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Water Resources Data California

Water Year 1985

Volume 5. Ground-water data for California

by D.E. Maltby, K.T. Downing, G.L. Keeter, and C.E. Lamb

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-85-5
Prepared in cooperation with other Federal, State,
and local agencies

DEPARTMENT OF THE INTERIOR

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1987

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-87/223	2.	3. Recipient's Accession No.

4. Title and Subtitle
Water Resources Data for California, Water Year 1985
Volume 5. Ground-water data for California

5. Report Date
April 1987

6.

7. Author(s)
Maltby, D.E., Downing, K.T. Keeter, G.L., and Lamb, C.E.

8. Performing Organization Rept. No.
USGS-WDR-CA-85-5

9. Performing Organization Name and Address
U.S. Geological Survey, Water Resources Division
California District
2800 Cottage Way, Room W-2234
Sacramento, CA 95825

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C)
(G)

12. Sponsoring Organization Name and Address
U.S. Geological Survey, Water Resources Division
California District
2800 Cottage Way, Room W-2234
Sacramento, CA 95825

13. Type of Report & Period Covered
Annual--Oct. 1, 1984 to Sept. 30, 1985

14.

15. Supplementary Notes
Prepared in cooperation with other Federal, State, and local agencies.

16. Abstract (Limit: 200 words)
Water resources data for the 1985 water year for California consists of records of stage, discharge, and water quality of streams; stage and contents in lakes and reservoirs; and water levels and water quality in wells. Volume 5 contains water levels for 1052 observation wells, and water-quality data for 924 observation wells. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.

17. Document Analysis a. Descriptors
*California, *Hydrologic data, *Ground water, Chemical analyses, Water temperature, Sampling sites, Water levels, Water analyses

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement: No restriction on distribution. This report may be purchased from National Technical Information Service Springfield, VA 22161

19. Security Class (This Report) Unclassified

21. No. of Pages 366

20. Security Class (This Page) Unclassified

22. Price

(See ANSI-Z39.18) See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

PREFACE

This volume of the annual hydrologic data report of California is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for California are contained in 5 volumes:

Volume 1. Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River

Volume 2. Pacific Slope Basins from Arroyo Grande to Oregon State Line except Central Valley

Volume 3. Southern Central Valley Basins and The Great Basin from Walker River to Truckee River

Volume 4. Northern Central Valley Basins and The Great Basin from Honey Lake Basin to Oregon State Line

Volume 5. Ground-water data for California

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the individuals contributing significantly to the collection, processing, and tabulation of the data are given on page V.

This report was prepared in cooperation with the California Department of Water Resources and with other agencies under the general supervision of Gilbert L. Bertoldi and John M. Klein, successive District Chiefs, California.

WATER RESOURCES DATA - CALIFORNIA, 1985

Volume 5

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of California each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data for California."

This report includes records on ground water in the State. Specifically, it contains: water level and quality records for 1,052 observation wells.

This series of annual reports for California began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format changed, to one volume containing data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1985 water year ground-water levels and quality were published in a separate volume for California.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for California were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 6A and 6B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CA-85-5." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on back of title page or by telephone (916) 978-4668.

COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of water-resource records since 1903. Organizations that supplied data are acknowledged in well descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Antelope Valley-East Kern Water Agency, Wallace G. Spinarski, General Manager.
California Department of Water Resources, David N. Kennedy, Director.
California State Water Resources Control Board, James Easton, Director.
Carpinteria County Water District, Robert R. Lieberknecht, General Manager-Secretary.
Coachella Valley Water District, Lowell O. Weeks, General Manager-Chief Engineer.
Desert Water Agency, Paul G. Payne, General Manger.
East Valley Water District, Larry W. Rowe, General Manager.
Goleta Water District, Lloyd C. Fowler, General Manager and Chief Engineer.
Imperial County Department of Public Works, David E. Pierson, Director.
Imperial Irrigation District, Donald A. Twogood, General Manager.
Indian Wells Valley Water District, James H. Stramler, General Manager.
Inyo County Department of Water, Gregory L. James, Director.
Los Angeles Department of Water and Power, LeVal Lund, Engineer, Aqueduct Division.
Merced, City of, Stevan M. Stroud, City Engineer.
Mojave Water Agency, Jon D. Edson, General Manager.
Montecito Water District, Charles C. Evans, General Manager and Chief Engineer.
Orange County Water District, Neil M. Cline, Secretary-Manager.
Riverside County Flood Control and Water Conservation District, Kenneth L. Edwards, Chief Engineer.
San Bernardino Valley Municipal Water District, G. Louis Fletcher, General Manager.
San Diego County Department of Sanitation and Flood Control, R.J. Massman, Director.
Santa Barbara, City of, Robert W. Puddicombe, Director.
Santa Barbara County Flood Control and Water Conservation District, James M. Stubchaer, Flood Control Engineer.
Santa Barbara County Water Agency, James M. Stubchaer, Engineer-Manager.
Santa Maria Valley Water Conservation District, Maurice F. Twitchell, Secretary.
Western Municipal Water District, Howard A. Hicks, General Manager.

Assistance in the form of funds or services was given by the Vandenberg Air Force Base, U.S. Air Force; Corps of Engineers, U.S. Army; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, and National Park Service, U.S. Department of the Interior; Marine Corps, and Naval Weapons Center, U.S. Navy.

SUMMARY OF HYDROLOGIC CONDITIONS

Ground Water

The geography and geology of California are sufficiently complex that a summary of ground-water conditions in the State is difficult. Descriptions of conditions in specific basins and valleys apply only to those areas and cannot be transferred to other areas.

Ground-water levels fluctuate in response to a variety of stresses and changes in stress. Short- and long-term climatic conditions can lead to changes in natural recharge and discharge. Ground-water pumping also can cause changes in ground-water levels.

EXPLANATION OF THE RECORDS

The ground-water records published in this report are for the 1985 water year that began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain quality of ground water, and ground-water level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the 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 the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number.

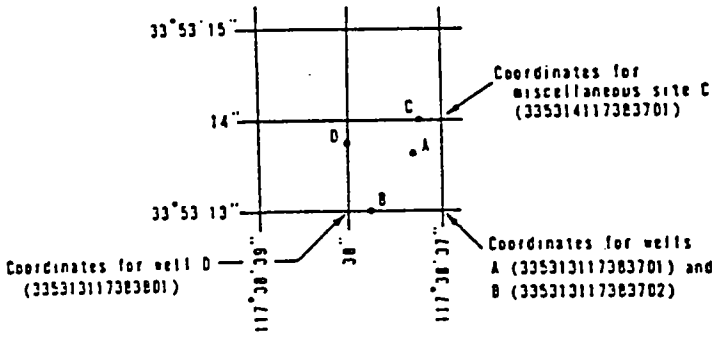

Figure 1.--System for numbering wells and miscellaneous sites (latitude and longitude).

Local well numbers

Wells and springs in California are assigned numbers according to their location on the rectangular system for the subdivision of public land. For example, in the number 005S/010E-22G01 M, the part of the number preceding the slash indicates the township (T.5 S.) and the number between the slash and the hyphen indicates the range (R.10 E.,); the digits following the hyphen indicate the section (sec.22); the letter following the section number indicates the 40-acre subdivision of the section. Within each 40-acre tract, the wells are numbered serially, as indicated by the final digit. The final letter, separated from the rest of the number by a space, indicates the base line and meridian. Base-line and meridian designations are as follows: H, Humboldt; M, Mount Diablo; S, San Bernardino. See figure 2.

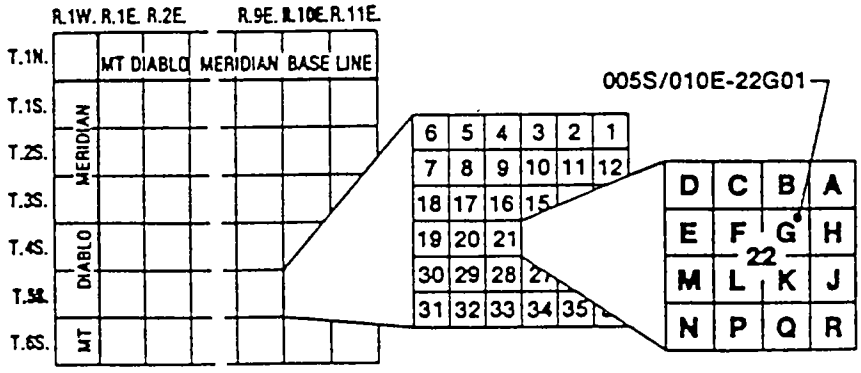

Figure 2.--California well-numbering system.

Records of Ground-Water Levels

Records are obtained through cooperative efforts of many Federal, State, and local agencies for several thousand observation wells throughout California and are placed in computer storage. Information about the availability of the data in the water-level file may be obtained from the District Chief, California District. (See address on back of front page).

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number of a given well is the local well number, an alpha numeric number, derived from the township-range location of the well. The secondary identification number of a given well is the 15-digit number that appears following the local well number.

Water-level records are obtained from direct measurements with a steel tape or electric sounder, or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. Water levels in wells equipped with recording gages are reported daily at 1200 hours.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the water value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

A table of water levels follows the station description of each well. Water levels are reported in feet below land-surface datum and all measurements of water level are listed. The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the descriptive heading. Missing records on daily tables are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by county, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to water-quality, and other hydrologic data, as used in this report are defined below. See also table for converting inch-pound units to International System (SI) Units on the inside of the back cover.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by a well. A flowing artesian well is one in which the water level is above the land surface.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Dissolved is that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate. It is recognized that certain kinds of samples cannot be filtered; to provide for this, procedures that are considered equivalent to filtering through a 0.45-micrometer membrane filter will be identified and announced at a later date.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap that is required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with a pH less than 7 are termed acidic, and solutions with a pH greater than 7 are termed basic. Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Specific conductance is a measure of the ability of water to conduct an electrical current and is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids concentration in water. Commonly, dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from well to well, and it may even vary in the same source with changes in the composition of the water.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in the dissolved and suspended phases of the sample. A knowledge of the expected form is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

REMARK CODES

The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
P	Pumping.
S	Nearby pumping.
R	Recently pumped.
F	Flowing.
T	Nearby recently pumped.
(a)	Results based on laboratory value.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225. Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. Water temperature--influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. Measurement of peak discharge by slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. Measurement of time of travel and dispersion in streams by dye tracing, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. Discharge ratings at gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. Introduction to ground-water hydraulics, a programmed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

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5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

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7-C3. A model for simulation of flow in singular and interconnected channels by R. W. Shaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

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8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

SAN DIEGO COUNTY

SAN DIEGO COUNTY--Continued

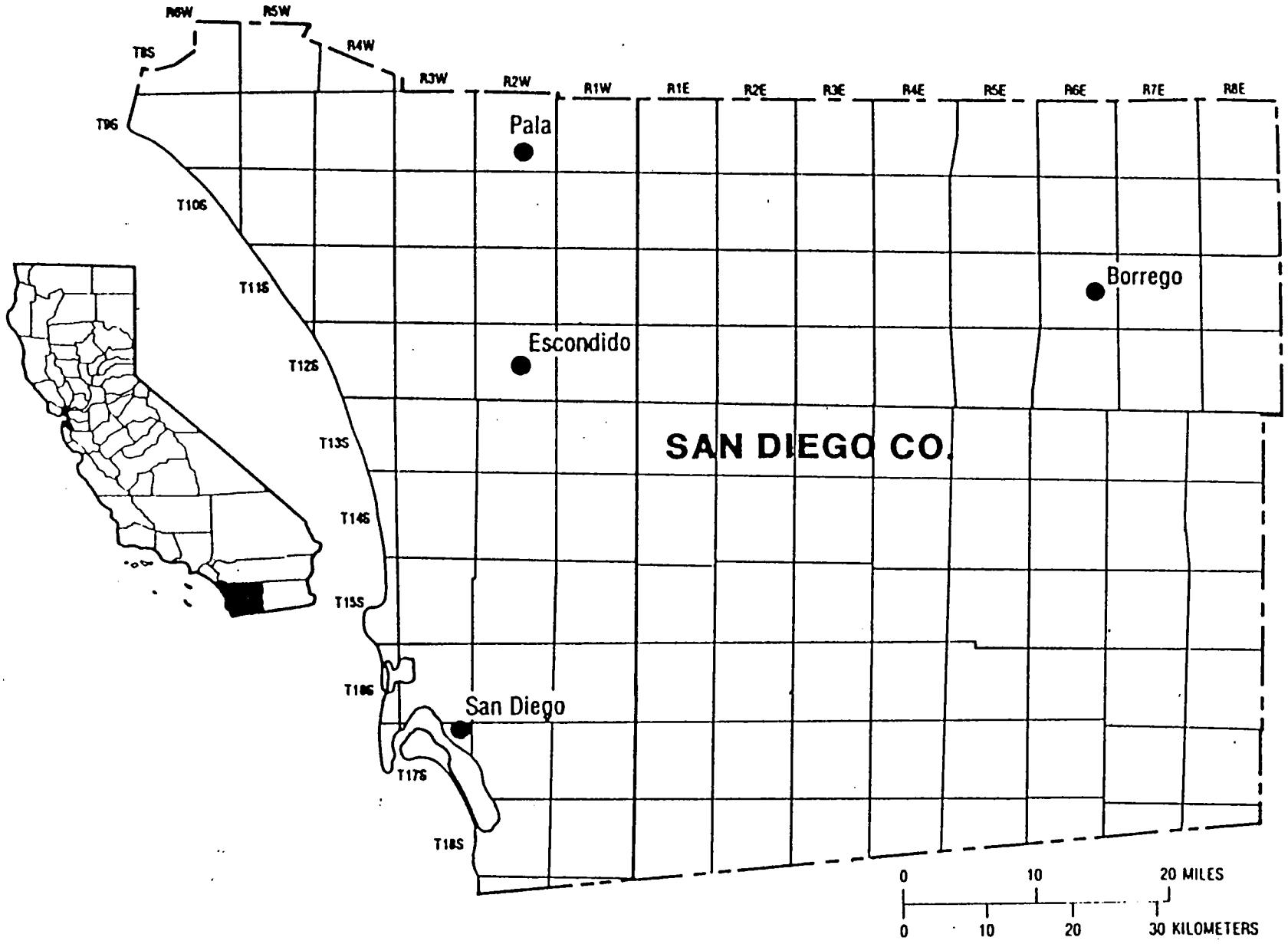

FIGURE 14.--Index map to location of wells in San Diego County.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SITE NUMBER 333737116540701 LOCAL NUMBER 010S001E20G01S

ABOUT 5.1 MI EAST OF RINCON SPRINGS ON HWY 78. ABOUT 126 FT SOUTH OF HWY. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 IN. DEPTH 70 FT. ALTITUDE OF LSD 2580 FT. RECORDS AVAILABLE 1960. 1967. 1971. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.25 FEET BELOW LAND SURFACE DATUM MAR 31. 1980.

LOWEST WATER LEVEL 37.75 FEET BELOW LAND SURFACE DATUM AUG 25. 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06. 1984	18.04	FEB 11. 1985	15.97	JUN 06. 1985	17.66	AUG 15. 1985	21.40 R
DEC 17	17.24	MAY 02	17.00 R				

SITE NUMBER 333720116522001 LOCAL NUMBER 010S001E22H01S

NORTH SIDE OF HWY 78. ABOUT 1.82 MI EAST OF JUNCTION WITH ROAD TO MOUNT PALOMAR. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 8.5 IN. DEPTH 93 FT. ALTITUDE OF LSD 2740 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.22 FEET BELOW LAND SURFACE DATUM MAY 13. 1980.

LOWEST WATER LEVEL 20.30 FEET BELOW LAND SURFACE DATUM JAN 27. 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13. 1984	13.87	MAY 02. 1985	11.92

SITE NUMBER 331800116210001 LOCAL NUMBER 010S006E21A01S

ABOUT 0.1 MI SOUTHEAST OF INTERSECTION OF BORREGO VALLEY AND HENDERSON CANYON ROADS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 310 FT. ALTITUDE OF LSD 840 FT. RECORDER INSTALLED BY CALIFORNIA STATE WATER RESOURCES DEPARTMENT IN 1952. RECORDS AVAILABLE 1952-76. 1978. 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 130.55 FEET BELOW LAND SURFACE DATUM JAN 03. 1953.

LOWEST WATER LEVEL 185.46 FEET BELOW LAND SURFACE DATUM JUL 22. 1985.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 26. 1985	179.60	SEP 12. 1985	182.56

SITE NUMBER 331432116194602 LOCAL NUMBER 011S008E11D02S

ABOUT 1 MI SOUTHEAST OF INTERSECTION OF BORREGO VALLEY ROAD AND PALM CANYON DRIVE. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 218 FT. ALTITUDE OF LSD 500 FT. RECORDS AVAILABLE 1953-71. 1978. 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.53 FEET BELOW LAND SURFACE DATUM NOV 16. 1953.

LOWEST WATER LEVEL 65.60 FEET BELOW LAND SURFACE DATUM AUG 14. 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 26. 1985	43.48.	SEP 13. 1985	46.63

R Recently pumped.

SITE NUMBER 330639116074701 LOCAL NUMBER 012S008E22E01S

ABOUT 2.5 MI SOUTHEAST OF INTERSECTION OF HWY 78 AND SPLIT MTN ROAD. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 226 FT. ALTITUDE OF LSD 110 FT. RECORDS AVAILABLE 1951. 1953-71. 1978. 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 101.83 FEET BELOW LAND SURFACE DATUM NOV 10. 1954.

LOWEST WATER LEVEL 119.18 FEET BELOW LAND SURFACE DATUM NOV 10. 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 20. 1985	109.01	JUN 14. 1985	109.00

SITE NUMBER 325835116512901 LOCAL NUMBER 014S001E22H01S

NORTHEAST OF EL CAJON. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 22 FT. CASED TO 13.8 FT. PERFORATED 12.8-13.8 FT. ALTITUDE OF LSD 1340 FT. RECORDS AVAILABLE 1978. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.93 FEET BELOW LAND SURFACE DATUM MAR 31. 1981.

LOWEST WATER LEVEL WELL DRY NOV 19. 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 08. 1985	7.95

SITE NUMBER 325810116521401 LOCAL NUMBER 014S001E22P02S

ON BARONA INDIAN RESERVATION. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8.5 IN. DEPTH 45.2 FT. ALTITUDE OF LSD 1315 FT. RECORDS AVAILABLE 1973-74. 1978. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.37 FEET BELOW LAND SURFACE DATUM JUN 01. 1983.

LOWEST WATER LEVEL 9.20 FEET BELOW LAND SURFACE DATUM NOV 08. 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 08. 1985	8.13

SITE NUMBER 325838116512801 LOCAL NUMBER 014S001E23E02S

ON BARONA INDIAN RESERVATION. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8.5 IN. DEPTH 58 FT. ALTITUDE OF LSD 1340 FT. RECORDS AVAILABLE 1978. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.82 FEET BELOW LAND SURFACE DATUM MAR 31. 1981.

LOWEST WATER LEVEL 11.91 FEET BELOW LAND SURFACE DATUM JAN 23. 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 08. 1985	6.07

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SITE NUMBER 325824116511201 LOCAL NUMBER 014S001E23L01S

ON BARONA INDIAN RESERVATION. UNUSED WATER-TABLE WELL. DIAM 24 IN. DEPTH 19.6 FT. ALTITUDE OF LSD 1355 FT. RECORDS AVAILABLE 1953. 1978. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.55 FEET BELOW LAND SURFACE DATUM JAN 23. 1979.

LOWEST WATER LEVEL 9.50 FEET BELOW LAND SURFACE DATUM JUL 29. 1953.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 08. 1985	6.54

SITE NUMBER 325848116280301 LOCAL NUMBER 014S005E02J03S

ABOUT 0.2 MI NORTH OF AGUA CALIENTE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN. DEPTH 181 FT. ALTITUDE OF LSD 2030 FT. RECORDS AVAILABLE 1978. 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 40.35 FEET BELOW LAND SURFACE DATUM MAR 01. 1985.

LOWEST WATER LEVEL 74.10 FEET BELOW LAND SURFACE DATUM DEC 27. 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 01. 1985	40.35	JUN 14. 1985	41.56

SITE NUMBER 325808116232801 LOCAL NUMBER 014S006E08F03S

ABOUT 1 MI NORTHEAST OF TROUTMAN MTN. UNUSED WATER-TABLE WELL. DIAM 8 IN. DEPTH 110 FT. ALTITUDE OF LSD 1645 FT. RECORDS AVAILABLE 1960. 1982. 1964-66. 1968. 1978. 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 65.31 FEET BELOW LAND SURFACE DATUM MAR 16. 1982.

LOWEST WATER LEVEL 78.20 FEET BELOW LAND SURFACE DATUM OCT 01. 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 01. 1985	70.98	JUN 14. 1985	70.35

SITE NUMBER 325118116414201 LOCAL NUMBER 015S003E20F01S

ON VIEJAS INDIAN RESERVATION. DRILLED UNUSED WATER-TABLE WELL. DIAM 8 IN. DEPTH 130 FT. PERFORATED 95-115 FT. ALTITUDE OF LSD 2415 FT. RECORDS AVAILABLE 1973-74. 1978. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.78 FEET BELOW LAND SURFACE DATUM JUN 06. 1983.

LOWEST WATER LEVEL 19.98 FEET BELOW LAND SURFACE DATUM APR 05. 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 10. 1985	12.53

SITE NUMBER 325116116413201 LOCAL NUMBER 0155OOJE20G01S

ON VIEJAS INDIAN RESERVATION. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 12 IN. DEPTH DRILLED 143 FT. ALTITUDE OF LSD 2400 FT. RECORDS AVAILABLE 1957. 1971. 1976. 1978-79. 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 12.70 FEET BELOW LAND SURFACE DATUM JAN 24. 1979.

LOWEST WATER LEVEL 26.65 FEET BELOW LAND SURFACE DATUM APR 05. 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 10. 1985	20.09

SITE NUMBER 325215116110701 LOCAL NUMBER 0155008E17D02S

WEST OF BOW WILLOW RANGER STATION. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN. DEPTH 87 FT. ALTITUDE OF LSD 610 FT. RECORDS AVAILABLE 1966. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 38.48 FEET BELOW LAND SURFACE DATUM MAR 01. 1985.

LOWEST WATER LEVEL 71.40 FEET BELOW LAND SURFACE DATUM FEB 01. 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 01. 1985	38.48	SEP 17. 1985	39.04

SITE NUMBER 324700116500201 LOCAL NUMBER 0165001E13C03S

ON SYCUAN INDIAN RESERVATION. PUBLIC SUPPLY WATER-TABLE WELL. DIAM 8 IN. DEPTH 90 FT. ALTITUDE OF LSD 630 FT. RECORDS AVAILABLE 1970. 1976. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.10 FEET BELOW LAND SURFACE DATUM NOV 21. 1980.

LOWEST WATER LEVEL 34.80 FEET BELOW LAND SURFACE DATUM JAN 30. 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 07. 1985	22.26

SITE NUMBER 323850116281401 LOCAL NUMBER 0175005E33R01S

ON CAMPO INDIAN RESERVATION. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN. DEPTH 81 FT. ALTITUDE OF LSD 2605 FT. RECORDS AVAILABLE 1975-76. 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 14.31 FEET BELOW LAND SURFACE DATUM JUN 02. 1983.

LOWEST WATER LEVEL 35.82 FEET BELOW LAND SURFACE DATUM JAN 06. 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 08. 1985	27.46

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SITE NUMBER 324319116192101 LOCAL NUMBER 017S006E01L02S

NEAR CAMPO INDIAN RESERVATION. DRILLED UNUSED WATER-TABLE WELL. DIAM 6 IN. DEPTH 68 FT. CASED TO 50 FT. PERFORATED 40-50 FT. ALTITUDE OF LSD 3980 FT. RECORDS AVAILABLE 1973-74, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.28 FEET BELOW LAND SURFACE DATUM JUN 02, 1983.

LOWEST WATER LEVEL 21.58 FEET BELOW LAND SURFACE DATUM AUG 14, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 09, 1985	13.98

SITE NUMBER 324237116193201 LOCAL NUMBER 017S006E12R01S

NORTHEAST OF LIVE OAK SPRINGS. DRILLED UNUSED WATER-TABLE WELL. DIAM 6 IN. DEPTH 119 FT. CASED TO 119 FT. PERFORATED 99-119 FT. ALTITUDE OF LSD 4100 FT. RECORDS AVAILABLE 1973-74, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.13 FEET BELOW LAND SURFACE DATUM JUN 02, 1983.

LOWEST WATER LEVEL 36.18 FEET BELOW LAND SURFACE DATUM AUG 14, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 09, 1985	27.79

SITE NUMBER 324028116211501 LOCAL NUMBER 017S006E27A01S

SOUTHWEST OF LIVE OAK SPRINGS. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN. DEPTH 76 FT. CASED TO 76 FT. PERFORATED 56-76 FT. ALTITUDE OF LSD 3640 FT. RECORDS AVAILABLE 1973, 1975, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 12.67 FEET BELOW LAND SURFACE DATUM JUN 02, 1983.

LOWEST WATER LEVEL 27.73 FEET BELOW LAND SURFACE DATUM JAN 09, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 09, 1985	18.20

SITE NUMBER 323824116224601 LOCAL NUMBER 016S006E04F01S

EAST OF CAMERON CORNERS. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN. DEPTH 75 FT. CASED TO 75 FT. PERFORATED 33-44, 65-75 FT. ALTITUDE OF LSD 3180 FT. RECORDS AVAILABLE 1974-75, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.63 FEET BELOW LAND SURFACE DATUM NOV 20, 1980.

LOWEST WATER LEVEL 48.92 FEET BELOW LAND SURFACE DATUM JAN 07, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 09, 1985	26.54

SITE NUMBER 333203117035101 LOCAL NUMBER 009S002V26E01S

ABOUT .18 MI NORTH OF HWY 76. DRILLED UNUSED WATER-TABLE WELL. DIAM UNKNOWN. DEPTH 120 FT. PERFORATIONS 68-95 FT. ALTITUDE OF LSD 455 FT. RECORDS AVAILABLE 1953. 1967. 1971-73. 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 58.84 FEET BELOW LAND SURFACE DATUM MAY 15. 1980.

LOWEST WATER LEVEL 90.02 FEET BELOW LAND SURFACE DATUM SEP 26. 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06. 1984	72.49 S	FEB 11. 1985	61.79	JUN 06. 1985	83.68 S	AUG 14. 1985	69.89 S
DEC 17	68.89	MAY 01	61.91 S				

SITE NUMBER 333153117032901 LOCAL NUMBER 009S002V26K01S

ABOUT .07 MI EAST OF CONCORD ROAD. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 10 IN. DEPTH 173 FT. ALTITUDE OF LSD 470 FT. RECORDS AVAILABLE 1967. 1971-72. 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 59.07 FEET BELOW LAND SURFACE DATUM APR 26. 1983.

LOWEST WATER LEVEL 89.84 FEET BELOW LAND SURFACE DATUM SEP 26. 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 13. 1984	72.55

SITE NUMBER 333151117040001 LOCAL NUMBER 009S002V26M01S

ON PALA INDIAN RESERVATION. NORTH OF HWY 76. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 10 IN. DEPTH 146 FT. ALTITUDE OF LSD 425 FT. RECORDS AVAILABLE 1964-73. 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 35.48 FEET BELOW LAND SURFACE DATUM MAY 14. 1980.

LOWEST WATER LEVEL 65.60 FEET BELOW LAND SURFACE DATUM SEP 27. 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13. 1984	47.29	MAY 01. 1985	38.42

SITE NUMBER 333225117035201 LOCAL NUMBER 009S002V26R02S

ON PALA INDIAN RESERVATION. NORTH OF HWY 76. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 20 IN. DEPTH 143 FT. ALTITUDE OF LSD 435 FT. RECORDS AVAILABLE 1955. 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 36.84 FEET BELOW LAND SURFACE DATUM MAR 31. 1980.

LOWEST WATER LEVEL 71.22 FEET BELOW LAND SURFACE DATUM DEC 20. 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06. 1984	67.67 P	DEC 17. 1984	90.27	FEB 11. 1985	42.60	JUN 06. 1985	58.25 P

P Pumping.
S Nearby pumping.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SITE NUMBER 333141117033401 LOCAL NUMBER 009S002W28P01S

ABOUT .24 MI SOUTH OF HWY 76. DUG PUBLIC SUPPLY WATER-TABLE WELL. DIAM 96 IN. DEPTH 63 FT. ALTITUDE OF LSD 422.7 FT. RECORDS AVAILABLE 1915, 1941, 1961, 1971-72, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.01 FEET BELOW LAND SURFACE DATUM MAR 02, 1915.

LOWEST WATER LEVEL 40.58 FEET BELOW LAND SURFACE DATUM NOV 17, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08, 1984	22.80	FEB 11, 1985	11.78	JUN 08, 1985	12.40	AUG 14, 1985	17.34
DEC 17	14.22	MAY 01	12.12				

SITE NUMBER 333121117041901 LOCAL NUMBER 009S002W34A01S

NORTH OF LILAC ROAD. DRILLED UNUSED WATER-TABLE WELL. DIAM 6 IN. DEPTH 47 FT. ALTITUDE OF LSD 395 FT. RECORDS AVAILABLE 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.35 FEET BELOW LAND SURFACE DATUM APR 03, 1980.

LOWEST WATER LEVEL 33.78 FEET BELOW LAND SURFACE DATUM DEC 20, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08, 1984	15.22	FEB 11, 1985	15.80	JUN 08, 1985	14.72	AUG 14, 1985	15.26
DEC 17	16.38	MAY 01	15.04				

SITE NUMBER 333119117043101 LOCAL NUMBER 009S002W34D02S

ON PALA INDIAN RESERVATION. SOUTH OF HWY 76. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 12 IN. DEPTH 90 FT. ALTITUDE OF LSD 375 FT. RECORDS AVAILABLE 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.48 FEET BELOW LAND SURFACE DATUM APR 28, 1983.

LOWEST WATER LEVEL 23.28 FEET BELOW LAND SURFACE DATUM DEC 20, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13, 1984	9.32	MAY 01, 1985	10.42

SITE NUMBER 333200117004401 LOCAL NUMBER 010S001W05R01S

SOUTHWEST OF HWY 76. DRILLED WITHDRAWAL WATER-TABLE WELL. DIAM 16 IN. DEPTH 270 FT. ALTITUDE OF LSD 710 FT. RECORDS AVAILABLE 1964-69, 1972-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.00 FEET BELOW LAND SURFACE DATUM MAR 11, 1981.

LOWEST WATER LEVEL 82.06 FEET BELOW LAND SURFACE DATUM DEC 20, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08, 1984	42.75 R	FEB 11, 1985	4.83	JUN 08, 1985	54.48 P	AUG 14, 1985	49.80 R
DEC 17	8.93	MAY 01	20.72				

P Pumping.
R Recently pumped.

SITE NUMBER 333161116570901 LOCAL NUMBER 010S001W35C01S

WEST OF HWY 6 AND SOUTH OF SECTION LINE ROAD. DRILLED UNUSED WATER-TABLE WELL. DIAM 18 IN. DEPTH 105 FT. ALTITUDE OF LSD 860 FT. RECORDS AVAILABLE 1938, 1940, 1950, 1959-63, 1971-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.16 FEET BELOW LAND SURFACE DATUM MAR 31, 1980.

LOWEST WATER LEVEL 48.50 FEET BELOW LAND SURFACE DATUM JUN 01, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1984	14.58	FEB 11, 1985	14.81	JUN 06, 1985	15.12	AUG 14, 1985	14.35
DEC 17	14.92	MAY 01	14.92				

SITE NUMBER 333535116564101 LOCAL NUMBER 010S001W35J01S

ABOUT .58 MI SOUTHEAST OF HWY 6 AND ABOUT 150 FT WEST OF RINCON INDIAN RESERVATION. DUG UNUSED WATER-TABLE WELL. DIAM 6 FT. DEPTH 42 FT. ALTITUDE OF LSD 674 FT. RECORDS AVAILABLE 1923-24, 1928, 1929-34, 1940, 1959-60, 1967, 1971-72, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.69 FEET BELOW LAND SURFACE DATUM APR 10, 1979.

LOWEST WATER LEVEL WELL DRY FEB 03, 1977; MAR 24, 1977; APR 22, 1977; AUG 25, 1977; SEP 27, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1984	11.98	FEB 01, 1985	11.08	MAY 01, 1985	11.71	AUG 14, 1985	12.78
DEC 17	11.12	11	10.64	JUN 06	13.49		

SITE NUMBER 331228116575401 LOCAL NUMBER 011S001W22H02S

ABOUT 2 MI NORTH OF PARADISE MT. ROAD AND ABOUT .25 MI EAST OF LAKE WOHLFORD ROAD. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 4 IN. DEPTH 35.3 FT. ALTITUDE OF LSD 1660 FT. RECORDS AVAILABLE 1967, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.45 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 14.96 FEET BELOW LAND SURFACE DATUM JAN 05, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13, 1984	3.31	MAY 01, 1985	2.20

SITE NUMBER 331209116575801 LOCAL NUMBER 011S001W22R01S

ABOUT .30 MI WEST OF LAKE WOHLFORD ROAD. DRILLED UNUSED WATER-TABLE WELL. DIAM 3 IN. DEPTH 27 FT. ALTITUDE OF LSD 1675 FT. RECORDS AVAILABLE 1967, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.67 FEET BELOW LAND SURFACE DATUM MAR 22, 1978.

LOWEST WATER LEVEL 23.00 FEET BELOW LAND SURFACE DATUM DEC 20, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1984	10.85	FEB 11, 1985	5.10	JUN 06, 1985	8.67	AUG 14, 1985	11.04
DEC 17	10.82	MAY 01	7.02				

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

SITE NUMBER 324630117082701 LOCAL NUMBER 018S003W13Q04S

ABOUT 0.3 MI SOUTHWEST OF INTERSECTION OF FRIARS ROAD AND STADIUM WAY, NORTH OF UNIVERSITY HEIGHTS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 52.45 FT. ALTITUDE OF LSD 45 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.60 FEET BELOW LAND SURFACE DATUM JUL 14, 1980.

LOWEST WATER LEVEL 14.88 FEET BELOW LAND SURFACE DATUM AUG 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 30, 1984	13.98	AUG 13, 1985	13.13

INORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
010S001E20G01S	85-08-28	1400	250	8.8	20.0	79	3	21	6.4	18
010S001E27Q02S	85-08-28	1530	675	8.5	21.5	180	58	35	17	85
009S002V26E02S	85-08-22	1630	680	7.3	21.5	230	50	64	18	44
009S002V26E03S	85-08-22	1800	845	7.4	21.0	230	42	61	18	46
009S002V26H02S	85-08-21	1400	650	7.2	20.5	210	78	54	18	51
009S002V26P01S	85-08-22	0900	845	7.1	19.5	290	180	78	24	55
009S002V27H01S	85-08-22	1500	700	7.5	21.0	250	71	69	19	49
009S002V27H01S	85-09-30	1330	660	7.3	23.0	220	58	57	19	50
009S002V32L01S	85-08-21	1130	930	7.1	20.0	310	130	80	26	61
009S002V34A01S	85-08-22	1300	740	7.3	21.0	280	110	68	21	47
009S002V34D01S	85-08-22	1100	820	7.2	20.5	280	110	74	23	53
010S001V03H02S	85-08-23	1000	775	7.2	20.5	310	160	89	21	42
010S001V08H01S	85-08-28	1200	1610	7.8	20.5	560	380	140	51	110
010S001V08R02S	85-08-23	1200	1000	7.3	21.0	430	260	110	37	55
010S001V18H01S	85-08-27	1500	1000	7.4	22.0	310	120	71	32	78
010S001V26F01S	85-08-23	1400	590	7.5	19.5	190	21	47	17	48
011S001V02F01S	85-08-28	1000	750	7.2	20.0	280	91	65	23	57
011S001V22J01S	85-08-27	1200	600	8.7	21.0	180	78	43	18	50
011S002V01F02S	84-10-17	—	1900	7.3	19.0	560	280	120	63	180
	85-03-18	—	1730	7.1	16.0	570	340	130	59	170
011S002V01R02S	84-10-17	—	960	7.3	21.0	290	89	78	24	75
	85-03-21	0100	964	7.5	20.0	320	120	86	25	72
011S002V05J01S	84-10-17	—	1240	8.7	19.5	290	130	54	38	140
	85-03-21	—	1290	8.7	17.5	340	180	88	43	140
011S002V05W01S	84-10-17	—	1550	8.7	18.5	490	260	110	53	100
011S002V05Q02S	84-10-17	—	1790	8.7	20.0	440	270	97	49	190
	85-03-18	—	1820	8.8	15.0	530	310	120	57	180
011S002V08G02S	84-10-17	—	1840	7.2	21.5	470	210	99	54	200
	85-03-18	—	1920	7.0	16.5	590	340	130	64	200
011S002V09J02S	84-10-17	—	790	8.7	19.0	210	84	50	20	78
011S002V10N01S	84-10-17	—	1330	8.8	19.0	400	280	95	39	110
	85-03-18	—	1250	8.5	15.5	390	210	92	38	110
014S001V07D02S	84-10-16	—	2300	7.1	21.0	690	450	120	96	230
014S001V08D01S	84-10-16	—	1060	7.0	22.0	240	81	49	29	130
	85-03-19	—	972	7.1	20.5	240	88	46	31	140
014S001V08N02S	84-10-16	—	860	8.8	21.0	200	84	54	17	110
014S001V17B02S	84-10-16	—	1170	8.7	23.5	310	110	50	45	120
	85-03-19	—	1180	8.8	21.5	340	140	55	48	120
014S001V21N01S	84-10-16	—	1780	8.9	20.5	530	210	140	43	170
	85-03-19	—	1800	7.0	20.5	540	220	140	47	180
014S002V12K02S	84-10-16	—	2600	7.0	21.0	810	550	160	100	230
	85-03-19	—	2640	7.2	21.0	940	600	180	130	280
014S002V19K01S	85-03-20	—	1990	7.2	18.0	580	290	120	63	220
014S002V22C01S	84-10-16	—	1500	8.9	21.0	390	190	89	53	140
	85-03-19	—	1470	8.8	21.5	410	200	72	55	150
014S002V25H01S	84-10-16	—	1770	7.1	—	470	180	120	42	170
	85-03-19	—	1520	8.9	20.5	470	200	120	40	140
014S002V26J01S	84-10-16	—	1800	7.0	19.0	480	230	120	43	130
	85-03-19	—	1500	7.0	19.0	450	230	110	43	120
014S003V20F01S	84-10-15	1700	930	7.1	27.0	220	28	50	23	84
	85-03-20	—	882	7.1	26.5	220	31	58	19	110
014S003V20G01S	84-10-15	—	2880	7.1	22.5	1000	790	290	77	250
	85-03-20	—	2700	7.0	22.5	1000	750	290	72	280
014S003V20L01S	85-03-20	—	1840	7.4	19.0	540	320	150	41	150
014S003V24R01S	84-10-16	—	2800	7.2	23.5	550	370	130	54	320
	85-03-20	—	2500	7.2	23.0	510	340	120	52	350

INORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
010S001E20C01S	85-08-28	33	.9	.70	76	37	12	20	.20	47
010S001E27B02S	85-08-28	46	2	4.8	102	62	110	78	.50	44
009S002V26E02S	85-08-22	29	1	2.9	176	17	50	61	.20	35
009S002V26E03S	85-08-22	30	1	2.7	185	14	49	52	.20	41
009S002V26R02S	85-08-21	34	2	4.7	131	16	110	57	.30	40
009S002V26P01S	85-08-22	29	1	5.4	108	17	190	91	.20	30
009S002V27H01S	85-08-22	30	1	3.3	180	11	84	58	.20	41
009S002V27R01S	85-09-30	33	2	1.2	185	18	58	62	.20	38
009S002V32L01S	85-08-21	26	2	26	176	27	170	87	.30	32
009S002V34A01S	85-08-22	28	1	4.7	148	14	140	58	.40	31
009S002V34D01S	85-08-22	29	1	3.8	171	21	86	110	.20	32
010S001V03R02S	85-08-23	22	1	5.6	153	19	180	39	.30	38
010S001V08R01S	85-08-28	30	2	6.4	183	6.8	350	230	.30	34
010S001V08R02S	85-08-23	22	1	3.8	187	18	290	47	.20	46
010S001V16H01S	85-08-27	35	2	3.3	194	15	110	120	.20	44
010S001V28P01S	85-08-23	35	2	3.6	187	10	81	42	.20	35
011S001V02F01S	85-08-28	32	2	2.9	166	20	73	88	.20	44
011S001V22J01S	85-08-27	37	2	1.6	103	40	25	110	.10	54
011S002V01F02S	84-10-17	41	3	2.2	280	27	240	330	.30	36
	85-03-18	39	3	2.1	227	35	240	290	.30	35
011S002V01B02S	84-10-17	36	2	5.1	200	18	37	180	.40	42
	85-03-21	33	2	5.0	196	12	38	170	.40	44
011S002V05J01S	84-10-17	51	4	3.4	159	61	160	210	.40	48
	85-03-21	47	3	3.7	180	62	200	210	.40	51
011S002V05N01S	84-10-17	30	2	8.8	229	88	110	290	.20	46
011S002V05G02S	84-10-17	48	4	4.2	178	88	230	350	.40	46
	85-03-18	42	3	3.5	229	111	280	330	.40	44
011S002V06G02S	84-10-17	48	4	1.9	257	31	280	300	.60	39
	85-03-18	42	4	1.9	249	48	300	300	.40	37
011S002V09J02S	84-10-17	45	2	1.8	143	55	56	130	.30	48
011S002V10N01S	84-10-17	37	2	2.8	117	57	180	250	.40	40
	85-03-18	38	3	2.7	178	109	190	210	.40	43
014S001V07D02S	84-10-16	42	4	4.8	247	38	400	400	.40	60
014S001V08D01S	84-10-16	54	4	2.8	181	31	100	150	.70	60
	85-03-19	55	4	2.5	155	24	100	160	.60	63
014S001V08H02S	84-10-16	54	3	1.9	141	69	81	140	1.0	28
014S001V17B02S	84-10-16	45	3	6.7	205	79	100	210	.70	73
	85-03-19	43	3	6.4	198	81	100	210	.70	77
014S001V21H01S	84-10-16	41	3	3.6	317	77	84	370	1.0	49
	85-03-19	39	3	3.9	321	82	90	380	.90	47
014S002V12K02S	84-10-16	38	4	4.0	262	51	290	570	.50	57
	85-03-19	39	4	4.0	335	41	240	460	.40	46
014S002V19K01S	85-03-20	46	4	2.9	271	33	130	470	.60	39
014S002V22C01S	84-10-16	43	3	4.3	203	49	69	300	.70	57
	85-03-19	44	3	4.3	210	51	71	310	.60	62
014S002V25R01S	84-10-16	44	4	1.7	295	45	48	380	.60	46
	85-03-19	40	3	1.5	264	64	36	330	.50	55
014S002V26J01S	84-10-16	37	3	1.9	251	49	41	350	.60	45
	85-03-19	37	3	1.8	227	44	39	330	.60	50
014S003V20F01S	84-10-15	45	3	3.3	194	30	33	170	.50	49
	85-03-20	52	3	1.8	193	30	67	130	.90	30
014S003V20G01S	84-10-15	34	3	5.1	257	40	660	500	.70	27
	85-03-20	37	4	4.7	272	53	870	460	.70	26
014S003V20L01S	85-03-20	37	3	2.7	221	17	290	260	.60	28
014S003V24R01S	84-10-16	56	6	2.7	181	22	180	840	1.0	44
	85-03-20	60	7	2.9	180	22	180	840	1.0	42

INORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)
010S001E20G01S	85-08-28	--	170	.23	--	--	--	1.2	--	--
010S001E27Q02S	85-08-28	--	420	.57	--	--	--	.21	--	--
009S002V26E02S	85-08-22	--	380	.52	--	--	--	7.0	--	--
009S002V26E03S	85-08-22	--	380	.52	--	--	--	4.6	--	--
009S002V26M02S	85-08-21	--	410	.56	--	--	--	1.3	--	--
009S002V26P01S	85-08-22	--	540	.73	--	--	--	.13	--	--
009S002V27M01S	85-08-22	--	430	.59	--	--	--	1.6	--	--
009S002V27R01S	85-09-30	--	390	.52	--	--	--	4.4	--	--
009S002V32L01S	85-08-21	--	590	.80	--	--	--	.65	--	--
009S002V34A01S	85-08-22	--	460	.63	--	--	--	.41	--	--
009S002V34D01S	85-08-22	--	460	.66	--	--	--	.49	--	--
010S001V03M02S	85-08-23	--	500	.69	--	--	--	3.5	--	--
010S001V08M01S	85-08-28	--	1000	1.4	--	--	--	1.8	--	--
010S001V08R02S	85-08-23	--	690	.94	--	--	--	1.4	--	--
010S001V18M01S	85-08-27	--	580	.78	--	--	--	10	--	--
010S001V28P01S	85-08-23	--	350	.48	--	--	--	1.2	--	--
011S001V02F01S	85-08-28	--	450	.62	--	--	--	1.7	--	--
011S001V22J01S	85-08-27	--	360	.49	--	--	--	1.2	--	--
011S002V01F02S	84-10-17	1170	1100	1.6	--	<.010	--	.83	.050	.06
	85-03-18	1080	1100	1.4	--	<.010	--	1.6	<.010	--
011S002V01Q02S	84-10-17	525	580	.71	--	<.010	--	<.10	.020	.03
	85-03-21	535	580	.73	--	<.010	--	<.10	<.010	--
011S002V05J01S	84-10-17	752	750	1.0	--	<.010	--	1.1	<.010	--
	85-03-21	833	810	1.1	--	<.010	--	.98	.010	.01
011S002V05W01S	84-10-17	917	860	1.2	--	<.010	--	7.8	.030	.04
011S002V05Q02S	84-10-17	1100	1100	1.5	--	<.010	--	.12	.020	.03
	85-03-18	1140	1200	1.6	--	<.010	--	.28	<.010	--
011S002V06G02S	84-10-17	1170	1100	1.6	.09	<.020	.07	.11	.030	.04
	85-03-18	1260	1200	1.7	--	--	--	.35	--	--
011S002V09J02S	84-10-17	467	470	.66	--	<.010	--	1.0	.020	.03
011S002V10W01S	84-10-17	824	790	1.1	--	<.010	--	3.5	.020	.03
	85-03-18	786	790	1.1	--	<.010	--	3.8	.030	.04
014S001V07D02S	84-10-18	1560	1500	2.1	--	<.010	--	11	.010	.01
014S001V08D01S	84-10-18	840	820	.87	--	<.010	--	13	<.010	--
	85-03-18	868	840	.84	--	<.010	--	10	<.010	--
014S001V08H02S	84-10-18	581	520	.78	.35	.020	.07	.37	.020	.03
014S001V17B02S	84-10-18	715	730	.97	--	<.010	--	<.10	.020	.03
	85-03-19	732	740	1.0	--	<.010	--	.11	<.010	--
014S001V21H01S	84-10-18	972	1100	1.3	--	<.010	--	.80	.040	.05
	85-03-19	1070	1100	1.5	--	<.010	--	<.10	.020	.03
014S002V12K02S	84-10-18	1820	1600	2.2	4.3	.050	.18	4.3	.030	.04
	85-03-19	804	1500	1.1	3.8	.010	.03	3.8	<.010	.01
014S002V19K01S	85-03-20	1210	1200	1.6	--	<.010	--	<.10	.020	.03
014S002V22C01S	84-10-18	884	820	1.2	--	<.010	--	4.9	.020	.03
	85-03-19	870	850	1.2	--	<.010	--	4.5	<.010	--
014S002V25R01S	84-10-18	980	990	1.3	--	<.010	--	1.4	.030	.04
	85-03-19	910	880	1.2	--	<.010	--	1.8	.010	.01
014S002V28J01S	84-10-18	782	880	1.1	--	<.010	--	2.7	.040	.05
	85-03-19	898	830	1.2	--	<.010	--	2.9	.010	.01
014S003V20F01S	84-10-15	518	530	.70	--	--	--	1.8	--	--
	85-03-20	537	550	.73	--	<.010	--	.22	.030	.04
014S003V20G01S	84-10-15	1990	2000	2.7	--	<.010	--	.47	.140	.18
	85-03-20	1910	2000	2.6	--	<.010	--	.21	.110	.14
014S003V20L01S	85-03-20	1070	1100	1.5	--	<.010	--	.20	.290	.37
014S003V24R01S	84-10-18	1500	1500	2.0	--	<.010	--	<.10	.040	.05
	85-03-20	1490	1500	2.0	--	<.010	--	<.10	.030	.04

< Actual value is known to be less than the value shown.

INORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)
010S001E20G01S	85-08-28	--	.010	--	--	20	--	--	--	--
010S001E27B02S	85-08-28	--	<.010	--	--	20	--	--	--	--
009S002V28E02S	85-08-22	--	.010	--	--	30	--	--	--	--
009S002V28E03S	85-08-22	--	.010	--	--	30	--	--	--	--
009S002V28M02S	85-08-21	--	.030	--	--	60	--	--	--	--
009S002V28P01S	85-08-22	--	.010	--	--	60	--	--	--	--
009S002V27H01S	85-08-22	--	<.010	--	--	50	--	--	--	--
009S002V27H01S	85-09-30	--	.010	--	--	50	--	--	--	--
009S002V32L01S	85-08-21	--	.050	--	--	90	--	--	--	--
009S002V34A01S	85-08-22	--	<.010	--	--	50	--	--	--	--
009S002V34D01S	85-08-22	--	.030	--	--	70	--	--	--	--
010S001V03M02S	85-08-23	--	.030	--	--	20	--	--	--	--
010S001V08M01S	85-08-28	--	.040	--	--	110	--	--	--	--
010S001V08R02S	85-08-23	--	.040	--	--	50	--	--	--	--
010S001V16H01S	85-08-27	--	.050	--	--	30	--	--	--	--
010S001V26P01S	85-08-23	--	.030	--	--	80	--	--	--	--
011S001V02F01S	85-08-28	--	.010	--	--	60	--	--	--	--
011S001V22J01S	85-08-27	--	.010	--	--	40	--	--	--	--
011S002V01F02S	84-10-17	<.20	.060	--	--	140	--	--	--	--
	85-03-18	--	.040	<10	--	130	<1	<1	<1	2
011S002V01Q02S	84-10-17	<.20	.010	--	--	80	--	--	--	--
	85-03-21	<.20	<.010	<10	<1	80	<1	<1	<1	2
011S002V05J01S	84-10-17	.20	.020	--	--	110	--	--	--	--
	85-03-21	.30	.010	<10	<1	120	<1	<1	<1	5
011S002V05N01S	84-10-17	1.5	.050	--	--	80	--	--	--	--
011S002V05Q02S	84-10-17	<.20	.050	--	--	120	--	--	--	--
	85-03-18	.40	.060	30	<1	110	--	--	--	--
011S002V06G02S	84-10-17	<.20	.040	--	--	170	--	--	--	--
	85-03-18	--	--	<10	<1	140	<1	<1	2	3
011S002V09J02S	84-10-17	<.20	.050	--	--	80	--	--	--	--
011S002V10N01S	84-10-17	.80	.020	--	--	100	--	--	--	--
	85-03-18	.10	.020	<10	<1	110	<1	<1	<1	10
014S001V07D02S	84-10-18	1.3	.070	--	--	150	--	--	--	--
014S001V08D01S	84-10-18	<.20	.070	--	--	80	--	--	--	--
	85-03-19	.30	.060	10	2	90	<1	<1	<1	2
014S001V08H02S	84-10-18	--	.140	--	--	200	--	--	--	--
014S001V17B02S	84-10-18	<.20	.020	--	--	170	--	--	--	--
	85-03-19	.30	.010	<10	2	170	<1	<1	<1	190
014S001V21H01S	84-10-18	<.20	.010	--	--	120	--	--	--	--
	85-03-19	.30	<.010	<10	<1	110	<1	<1	<1	4
014S002V12K02S	84-10-18	.80	.010	--	--	230	--	--	--	--
	85-03-19	.60	.020	20	<1	200	<1	<1	<1	4
014S002V19K01S	85-03-20	.20	<.010	10	<1	210	<1	<1	<1	2
014S002V22C01S	84-10-18	.80	.120	--	--	190	--	--	--	--
	85-03-19	.30	.120	<10	2	180	<1	<1	<1	4
014S002V25R01S	84-10-18	.20	.040	--	--	70	--	--	--	--
	85-03-19	.30	.030	10	<1	70	<1	<1	<1	5
014S002V26J01S	84-10-18	.80	.020	--	--	80	--	--	--	--
	85-03-19	.40	.010	10	1	80	<1	<1	<1	3
014S003V20F01S	84-10-15	--	--	--	--	90	--	--	--	--
	85-03-20	.30	<.010	20	2	200	<1	<1	<1	1
014S003V20G01S	84-10-15	<.20	.010	--	--	340	--	--	--	--
	85-03-20	.80	<.010	10	2	330	<1.	<1	<1	8
014S003V20L01S	85-03-20	.50	.020	20	1	250	<1	<1	<1	1
014S003V24R01S	84-10-18	<.20	.020	--	--	430	--	--	--	--
	85-03-20	.20	<.010	10	<1	420	1	<1	<1	2

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INORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)
010S001E20G01S	85-08-28	5	--	--	5	--	--
010S001E27Q02S	85-08-28	8800	--	--	130	--	--
009S002V26E02S	85-08-22	<3	--	--	<1	--	--
009S002V26E03S	85-08-22	<3	--	--	<1	--	--
009S002V26N02S	85-08-21	<3	--	--	<1	--	--
009S002V26P01S	85-08-22	<20	--	--	<5	--	--
009S002V27H01S	85-08-22	25	--	--	<1	--	--
009S002V27H01S	85-09-30	23	--	--	11	--	--
008S002V32L01S	85-08-21	130	--	--	280	--	--
009S002V34A01S	85-08-22	170	--	--	250	--	--
009S002V34D01S	85-08-22	97	--	--	80	--	--
010S001V03N02S	85-08-23	20	--	--	1	--	--
010S001V08N01S	85-08-28	44	--	--	30	--	--
010S001V08R02S	85-08-23	8	--	--	2	--	--
010S001V16N01S	85-08-27	<3	--	--	<1	--	--
010S001V28F01S	85-08-23	<3	--	--	<1	--	--
011S001V02F01S	85-08-28	3	--	--	<1	--	--
011S001V22J01S	85-08-27	22	--	--	5	--	--
011S002V01F02S	84-10-17	4	--	--	--	--	--
	85-03-18	34	1	23	--	8	1
011S002V01G02S	84-10-17	580	--	--	--	--	--
	85-03-21	760	<1	81	--	13	<1
011S002V05J01S	84-10-17	21	--	--	--	--	--
	85-03-21	18	3	42	--	6	3
011S002V05N01S	84-10-17	5	--	--	--	--	--
011S002V05Q02S	84-10-17	140	--	--	--	--	--
	85-03-18	35	--	--	--	--	--
011S002V06G02S	84-10-17	37	--	--	--	--	--
	85-03-18	81	2	24	--	13	2
011S002V08J02S	84-10-17	11	--	--	--	--	--
011S002V10R01S	84-10-17	17	--	--	--	--	--
	85-03-18	15	2	70	--	8	3
014S001V07D02S	84-10-16	30	--	--	--	--	--
014S001V08D01S	84-10-16	23	--	--	--	--	--
	85-03-19	78	<1	30	--	7	<1
014S001V08H02S	84-10-16	140	--	--	--	--	--
014S001V17B02S	84-10-16	19	--	--	--	--	--
	85-03-19	11	<1	63	--	10	<1
014S001V21H01S	84-10-16	200	--	--	--	--	--
	85-03-19	2200	<1	150	--	6	<1
014S002V12K02S	84-10-16	600	--	--	--	--	--
	85-03-19	50	<1	80	--	10	1
014S002V19K01S	85-03-20	<3	<1	84	--	6	<1
014S002V22C01S	84-10-16	15	--	--	--	--	--
	85-03-19	12	<1	77	--	13	<1
014S002V25H01S	84-10-16	42	--	--	--	--	--
	85-03-19	60	<1	75	--	<1	<1
014S002V26J01S	84-10-16	10	--	--	--	--	--
	85-03-19	13	<1	120	--	1	<1
014S003V20F01S	84-10-15	14	--	--	--	--	--
	85-03-20	160	<1	41	--	2	3
014S003V20G01S	84-10-15	290	--	--	--	--	--
	85-03-20	570	<1	100	--	2	<1
014S003V20L01S	85-03-20	350	<1	57	--	1	<1
014S003V24R01S	84-10-16	440	--	--	--	--	--
	85-03-20	420	<1	50	--	6	2

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INORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
010S001E20G01S	85-08-28	--	--	--	--
010S001E27B02S	85-08-28	--	--	--	--
009S002V36E02S	85-08-22	--	--	--	--
009S002V28E03S	85-08-22	--	--	--	--
009S002V26H02S	85-08-21	--	--	--	--
009S002V28P01S	85-08-22	--	--	--	--
009S002V27H01S	85-08-22	--	--	--	--
008S002V27H01S	85-09-30	--	--	--	--
009S002V32L01S	85-08-21	--	--	--	--
009S002V34A01S	85-08-22	--	--	--	--
009S002V34D01S	85-08-22	--	--	--	--
010S001V03H02J	85-08-23	--	--	--	--
010S001V08H01S	85-08-28	--	--	--	--
010S001V08H02S	85-08-23	--	--	--	--
010S001V16H01S	85-08-27	--	--	--	--
010S001V28P01S	85-08-23	--	--	--	--
011S001V02F01S	85-08-28	--	--	--	--
011S001V22J01S	85-08-27	--	--	--	--
011S002V01F02S	84-10-17	--	--	--	--
	85-03-18	<1	540	18	24
011S002V01G02S	84-10-17	--	--	--	--
	85-03-21	<1	160	6	38
011S002V05J01S	84-10-17	--	--	--	--
	85-03-21	<1	300	15	10
011S002V05W01S	84-10-17	--	--	--	--
011S002V05B02S	84-10-17	--	--	--	--
	85-03-18	--	--	--	--
011S002V06G02S	84-10-17	--	--	--	--
	85-03-18	<1	540	18	25
011S002V09J02S	84-10-17	--	--	--	--
011S002V10W01S	84-10-17	--	--	--	--
	85-03-18	2	210	4	18
014S001V07D02S	84-10-16	--	--	--	--
014S001V08D01S	84-10-16	--	--	--	--
	85-03-19	1	220	23	110
014S001V08H02S	84-10-16	--	--	--	--
014S001V17B02S	84-10-16	--	--	--	--
	85-03-19	<1	190	19	120
014S001V21H01S	84-10-16	--	--	--	--
	85-03-19	<1	710	18	410
014S002V12K02S	84-10-16	--	--	--	--
	85-03-19	1	780	11	60
014S002V19K01S	85-03-20	<1	560	9	180
014S002V22C01S	84-10-16	--	--	--	--
	85-03-19	2	280	24	950
014S002V25H01S	84-10-16	--	--	--	--
	85-03-19	2	560	7	12
014S002V26J01S	84-10-16	--	--	--	--
	85-03-19	5	820	7	48
014S003V20F01S	84-10-15	--	--	--	--
	85-03-20	<1	160	2	40
014S003V20G01S	84-10-15	--	--	--	--
	85-03-20	1	910	9	30
014S003V20L01S	85-03-20	<1	490	3	27
014S003V24H01S	84-10-16	--	--	--	--
	85-03-20	<1	620	15	20

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ORGANIC DATA

WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)
011S002V10N01S	84-10-17	--	<.010	<.1	<.010	<.010	<.010	<.01	<.010	<.01C
014S001V08D01S	84-10-16	--	<.010	<.1	<.010	<.010	<.010	<.01	<.010	<.01C
014S002V22C01S	84-10-16	--	<.010	<.1	<.010	<.010	<.010	<.01	<.010	<.01C
	85-03-19	--	<.010	<.1	<.010	<.010	<.010	<.01	<.010	<.01C
014S003V20G01S	84-10-15	--	<.010	<.1	<.010	<.010	<.010	<.01	<.010	<.01C

LOCAL IDENTIFIER	DATE OF SAMPLE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
011S002V10N01S	84-10-17	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01	<.01
014S001V08D01S	84-10-16	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01	<.01
014S002V22C01S	84-10-16	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01	<.01
	85-03-19	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01	<.01
014S003V20G01S	84-10-15	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01	<.01

LOCAL IDENTIFIER	DATE OF SAMPLE	MIREX, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PCB, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOTAL TRITHION (UG/L)	TOXAPHENE, TOTAL (UG/L)
011S002V10N01S	84-10-17	<.01	<.10	<.01	<.1	<.1	<.01	<1
014S001V08D01S	84-10-16	<.01	<.10	<.01	<.1	<.1	<.01	<1
014S002V22C01S	84-10-16	<.01	<.10	<.01	<.1	<.1	<.01	<1
	85-03-19	<.01	<.10	<.01	<.1	<.1	<.01	<1
014S003V20G01S	84-10-15	<.01	<.10	<.01	<.1	<.1	<.01	<1

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SAN JOAQUIN COUNTY