119091401	07-12-90	1640	USGS	--	380	97	2,410
2N/22W-27K1		341342119100801	02-28-91	0800	USGS	--	272	80.3	1,490
2N/22W-28L1		341340119113701	02-27-91	1400	USGS	--	294	66.4	1,840
2N/22W-30Q1		341321119132901	04-07-93	0815	USGS	--	510	37	--
2N/22W-31C2		341308119134501	04-07-93	0915	USGS	--	292	33	--
2N/22W-32C1		341309119123801	04-07-93	0945	USGS	--	250	48	--
2N/23W-13K4		341511119142801	09-04-90	1530	USGS	--	1,200	69	1,650
3N/19W-6D3		342241118550801	05-08-92	0900	USGS	--	400	435	1,390
3N/19W-28N1		341831118524401	07-10-92	1115	USGS	--	890	820	1,570
3N/20W-2A1		342232118562501	08-28-91	1500	USGS	--	92	376	1,630
3N/20W-3N1		342203118580501	05-06-92	1730	USGS	--	184	342	1,510
3N/20W-6P2		342153119005701	08-28-91	1615	USGS	--	252	300	--
3N/20W-24J1		341932118552401	07-19-93	1100	USGS	--	1,010	1040	486
3N/20W-26R3		341832118562501	07-21-93	1015	USGS	--	1,180	710	778
3N/20W-35R2	P7 1110	341745118561601	02-06-91	1845	USGS	384.96	1,110	590	620
			07-22-92	1800	USGS	393.86			560
3N/20W-35R3	P7 900	341745118561602	02-07-91	1800	USGS	386.89	900	590	680
3N/20W-35R4	P7 530	341745118561603	08-21-91	1625	USGS	266.14	530	590	485
			07-23-92	1130	USGS	268.90			457
3N/21W-11D2		342145119032101	08-28-91	0845	USGS	--	570	330	1,250
3N/21W-12F3		342130119021101	08-27-91	0930	USGS	--	300	300	1,210
3N/21W-12H1		342135119013501	08-22-91	1600	USGS	--	150	277	1,300
3N/21W-15C4		342056119041401	08-28-91	1015	USGS	--	284	241	1,650
3N/21W-15C6		342058119041201	08-28-91	0930	USGS	--	670	243	1,230
3N/21W-16A2		342053119044501	05-07-92	1300	USGS	--	600	244	1,190
3N/21W-16K1		342020119050101	08-27-91	1200	USGS	--	216	232	1,490
3N/21W-16K3		342022119055901	06-09-92	1700	USGS	--	760	238	1,300
3N/21W-19G4		341945119065701	08-27-91	1030	USGS	--	720	251	1,420
3N/21W-30H4		341844119065601	08-28-91	1415	USGS	--	500	205	1,710
3N/21W-34A1		341806119033601	08-27-91	1130	USGS	--	1,510	760	2,160
3N/22W-36K4		341749119081201	06-10-92	1030	USGS	--	867	189	1,610
3N/22W-36R1		341734119080801	05-06-92	1230	USGS	--	250	152	2,300
4N/18W-20M1		342402118474401	06-18-92	1330	USGS	--	397	685	1,820
4N/18W-20N1		342431118472901	08-26-91	1930	USGS	--	441	657	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
2N/22W-26C5	07-12-90	2,290	7.5	7.5	25.0	20.0	1,100	270	92	130
2N/22W-27K1	02-28-91	1,450	7.5	7.7	14.0	18.5	610	160	51	94
2N/22W-28L1	02-27-91	1,770	7.8	8.0	--	--	810	210	69	110
2N/22W-30Q1	04-07-93	1,230	--	--	13.5	18.5	--	--	--	--
2N/22W-31C2	04-07-93	1,570	--	--	17.5	18.5	--	--	--	--
2N/22W-32C1	04-07-93	1,420	--	--	17.0	17.5	--	--	--	--
2N/23W-13K4	09-04-90	1,640	7.4	7.5	26.0	21.0	560	150	46	160
3N/19W-6D3	05-08-92	1,350	7.4	7.7	--	15.5	540	130	53	95
3N/19W-28N1	07-10-92	1,620	7.4	7.5	25.5	24.5	410	110	34	180
3N/20W-2A1	08-28-91	1,570	7.5	7.5	28.5	20.5	670	170	60	90
3N/20W-3N1	05-06-92	1,520	7.5	7.5	23.5	17.5	660	170	57	92
3N/20W-6P2	08-28-91	1,340	7.7	7.6	28.0	21.0	580	150	49	84
3N/20W-24J1	07-19-93	485	7.9	7.6	--	22.0	190	51	15	23
3N/20W-26R3	07-21-93	781	7.5	7.7	31.5	23.5	300	89	19	47
3N/20W-35R2	02-06-91	606	7.7	7.9	19.0	21.5	220	68	13	40
	07-22-92	541	7.7	7.9	21.0	22.0	230	66	15	33
3N/20W-35R3	02-07-91	681	7.7	8.0	18.5	22.0	200	62	12	66
3N/20W-35R4	08-21-91	465	7.8	8.0	26.0	24.5	160	45	12	34
	07-23-92	459	7.6	7.8	--	22.0	180	51	12	30
3N/21W-11D2	08-28-91	1,340	7.1	7.7	23.5	20.0	550	160	37	95
3N/21W-12F3	08-27-91	1,290	7.2	7.6	18.0	16.5	560	150	46	85
3N/21W-12H1	08-22-91	1,420	7.4	7.7	24.0	16.5	620	160	53	82
3N/21W-15C4	08-28-91	1,790	7.4	7.4	--	19.5	800	220	60	110
3N/21W-15C6	08-28-91	1,280	7.6	7.7	21.0	19.5	560	160	39	88
3N/21W-16A2	05-07-92	1,190	7.3	7.5	--	18.5	490	140	33	86
3N/21W-16K1	08-27-91	1,640	7.3	7.5	26.0	19.0	670	180	54	120
3N/21W-16K3	06-09-92	1,290	7.2	7.4	27.5	18.5	540	150	40	89
3N/21W-19G4	08-27-91	1,510	7.3	7.5	--	20.0	590	170	40	110
3N/21W-30H4	08-28-91	1,870	7.5	7.6	--	21.5	740	200	58	170
3N/21W-34A1	08-27-91	2,170	7.7	7.8	21.5	25.0	540	61	93	310
3N/22W-36K4	06-10-92	1,590	7.2	7.4	20.0	19.0	720	210	48	80
3N/22W-36R1	05-06-92	2,280	7.2	7.3	--	18.5	900	240	74	160
4N/18W-20M1	06-18-92	1,850	7.2	7.4	27.0	18.0	840	210	76	100
4N/18W-20N1	08-26-91	1,850	7.0	7.5	21.5	18.0	750	190	67	150

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
2N/22W-26C5	07-12-90	5.7	287	283	840	71	0.40	1.5	0.033	29
2N/22W-27K1	02-28-91	4.9	[1]234	268	470	58	.60	.30	.009	29
2N/22W-28L1	02-27-91	5.0	[3]267	244	650	75	.50	1.7	.009	27
2N/22W-30Q1	04-07-93	--	--	--	--	42	--	--	--	--
2N/22W-31C2	04-07-93	--	--	--	--	61	--	--	--	--
2N/22W-32C1	04-07-93	--	--	--	--	55	--	--	--	--
2N/23W-13K4	09-04-90	4.9	295	296	530	74	.20	.63	.140	38
3N/19W-6D3	05-08-92	4.7	226	230	410	34	.80	.22	.005	29
3N/19W-28N1	07-10-92	5.7	235	249	360	160	.70	.62	.130	40
3N/20W-2A1	08-28-91	5.1	250	269	530	59	.60	.20	.005	25
3N/20W-3N1	05-06-92	5.0	256	258	450	40	.60	.21	.004	28
3N/20W-6P2	08-28-91	3.5	220	223	540	41	.70	.17	.017	25
3N/20W-24J1	07-19-93	3.4	148	143	86	12	.40	.050	.008	27
3N/20W-26R3	07-21-93	2.5	208	204	150	38	.30	.13	.066	36
3N/20W-35R2	02-06-91	3.7	[1]161	163	140	14	.30	.11	.019	33
	07-22-92	2.8	162	159	100	18	.20	.10	.025	34
3N/20W-35R3	02-07-91	4.0	[1]179	177	150	22	.30	.12	.026	35
3N/20W-35R4	08-21-91	2.2	167	172	29	14	.30	.070	.017	38
	07-23-92	1.9	152	164	38	19	.20	.070	.012	39
3N/21W-11D2	08-28-91	2.7	286	253	440	49	.40	.35	.031	24
3N/21W-12F3	08-27-91	3.7	--	232	530	39	.60	.18	.023	27
3N/21W-12H1	08-22-91	4.0	221	232	440	41	.70	.20	.021	28
3N/21W-15C4	08-28-91	3.4	300	308	730	65	.40	.39	.012	26
3N/21W-15C6	08-28-91	2.9	240	234	440	43	.40	.29	.018	28
3N/21W-16A2	05-07-92	3.4	225	227	350	27	.50	.22	.038	31
3N/21W-16K1	08-27-91	3.8	295	312	630	56	.50	.31	.023	27
3N/21W-16K3	06-09-92	4.2	224	223	400	42	.50	.24	.038	33
3N/21W-19G4	08-27-91	3.5	258	267	600	56	.40	.37	.110	31
3N/21W-30H4	08-28-91	6.0	304	310	770	88	.30	.50	.079	31
3N/21W-34A1	08-27-91	--	754	723	390	61	.20	.22	.020	21
3N/22W-36K4	06-10-92	3.9	268	260	520	68	.40	.74	.160	35
3N/22W-36R1	05-06-92	4.6	298	298	760	93	.70	.91	.180	31
4N/18W-20M1	06-18-92	6.0	279	299	620	100	1.0	.47	.007	14
4N/18W-20N1	08-26-91	6.0	--	279	690	110	.60	.38	.007	24

See footnotes at end of table.

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
2N/22W-26C5	07-12-90	1,760	1,720	--	24.0	0.220	0.80	0.050	0.21	--
2N/22W-27K1	02-28-91	1,070	1,050	<0.010	4.50	.030	.80	.060	.09	--
2N/22W-28L1	02-27-91	1,360	1,390	<.010	19.0	.020	.80	.040	.06	--
2N/22W-30Q1	04-07-93	--	--	--	--	--	--	--	--	--
2N/22W-31C2	04-07-93	--	--	--	--	--	--	--	--	--
2N/22W-32C1	04-07-93	--	--	--	--	--	--	--	--	--
2N/23W-13K4	09-04-90	1,150	1,180	--	<.100	.310	.30	.030	.06	20
3N/19W-6D3	05-08-92	976	901	<.010	1.20	<.010	<.20	.010	.06	--
3N/19W-28N1	07-10-92	1,040	1,040	<.010	<.050	.060	<.20	<.010	.06	--
3N/20W-2A1	08-28-91	1,160	1,130	<.010	7.40	.020	.70	.050	.09	--
3N/20W-3N1	05-06-92	1,120	1,020	<.010	5.70	.010	<.20	.030	.12	--
3N/20W-6P2	08-28-91	976	1,040	<.010	2.80	.010	.30	.030	.03	--
3N/20W-24J1	07-19-93	308	305	.020	<.050	.920	1.0	<.010	.06	--
3N/20W-26R3	07-21-93	529	515	.040	2.30	.040	<.20	<.010	.03	--
3N/20W-35R2	02-06-91	397	410	<.010	<.100	.300	.60	.100	.18	10
	07-22-92	368	369	.040	.770	.080	<.20	.280	.83	--
3N/20W-35R3	02-07-91	438	460	<.010	<.100	.090	.40	.320	.83	<10
3N/20W-35R4	08-21-91	296	296	<.010	3.40	<.010	<.20	.990	2.8	--
	07-23-92	288	306	<.010	3.50	.010	<.20	.290	.86	--
3N/21W-11D2	08-28-91	988	977	<.010	3.70	.030	.20	.030	--	--
3N/21W-12F3	08-27-91	1,000	1,030	.010	2.70	.020	<.20	.030	--	--
3N/21W-12H1	08-22-91	1,050	966	.010	3.80	.020	<.20	.030	.06	--
3N/21W-15C4	08-28-91	1,390	1,410	<.010	2.80	.040	<.20	.030	--	--
3N/21W-15C6	08-28-91	936	957	.010	3.30	.020	.30	.030	--	--
3N/21W-16A2	05-07-92	850	810	<.010	.550	<.010	<.20	<.010	.06	--
3N/21W-16K1	08-27-91	1,240	1,260	<.010	.740	.020	<.20	.030	--	--
3N/21W-16K3	06-09-92	946	899	<.010	1.00	.020	<.20	.020	.06	--
3N/21W-19G4	08-27-91	1,120	1,180	<.010	1.10	.080	.20	.030	--	--
3N/21W-30H4	08-28-91	1,470	1,510	<.010	<.050	.050	.40	.020	--	--
3N/21W-34A1	08-27-91	1,350	1,410	.110	.110	10.0	13	.030	--	<10
3N/22W-36K4	06-10-92	1,200	1,130	<.010	<.050	.100	<.20	.010	.12	--
3N/22W-36R1	05-06-92	1,800	1,570	.050	5.10	.030	<.20	.020	.12	--
4N/18W-20M1	06-18-92	1,390	1,320	<.010	2.20	.080	<.20	.040	.12	--
4N/18W-20N1	08-26-91	1,350	1,430	<.010	5.70	.020	.50	.050	.15	--

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
2N/22W-26C5	07-12-90	<100	890	20	--	10	--	-47.0	-7.00
2N/22W-27K1	02-28-91	27	750	7	--	7	--	-48.0	-7.05
2N/22W-28L1	02-27-91	29	800	16	--	3	--	-47.5	-7.00
2N/22W-30Q1	04-07-93	--	--	--	--	--	--	-49.3	-7.63
2N/22W-31C2	04-07-93	--	--	--	--	--	--	-50.3	-7.37
2N/22W-32C1	04-07-93	--	--	--	--	--	--	-49.9	-7.37
2N/23W-13K4	09-04-90	19	690	810	--	320	--	-46.5	-7.00
3N/19W-6D3	05-08-92	17	660	<3	--	<1	--	-56.0	-7.70
3N/19W-28N1	07-10-92	24	1,200	110	--	23	--	-44.5	-6.55
3N/20W-2A1	08-28-91	22	760	14	--	<1	--	-50.5	-7.50
3N/20W-3N1	05-06-92	21	750	4	--	<1	--	-54.0	-7.60
3N/20W-6P2	08-28-91	30	740	5	--	10	--	-51.5	-7.45
3N/20W-24J1	07-19-93	7	70	9	--	40	--	-41.8	-6.82
3N/20W-26R3	07-21-93	79	80	35	--	28	--	-41.4	-6.49
3N/20W-35R2	02-06-91	80	80	56	--	86	380	-44.0	-6.90
	07-22-92	79	80	4	--	21	--	-44.0	-6.75
3N/20W-35R3	02-07-91	54	<110	240	--	47	370	-44.0	-6.95
3N/20W-35R4	08-21-91	52	70	8	--	1	--	-42.5	-6.55
	07-23-92	73	70	4	--	<1	--	-42.5	-6.50
3N/21W-11D2	08-28-91	28	490	20	--	100	--	-46.0	-7.15
3N/21W-12F3	08-27-91	15	700	<3	--	170	--	-53.0	-7.75
3N/21W-12H1	08-22-91	25	750	5	--	62	--	-52.5	-7.40
3N/21W-15C4	08-28-91	31	660	18	--	<1	--	-50.0	-7.35
3N/21W-15C6	08-28-91	26	530	5	--	72	--	-49.5	-7.55
3N/21W-16A2	05-07-92	19	480	12	--	160	--	-50.5	-7.65
3N/21W-16K1	08-27-91	20	810	<3	--	86	--	-50.0	-7.20
3N/21W-16K3	06-09-92	17	590	5	--	230	1,000	-52.5	-7.70
3N/21W-19G4	08-27-91	24	610	200	--	250	--	-48.5	-7.35
3N/21W-30H4	08-28-91	24	790	460	--	240	--	-49.0	-7.40
3N/21W-34A1	08-27-91	<100	1,500	<10	150	100	910	-43.0	-6.70
3N/22W-36K4	06-10-92	29	430	1300	--	180	1,300	-44.5	-7.10
3N/22W-36R1	05-06-92	<100	820	10	--	720	--	-45.0	-6.85
4N/18W-20M1	06-18-92	24	940	5	--	1	1,900	-46.5	-6.00
4N/18W-20N1	08-26-91	26	770	15	--	2	--	-51.5	-6.95

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Agency collecting sample	Water level (ft below land surface)	Depth of well, total (ft)	Elevation of land-surface datum (ft above sea level)	Specific conductance, field (µs/cm)
4N/18W-20P1		342443118472601	06-18-92	1230	USGS	--	1,000	670	2,060
4N/18W-28C2		342427118462301	06-10-92	1630	USGS	--	750	676	1,540
4N/18W-29F1		342403118472601	08-26-91	1630	USGS	--	285	638	1,260
4N/18W-29K1		342359118471001	08-26-91	1800	USGS	--	745	640	--
4N/18W-31D2		342333118484701	08-27-91	1715	USGS	--	500	605	1,120
4N/19W-25J4		342401118485001	08-27-91	1700	USGS	--	500	601	--
4N/19W-26Q3		342350118501601	08-27-91	1550	USGS	--	--	570	--
4N/19W-27R3		342339118511201	06-17-92	0930	USGS	14.04	402	530	1,640
4N/19W-29R4		342342118530501	06-09-92	1430	USGS	--	180	468	1,220
4N/19W-30Q2		342345118542401	05-06-92	1230	USGS	--	510	438	1,540
4N/19W-30R1		342346118541301	05-06-92	1130	USGS	--	305	441.9	1,720
4N/19W-34B1		342335118512701	06-17-92	1130	USGS	28.19	325	540	1,920
4N/19W-35L5		342310118503301	08-28-91	0930	USGS	--	302	540	1,280
4N/20W-24R2		342439118551601	06-11-92	0830	USGS	--	1,850	450	1,310
4N/20W-25B1		342426118553501	06-11-92	1000	USGS	--	300	444	1,120
4N/20W-32R1		342243118594301	06-17-92	1420	USGS	--	334	440	1,450
4N/20W-33C3		342324118585601	06-11-92	1400	USGS	--	724	520	1,250

State well No.	Date	Specific conductance, lab (µS/cm)	pH, field (standard units)	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
4N/18W-20P1	06-18-92	2,080	7.6	7.4	27.0	18.0	810	190	82	160
4N/18W-28C2	06-10-92	1,520	7.4	7.6	20.5	17.5	510	120	51	140
4N/18W-29F1	08-26-91	1,460	7.5	7.8	--	18.5	480	120	44	130
4N/18W-29K1	08-26-91	1,500	7.2	7.7	25.5	18.0	530	130	49	130
4N/18W-31D2	08-27-91	1,240	7.8	7.7	--	18.0	490	120	45	84
4N/19W-25J4	08-27-91	1,430	7.7	7.7	--	19.5	520	130	47	110
4N/19W-26Q3	08-27-91	2,100	7.3	7.5	25.0	19.0	1,100	240	110	130
4N/19W-27R3	06-17-92	1,660	7.4	7.3	22.0	17.5	740	180	69	96
4N/19W-29R4	06-09-92	1,200	7.4	7.6	35.0	16.0	450	110	43	99
4N/19W-30Q2	05-06-92	1,540	7.4	7.6	26.0	17.0	650	160	62	100
4N/19W-30R1	05-06-92	1,700	7.2	7.4	26.0	16.5	770	200	66	110
4N/19W-34B1	06-17-92	1,930	7.5	7.6	22.0	17.5	950	240	84	120
4N/19W-35L5	08-28-91	1,420	7.6	7.6	25.5	20.0	610	150	57	82
4N/20W-24R2	06-11-92	1,290	7.3	7.4	19.0	20.0	470	120	42	100
4N/20W-25B1	06-11-92	1,100	7.3	7.5	19.5	18.0	520	140	42	61
4N/20W-32R1	06-17-92	1,450	7.1	7.4	22.0	20.0	730	210	49	66
4N/20W-33C3	06-11-92	1,240	7.4	7.3	--	22.0	500	150	31	86

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L as SiO_2)
4N/18W-20P1	06-18-92	5.6	253	259	790	88	0.60	0.45	0.004	23
4N/18W-28C2	06-10-92	4.5	268	253	380	110	.70	.32	.043	21
4N/18W-29F1	08-26-91	5.1	202	245	430	110	.60	.33	.008	18
4N/18W-29K1	08-26-91	4.8	--	267	440	93	.60	.28	.067	19
4N/18W-31D2	08-27-91	4.4	190	189	440	72	.70	.28	.006	21
4N/19W-25J4	08-27-91	4.9	--	258	420	86	.60	.30	.005	21
4N/19W-26Q3	08-27-91	5.7	320	321	1,000	44	.70	.26	.017	28
4N/19W-27R3	06-17-92	5.5	305	295	550	46	.60	.21	.016	30
4N/19W-29R4	06-09-92	4.3	220	201	360	36	.70	.20	.004	30
4N/19W-30Q2	05-06-92	5.1	228	252	480	42	.70	.24	.022	30
4N/19W-30R1	05-06-92	4.9	252	273	610	51	1.0	.28	.009	30
4N/19W-34B1	06-17-92	6.5	325	329	690	54	.50	.27	.006	30
4N/19W-35L5	08-28-91	4.6	194	201	500	66	.70	.31	.006	25
4N/20W-24R2	06-11-92	5.3	248	244	400	40	.40	.24	.037	38
4N/20W-25B1	06-11-92	2.6	237	226	300	35	.70	.11	.002	21
4N/20W-32R1	06-17-92	1.7	255	252	440	41	.50	.23	.002	23
4N/20W-33C3	06-11-92	1.9	285	263	300	34	.50	.23	.005	22

State well No.	Date	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO_2 + NO_3, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Aluminum, dissolved (µg/L as Al)
4N/18W-20P1	06-18-92	23	1,600	1,520	<0.010	4.30	0.040	<0.20	<0.010	
4N/18W-28C2	06-10-92	21	1,010	1,010	<.010	5.40	.020	<.20	.040	
4N/18W-29F1	08-26-91	18	978	1,040	<.010	6.80	.020	.70	.070	
4N/18W-29K1	08-26-91	19	1,030	1,050	<.010	4.50	.010	.40	.080	
4N/18W-31D2	08-27-91	21	886	909	<.010	1.80	.010	.40	.060	
4N/19W-25J4	08-27-91	21	988	999	<.010	5.40	.010	.50	.060	
4N/19W-26Q3	08-27-91	28	1,740	1,770	<.010	3.20	.020	.20	.040	
4N/19W-27R3	06-17-92	30	1,250	1,180	<.010	4.90	.030	<.20	.020	
4N/19W-29R4	06-09-92	30	838	809	<.010	.790	.010	<.20	.010	
4N/19W-30Q2	05-06-92	30	1,140	1,040	<.010	2.80	.010	<.20	.010	
4N/19W-30R1	05-06-92	30	1,310	1,260	<.010	4.80	.020	<.20	.020	
4N/19W-34B1	06-17-92	30	1,510	1,470	<.010	8.90	.040	.20	.030	
4N/19W-35L5	08-28-91	25	1,050	1,020	<.010	3.30	.020	<.20	.050	
4N/20W-24R2	06-11-92	38	938	895	<.010	.220	.070	<.20	<.010	
4N/20W-25B1	06-11-92	21	768	752	<.010	2.70	.020	<.20	<.010	
4N/20W-32R1	06-17-92	23	1,100	1,060	<.010	17.0	.030	<.20	.020	
4N/20W-33C3	06-11-92	22	852	846	<.010	14.0	.010	<.20	<.010	

Table 1. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in ground-water samples, Ventura County, California, 1989-93--*Continued*

State well No.	Date	Barium, dissolved (µg/L as Ba)	Boron, dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Lithium, dissolved (µg/L as Li)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
4N/18W-20P1	06-18-92	0.03	<100	550	<10	<10	1,700	-51.5	-7.55
4N/18W-28C2	06-10-92	.15	16	690	3	1	990	-53.0	-7.45
4N/18W-29F1	08-26-91	.15	30	690	5	2	--	-53.5	-7.50
4N/18W-29K1	08-26-91	.15	20	770	4	<1	--	-55.0	-7.60
4N/18W-31D2	08-27-91	.12	18	620	4	<1	--	-51.0	-6.70
4N/19W-25J4	08-27-91	.12	24	690	11	<1	--	-53.0	-7.40
4N/19W-26Q3	08-27-91	.06	<100	1,100	<10	80	--	-52.5	-7.35
4N/19W-27R3	06-17-92	.12	17	970	5	<1	1,600	-52.0	-7.30
4N/19W-29R4	06-09-92	.06	14	370	5	4	930	-54.5	-8.10
4N/19W-30Q2	05-06-92	.09	14	860	<3	<1	--	-53.0	-7.55
4N/19W-30R1	05-06-92	.09	15	740	8	4	--	-51.5	-7.55
4N/19W-34B1	06-17-92	.15	19	1,000	3	<1	2,000	-50.0	-7.10
4N/19W-35L5	08-28-91	.09	16	700	4	<1	--	-50.5	-6.90
4N/20W-24R2	06-11-92	.03	31	490	300	170	1,100	-51.0	-7.50
4N/20W-25B1	06-11-92	.06	18	710	3	16	1,200	-52.0	-7.95
4N/20W-32R1	06-17-92	.06	48	150	19	<1	710	-43.0	-6.85
4N/20W-33C3	06-11-92	.03	28	150	6	1	620	-42.5	-6.75

[1]Unfiltered incremental titration.
[2]Unfiltered fixed end-point titration.
[3]Filtered fixed end-point titration.

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93

[All data were collected by U.S. Geological Survey and analyzed at U.S. Geological Survey laboratories. Numbering system for sites is explained in text. Location of sites is shown in figure 5. TU, tritium unit. --, no data]

State well, spring, or drain No.	Driller's designation	Site identification No.	Date	Time	Tritium, in water molecules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Strontium-87/86 (ratio)
1N/20W-6P2		341129119011201	08-28-91	1200	--	--	-14.4	--	3.0	--
1N/21W-3K1		341148119040601	02-27-91	0800	--	--	--	--	--	0.70906
1N/21W-3R1		341128119034101	03-12-91	1315	--	--	--	--	--	.70905
1N/21W-4D4		341206119054101	02-27-91	0950	--	--	--	--	--	.70886
1N/21W-4K1		341146119045701	02-27-91	0900	--	--	--	--	--	.70916
			12-17-91	0900	--	--	-14.7	--	--	--
1N/21W-5J2		341141119054501	07-25-91	1020	0.00	0.40	--	--	--	--
1N/21W-5K1		341149119060901	07-24-91	0930	.00	.40	--	--	--	--
1N/21W-6J5		341143119064801	02-21-91	0900	.03	.15	-18.0	16.8	--	.70911
1N/21W-7J2		341048119065001	02-20-91	1430	.27	.26	--	--	--	.70940
1N/21W-8R1		341034119054501	02-27-91	1040	--	--	--	--	--	.70888
			08-07-91	0930	--	--	-16.5	--	0.5	--
			12-17-91	1300	--	--	-15.7	--	--	--
1N/21W-10G1		341059119040601	03-12-91	1100	--	--	--	--	--	.70889
1N/21W-19L10	SCE 414	340914119073301	06-12-91	1800	.10	.13	--	--	--	.70954
1N/21W-19L11	SCE 320	340914119073302	06-12-91	1000	.33	.12	--	--	--	.70941
			07-09-92	1400	.25	.11	--	--	--	--
1N/21W-19L12	SCE 220	340914119073303	06-12-91	1730	.61	.12	--	--	--	.71029
			07-09-92	1735	.08	.11	--	--	--	--
			08-26-92	1048	.04	.15	--	--	--	--
			09-30-92	1530	.03	.17	--	--	--	--
1N/21W-19L13	SCE 130	340914119073304	06-12-91	1600	.61	.12	--	--	--	.71016
			07-09-92	1620	.12	.11	--	--	--	--
1N/21W-19L14	SCE 38	340914119073305	06-13-91	0900	.20	.20	--	--	--	.71042
DRAIN 1N/21W-19-1		340915119073101	05-21-91	0800	--	--	--	--	--	.71044
1N/21W-22C1		340912119040901	03-12-91	0845	--	--	--	--	--	.70853
			12-18-91	1300	--	--	-18.6	--	7.1	--
1N/21W-28D1		340842119054301	03-12-91	0800	--	--	--	--	--	.70899
1N/21W-32Q2	Q2 970	340712119062001	06-25-91	1330	--	--	-10.7	--	58.7	.70786
			12-18-91	1300	--	--	-8.90	--	--	--
1N/21W-32Q3	Q2 840	340712119062002	06-25-91	1200	.09	.14	-23.9	--	24.9	.70899
1N/21W-32Q4	Q2 640	340712119062003	06-25-91	1650	.20	.11	-22.6	--	18.3	.70892
1N/21W-32Q5	Q2 370	340712119062004	06-25-91	1915	.21	.12	-12.0	--	-2.2	.70873
1N/21W-32Q6	Q2 220	340712119062005	06-26-91	1915	.00	.11	-17.0	--	11.4	.70945
DRAIN 1N/21W-32-1		340711119061201	06-19-91	1000	--	--	--	--	--	.70955
1N/21W-32Q7	Q2 285	340712119062006	06-25-91	1500	.00	.12	-16.8	--	9.3	.70887
1N/22W-6B1		341209119132801	07-24-91	0900	6.20	.50	--	--	--	--

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93--*Continued*

State well, spring, or drain No.	Driller's designation	Site identification No.	Date	Time	Tritium, in water molecules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Strontium-87/86 (ratio)
1N/22W-20J4	A1 890	340916119120901	05-30-91	1630	--	--	--	--	--	0.70990
1N/22W-20J5	A1 680	340916119120902	05-30-91	1555	--	--	--	--	--	.71016
1N/22W-20J6	A1 425	340916119120903	05-30-91	1830	--	--	--	--	--	.70957
1N/22W-20J7	A1 320	340916119120904	05-30-91	1900	--	--	--	--	--	.70987
1N/22W-20J8	A1 195	340916119120905	05-31-91	0930	--	--	--	--	--	.71026
			02-04-92	1330	0.33	0.22	--	--	--	--
			09-29-92	1400	.18	.13	--	--	--	--
			09-29-92	1405	.00	.13	--	--	--	--
1N/22W-20M1	A2 940	340907119125201	11-13-91	1645	.00	.12	--	--	--	--
			08-05-92	1515	.00	.12	--	--	--	--
1N/22W-20M2	A2 740	340907119125202	08-05-92	1715	.09	.12	--	--	--	--
1N/22W-20M4	A2 320	340907119125204	08-05-92	1825	.09	.11	--	--	--	--
1N/22W-20M5	A2 170	340907119125301	08-05-92	1205	.22	.10	--	--	--	--
			09-29-92	1010	.33	.15	--	--	--	--
			09-29-92	1015	.26	.14	--	--	--	--
1N/22W-20M6	A2 70	340907119125302	08-06-92	1010	1.37	.13	--	--	--	--
1N/22W-21B3		340938119111301	02-28-91	1600	.10	.13	--	--	--	--
1N/22W-21B6		340932119111101	02-28-91	1605	.40	.20	--	--	--	--
1N/22W-22J7		340911119095601	07-25-90	0850	.18	.24	--	--	--	--
1N/22W-22J8		340911119095602	08-16-90	1400	.50	.22	--	--	--	--
1N/22W-22J12		340907119055801	07-23-90	1500	.39	.25	--	--	--	--
1N/22W-23Q2		340820119103401	07-10-91	1530	7.1	.30	--	--	--	--
1N/22W-26J3	SWIFT 350	340821119085701	10-29-90	1630	--	--	--	--	--	.71016
1N/22W-26J4	SWIFT 205	340821119085702	09-28-90	0930	--	--	--	--	--	.71028
			06-13-91	1540	.00	.12	--	--	--	--
			09-30-92	1630	.00	.14	--	--	--	--
			09-30-92	1635	.05	.17	--	--	--	--
1N/22W-26J5	SW 65	340821119085703	09-28-90	1030	--	--	--	--	--	.70996
			06-13-91	1445	.00	.15	--	--	--	--
1N/22W-27C3	SW 195	340848119102602	09-29-92	1505	.00	.15	--	--	--	--
1N/22W-27R3	CM7 350	340800119095901	06-26-91	1150	.00	.14	--	--	--	.71005
1N/22W-27R4	CM7 190	340800119095902	11-01-90	1500	--	--	--	--	--	.71020
1N/22W-27R5	CM7 110	340800119095903	06-26-91	1320	.00	.15	--	--	--	.71007
1N/22W-28G1	CM4 1395	340827119110901	05-15-91	1920	--	--	-19.4	--	12.4	.70904
1N/22W-28G2	CM4 1095	340827119110902	05-15-91	2100	--	--	-15.3	--	3.8	.70969

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93--*Continued*

State well, spring, or drain No.	Driller's desig-nation	Site identification No.	Date	Time	Tritium, in water mole-cules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Stron-tium-87/86 (ratio)
1N/22W-28G2	CM4 1095	340827119110902	05-15-91	2105	--	--	--	--	3.8	--
1N/22W-28G4	CM4 275	340827119110904	05-14-91	1825	0.00	0.14	--	--	--	--
1N/22W-28G5	CM4 200	340827119110905	05-14-91	1505	.00	.15	--	--	--	--
1N/22W-29D1	CM2 870	340845119125401	05-13-91	1420	--	--	-14.0	--	-.2	--
			05-13-91	1425	--	--	--	--	.6	--
1N/22W-29D2	CM2 760	340845119125402	05-13-91	1650	--	--	--	--	--	0.71008
			09-28-92	1430	.00	.12	--	--	--	--
			09-28-92	1435	.05	.13	--	--	--	--
1N/22W-29D3	CM2 520	340845119125403	05-13-91	2015	.30	.13	--	--	--	--
			08-06-92	1800	.23	.12	--	--	--	--
			09-28-92	1900	.23	.14	--	--	--	--
			09-28-92	1905	.00	.12	--	--	--	--
1N/22W-29D4	CM2 280	340845119125404	08-06-92	1325	.30	.12	--	--	--	--
			09-28-92	1800	.05	.14	--	--	--	--
			09-28-92	1805	.00	.14	--	--	--	--
1N/22W-35E1	CM5 1200	340732119093801	04-29-92	1300	--	--	-17.1	--	14.9	.70925
1N/22W-35E2	CM5 940	340732119093802	04-29-92	1600	--	--	-16.9	--	2.8	.70916
1N/22W-35E3	CM5 470	340732119093803	04-29-92	1410	--	--	-26.3	--	--	.70958
1N/22W-35E4	CM5 320	340732119093804	04-29-92	1500	--	--	-29.1	--	1.9	.70985
1N/22W-35E5	CM5 220	340732119093805	04-29-92	1610	--	--	-19.5	--	4.4	.71018
1N/22W-36K5	DP 720	340727119075601	09-25-90	1100	--	--	--	--	--	.70919
			05-22-91	1630	.16	.13	-23.7	--	21.7	--
1N/22W-36K6	DP 580	340727119075602	09-25-90	1130	--	--	--	--	--	.70949
			05-23-91	1400	.14	.11	-21.1	--	4.0	--
			05-23-91	1405	--	--	--	--	3.9	--
1N/22W-36K7	DP 450	340727119075603	09-25-90	1300	--	--	--	--	--	.70914
			05-22-91	2040	.13	.12	-28.1	--	--	--
1N/22W-36K8	DP 330	340727119075604	05-23-91	1200	--	--	-13.6	--	-2.0	.70922
1N/22W-36K9	DP 195	340727119075605	05-22-91	1535	--	--	--	--	8.0	--
			05-23-91	1530	.00	.12	-20.8	--	8.0	.71007
1N/23W--1C2	CM3 1490	341215119145501	12-04-90	1315	.14	.16	-15.9	1.8	--	.70999
			01-09-92	1215	--	--	--	--	16.0	--
1N/23W--1C3	CM3 1065	341215119145502	12-04-90	1830	.23	.15	-12.3	--	--	.71031
			01-07-92	1820	--	--	--	--	-5.2	--
1N/23W--1C4	CM3 695	341215119145503	12-04-90	1515	.00	.30	-11.1	--	--	.71041

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93--*Continued*

State well, spring, or drain No.	Driller's desig-nation	Site identification No.	Date	Time	Tritium, in water mole-cules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Stron-tium-87/86 (ratio)
1N/23W-1C4	CM3 695	341215119145503	01-07-92	1535	--	--	--	--	-5.9	--
1N/23W-1C5	CM3 200	341215119145504	12-04-90	1000	0.00	0.30	--	--	--	--
			01-07-92	1330	--	--	--	--	-2.5	--
1S/21W-8L3	CM1 565	340544119062901	07-18-91	1630	--	--	-22.0	--	21.7	0.70912
			07-18-91	1635	--	--	-22.0	--	--	.70912
1S/21W-8L4	CM1 220	340544119062902	07-18-91	1300	.56	.12	-11.9	--	21.3	.70902
			07-18-91	1305	--	--	-11.9	--	--	--
			09-30-92	1100	.88	.15	--	--	--	--
1S/22W-1H1	CM6 550	340650119080201	10-31-90	1330	--	--	--	--	--	.70878
			01-22-92	1230	--	--	-10.3	--	--	--
1S/22W-1H2	CM6 400	340650119080202	06-12-91	1115	.20	.13	-28.6	--	26.8	.70917
1S/22W-1H3	CM6 330	340650119080203	06-11-91	1555	.00	.12	-16.2	--	5.7	.70928
1S/22W-1H4	CM6 200	340650119080204	11-01-90	1100	--	--	--	--	--	.70971
			06-11-91	1500	.10	.11	-18.6	--	11.7	--
			10-06-92	1115	.15	.14	--	--	--	--
2N/19W-6F1		341711118544301	07-22-93	0830	6.17	.44	--	--	--	--
2N/19W-6N3		341652118550101	07-20-93	1530	9.0	.60	--	--	--	--
2N/19W-7C1		341640118544301	07-21-93	0830	7.94	.52	--	--	--	--
2N/20W-1Q1		341652118553101	07-22-93	1015	9.40	.60	--	--	--	--
2N/20W-2N3		341657118570801	07-20-93	1030	.01	.18	-14.0	--	--	--
2N/20W-4F2		341710118585401	08-10-92	1730	.00	.20	-14.5	35.6	--	--
2N/20W-6R1		341647119003501	07-08-92	1615	.00	.20	-16.1	14.6	--	--
2N/20W-7L1		341617119010001	07-23-92	0800	.00	.20	-15.4	22.0	--	--
			08-11-92	0900	--	--	--	23.1	--	--
2N/20W-11R2		341554118562601	07-19-91	1030	--	--	--	--	--	.70869
2N/20W-16B3		341539118584001	06-25-91	0830	--	--	--	--	--	.70910
2N/20W-23G3		341433118564201	09-04-91	1230	--	--	-17.6	--	12.8	.70765
2N/20W-31B1		341309119005601	07-25-90	1300	--	--	--	--	--	.70904
2N/21W-7L3	SAT 700	341608119072901	09-27-90	1100	6.30	.30	--	--	--	--
			11-27-90	1030	6.02	.28	-11.1	64.1	--	.70915
			12-10-91	1520	--	--	--	--	-5.9	--
			05-12-92	1255	6.00	.40	--	--	--	--
2N/21W-7L4	SAT 540	341608119072902	09-27-90	1130	3.1	.30	--	--	--	--

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93--*Continued*

State well, spring, or drain No.	Driller's desig-nation	Site identification No.	Date	Time	Tritium, in water mole-cules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Stron-tium-87/86 (ratio)
2N/21W-7L4	SAT 540	341608119072902	11-28-90	0830	8.10	0.30	-14.4	14.2	--	0.70925
			12-10-91	1800	--	--	--	--	9.9	--
			05-12-92	1700	5.40	.30	--	--	--	--
2N/21W-7L5	SAT 310	341608119072903	09-27-90	1200	4.40	.40	--	--	--	--
			11-27-90	1730	5.60	.40	-13.3	73.1	--	.70995
			12-10-91	1800	--	--	--	--	-8.2	--
2N/21W-7L6	SAT 155	341608119072904	12-10-91	1500	--	--	--	--	-7.0	--
			05-12-92	1315	4.30	.30	--	--	--	--
2N/21W-7M3		341602119073101	02-25-91	1030	4.30	.40	--	--	--	--
2N/21W-7P3		341557119071801	02-25-91	0900	4.30	.30	--	--	--	--
2N/21W-11H2		341619119023201	08-11-92	1400	.00	.20	--	--	--	--
2N/21W-11J3	LP 1080	341607119023301	07-21-92	1800	.00	.20	-15.3	11.1	--	--
2N/21W-15M4		341520119043001	07-21-92	1000	.00	.20	-14.5	16.8	--	--
2N/21W-18H3		341532119064601	02-27-91	0940	.00	.30	--	--	--	--
2N/21W-18H5		341533119065001	03-27-91	1000	.30	.30	--	--	--	--
2N/21W-18H12		341532119064801	02-27-91	0900	4.69	.23	--	--	--	--
2N/21W-18Q1		341506119070601	07-25-91	1400	2.90	.50	--	--	--	--
2N/21W-19A1		341457119064901	07-25-91	1330	3.20	.40	--	--	--	--
2N/21W-19B2		341445119070601	03-01-91	1100	2.70	.40	--	--	--	--
2N/21W-20F2		341439119062801	02-20-91	1100	.31	.14	-38.5	39.8	--	--
2N/21W-32E1		341259119063301	02-20-91	1730	.39	.15	-38.4	15.0	--	.70880
2N/21W-34G1		341246119040601	08-03-90	1800	--	--	--	--	--	.70892
			08-06-91	0900	--	--	-17.0	--	.8	--
2N/21W-34G2	PV 998	341246119040201	08-05-91	1530	--	--	-14.3	--	-2.7	.70905
			08-17-93	1330	--	--	-14.6	32.9	--	--
2N/21W-34G3	PV 860	341246119040202	08-05-91	1230	--	--	-14.9	--	-3.4	.70895
			08-17-93	1610	--	--	-14.1	52.3	--	--
2N/21W-34G4	PV 380	341246119040203	08-05-91	1800	--	--	-13.1	--	-4.9	.70913
			08-18-93	1815	--	--	-12.0	21.1	--	--
2N/21W-34G5	PV 190	341246119040204	08-05-91	1100	--	--	-14.0	--	-5.4	.70889
			08-19-93	1250	--	--	-14.3	56.9	--	--
2N/22W-13N2		341502119083301	02-25-91	1430	.00	.13	--	--	--	--
2N/22W-14B1		341540119090001	02-27-91	1300	3.30	.40	--	--	--	--
2N/22W-14G5		341527119090401	02-21-91	1330	6.40	.40	--	--	--	--
2N/22W-14G6		341527119090402	02-21-91	1430	3.70	.30	--	--	--	--

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93--*Continued*

State well, spring, or drain No.	Driller's designation	Site identification No.	Date	Time	Tritium, in water molecules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Strontium-87/86 (ratio)
2N/22W-14G7		341527119090403	02-19-91	1615	3.30	0.30	--	--	--	--
2N/22W-23B1		341451119090301	07-12-90	1145	6.20	.30	--	--	--	--
			02-26-91	1507	5.80	.50	--	--	--	--
2N/22W-23B2		341457119090601	02-26-91	1530	5.00	.50	--	--	--	--
2N/22W-23B3	SG 1250	341449119090101	11-28-90	1518	.18	.16	-31.1	5.60	--	0.71010
2N/22W-23B4	SG 1150	341449119090102	11-28-90	1930	.12	.11	-15.0	21.6	--	.70985
			12-12-91	1455	--	--	--	--	-4.6	--
2N/22W-23B5	SG 870	341449119090103	12-05-90	1700	.01	.16	-13.1	53.5	--	.71015
			12-12-91	1700	--	--	--	--	-7.9	--
			05-13-92	1100	.00	.30	--	--	--	--
2N/22W-23B6	SG 500	341449119090104	12-05-90	1900	6.20	.40	--	--	--	--
			12-11-91	1255	--	--	--	--	-6.7	--
			05-13-92	1615	4.50	.80	--	--	--	--
2N/22W-23B7	SG 300	341449119090105	12-05-90	1430	5.70	.40	--	--	--	--
			12-11-91	1115	--	--	--	--	-7.2	--
			05-13-92	1850	4.50	.30	--	--	--	--
2N/22W-23H4		341444119085301	07-12-90	1020	.14	.14	--	--	--	--
			02-28-91	1545	.00	.13	--	--	--	--
2N/22W-24P2		341419119081401	02-25-91	1630	5.00	.40	--	--	--	--
2N/22W-24R1		341408119074201	07-24-91	1245	6.80	.50	--	--	--	--
2N/22W-24R2		341414119074401	02-25-91	1130	6.50	.50	--	--	--	--
2N/22W-25Q3		341322119080601	03-01-91	0930	5.70	.40	--	--	--	--
			06-19-92	1030	6.40	.60	--	--	--	--
2N/22W-26C3		341402119091401	07-12-90	1445	8.40	.40	--	--	--	--
			02-27-91	0800	8.70	.60	--	--	--	--
			06-19-92	0930	5.30	.30	--	--	--	--
2N/22W-27K1		341342119100801	02-28-91	0800	7.40	.50	--	--	--	--
2N/22W-28L1		341340119113701	02-27-91	1400	7.80	.50	--	--	--	--
2N/22W-30Q1		341321119132901	07-24-91	1000	.00	.40	--	--	--	--
2N/22W-33M2		341244119113901	02-27-91	1530	6.20	.50	--	--	--	--
3N/19W-28N1		341831118524401	07-10-92	1115	.00	.20	-12.0	23.8	--	--
3N/20W-2A1		342232118562501	08-28-91	1500	5.90	.40	--	--	--	--
3N/20W-24J1		341932118552401	07-19-93	1100	.22	.18	-15.0	38.0	--	--
3N/20W-26R3		341832118562501	07-21-93	1015	.00	.18	-13.6	32.1	--	--
3N/20W-35R2	P7 1110	341745118561601	02-06-91	1845	.17	.19	-14.3	38.7	--	--
			07-22-92	1800	.00	.20	-13.8	37.8	--	--
3N/20W-35R3	P7 900	341745118561602	02-07-91	1800	.22	.10	-14.2	48.9	--	--

Table 2. Tritium, carbon-13/12, carbon-14, sulfur-34/32, and strontium-87/86 in ground-water samples, Ventura County, California, 1990-93--*Continued*

State well, spring, or drain No.	Driller's designation	Site identification No.	Date	Time	Tritium, in water molecules (TU)	Tritium counts error (TU)	Carbon-13/12 (per-mil)	Carbon-14 (percent modern)	Sulfur-34/32 (per-mil)	Strontium-87/86 (ratio)
3N/20W-35R4		341745118561603	07-23-92	1130	0.00	0.20	--	--	--	--
3N/21W-11D2		342145119032101	08-28-91	0845	1.56	.16	--	--	--	--
3N/21W-12F3		342130119021101	08-27-91	0930	5.42	.24	--	--	--	--
3N/21W-12H1		342135119013501	08-22-91	1600	6.70	.40	--	--	--	--
3N/21W-15C4		342056119041401	08-28-91	1015	4.80	.30	--	--	--	--
3N/21W-16K1		342020119050101	08-27-91	1200	6.30	.40	--	--	--	--
3N/21W-16K3		342022119055901	06-09-92	1700	.875	.20	-12.6	59.3	--	--
3N/21W-19G4		341945119065701	08-27-91	1030	.63	.16	--	--	--	--
3N/21W-30H4		341844119065601	08-28-91	1415	2.00	.30	--	--	--	--
3N/21W-34A1		341806119033601	08-27-91	1130	--	--	-13.0	--	-5.7	--
3N/22W-36K4		341749119081201	06-10-92	1030	.00	.20	-12.8	58.4	--	--
4N/18W-20P1		342443118472601	06-18-92	1230	3.75	.30	-12.6	89.4	--	--
4N/18W-28C2		342427118462301	06-10-92	1630	6.25	.40	--	--	--	--
4N/19W-27R3		342339118511201	06-17-92	0930	8.12	.70	-10.9	81.4	--	--
4N/19W-29R4		342342118530501	06-09-92	1430	.00	.20	--	--	--	--
4N/19W-34B1		342335118512701	06-17-92	1130	8.12	.70	--	--	--	--
4N/20W-24R2		342439118551601	06-11-92	0830	.00	.20	-12.6	43.6	--	--
4N/20W-25B1		342426118553501	06-11-92	1000	3.75	.30	--	--	--	--
4N/20W-32R1		342243118594301	06-17-92	1420	1.37	.20	--	--	--	--
4N/20W-33C3		342324118585601	06-11-92	1400	1.06	.20	-14.4	71.8	--	--

Table 3. Dissolved gases in ground-water samples, Ventura County, California, 1990-92

[All data were collected by U.S. Geological Survey and analyzed at U.S. Geological Survey laboratories. Numbering system for sites is explained in text. Location of sites shown in figure 5. Chlorofluoro-carbon-11 results are given as range in five replicate samples. mg/L, miligrams per liter; µg/L, micrograms per liter; pg/kg; picograms per kilogram. <, actual value is less than value shown; --, no data]

State well No.	Driller's desig-nation	Site identification No.	Date	Time	Hydro-gen (µg/L as H)	Methane (µg/L as CH_4)	Oxygen (mg/L)	Chloro-fluoro-carbon-11 (pg/kg)
1N/21W-3J1	A1 195	341145119034601	08-07-91	1500	0.14	400	--	--
1N/21W-3K1		341148119040601	08-05-91	1430	.001	<10	--	--
1N/21W-3R1		341128119034101	08-05-91	1600	.001	180	--	--
1N/21W-4D4		341206119054101	08-05-91	1700	--	720	--	--
1N/21W-4K1		341146119045701	08-08-91	1200	.007	2,300	--	--
1N/21W-6J5		341143119064801	08-06-91	1645	.003	800	--	--
1N/21W-7J2		341048119065001	08-06-91	1700	.006	600	--	--
1N/21W-8R1		341034119054501	08-07-91	0930	.003	90	--	--
1N/21W-10G1		341059119040601	08-06-91	0930	.001	600	--	--
1N/21W-11P1		341046119030801	08-07-91	1630	.005	--	--	--
1N/21W-15J4		341003119034701	08-08-91	1030	.006	230	--	--
1N/21W-15L2		341007119042101	08-08-91	0930	.005	<10	--	--
1N/21W-19L12	SCE 220	340914119073303	09-30-92	1530	--	--	<0.2	4.0-6.8
1N/21W-22C1	A2 170	340912119040901	08-06-91	1000	.004	1,700	--	--
1N/21W-28D1	SWIFT 205	340842119054301	08-06-91	1330	.004	<10	--	--
1N/21W-32Q2	Q2 970	340712119062001	08-06-91	1745	.002	1,400	--	--
1N/21W-32Q3	Q2 840	340712119062002	08-07-91	1100	.001	1,100	--	--
1N/21W-32Q4	Q2 640	340712119062003	08-07-91	1245	.13	400	--	--
1N/21W-32Q5	Q2 330	340712119062004	08-07-91	1415	.050	60	--	--
1N/21W-32Q6	Q2 220	340712119062005	08-06-91	1800	.033	<10	--	--
1N/21W-32Q7	Q2 285	340712119062006	08-07-91	1700	.024	<10	--	--
1N/22W-1M3	A1 195	341142119082601	08-06-91	1430	.001	<10	--	--
1N/22W-13D3		341032119082701	08-06-91	1200	.009	<10	--	--
1N/22W-20J8		340916119120905	09-29-92	1400	--	--	<.2	13.7-20.2
1N/22W-20M5	A2 170	340907119125301	09-29-92	1010	--	--	<.2	0-17.1
1N/22W-26J4	SWIFT 205	340821119085702	09-30-92	1630	--	--	<.2	6.7-9.9
1N/22W-27C3	SW 195	340848119102602	09-29-92	1500	--	--	<.2	4.8-9.8
1N/22W-29D2	CM2 760	340845119125402	09-28-92	1430	--	--	<.2	9.6-56.7
1N/22W-29D3	CM2 520	340845119125403	09-28-92	1900	--	--	<.2	3.9-8.2
1N/22W-29D4	CM2 280	340845119125404	09-28-92	1800	--	--	<.2	13.8-29.1
1N/22W-36K4	DP 195	340729119075401	08-08-91	1330	.001	600	--	--
1N/22W-36K5	DP 720	340727119075601	08-08-91	1500	.002	1,400	--	--
1N/22W-36K6	DP 580	340727119075602	08-08-91	1530	.002	300	--	--
1N/22W-36K8	DP 330	340727119075604	08-08-91	1600	.008	<10	--	--
1N/22W-36K9	DP 195	340727119075605	08-08-91	1700	--	<10	--	--
1N/23W-1C2	CM3 1,490	341215119145501	12-04-90	1315	--	--	<.2	--
1N/23W-1C3	CM3 1,065	341215119145502	12-04-90	1830	--	--	<.2	--
1N/23W-1C4	CM3 695	341215119145503	12-04-90	1515	--	--	<.2	--
1N/23W-1C5	CM3 145	341215119145504	12-04-90	1000	--	--	.7	--
1S/21W-8L3	CM1A 565	340544119062901	08-06-91	1530	.025	1,500	--	--
1S/21W-8L4	CM1A 220	340544119062902	08-06-91	1100	.019	<10	--	--
			09-30-92	1100	--	--	<.2	0-2.2
1S/22W-1H1	CM6 550	340650119080201	08-07-91	1800	.032	1,800	--	--
1S/22W-1H2	CM6 400	340650119080202	08-08-91	0930	.023	1,600	--	--
1S/22W-1H4	CM6 200	340650119080204	08-07-91	1830	.014	<10	--	--
			10-06-92	1110	--	--	--	10.4-49.1

Table 3. Dissolved gases in ground-water samples, Ventura County, California, 1990-92--*Continued*

State well No.	Driller's designation	Site identification No.	Date	Time	Hydrogen (µg/L as H)	Methane (µg/L as CH_4)	Oxygen (mg/L)	Chlorofluorocarbon-11 (pg/kg)
2N/20W-19F4	PV1 190	341438119010501	08-07-91	1300	0.008	<10	--	--
2N/21W-7L3	SAT 700	341608119072901	11-27-90	1030	--	--	<0.2	--
2N/21W-7L4	SAT 540	341608119072902	11-28-90	0830	--	--	<.2	--
2N/21W-7L5	SAT 310	341608119072903	11-27-90	1730	--	--	<.2	--
2N/21W-32E1	PV1 190	341259119063301	08-07-91	1315	.002	150	--	--
2N/21W-34G1		341246119040601	08-06-91	0900	.019	150	--	--
2N/21W-34G2	PV1 998	341246119040201	08-05-91	1530	.012	<10	--	--
2N/21W-34G3	PV1 860	341246119040202	08-05-91	1230	.001	<10	--	--
2N/21W-34G4	PV1 380	341246119040203	08-05-91	1800	.050	<10	--	--
2N/21W-34G5	PV1 190	341246119040204	08-05-91	1100	.010	<10	--	--
2N/21W-36G3		341253119014601	08-07-91	1730	.002	240	--	--
2N/22W-13N2	SAT 300	341502119083301	08-07-91	1230	.007	<10	--	--
2N/22W-23B1		341449119090105	12-05-90	1430	--	--	<1.0	--
2N/22W-23B3	SG 1,250	341449119090101	11-28-90	1518	--	--	<.2	--
2N/22W-23B4	SG 1,150	341449119090102	11-28-90	1930	--	--	.4	--
2N/22W-23H4	PV1 190	341444119085301	08-06-91	1100	.006	30	--	--

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93

[All analyses were done at U.S. Geological Survey laboratories. Location of sites shown in figure 6. Analysis for each sample is shown on one line on four consecutive pages. **Station number**: The 8-digit numbers represent regular surface-water stations and are based on downstream order. The 15-digit numbers represent sites at which only miscellaneous measurements were made and are based on latitude-longitude. Detailed explanation given in text. **Agency collecting sample**: USGS, U.S. Geological Survey; UWCD, United Water Conservation District. **Sampling method (code number)**: 1=equal-width increment, 2=grab sample. **Discharge, instantaneous:** E, estimate. ft^3/s, cubic foot per second; µS/cm, microsiemens per centimeter at 25 degrees Celsius;; °C, degrees Celcius; mg/L, milligrams per liter; µg/L, microgram per liter; <, actual value is less than value shown; --, no data]

Site No.	Station name	Station number	Date	Time	Agency collecting sample	Sampling method (code number)	Discharge, instantaneous (ft^3/s)	Specific conductance, field (µS/cm)	Specific conductance, lab (µS/cm)	pH, field (standard units)
1	Santa Clara R. at Los Angeles-Ventura Co. line	11108500	10-07-91	1245	USGS	2	15	1,400	1,440	--
			04-27-92	1120	USGS	1	46	1,340	1,340	8.2
2	Santa Clara R. near Piru	11109000	06-14-90	1850	USGS	2	27	1,500	--	--
			10-21-91	1100	USGS	2	15	1,380	1,430	--
			09-02-92	1230	USGS	1	9.6	1,690	1,700	8.5
3	Santa Clara R. downstream from Camulos Ranch	342413118425401	10-08-91	1200	UWCD	2	7.3	--	--	--
4	Santa Clara R. upstream from Piru Creek	342356118470801	06-10-91	2000	USGS	--	.0	--	--	--
			09-30-91	1800	USGS	--	.0	--	--	--
			10-08-91	1800	USGS	--	.0	--	--	--
			10-23-91	1800	USGS	--	.0	--	--	--
5	Piru Cr. downstream from Santa Felicia Dam	11109800	04-28-92	0825	USGS	1	99	822	856	7.9
			09-02-92	1000	USGS	1	5.5	863	856	7.9
6	Piru Cr. at Piru	342500118471701	10-07-91	1530	USGS	2	346	1,050	1,030	--
7	Piru Cr. at mouth	342406118470701	06-10-91	2000	USGS	2	97	1,100	--	--
8	Santa Clara R. at Torrey Rd.	342341118475201	06-10-91	1830	USGS	2	97	1,060	--	--
			10-08-91	0930	USGS	2	280	1,060	1,030	--
			10-21-91	1400	USGS	2	404	966	1,030	--
9	Santa Clara R. near Wiley Canyon	342310118494901	06-10-91	1600	USGS	2	28	1,060	--	--
10	Santa Clara R. at Cavin Rd.	342317118505601	06-10-91	1400	USGS	2	.70	1,120	--	--
			10-08-91	1500	USGS	2	129	1,060	1,030	--
			10-17-91	1600	UWCD	2	149	--	--	--
			10-21-91	1420	USGS	2	236	987	1,030	--
			11-20-91	1700	USGS	--	.0	--	--	--
11	Santa Clara R. at Chambersburg Rd.	342323118545601	10-17-91	1730	USGS	2	95	--	--	--
			10-22-91	0930	USGS	2	156	1,010	1,030	--
12	Santa Clara R. near Bardsdale	342255118563201	10-25-91	1740	UWCD	2	105	--	--	--
13	Sespe Cr. near Fillmore	11113000	04-30-92	0945	USGS	1	137	820	840	8.5
			09-01-92	1200	USGS	1	6.7	975	975	8.8
14	Sespe Cr. at Route 126	342337118562401	09-30-91	1730	USGS	--	.0	--	--	--
			10-08-91	1730	USGS	--	.0	--	--	--
			10-23-91	1730	USGS	--	.0	--	--	--
15	Santa Clara R. upstream from Richardson diversion	342201118593901	10-10-91	1300	UWCD	2	--	--	1,340	--
			10-23-91	1030	USGS	2	87	1,050	1,080	--
16	Santa Clara R. 2.6 miles upstream from bridge at South Mountain Rd.	342143119002901	06-13-90	1510	USGS	2	.39	1,950	--	--
			09-30-91	1130	USGS	2	344	1,690	--	--
			10-23-91	1150	USGS	2	60	1,060	1,080	--
17	Richardson diversion	342130119003101	10-09-91	1700	UWCD	--	8.1	--	--	--

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)
1	Santa Clara R. at Los	--	31.0	22.0	--	--	--	--	1,400	--	340
	Angeles-Ventura Co. line	7.9	--	26.0	100	35	120	6.7	208	238	290
2	Santa Clara R. near Piru		--	21.0	19.5	--	--	--	--	--	----
		--	21.5	20.5	--	--	--	--	--	--	340
		8.4	26.0	24.0	130	51	160	8.4	278	288	420
3	Santa Clara R. downstream from Camulos Ranch	--	--	--	--	--	--	--	--	--	--
4	Santa Clara R. upstream		--	20.5	--	--	--	--	--	--	----
	from Piru Creek	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
5	Piru Cr. downstream from	7.9	--	11.5	71	26	65	3.3	122	131	200
	Santa Felicia Dam	7.9	25.5	12.5	75	26	62	3.7	135	142	210
6	Piru Cr. at Piru	--	27.0	20.0	--	--	--	--	--	--	260
7	Piru Cr. at mouth	--	20.5	16.5	--	--	--	--	--	--	--
8	Santa Clara R.	--	23.0	19.0	--	--	--	--	--	--	--
	at Torrey Rd.	--	24.0	18.5	--	--	--	--	--	--	260
		--	26.0	22.0	--	--	--	--	--	--	64
9	Santa Clara R. near Wiley Canyon	--	29.0	29.0	--	--	--	--	--	--	--
10	Santa Clara R. at Cavin Rd.	--	29.0	29.0	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	260
		--	--	--	--	--	--	--	--	--	--
		--	21.0	22.5	--	--	--	--	--	--	250
		--	--	--	--	--	--	--	--	--	--
11	Santa Clara R. at	--	--	--	--	--	--	--	--	--	--
	Chambersburg Rd.	--	19.5	20.0	--	--	--	--	--	--	260
12	Santa Clara R. near Bardsdale	--	--	--	--	--	--	--	--	--	--
13	Sespe Cr. near Fillmore	8.3	--	19.0	100	28	41	1.8	174	165	270
		8.6	21.5	26.0	86	26	81	3.1	118	122	290
14	Sespe Cr. at Route 126	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
15	Santa Clara R. upstream	--	--	--	--	--	--	--	--	--	410
	from Richardson diversion	--	--	19.0	--	--	--	--	--	--	270
16	Santa Clara R. 2.6 miles	--	22.0	19.0	--	--	--	--	--	--	--
	upstream from bridge at	--	--	20.5	--	--	--	--	--	--	630
	South Mountain Rd.	--	26.0	20.0	--	--	--	--	--	--	260
17	Richardson diversion	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L SiO_2)	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$ dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)
1	Santa Clara R. at Los	120	--	--	--	--	--	--	--	--	--
	Angeles-Ventura Co. line	100	0.30	0.22	0.028	19	--	836	0.410	3.70	0.440
2	Santa Clara R. near Piru	--	--	--	--	--	--	--	--	--	--
		110	--	--	--	--	--	--	--	--	--
		120	.60	.37	.029	22	1,160	1,090	.100	5.20	.110
3	Santa Clara R. downstream from Camulos Ranch	--	--	--	--	--	--	--	--	--	--
4	Santa Clara R. upstream	--	--	--	--	--	--	--	--	--	--
	from Piru Creek	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
5	Piru Cr. downstream from	69	.40	.14	.018	12	--	530	<.010	.650	.020
	Santa Felicia Dam	66	.80	.12	.019	14	547	544	<.010	.650	.040
6	Piru Cr. at Piru	96	--	--	--	--	--	--	--	--	--
7	Piru Cr. at mouth	--	--	--	--	--	--	--	--	--	--
8	Santa Clara R. at Torrey Rd.	--	--	--	--	--	--	--	--	--	--
		95	--	--	--	--	--	--	--	--	--
		15	--	--	--	--	--	--	--	--	--
9	Santa Clara R. near Wiley Rd.	--	--	--	--	--	--	--	--	--	--
10	Santa Clara R. Cavin Rd.	--	--	--	--	--	--	--	--	--	--
		96	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		100	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
11	Santa Clara R. at	--	--	--	--	--	--	--	--	--	--
	Chambersburg Rd.	100	--	--	--	--	--	--	--	--	--
12	Santa Clara R. near Bardsdale	--	--	--	--	--	--	--	--	--	--
13	Sespe Cr. near Fillmore	15	.80	.02	.012	16	--	573	<.01	<.05	.02
		64	1.2	.13	.045	16	654	644	<.01	<.05	.050
14	Sespe Cr. at Route 126	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
15	Santa Clara R. upstream	82	--	--	--	--	--	--	--	--	--
	from Richardson diversion	110	--	--	--	--	--	--	--	--	--
16	Santa Clara R 2.6 miles	--	--	--	--	--	--	--	--	--	--
	upstream from bridge at	56	--	--	--	--	--	--	--	--	--
	South Mountain Rd.	100	--	--	--	--	--	--	--	--	--
17	Richardson diversion	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Barium, dissolved (µg/L as Ba)	Boron dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
1	Santa Clara R. at Los	--	--	--	--	--	--	--	--	-53.0	-7.45
	Angeles-Ventura Co. line	1.0	1.50	3.7	57	650	3	13	810	-55.0	-7.60
2	Santa Clara R. near Piru	--	--	--	--	--	--	--	--	-54.0	-7.55
		--	--	--	--	--	--	--	--	-52.5	-7.55
		.50	1.10	1.10	49	780	3	16	1,000	-52.0	-7.40
3	Santa Clara R. downstream from Camulos Ranch	--	--	--	--	--	--	--	--	--	--
4	Santa Clara R. upstream from	--	--	--	--	--	--	--	--	--	--
	Piru Creek	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
5	Piru Cr. downstream from	<.20	.030	.04	34	460	6	29	690	-60.5	-8.30
	Santa Felicia Creek	<.20	.040	.03	32	410	3	4	740	-61.0	-8.65
6	Piru Cr. at Piru	--	--	--	--	--	--	--	--	-52.0	-6.70
7	Piru Cr. at mouth	--	--	--	--	--	--	--	--	--	--
8	Santa Clara R. at Torrey Rd.	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	-53.0	-6.65
		--	--	--	--	--	--	--	--	-53.0	-6.30
9	Santa Clara R. near Wiley Canyon	--	--	--	--	--	--	--	--	--	--
10	Santa Clara R. at Cavin Rd.	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	-53.0	-6.55
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	-51.0	-6.15
		--	--	--	--	--	--	--	--	--	--
11	Santa Clara R. at	--	--	--	--	--	--	--	--	--	--
	Chambersburg Rd.	--	--	--	--	--	--	--	--	-51.0	-6.25
12	Santa Clara R. near Bardsdale	--	--	--	--	--	--	--	--	--	--
13	Sespe Cr. near Fillmore	<.20	.02	.02	46	480	16	5	1,100	-58.0	-8.80
		<.20	.01	.02	51	1,800	5	10	1,200	-51.0	-7.30
14	Sespe Cr. at Route 126	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
15	Santa Clara R. upstream from Richardson diversion	--	--	--	--	--	--	--	--	-51.5	-6.75
		--	--	--	--	--	--	--	--	-51.5	-6.20
16	Santa Clara R. 2.6 miles upstream	--	--	--	--	--	--	--	--	-49.5	-7.20
	from bridge at South Mountain Rd.	--	--	--	--	--	--	--	--	-53.0	-7.70
		--	--	--	--	--	--	--	--	-50.5	-6.10
17	Richardson diversion	--	--	--	--	--	--	--	--	--	--

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Station number	Date	Time	Agency collecting sample	Sampling method (code number)	Discharge, instantaneous (ft^3/s)	Specific conductance, field (µS/cm)	Specific conductance, lab (µS/cm)	pH, field (standard units)
18	Santa Clara R. 1.4 miles upstream from bridge at South Mountain Rd.	342113119014001	06-13-90	1245	USGS	2	14	1,930	--	--
			09-30-91	1600	USGS	2	15	--	1,910	--
			10-08-91	1400	USGS	2	25	1,520	1,720	--
			10-22-91	1300	USGS	2	85	1,280	1,250	--
			10-30-91	1445	USGS	2	135	1,120	1,190	--
			11-12-91	1445	USGS	2	21	1,930	1,950	--
			11-19-91	1300	UWCD	2	19	--	1,870	--
			11-21-91	1145	USGS	2	19	1,840	1,880	--
			11-26-91	1600	UWCD	2	13	--	1,870	--
			04-29-92	1020	USGS	1	197	1,240	1,230	8.2
			09-01-92	1000	USGS	1	33	1,810	1,810	8.2
19	Santa Paula Cr. near Santa Paula	11113500	04-28-92	1420	USGS	1	34	693	706	8.4
			09-01-92	1400	USGS	1	5.7	775	767	8.6
20	Santa Paula Cr. at Old Route 126	342129119025301	09-30-91	1700	USGS	--	.0	--	--	--
			10-08-91	1700	USGS	--	.0	--	--	--
			10-23-91	1800	USGS	--	.0	--	--	--
21	Santa Clara R. at bridge for South Mountain Rd.	342055119030401	06-13-90	1645	USGS	--	3.1	--	--	--
			09-30-91	1410	USGS	2	6.9	--	1,990	--
			10-07-91	1640	USGS	2	14	1,510	1,790	--
			10-22-91	1200	USGS	2	63	1,130	1,340	--
22	Santa Paula wastewater treatment plant	342003119045501	06-18-92	1615	USGS	2	--	--	2,240	7.5
23	Santa Clara R. near Haines	341859119053301	10-25-91	1400	UWCD	2	76	--	1,400	--
24	Santa Clara R. at Freeman Diversion	341742119065401	02-25-91	1630	USGS	2	--	2,150	--	--
			02-28-91	0930	USGS	2	473	1,240	1,220	8.3
			09-30-91	1200	USGS	2	E9.0	--	2,100	--
			10-07-91	1300	USGS	2	16	1,520	1,860	--
			10-10-91	1200	UWCD	2	--	--	2,010	--
			10-21-91	1400	USGS	2	75	1,250	1,510	--
			10-30-91	1030	USGS	2	131	1,260	1,330	--
			11-12-91	1230	USGS	2	18	1,940	1,940	--
			11-19-91	1530	UWCD	2	13	--	1,950	--
			11-27-91	0830	UWCD	2	--	--	2,030	--
			05-08-92	1400	USGS	2	--	--	1,260	--
			08-31-92	1400	USGS	2	E35	1,730	1,740	--
25	Arroyo Simi at Madera Rd.	341640118474502	09-02-93	1245	USGS	1	5.5	2,360	2,470	8.4

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)
18	Santa Clara R. 1.4 miles	--	27.0	18.5	--	--	--	--	--	--	--
	upstream from bridge at	--	--	--	--	--	--	--	--	--	740
	South Mountain Rd.	--	--	--	--	--	--	--	--	--	640
		--	19.0	18.5	--	--	--	--	--	--	360
		--	17.0	16.0	--	--	--	--	--	--	320
		--	--	--	--	--	--	--	--	--	760
		--	--	--	--	--	--	--	--	--	750
		--	21.0	17.0	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	770
		8.2	--	18.5	140	44	71	3.0	220	219	380
		8.1	--	17.5	200	69	120	5.5	259	258	660
19	Santa Paula Cr. near	8.4	--	20.5	95	22	28	1.2	176	175	200
	Santa Paula	8.2	29.5	23.0	97	24	39	1.6	186	188	210
20	Santa Paula Cr. at	--	--	--	--	--	--	--	--	--	--
	Old Route 126	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
21	Santa Clara R. at	--	20.0	19.5	--	--	--	--	--	--	--
	bridge for	--	--	--	--	--	--	--	--	--	790
	South Mountain Rd.	--	22.5	21.5	--	--	--	--	--	--	680
		--	18.5	17.5	--	--	--	--	--	--	410
22	Santa Paula wastewater treatment plant	7.5	22.5	24.0	140	46	240	20	392	402	460
23	Santa Clara R. near Haines	--	--	--	--	--	--	--	--	--	420
24	Santa Clara R. at	--	18.5	17.0	--	--	--	--	--	--	--
	Freeman Diversion	7.6	13.5	13.0	110	34	100	9.3	103	131	460
		--	--	--	--	--	--	--	--	--	760
		--	21.5	20.5	--	--	--	--	--	--	680
		--	--	--	--	--	--	--	--	--	740
		--	22.0	20.0	--	--	--	--	--	--	490
		--	19.0	14.0	--	--	--	--	--	--	390
		--	--	--	--	--	--	--	--	--	680
		--	--	--	--	--	--	--	--	--	750
		--	--	--	--	--	--	--	--	--	730
		8.0	--	--	140	43	81	4.3	--	217	400
		8.0	28.0	28.0	170	60	130	6.9	234	221	610
25	Arroyo Simi at Madera Rd.	7.9	29.5	27.0	260	96	220	6.6	240	101	1,000

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L SiO_2)	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$ dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)
18	Santa Clara R. 1.4 miles upstream from bridge at South Mountain Rd.	--	--	--	--	--	--	--	--	--	--
		66	--	--	--	--	--	--	--	--	--
		76	--	--	--	--	--	--	--	--	--
		93	--	--	--	--	--	--	--	--	--
		98	--	--	--	--	--	--	--	--	--
		68	--	--	--	--	--	--	--	--	--
		72	--	--	--	--	--	--	--	--	--
		76	--	--	--	--	--	--	--	--	--
		73	--	--	--	--	--	--	--	--	--
		34	0.80	0.13	0.014	19	--	832	0.010	1.60	0.020
		57	1.1	.30	.022	25	1,390	1,310	.040	3.20	.050
19	Santa Paula Cr. near Santa Paula	21	.80	.10	.009	15	--	491	<.010	.500	.030
		17	.60	.16	.018	18	527	521	.010	.130	.050
20	Santa Paula Cr. at Old Route 126	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
21	Santa Clara R. at bridge for South Mountain Rd.	--	--	--	--	--	--	--	--	--	--
		71	--	--	--	--	--	--	--	--	--
		78	--	--	--	--	--	--	--	--	--
		95	--	--	--	--	--	--	--	--	--
22	Santa Paula wastewater treatment plant	210	.80	.13	.018	30	1,400	1,420	.210	.580	24.0
23	Santa Clara R. Near Haines	96	--	--	--	--	--	--	--	--	--
24	Santa Clara R. at Freeman Diversion	--	--	--	--	--	--	--	--	--	--
		59	.60	.16	.038	7.3	856	873	.090	2.80	.450
		110	--	--	--	--	--	--	--	--	--
		94	--	--	--	--	--	--	--	--	--
		98	--	--	--	--	--	--	--	--	--
		98	--	--	--	--	--	--	--	--	--
		100	--	--	--	--	--	--	--	--	--
		92	--	--	--	--	--	--	--	--	--
		110	--	--	--	--	--	--	--	--	--
		110	--	--	--	--	--	--	--	--	--
		45	.70	.18	.025	19	--	874	.090	1.60	.450
		79	.70	.26	.033	25	1,290	1,230	.450	3.10	.300
25	Arroyo Simi at Madera Rd.	180	.50	.39	.046	38	1,570	1,890	.080	4.50	.080

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium. and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Nitrogen, ammonia + organic dissolved (mg/L as N)	Phos-phorus dis-solved (mg/L as P)	Phosphate, ortho, dis-solved (mg/L as PO_4)	Barium, dis-solved (µg/L as Ba)	Boron dis-solved (µg/L as B)	Iron, dis-solved (µg/L as Fe)	Manga-nese, dis-solved (µg/L as Mn)	Stron-tium, dis-solved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
18	Santa Clara R. 1.4 miles	--	--	--	--	--	--	--	--	-51.0	-7.30
	upstream from bridge at	--	--	--	--	--	--	--	--	-50.0	-7.35
	South Mountain Rd.	--	--	--	--	--	--	--	--	-52.0	-7.20
		--	--	--	--	--	--	--	--	-51.0	-6.45
		--	--	--	--	--	--	--	--	-50.5	-6.10
		--	--	--	--	--	--	--	--	-49.5	-7.30
		--	--	--	--	--	--	--	--	-52.0	-7.25
		--	--	--	--	--	--	--	--	-51.0	-7.10
		--	--	--	--	--	--	--	--	-51.0	-7.40
		<0.20	0.020	0.09	47	630	3	14	1,300	-55.0	-8.10
		.20	.020	.06	39	900	6	32	1,800	-50.5	-7.55
19	Santa Paula Cr. near	<.20	<.010	.06	44	110	7	12	960	-50.0	-7.90
	Santa Paula	<.20	.030	.020	45	160	5	7	1,000	-46.5	-7.60
20	Santa Paula Cr. at	--	--	--	--	--	--	--	--	--	--
	Old Route 126	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--
21	Santa Clara R. at bridge	--	--	--	--	--	--	--	--	-50.0	-7.25
	for South Mountain Rd.	--	--	--	--	--	--	--	--	-50.5	-7.50
		--	--	--	--	--	--	--	--	-51.5	-7.25
		--	--	--	--	--	--	--	--	-51.5	-6.55
22	Santa Paula wastewater treatment plant	36	1.70	2.0	<100	90	20	30	1,100	-47.0	-7.20
23	Santa Clara R. near Haines	--	--	--	--	--	--	--	--	-51.0	-6.25
24	Santa Clara R. at	--	--	--	--	--	--	--	--	--	--
	Freeman Diversion	1.3	.040	.03	52	800	23	65	--	-98.5	-13.60
		--	--	--	--	--	--	--	--	-49.0	-7.15
		--	--	--	--	--	--	--	--	-51.0	-7.05
		--	--	--	--	--	--	--	--	-50.5	-6.90
		--	--	--	--	--	--	--	--	-50.5	-6.55
		--	--	--	--	--	--	--	--	-50.5	-6.25
		--	--	--	--	--	--	--	--	-50.0	-6.95
		--	--	--	--	--	--	--	--	-49.0	-6.90
		--	--	--	--	--	--	--	--	-50.0	-7.15
		.50	.200	.58	47	650	4	12	1,300	-53.5	-7.80
		.70	.790	2.4	49	840	3	18	1,600	-49.0	-7.10
25	Arroyo Simi at Madera Rd.	.50	.040	.12	<100	1,400	<10	20	2,400	-42.8	-6.16

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Station number	Date	Time	Agency collecting sample	Sampling method (code number)	Discharge, instantaneous (ft^3/s)	Specific conductance, field (µS/cm)	Specific conductance, lab (µS/cm)	pH, field (standard units)
26	Arroyo Simi upstream from wastewater treatment plant	341657118483801	05-23-90	1315	USGS	1	4.4	2,680	2,570	8.3
			09-05-90	1200	USGS	1	4.4	2,530	2,560	8.2
			08-31-93	1345	USGS	1	6.1	2,350	2,530	8.0
27	Simi Valley wastewater treatment plant	341657118484101	05-23-90	1215	USGS	2	12	1,310	1,300	6.9
			09-05-90	0930	USGS	2	13	1,200	1,100	6.8
			08-31-93	1540	USGS	2	14	1,330	1,360	6.9
28	Arroyo Simi at Los Angeles Rd.	341733118505001	09-02-93	0948	USGS	1	17	1,830	1,880	8.0
29	Arroyo Simi at Moorpark Rd.	341637118522601	09-01-93	1310	USGS	1	11	1,800	1,860	8.1
30	Arroyo Simi at Hitch Rd.	341618118552201	05-23-90	1850	USGS	1	12	1,800	1,760	8.0
			09-05-90	1600	USGS	1	10	1,750	1,680	7.9
			09-01-93	0935	USGS	1	18	1,730	1,790	8.0
31	Arroyo Conejo at Hill Canyon	341334118554501	07-10-90	1330	USGS	1	13	1,310	1,280	7.7
32	Conejo Cr. at Adolfo Rd.	341245118592201	07-10-90	1830	USGS	1	6.2	1,420	1,390	8.0
33	Calleguas Cr. at Lewis Rd.	341047119023601	07-11-90	1115	USGS	2	8.2	1,500	--	--
34	Beardsley Wash at Walnut Av.	341517119043501	07-23-90	1745	USGS	2	0.21	1,320	--	--

Site No.	Station name	pH, lab (standard units)	Temperature, air (°C)	Temperature, water (°C)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity, filtered, incremental titration (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)
26	Arroyo Simi upstream from wastewater treatment plant	8.0	26.0	21.5	240	100	240	5.7	263[1]	231	1,000
		8.1	32.0	20.0	240	92	220	5.5	289	185	930
		--	38.5	30.0	--	--	--	--	208	--	--
27	Simi Valley wastewater treatment plant	7.1	26.0	24.0	37	21	150	12	202[1]	146	170
		6.8	30.0	26.5	33	19	150	13	154	160	190
		6.9	27.5	28.5	65	29	140	1.0	186	66	250
28	Arroyo Simi at Los Angeles Rd.	--	25.5	27.0	--	--	--	--	225	--	--
29	Arroyo Simi at Moorpark Rd.	--	29.5	31.5	--	--	--	--	--	--	--
30	Arroyo Simi at Hitch Rd.	7.4	22.5	22.5	130	43	180	8.6	205[1]	161	440
		7.8	--	28.0	120	40	180	9.4	170[2]	69	400
		7.4	25.0	20.5	150	49	170	8.7	200	182	500
31	Arroyo Conejo at Hill Canyon	7.5	31.5	26.0	46	32	130	10	198	198	150
32	Conejo Cr. at Adolfo Rd.	7.8	30.0	28.5	53	39	140	10	196	188	180
33	Calleguas Cr. at Lewis Rd.	--	28.0	25.5	--	--	--	--	--	--	--
34	Beardsley Wash at Walnut Av.	--	24.5	21.0	--	--	--	--	--	--	--

See footnotes at end of table.

Table 4. Physical properties of and major ions, nutrients, selected trace elements, deuterium, and oxygen-18 in surface-water samples, Ventura County, California, 1990-93--*Continued*

Site No.	Station name	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L as Br)	Iodide, dissolved (mg/L as I)	Silica, dissolved (mg/L SiO_2)	Solids, residue at 180°C, dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$ dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)
26	Arroyo Simi upstream from wastewater treatment plant	210	0.40	0.88	0.091	35	1,960	2,000	--	2.60	0.060
		180	1.0	1.1	.097	37	1,880	1,830	--	2.50	0.040
		190	--	.42	--	--	--	--	0.060	3.40	0.030
27	Simi Valley wastewater treatment plant	180	.20	.19	.036	21	668	768	--	.300	26.0
		190	.20	.24	.030	21	632	726	--	.100	0.800
		160	.40	.15	.063	22	790	759	1.60	3.40	18.0
28	Arroyo Simi at Los Angeles Rd.	170	--	.45	--	--	--	--	1.60	3.90	9.50
29	Arroyo Simi at Moorpard Rd.	180	--	.44	--	--	--	--	2.20	6.50	4.10
30	Arroyo Simi at Hitch Rd.	190	.40	.44	.078	32	1,180	1,210	--	11.0	4.60
		180	.20	.43	.043	32	1,120	1,070	--	12.0	4.60
		170	.40	.43	.057	32	1,280	1,250	.930	12.0	2.30
31	Arroyo Conejo at Hill Canyon	170	.10	.25	.038	23	700	728	--	2.50	19.0
32	Conejo Cr. at Adolfo Rd.	190	.30	.28	.043	24	764	825	--	9.80	13.0
33	Calleguas Cr. at Lewis Rd.	--	--	--	--	--	--	--	--	--	--
34	Beardsley Wash at Walnut Av.	--	--	--	--	--	--	--	--	--	--

Site No.	Station name	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Phosphorus dissolved (mg/L as P)	Phosphate, ortho, dissolved (mg/L as PO_4)	Barium, dissolved (µg/L as Ba)	Boron dissolved (µg/L as B)	Iron, dissolved (µg/L as Fe)	Manganese, dissolved (µg/L as Mn)	Strontium, dissolved (µg/L as Sr)	H^2/H^1 (permil)	O^{18}/O^{16} (permil)
26	Arroyo Simi upstream from wastewater treatment plant	0.80	0.090	0.12	<100	1,300	30	40	--	-42.5	-6.20
		.40	.230	.09	<100	1,200	30	50	--	-45.0	-6.55
		.60	.050	.03	--	1,400	--	--	--	-41.9	-6.19
27	Simi Valley wastewater treatment plant	27	7.60	19	16	720	27	21	--	-70.9	-9.40
		29	4.20	11	4	690	48	22	--	-69.0	-9.35
		26	5.20	12	16	780	64	27	560	-59.9	-8.34
28	Arroyo Simi at Los Angeles Rd.	14	2.00	5.5	--	1,000	--	--	--	-54.0	-7.34
29	Arroyo Simi at Moorpark Rd.	5.4	1.90	5.2	--	1,100	--	--	--	-50.7	-6.92
30	Arroyo Simi at Hitch Rd.	5.7	3.20	10	36	870	7	11	--	-52.0	-7.05
		8.8	1.80	5.2	33	880	15	9	--	-56.0	-7.40
		3.8	1.70	4.6	42	910	9	5	1,400	-51.9	-7.25
31	Arroyo Conejo at Hill Canyon	20	5.30	12	22	480	29	33	--	-64.5	-8.65
32	Conejo Cr. at Adolfo Rd.	13	5.30	15	25	500	10	58	--	-61.0	-8.25
33	Calleguas Cr. at Lewis Rd.	--	--	--	--	--	--	--	--	--	--
34	Beardsley Wash at Walnut Av.	--	--	--	--	--	--	--	--	-42.5	-6.40

[1]Filtered fixed end-point titration.
[2]Unfiltered incremental titration.