

**ANNUAL REPORT**  
**COOPERATIVE WATER RESOURCE**  
**MANAGEMENT AGREEMENT**  
**CALENDAR YEAR 2017**



**JUNE 2018**

**PREPARED BY**  
**SANTA MARGARITA RIVER WATERSHED WATERMASTER**

*UNITED STATES OF AMERICA*  
*v.*  
*FALLBROOK PUBLIC UTILITY DISTRICT, ET AL.*

**CIVIL NO. 51-cv-1247-GPC-RBB**



**ANNUAL REPORT**  
**COOPERATIVE WATER RESOURCE**  
**MANAGEMENT AGREEMENT**  
**CALENDAR YEAR 2017**

**JUNE 2018**

**PREPARED BY**

**SANTA MARGARITA RIVER WATERSHED WATERMASTER**

*UNITED STATES OF AMERICA*

*v.*

*FALLBROOK PUBLIC UTILITY DISTRICT, ET AL.*

**CIVIL NO. 51-cv-1247-GPC-RBB**





**WATERMASTER**  
**SANTA MARGARITA RIVER WATERSHED**  
169 Parkshore Drive, Suite 110  
Folsom, California 95630  
(916) 542-7895

June 25, 2018

Honorable Gonzalo P. Curiel  
United States District Court  
Southern District of California  
221 West Broadway, Suite 2190  
San Diego, CA 92101

Re: U.S.A. v. Fallbrook Public Utility District, et al., Civil No. 51-cv-1247-GPC-RBB  
Final Annual CWRMA Report for Calendar Year 2017

Dear Judge Curiel:

In accordance with Section 13 of the Cooperative Annual Water Resource Management Agreement (CWRMA), approved by the Court on August 20, 2002, the Watermaster has prepared the Annual CWRMA Report for Calendar Year 2017. The report was prepared in consultation with the CWRMA Technical Advisory Committee and has been approved by the signatory parties to the CWRMA. Accordingly, please find the enclosed hard copy and CD containing the PDF files for the final Annual CWRMA Report for Calendar Year 2017. Please make arrangements for posting the PDF files on the electronic docket.

If you have any questions please do not hesitate to call. Thank you.

Sincerely,



Michael J. Preszler, P.E.  
Watermaster

MJP  
Enclosures  
cc (w/o Encls.): Honorable Ruben B. Brooks  
cc (w/ Hard Copy of Encl.): Distribution List

Honorable Gonzalo P. Curiel  
Re: Final Annual CWRMA Report for Calendar Year 2017  
June 25, 2018  
Page 2 of 2

Distribution List:

Jeffrey D. Armstrong  
General Manager  
Rancho California Water District  
P.O. Box 9017  
Temecula, CA 92589-9017

John O. Simpson, Director  
Water Resources Division  
Box 555013  
Marine Corps Base  
Camp Pendleton, CA 92055-5013

Eva Plajzer, P.E., Assistant General Manager  
Engineering and Operations and Maintenance  
Rancho California Water District  
P. O. Box 9017  
Temecula, CA 92589-9017

Daniel P. Bartu  
Water Resources Division  
Box 555013  
Marine Corps Base  
Camp Pendleton, CA 92055-5013

Rich J. Ottolini  
Water Operations Manager  
Rancho California Water District  
P. O. Box 9017  
Temecula, CA 92589-9017

Paul R. Boughman, Esq.  
Western Area Counsel Office  
Box 555231 Bldg. 1254  
Marine Corps Base  
Camp Pendleton, CA 92055-5231

Craig Elitharp  
Kennedy Jenks Consultants  
Three Better World Circle, Suite 200  
Temecula, CA 92590

Michael E. McPherson, Esq.  
344 Plumosa Avenue  
Vista, CA 92083

James B. Gilpin, Esq.  
Best, Best & Krieger  
655 West Broadway, 15th Floor  
San Diego, CA 92101-8493

Bruce D. Bernard, Esq.  
United States Department of Justice  
Environment and Natural Resources Division  
Natural Resources Section  
999 18<sup>th</sup> Street, South Terrace – Suite 370  
Denver, Colorado 80202

Dennis E. Williams  
GEOSCIENCE Support Services Inc.  
P. O. Box 220  
Claremont, CA 91711

Stephen B. Reich  
Stetson Engineers, Inc.  
785 Grand Avenue, Suite 202  
Carlsbad, CA 92008

Wesley R. Danskin  
USGS  
San Diego Projects Office  
4165 Spruance Road, Suite 200  
San Diego, CA 92101

Molly Palmer  
Stetson Engineers, Inc.  
2171 E. Francisco Boulevard, Suite K  
San Rafael, CA 94901

Michael T. Wright  
USGS  
San Diego Projects Office  
4165 Spruance Road, Suite 200  
San Diego, CA 92101

# TABLE OF CONTENTS

	<u>PAGE NO.</u>
1. Introduction _____	1
1.1 Background _____	1
1.2 Purpose of Report _____	1
1.3 Activities for Calendar Year 2017 _____	2
1.3.1 Ongoing Activities _____	2
1.3.2 Other Activities _____	2
2. Flow Requirements and Accounts _____	2
2.1 Make-Up Water _____	2
2.2 Accounting Procedures _____	3
2.3 Hydrologic Condition _____	3
2.4 Annual Accounting for 2017 CWRMA Operations _____	5
2.5 Climatic Credits _____	10
2.6 CAP Credits _____	10
2.7 Camp Pendleton Groundwater Bank _____	10
3. Section 5(g) Monitoring Program _____	11
4. Section 7(d) Monitoring Program _____	11
5. Water Quality _____	17
5.1 Gorge _____	17
5.2 Monitoring Wells _____	17
5.3 Source Water _____	18
5.4 RCWD Production Wells _____	19
5.5 MWD Aqueduct No. 5 Discharge at Outlet WR-34 _____	19
6. CWRMA Groundwater Model _____	19
7. Other Items Related to CWRMA _____	21
7.1 CASGEM Program _____	21
7.2 Sustainable Groundwater Management Act _____	21

## LIST OF TABLES

	<u>Page No.</u>
1 - Definition of Terms _____	4
2 - Section 5 Minimum Daily Flow Requirements _____	6
3 – Hydrologic Conditions for Operations under CWRMA (2003 to Present) _____	7
4 – Monthly Summary of Required Flows, Discharges, Credits and Accounts (2017 Calendar Year, Above Normal Year) _____	9

## LIST OF FIGURES

	<u>Page No.</u>
1 – Piezometric Head for Multiple Depth Monitoring Well, Pala Park Well _____	13
2 – Piezometric Head for Multiple Depth Monitoring Well, Wolf Valley Well _____	14
3 – Piezometric Head for Multiple Depth Monitoring Well, Temecula Creek Well _____	15
4 – Piezometric Head for Multiple Depth Monitoring Well, VDC Recharge Basin Well _____	16

## APPENDICES

Appendix A	Hydrologic Condition Determination
Appendix B-1	March 30, 2018 Memorandum from Stetson Engineers, Inc.
Appendix B-2	2017 Requested Modifications for Required Minimum Daily Flows
Appendix C-1	Pala Park Groundwater Monitoring Well
Appendix C-2	Wolf Valley Groundwater Monitoring Well
Appendix C-3	Temecula Creek Groundwater Monitoring Well
Appendix C-4	VDC Recharge Basin Groundwater Monitoring Well
Appendix D-1	Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basins
Appendix D-2	Water Quality Data for Vail Lake
Appendix E	Water Quality Data for Selected RCWD Production Wells
Appendix F	Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34

## MAPS

Major Water Purveyors  
CWRMA Location Map

Bound at back of report  
Bound at back of report

## **1. Introduction**

### **1.1 Background**

On August 20, 2002, the Cooperative Water Resource Management Agreement (CWRMA) between the United States, on behalf of Marine Corps Base Camp Pendleton (Camp Pendleton), and Rancho California Water District (District) was approved by the United States District Court in United States of America v. Fallbrook Public Utility District, et al. (Civil No. 51-cv-1247-GPC-RBB) (Fallbrook Case). The Court Order (Docket Nos. 4867 and 4869) incorporated CWRMA into the Judgment as adjudicated in the Fallbrook Case. The purpose of CWRMA is to allow Camp Pendleton and the District to effectively manage water resources consistent with prior rights and entitlements while avoiding potential conflicts. These prior rights and entitlements are derived from the Fallbrook Case that incorporates the stipulated judgment in Rancho Santa Margarita v. Vail, San Diego Superior Court Action No. 42850 (1940 Judgment). The parties agreed and the Court ordered that, to the extent the provisions of CWRMA are inconsistent with the 1940 Judgment, the provisions of CWRMA shall control for so long as CWRMA is being complied with and in effect.

The CWRMA includes provisions for guaranteed flows for the Santa Margarita River near Temecula (USGS Gaging Station No. 11044000) commonly referred to as the Gorge. Other provisions include monitoring and operation of the groundwater resources upstream of the Gorge, and monitoring of operations under CWRMA to assess impacts on water supply, water quality, and riparian habitat within Camp Pendleton. The CWRMA is administered by the Santa Margarita River Watershed Watermaster (Watermaster) appointed by the Court in the Fallbrook Case, in consultation with a Technical Advisory Committee (TAC). The Major Water Purveyors map at the end of this report shows the watershed boundary, major streams and reservoirs, boundaries for the major water purveyors, and other geographical features of interest. The CWRMA Location Map also included at the end of this report provides an enlargement of the primary area pertaining to CWRMA and displays key gages, groundwater monitoring wells, selected groundwater production wells, and other features for implementation of CWRMA.

### **1.2 Purpose of Report**

Section 13 of CWRMA specifies the Watermaster shall prepare an annual report regarding the performance under the various provisions of CWRMA for filing in the Fallbrook Case. Prior Annual Watermaster Reports served as the annual report specified under CWRMA for submission to the Court. Beginning in Calendar Year 2011, a separate annual report has been prepared and submitted to the Court to meet the requirements of CWRMA. The Annual Watermaster Report continues to include a section dedicated to CWRMA, focusing on the accounting and operations related to Make-Up Water releases and flow requirements for the Santa Margarita River at the Gorge. The Annual CWRMA Report is prepared by the Watermaster in consultation with the TAC

and incorporates materials prepared by Camp Pendleton, the District, and the United States Geological Survey (USGS).

### **1.3 Activities for Calendar Year 2017**

#### **1.3.1 Ongoing Activities**

Several ongoing activities are conducted in accordance with CWRMA and such activities are described and reported in subsequent sections of the Annual CWRMA Report. Ongoing activities include conducting quarterly TAC meetings, determination of hydrologic year type, operation and accounting for Make-Up Water and flow requirements at the Gorge, monitoring under the programs specified in Sections 5(g) and 7(d) of CWRMA, water quality monitoring, and actions related to the CWRMA Groundwater Model.

The TAC is chaired by the Watermaster and includes representatives of Camp Pendleton, the District, and the USGS. Quarterly TAC meetings are conducted with agenda items related to implementation of CWRMA. Minutes and other meeting materials are maintained in the Watermaster files. During 2017, regularly scheduled quarterly TAC meetings were conducted on February 21, April 18, July 18, and October 17. Additionally, a technical subgroup of the TAC conducted various workshops throughout the year in the ongoing effort to update the CWRMA Groundwater Model.

#### **1.3.2 Other Activities**

Other activities related to CWRMA are also described and reported in subsequent sections of the Annual CWRMA Report. These other activities for 2017 include continuation of the California Statewide Groundwater Elevation Monitoring (CASGEM) program and the Sustainable Groundwater Management Act (SGMA).

## **2. Flow Requirements and Accounts**

### **2.1 Make-Up Water**

Section 5 of CWRMA includes provisions for the District to guarantee specific flows at the Gorge. These guaranteed flows, or flow requirements, are determined based upon stipulated methodologies and vary on a monthly basis depending upon hydrologic conditions. At a minimum, the District guarantees that flows, based on a 10-day running average, shall at no time be less than 3.0 cubic feet per second (cfs).

In order to meet the flow requirements, the District provides Make-Up Water in accordance with Section 6 of CWRMA. The Make-Up Water can be supplied from various sources; however, the District relies on two primary sources, both discharging into the river at the same location immediately upstream from the USGS gaging station at the Gorge. The first primary source of Make-Up Water is raw water from Metropolitan Water District (MWD) Aqueduct No.

5 discharged at Outlet WR-34. The second primary source of Make-Up Water is from the District's treated water distribution system through a potable connection to the pipeline for Outlet WR-34. In prior years, Make-Up Water was also discharged from the treated water distribution system to Murrieta Creek from two system discharge meters collectively referred to as the System River Meter. The two system discharge meters are located on opposite sides of Murrieta Creek immediately downstream of the USGS gaging station for Murrieta Creek at Temecula, which is located approximately 2,000 feet upstream of the confluence of Temecula Creek and Murrieta Creek. The System River Meter is operable as a secondary source of Make-Up Water if needed. Outlet WR-34 and the USGS gaging station at the Gorge are shown on the CWRMA Location Map.

## **2.2 Accounting Procedures**

The methods of accounting for the operations under CWRMA are specified in Sections 5 and 6 of CWRMA. Specific accounting procedures have evolved since the implementation of CWRMA in 2003. On April 21, 2006, Camp Pendleton and the District signed an accounting agreement to memorialize methods used for years 2003, 2004, and 2005, and also to agree upon specific procedures and definitions. The accounting definitions agreed to by Camp Pendleton and the District are shown on Table 1.

A flow tracking spreadsheet has been developed through a joint effort by staff and consultants for Camp Pendleton and the District. The spreadsheet is used on a daily basis by the District to manage Make-Up Water releases and track the various accounts. The spreadsheet is updated at the end of each calendar year through a joint exchange of information to reach agreement concerning the annual operations and accounting. A copy of the final spreadsheet is provided to the Watermaster for use in preparing the Annual Watermaster Report and the Annual CWRMA Report.

## **2.3 Hydrologic Condition**

The flow requirements and Make-Up Water releases for any particular calendar year are determined based on the hydrologic condition for the preceding October through April period. The methodology for determining the hydrologic condition is specified in Section 5 of CWRMA. A calculated hydrologic index is used to classify the hydrologic condition as one of the following hydrologic year types: Critically Dry, Below Normal, Above Normal, and Very Wet.

The hydrologic year type is determined by the TAC on May 1st of each year. The Minimum Daily Flow Requirements at the Gorge, calculated on a 10-day running average, are specified for each month based on the hydrologic year type. The Minimum Daily Flow Requirements specified under Section 5 of CWRMA are shown on Table 2.

**Table 1**  
**Definition of Terms**  
**Cooperative Water Resource Management Agreement**

**Minimum Daily Flow Requirement** “The *Minimum Daily Flow Requirement* for each winter period shall be 11.5 cfs, less any credit unused in a previous year, and less any credit established by the May 1<sup>st</sup> accounting of the prior year” [§5(b)]. “The *Minimum Daily Flow Requirement* is ... calculated on a 10-day running average” [§5(b)]. The winter period *Minimum Daily Flow Requirements* may be further reduced by the accrual of CAP Credits “when the District is required under this Section to provide *Make-Up Water* in any calendar year in excess of 4,000 acre-feet” [§5(e)]. For the non-winter period, the “*Minimum Daily Flow Requirements* (are) based upon the particular hydrologic condition established on May 1st for the prior October-April period” [§5(c)].

**Actual Flow Requirement** “On May 1<sup>st</sup> ..., the hydrologic condition for the immediately preceding October-April period shall be determined. Such condition, and the *Daily Flow Requirements* set forth in this Section 5(b), shall be used to determine the *Actual Flow Requirement* for the prior winter period, and whether this requirement was exceeded” [§5(b)]. “Camp Pendleton may acquire rights to such groundwater above the Gorge by foregoing its right to *Make-Up Water* from the District; or to the extent that the District’s *Actual Flow Maintenance Requirements* are less than the flows in the table in Section 5” [§17]. The *Actual Flow Requirement* is equal to the *Minimum Daily Flow Requirement* during the non-winter period (once the Hydrologic Condition is known) because no credits are applied in the non-winter period.

**Make-Up Water** “The District shall provide whatever *Make-Up Water* is needed to meet this (the *Minimum Daily Flow*) requirement” [§5(b)]. “The District shall not be required to provide more than the equivalent of 11.5 cfs *Make-Up Water* for any month”. [§5(d)] “The District guarantees that flows, based upon the 10-day running average, shall at no time be less than 3.0 cfs” [§5(f)]. “Make-Up Water ... (is) required ... at the Gorge in order to comply with the requirements of Section 5” [§6].

**Climatic Credits** are those credits earned by the District on Below Normal and Critically Dry years, when the *Minimum Daily Flow Requirement* for the winter period is found to be greater than the *Actual Flow Requirement* determined on May 1<sup>st</sup>. “In providing *Minimum Daily Flows* ... if the District has provided *Make-Up Water* in excess of its *Actual Requirement*, the District shall be entitled to a credit for such excess. The quantity of the excess flow shall be converted to a cfs equivalent, and applied during the following winter periods to reduce the 11.5 cfs requirement” [§5(b)].

**CAP Credits** are those credits earned by the District when Make-Up water is in excess of 4,000 acre-feet per year. “When the District is required under this Section to provide *Make-Up Water* in any calendar year in excess of 4,000 acre-feet, measured at the Gorge, it shall be entitled to a credit for the excess, taking into account transmission losses, to be applied during the following two winter periods” [§5(e)].

**Camp Pendleton Groundwater Bank Credits** are those credits earned by Camp Pendleton when the District’s *Actual Flow Maintenance Requirements* are less than the flows in the table in Section 5. “Camp Pendleton may acquire rights to such groundwater above the Gorge by foregoing its right to *Make-Up Water* from the District; or to the extent that the District’s *Actual Flow Maintenance Requirements* are less than the flows in the table in Section 5” [§17]. “Camp Pendleton’s rights to such groundwater in storage shall not exceed 5,000 acre-feet at any one time; and ... the District’s obligation to deliver stored groundwater shall not exceed 2,200 acre-feet per year over any required makeup obligation which the District may have, and in no event at a rate in excess of 11.5 cfs” [§17].

**Credits** earned by the District serve to reduce the *Minimum Daily Flow Requirement* during the winter period. *Credits* are applied in the following order (1) Climatic Credits from 2 or more years prior, (2) Climatic Credits earned in the previous year, (3) CAP Credits earned from the previous year, and finally (4) CAP Credits from 2 years prior. “In all years following the first winter period, the same procedure shall be followed, provided that the *Minimum Daily Flow Requirement* for each winter period shall be 11.5 cfs, less any *credit* unused in a previous year, and less any *credit* established by the May 1<sup>st</sup> accounting of the prior year” [§5(a)].



The hydrologic condition for 2017 was determined in accordance with CWRMA procedures as reported in the May 9, 2017 memorandum prepared by Stetson Engineers, Inc. (consultant to Camp Pendleton), provided in Appendix A. The Temecula Creek near Aguanga streamflow gage (USGS Gaging Station No. 11042400) and the Wildomar precipitation gage (Riverside County Flood Control and Water Conservation District Precipitation Station No. 246) are the key sources of data used for the determination and are shown on the CWRMA Location Map.

The determination for 2017 resulted in the classification of the hydrologic condition as an Above Normal hydrologic year and thus the Minimum Daily Flow Requirements for 2017 are shown in Table 2 under the column heading for “Above Normal” hydrologic year. The determinations of the hydrologic conditions for the years 2003 through 2017 are summarized on Table 3.

#### **2.4 Annual Accounting for 2017 CWRMA Operations**

The annual accounting for CWRMA operations is prepared through a joint effort by Camp Pendleton and the District. The flow tracking spreadsheet maintained on a daily basis by the District is provided to Camp Pendleton for review and use in preparing the annual accounting.

The annual accounting for the 2017 CWRMA operations is documented in the March 30, 2018 memorandum prepared by Stetson Engineers, Inc., as provided in Appendix B-1. The memorandum provides a description of the operations during 2017, including tables showing the daily flows at the Gorge, Minimum Daily Flow Requirements, Make-Up Water releases, and account balances.

Upon agreement by Camp Pendleton and the District, CWRMA includes provisions for the parties to alter normal operations to modify the Minimum Daily Flow Requirements at the Gorge. Examples of modifying the Minimum Daily Flow Requirements include instances when the parties are conducting sampling for downstream monitoring programs or requests to avoid accumulation of CAP Credits. Such modifications of CWRMA operations are accomplished through communications between, and approval by, the parties. In 2017, the parties reached agreement to modify normal operations to minimize CAP Credits for the year. This modification and the e-mail communications between the parties to reach agreement on the modification are provided in Appendix B-2.

One item of note concerns the USGS measured flows at the Gorge that are used for the daily determinations by the District for discharging Make-Up Water. Two columns of daily discharges for streamflow at the Gorge are shown in the tables in Appendix B-1: the USGS official discharge and the USGS website discharge. Camp Pendleton and the District have agreed that the

**Table 2**  
**Section 5 Minimum Daily Flow Requirements**  
**Cooperative Water Resource Management Agreement**

	Critically Dry	Below Normal	Above Normal	Very Wet
Month	cfs	cfs	cfs	cfs
Jan - April	4.5	8.0	17.8 *	24.1 *
May	3.8	5.7	11.7 *	15.7 *
June	3.3	4.9	9.4	12.2 *
July	3.0	4.3	7.8	9.7
August	3.0	4.4	7.6	9.2
September	3.0	4.1	7.4	9.4
October	3.0	3.9	7.7	10.1
November	3.0	4.5	8.8	11.5
December	3.3	5.3	10.4	13.5 *

\* Section 5(d) of CWRMA specifies the District shall not be required to provide more than the equivalent of 11.5 cfs Make-Up Water for any month.

**Table 3**  
**Hydrologic Conditions for Operations under CWRMA**  
**(2003 to Present)**

<b>Calendar Year</b>	<b>Hydrologic Condition</b>
2003	Above Normal
2004	Critically Dry
2005	Very Wet
2006	Below Normal
2007	Critically Dry
2008	Above Normal
2009	Above Normal
2010	Very Wet
2011	Very Wet
2012	Critically Dry
2013	Critically Dry
2014	Below Normal
2015	Below Normal
2016	Below Normal
2017	Above Normal

discharges shown on the website are accessed daily by the District for making daily decisions regarding the quantities of Make-Up Water required and those discharges are used to compute the 10-day running average. The website discharge is considered to be provisional subject to subsequent changes by the USGS for designation as approved for official publication. Changes to the provisional data may result in either lower or higher values for the official discharge depending upon any specific adjustments. Such adjustments may be due to periodic measurements at the gage resulting in a shift to the rating curve or other changes to the data to account for equipment malfunctions and other irregularities.

It is also noted the daily tables provided in Appendix B-1 show the Minimum Daily Flow Requirement for each month as determined by the hydrologic condition and any adjustments agreed upon by the parties. The winter period includes the months January through April, and in accordance with Section 5(e) of CWRMA, the Minimum Daily Flow Requirement “... shall be 11.5 cfs less any credit unused in a previous year, and less any credit established by the May 1st accounting of the prior year.” The Minimum Daily Flow Requirement for the 2017 winter period was determined to be 8.9 cfs (11.5 – 2.6 cfs in Credits), as documented in the annual accounting for the 2016 CWRMA operations (February 21, 2017 memorandum prepared by Stetson Engineers, Inc.).

A summary of the annual accounting for the 2017 CWRMA operations is shown on Table 4. During Calendar Year 2017, the total releases by the District to meet CWRMA flow requirements were 5,069.3 acre feet. All water was released from the raw water source at Outlet WR-34.

The number of days each month when the 10-day running average was less than the required flow is summarized on Table 4. It is noted the number of days when the 10-day running average is less than the required flow is determined based upon the provisional website discharge, as agreed upon by the parties. For Calendar Year 2017, there were 43 days when the 10-day running average was less than the required flow under normal CWRMA operations.

The Minimum Daily Flow Requirement for the 2018 winter period is determined as part of the annual accounting for the 2017 CWRMA operations. As described on Page 1, Appendix B-1, the Minimum Daily Flow Requirement at the Gorge during the 2018 winter period is determined to be 9.3 cfs (11.5 – 2.2 cfs, maximum minus 2.2 cfs in CAP Credits).

**Table 4**  
**Monthly Summary of Required Flows, Discharges, Credits and Accounts**  
**Cooperative Water Resource Management Agreement**

**2017 Calendar Year - Above Normal Year**

Month	USGS		Minimum Flow Requirement	Section 5 Flows	No. of Days Running Average is Less Than Required Flow	Discharge from WR-34	Climatic Credits Earned	Camp Pendleton	
	Official Discharge AF	Website Daily Discharge AF						cfs 1/	cfs 2/
January	13,846.8	13,443.0	8.9	17.8	0	157.9	0.0	387.5	5000.0
February	4,198.7	4,196.0	8.9	17.8	0	294.1	0.0	350.0	5000.0
March	682.7	688.9	8.9	17.8	0	429.2	0.0	387.5	5000.0
April	529.3	529.0	8.9	17.8	0	488.0	0.0	375.0	5000.0
May	712.4	712.5	11.5	11.7	6	650.1	0.0	12.4	5000.0
June	564.5	559.5	9.4	9.4	3	521.6	0.0	0.0	5000.0
July	479.7	479.4	7.8	7.8	0	464.8	0.0	0.0	5000.0
August	476.3	475.8	7.6	7.6	0	451.3	0.0	0.0	5000.0
September	441.2	440.3	7.4	7.4	0	433.6	0.0	0.0	5000.0
October	475.0	472.1	7.7	7.7	9	476.7	0.0	0.0	5000.0
November	398.7	398.9	8.8	8.8	6	393.0	0.0	119.0	5000.0
December	301.4	301.9	5.3	10.4	19	309.0	0.0	313.1	5000.0
<b>TOTAL</b>	<b>23,106.7</b>	<b>22,697.3</b>			<b>43</b>	<b>5,069.3</b>	<b>0.0</b>	<b>1,944.5</b>	<b>FULL</b>

1/ Required flows for January through April are equal to 11.5 cfs less 2.6 cfs of credits (623 AF of Climatic Credit earned in 2016).  
2/ The Table in Section 5 of the CWRMA sets forth guaranteed monthly flows at the Gorge once the Hydrologic Condition for the calendar year is established.  
3/ CAP Credits equal the WR-34 discharge in excess of 4,000 AF. CAP Credits of 1,069 AF earned in 2017.  
4/ Climatic Credits equal the WR-34 discharges less actual Flow Requirements, which is the flow indicated in Section 5 of the CWRMA less applicable credits but not less than 3.0 cfs. No Climatic Credits earned in 2017.  
5/ Camp Pendleton's rights to groundwater equal the flow indicated in Section 5 of the CWRMA less the Actual Flow Maintenance Requirement, which cannot be less than 3.0 cfs. Input to the Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

## **2.5 Climatic Credits**

Section 5(d) of CWRMA includes a provision for comparing the winter period Minimum Daily Flow Requirements with the Actual Flow Requirements based on the hydrologic conditions determined on May 1st. For Below Normal and Critically Dry years, if the Minimum Daily Flow Requirement is determined to be greater than the Actual Flow Requirements, the District is entitled to a Climatic Credit for such excess.

Beginning in January of each year, the District provides Make-Up Water to meet the Minimum Daily Flow Requirement of 11.5 cfs (less any applied credits) during the winter period January through April, based upon the 10-day running average. On May 1st, if the hydrologic determination results in a year type of Below Normal or Critically Dry, the Actual Flow Requirement, in retrospect, would be less than 11.5 cfs, as shown in Table 2. The District would be entitled to Climatic Credits for any excess releases in those year types. In Above Normal and Very Wet years, the winter period flow requirements are equal to 11.5 cfs and thus Climatic Credits cannot be earned.

The Climatic Credits are determined on a volumetric basis as the accumulation of the difference of the daily Outlet WR-34 Make-Up Water discharge, less the Actual Daily Flow Requirement, less any applied credits from the prior year. Climatic Credits earned in a particular year are converted to a cfs equivalent and applied during the following winter periods to reduce the 11.5 cfs requirement in accordance with the order of applying credits shown on Table 1.

As shown on Table 4, no Climatic Credits were earned by the District in 2017. A summary of the Climatic Credits earned and applied for the period 2003 to present is included in Appendix B-1.

## **2.6 CAP Credits**

CAP Credits are credits earned by the District when Make-Up Water is in excess of 4,000 acre feet per year as specified in Section 5(e) of CWRMA. Any CAP Credits earned in a particular year are applied during the following two winter periods to reduce the 11.5 cfs requirement. As described in Appendix B-1, 1,069 AF of CAP Credits were earned by the District in 2017. A summary of the CAP Credits earned and applied for the period 2003 to present is included in Appendix B-1.

## **2.7 Camp Pendleton Groundwater Bank**

Section 17 of CWRMA provides for emergency supplies for Camp Pendleton, including the establishment of rights to the use of groundwater in the basin upstream of the Gorge. Such rights are established by Camp Pendleton foregoing its rights to Make-Up Water, or to the extent that the District's Actual Flow Requirements are less than the flows specified on Table 2. The cumulative balance in the Camp Pendleton Groundwater Bank may not exceed 5,000 acre feet.

Table 4 shows the input or accrual to the Camp Pendleton Groundwater Bank in 2017 as 1,944.5 acre feet earned through determining the difference between actual and required flow requirements during the winter period. The groundwater input is shown on Table 4 but is not credited to the account due to the account balance maximum of 5,000 acre feet.

A summary of the Camp Pendleton Groundwater Bank credits earned and used for the period 2003 to present is included in Appendix B-1. The maximum account balance of 5,000 acre feet was reached in 2005, and has been maintained since that time. Camp Pendleton has not used any water from the Camp Pendleton Groundwater Bank to date.

### **3. Section 5(g) Monitoring Program**

Section 5(g) of CWRMA provides for a program to assess the impacts of CWRMA operations on water supply, water quality and riparian habitat within Camp Pendleton. During 2007-08, Camp Pendleton initiated the Section 5(g) program named as the Lower Santa Margarita River Watershed Monitoring Program (Program) to evaluate whether the increased flows under CWRMA impacted threatened and endangered species, riparian and wetland habitats, or water quality downstream. The Program will also support other water quality monitoring and watershed management activities in the Santa Margarita River Watershed. A copy of the Statement of Work for the Lower Santa Margarita River Watershed Monitoring Program was previously published in the 2007 and 2008 Annual Watermaster Reports. The monitoring was funded for a two-year period and the final report, Hydrological and Biological Support to Lower Santa Margarita River Watershed Monitoring Program Water Years 2008 2009, was published on February 21, 2010, by the United States Bureau of Reclamation, Southern California Office, under a cooperative agreement with Camp Pendleton and is available at the following website:

<http://www.usbr.gov/lc/socal/reports/SMMonitoringFinalReport.pdf>.

### **4. Section 7(d) Monitoring Program**

Section 7(d) of CWRMA provides for a program to assess safe yield operations of the District for pumping groundwater from the basin upstream of the Gorge through the use of a multi-level groundwater monitoring network and periodic updates of the CWRMA Groundwater Model. In September 2006, the USGS, under contract with Camp Pendleton and the District, constructed a multi-level monitoring well for the Murrieta-Temecula Groundwater Basin in accordance with Section 7(d) of CWRMA. The USGS monitoring program for the Pala Park Groundwater Monitoring Well (TMPP) is included in the ongoing Watermaster budget beginning in year 2007-08. The Pala Park Groundwater Monitoring Well is located near the confluence of Pechanga and Temecula creeks as shown on the CWRMA Location Map and was completed to a total depth of 1,499 feet. Six piezometers were installed for continuous water level recording in the saturated zone for the lower five screened intervals and a temperature probe for the upper-most screened interval to detect moisture in the unsaturated zone. In 2009, water level recording equipment was

added for the upper-most piezometer. The piezometric head for the six piezometers for the Pala Park Groundwater Monitoring Well for the period December 27, 2006 through December 31, 2017, is shown on Figure 1.

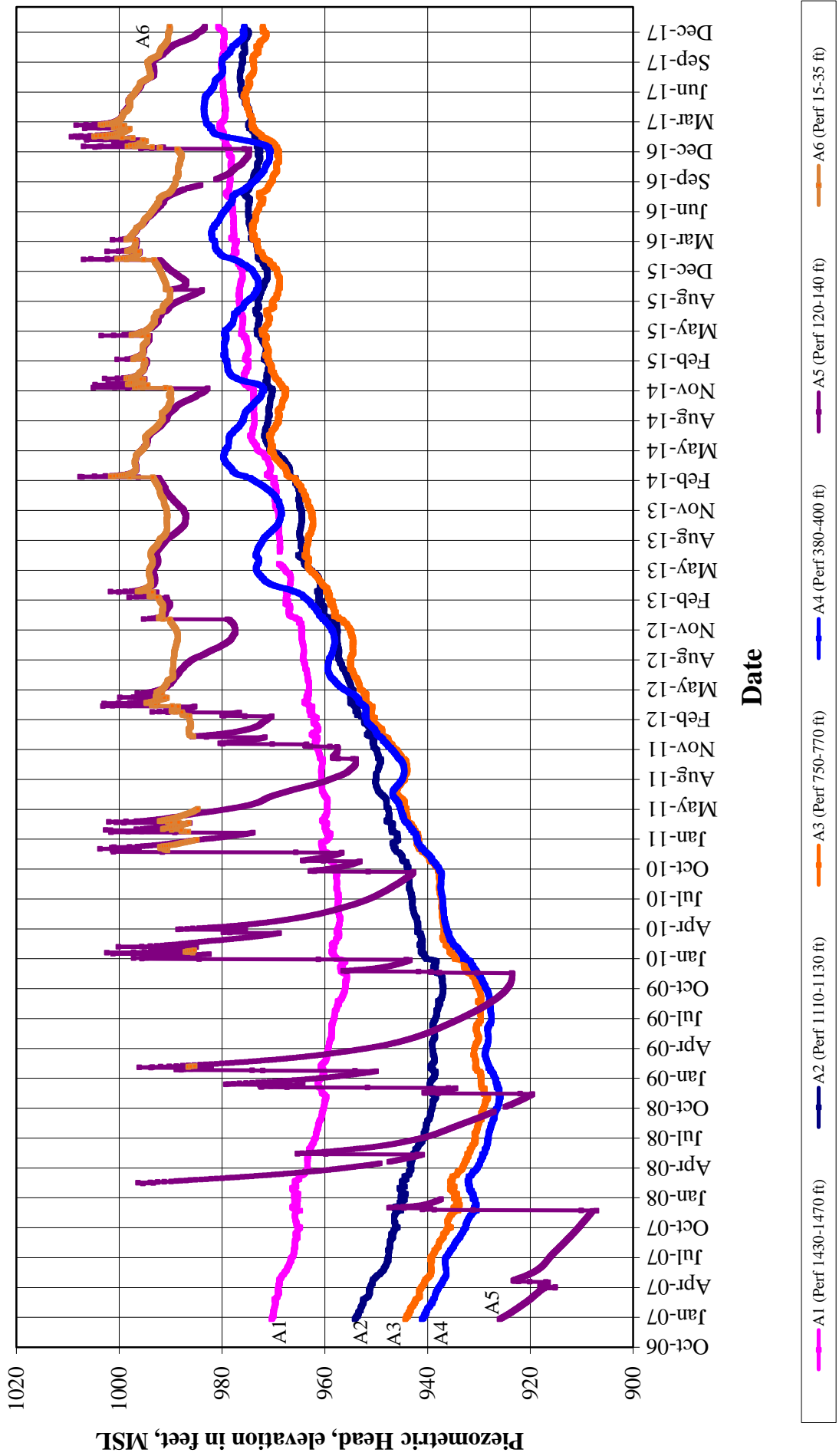
In 2009, the groundwater monitoring program was expanded to include the Wolf Valley Groundwater Monitoring Well (TMWV) that was previously constructed under a cooperative agreement between the USGS and the Pechanga Band of Luiseño Mission Indians. The Wolf Valley Groundwater Monitoring Well is located off the Pechanga Indian Reservation as shown on the CWRMA Location Map. Two piezometers are installed at the Wolf Valley Groundwater Monitoring Well. The groundwater level monitoring for the Wolf Valley Groundwater Monitoring Well was previously funded by the Pechanga Band, but is now included in the ongoing Watermaster budget beginning in year 2009-10. The piezometric head for the two piezometers for the Wolf Valley Groundwater Monitoring Well for the period March 5, 1990 through December 31, 2017, is shown on Figure 2.

In 2013, two additional groundwater monitoring wells were constructed by the USGS under contract with the District. The groundwater level monitoring for these additional wells is included in the ongoing Watermaster budget. The two additional wells are shown on the CWRMA Location Map as the Temecula Creek Groundwater Monitoring Well (TMTC) and the VDC Recharge Basin Groundwater Monitoring Well (TMVC). In April 2013, the Temecula Creek Groundwater Monitoring Well was drilled to a depth of 1,720 feet, and was completed with five piezometers. The piezometric head for the five piezometers for the Temecula Creek Groundwater Monitoring Well for the period September 28, 2013 through December 31, 2017, is shown on Figure 3. In August 2013, the VDC Recharge Basin Groundwater Monitoring Well was drilled to a depth of 1,033 feet, and was completed with six piezometers. The piezometric head for the four active piezometers for the VDC Recharge Basin Groundwater Monitoring Well for the period April 24, 2014 through December 31, 2017, is shown on Figure 4.

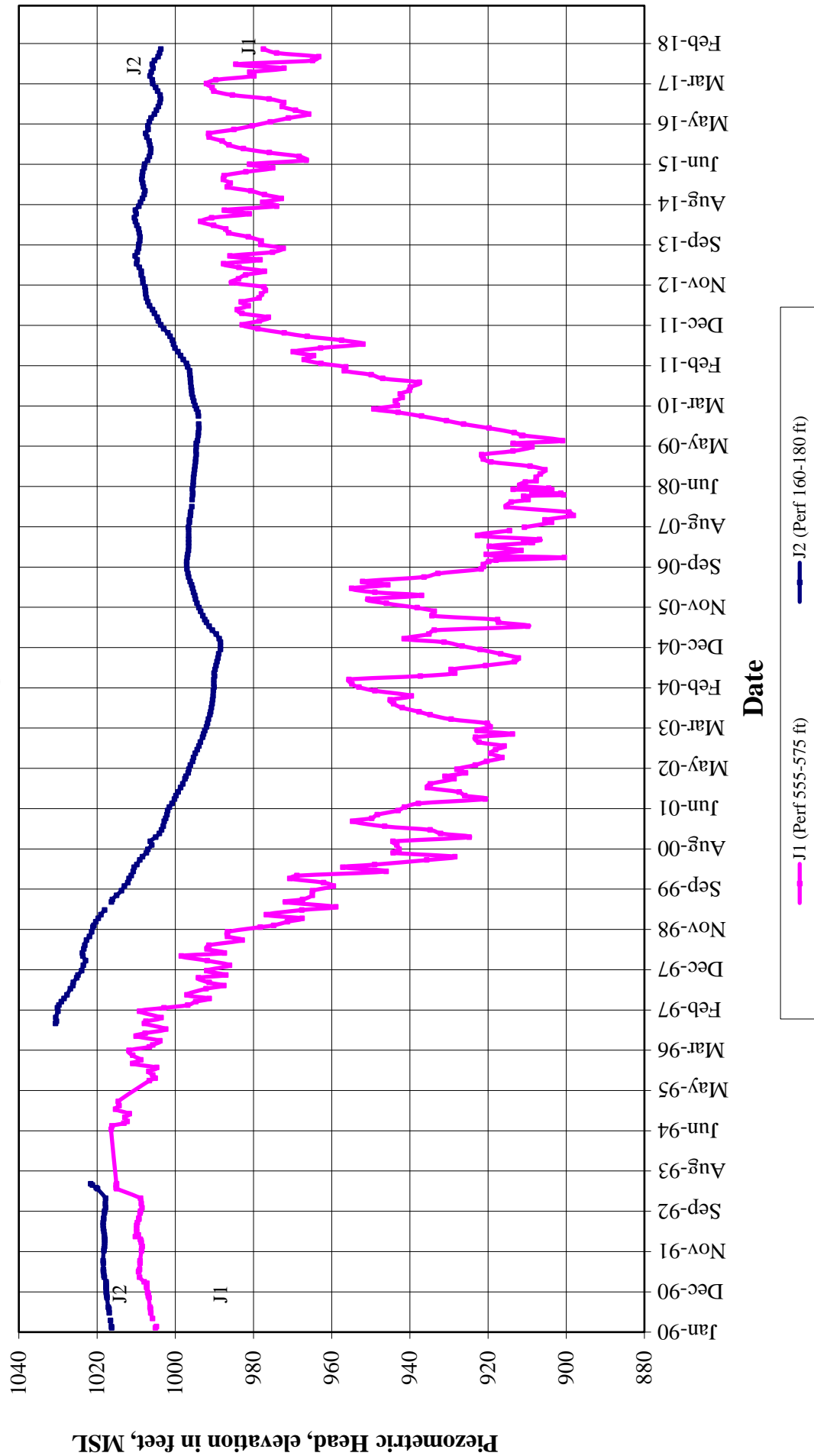
Information concerning the construction of the Pala Park, Wolf Valley, Temecula Creek, and VDC Recharge Basin groundwater monitoring wells, groundwater levels, and water quality data can be found at the following website: <http://ca.water.usgs.gov/temecula/>. Information obtained from the website, and supplemental information for the Pala Park Groundwater Monitoring Well, are provided in Appendix C-1. The information for the Wolf Valley Groundwater Monitoring Well is provided in Appendix C-2. Information for the Temecula Creek and VDC Recharge Basin monitoring wells is provided in Appendix C-3 and Appendix C-4, respectively.



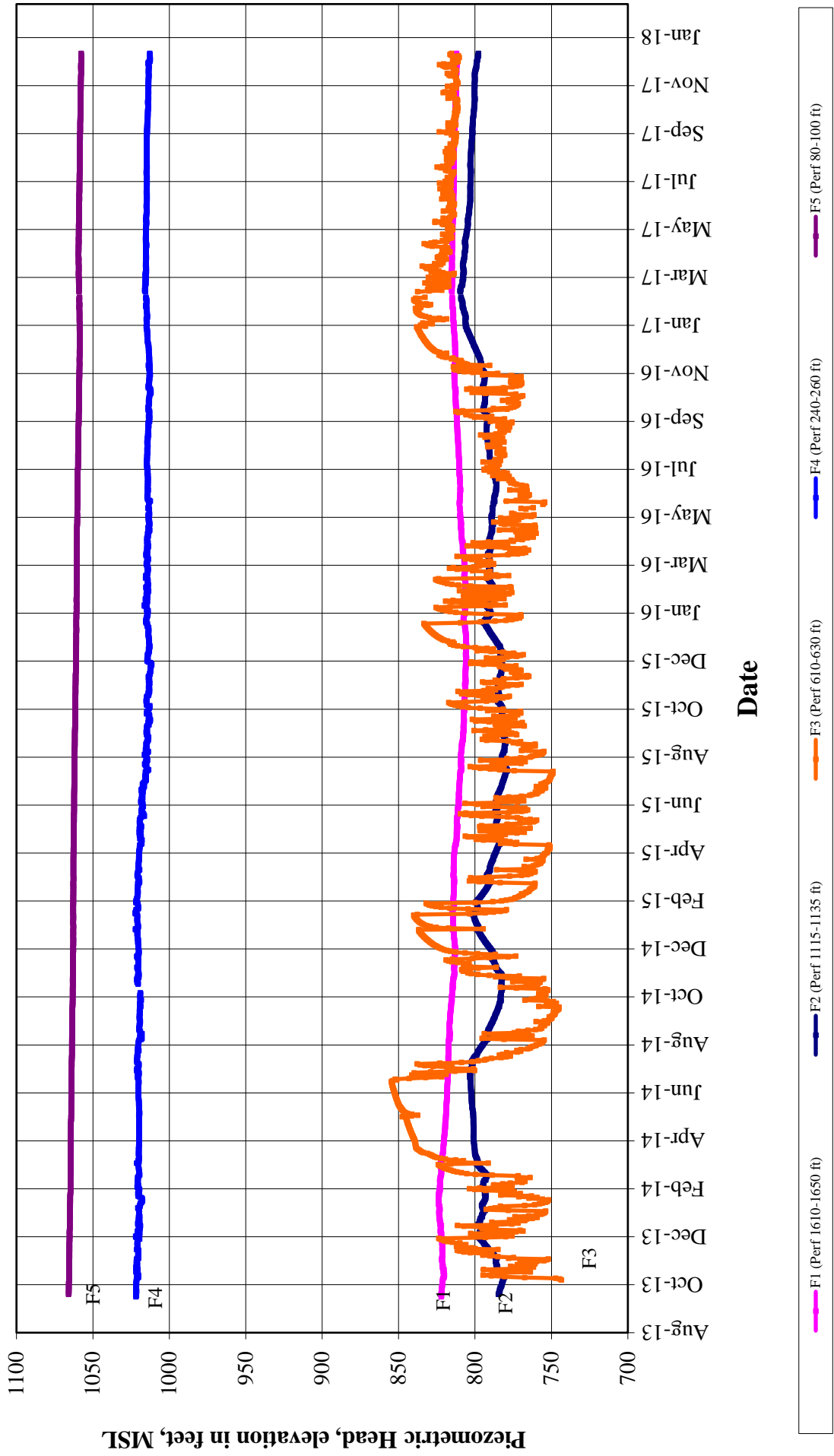
**Figure 1**  
**Piezometric Head for Multiple Depth Monitoring Well**  
**Pala Park Well (8S/2W-19A1-6)**  
**December 27, 2006 through December 31, 2017**



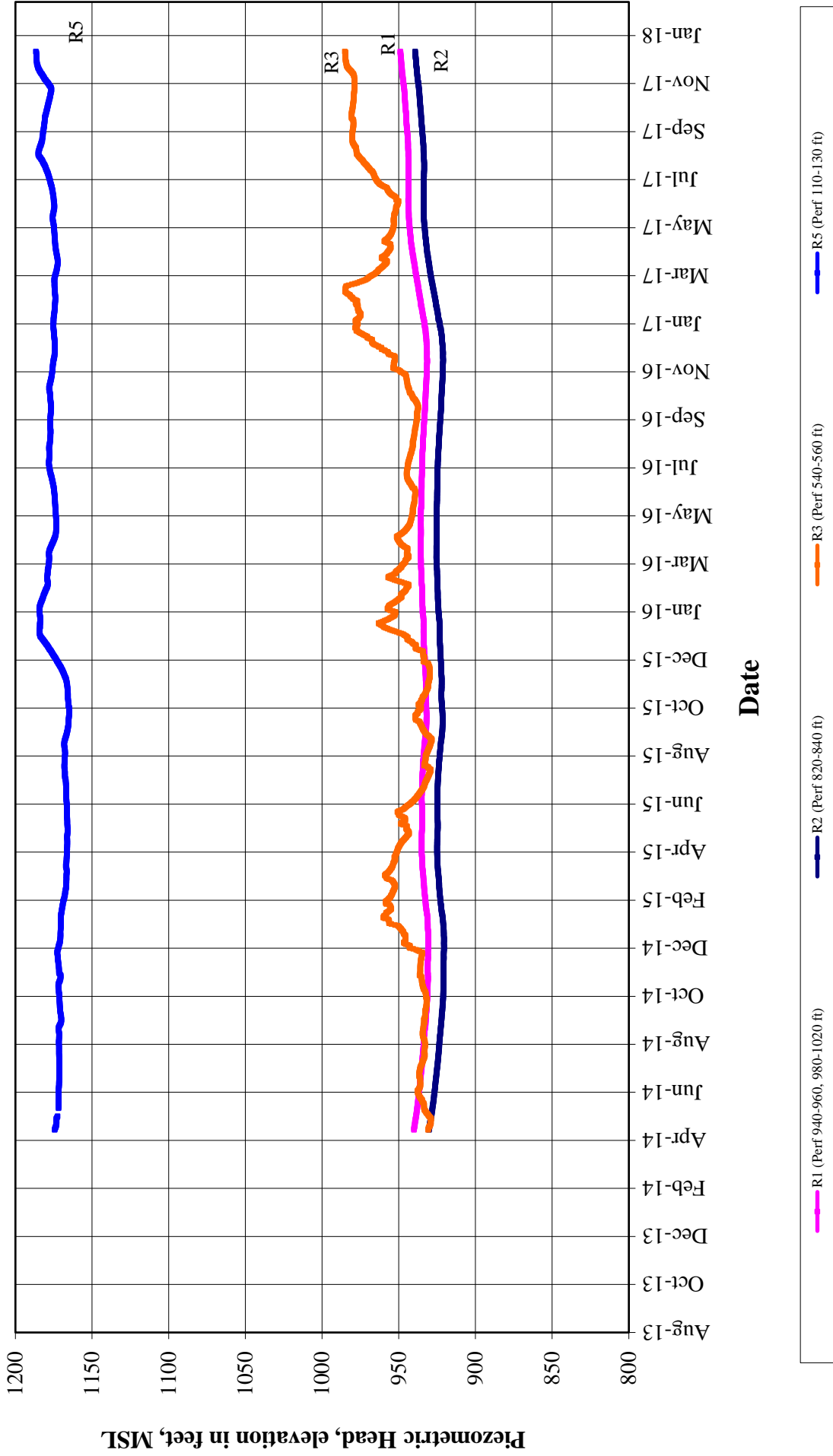
**Figure 2**  
**Piezometric Head for Multiple Depth Monitoring Well**  
**Wolf Valley Well (8S/2W-20J1-2)**  
**March 5, 1990 through December 31, 2017**



**Figure 3**  
**Piezometric Head for Multiple Depth Monitoring Well**  
**Temecula Creek Well (8S/2W-15F1-5)**  
**September 28, 2013 through December 31, 2017**



**Figure 4**  
**Piezometric Head for Multiple Depth Monitoring Well**  
**VDC Recharge Basin Well (8S/1W-6R1-6)**  
**April 24, 2014 through December 31, 2017**



## **5. Water Quality**

### **5.1 Gorge**

Section 10 of CWRMA specifies that the Watermaster shall monitor water quality at the Gorge. The Watermaster budget includes funding for the USGS to continuously monitor four water quality parameters at the Santa Margarita River near Temecula gaging station: dissolved oxygen, pH, specific conductance, and temperature. The annual water quality data are reported in the Annual Watermaster Report and data for the period of record can be accessed at the website:

[http://waterdata.usgs.gov/ca/nwis/uv/?site\\_no=11044000&agency\\_cd=USGS&](http://waterdata.usgs.gov/ca/nwis/uv/?site_no=11044000&agency_cd=USGS&)

### **5.2 Monitoring Wells**

Groundwater quality data are collected as part of the Section 7(d) Monitoring Program. Data are collected by the USGS with funding through the Watermaster budget. The data can also be accessed at the following website: <http://ca.water.usgs.gov/temecula/>.

Water quality data collected to date for the Pala Park Groundwater Monitoring Well are included in Appendix C-1. Water quality data have been collected in one or more of the piezometers since 2006. Analyses and piezometers included in the particular annual regimen vary to maximize utility of the annual funding levels. Also included in Appendix C-1 are tri-linear and stable isotope diagrams produced by the USGS.

Water quality data for the Wolf Valley Groundwater Monitoring Well are included in Appendix C-2. The water quality data include samples collected in 1990 and 1993, under the prior cooperative agreement between the USGS and the Pechanga Band. Data for 2009 and 2010 were collected with funding as part of the Watermaster budget. Tri-linear and stable isotope diagrams produced by the USGS are included in Appendix C-2.

Water quality data for the Temecula Creek Groundwater Monitoring Well are included in Appendix C-3. The water quality data include samples collected in 2013 and 2014. The samples collected in 2013 were included as part of construction of the well. Data for 2014 were collected with funding as part of the Watermaster budget. Tri-linear and stable isotope diagrams produced by the USGS are included in Appendix C-3.

Water quality data for the VDC Recharge Basin Groundwater Monitoring Well are included in Appendix C-4. The water quality data include samples collected in 2013 and 2014. The samples collected in 2013 were included as part of construction of the well. Data for 2014 were collected with funding as part of the Watermaster budget. Tri-linear and stable isotope diagrams produced by the USGS are included in Appendix C-4.

### **5.3 Source Water**

In 2010, 2011, and 2012, the water quality monitoring program also included collecting data for the two sources of supply for recharge at the head of Pauba Valley: (1) imported supplies for recharge at the District's groundwater recharge facilities, and (2) native supplies from Temecula Creek as sampled at Vail Lake. Funding from the Watermaster budget was used to collect and analyze the data.

The District operates groundwater recharge facilities at the head of Pauba Valley for the recharge of imported and native water supplies. Water quality data for the District's Upper VDC Recharge Basin Pond No. 5 are provided in Appendix D-1. The water quality data include a sample collected in 2007, as part of a cooperative effort between the USGS and the District. Data for 2010 through 2012 were collected with funding through the Watermaster budget. It is interesting to note the percentage of State Water Project (SWP) water in the imported supplies compared to the percentage of Colorado River water. The percentage of SWP water for the 2007, 2010, 2011, and 2012 samples is estimated as 28, 19, 63, and 51 percent, respectively. Several parameters, including hardness, calcium, sodium, and chloride, show a marked difference in 2011 and 2012, compared to samples collected in 2007 and 2010.

In 2009, the District initiated a water quality sampling program at Vail Lake in part to characterize the water quality for recharge from native supplies at the head of Pauba Valley. It is of interest to characterize the Vail Lake native water prior to the planned future storage of imported supplies in Vail Lake. The water quality sampling locations for Vail Lake and water quality data collected at Vail Lake Station No. 3 for the period September 22, 2009 through May 16, 2017 are provided in Appendix D-2. The Vail Lake sampling program was suspended from June 22, 2013 until October 31, 2015. The sampling event on October 31, 2015 was the only sampling for 2015. Samples are collected at two depths with sample numbering reflecting the sample depths: 3 Vail 1M denotes sampling Station No. 3 at a depth of one meter below water surface and 3 Vail 1MAB denotes sampling Station No. 3 at a depth of one meter above the bottom of the lake. In 2011, water quality sampling from Station No. 3 was added to the program funded by the Watermaster in order to obtain sample analyses comparable to sampling programs for the VDC Recharge Basin Pond No. 5 and the Pala Park and Wolf Valley groundwater monitoring wells. The water quality data collected in 2011 and 2012, by the USGS under the Watermaster program, are also shown in Appendix D-2.

Combined tri-linear and stable isotope diagrams for VDC Pond No. 5 and Vail Lake are repeated in both Appendices D-1 and D-2 with the parameters showing clear differences between the two sources of supply.

## **5.4 RCWD Production Wells**

In 2012, the water quality monitoring program also included collecting data from selected groundwater production wells operated by the District within Pauba Valley as shown on the CWRMA Location Map. These wells were selected to compliment the water quality data for the monitoring wells and the two sources of supply for recharge at the head of Pauba Valley as described in the preceding section. Previously, groundwater production wells operated by the District were included in the Groundwater Ambient Monitoring and Assessment (GAMA) program implemented by the California State Water Resources Control Board.

Water quality data for the selected production wells are included in Appendix E. Data reported for 2004 and 2007 were collected as part of the GAMA program. Data reported for 2012 were collected with funding from the Watermaster budget. Tri-linear and stable isotope diagrams produced by the USGS are included in Appendix E. The stable isotope diagrams are segregated by wells considered to be completed in the Pauba Aquifer and the Temecula Aquifer.

In 2013, the TAC and Watermaster Steering Committee approved using funding from the Watermaster budget to analyze archived, age-dating samples that were collected during 2012. The samples from two RCWD production wells, Well Nos. 109 and 234, were analyzed in 2014 for tritium and carbon isotopes. The water quality data tabulation for 2012 shown in Appendix E has been updated to include the age-dating results for Well Nos. 109 and 234.

## **5.5 MWD Aqueduct No. 5 Discharge at Outlet WR-34**

In 2012, the District's water quality sampling program was expanded to include sampling at the MWD Aqueduct No. 5 Discharge at Outlet WR-34. The water quality data for Outlet WR-34 for the period May 30, 2012 through January 17, 2017, are included in Appendix F. The data include inorganic, organic, and physical parameters comparable to the data collected at Vail Lake and the RCWD Production Wells.

In addition, the District is monitoring the presence or absence of Quagga mussels at a location in the Santa Margarita River approximately 100 feet downstream of the discharge point for Outlet WR-34. The monitoring utilizes coupon sampling equipment and protocol established under the Rancho California Water District Dreissena Mussel Response and Control Action Plan approved by the California Department of Fish and Wildlife in 2012. To date, there have been no Quagga mussels detected in the Santa Margarita River.

## **6. CWRMA Groundwater Model**

Section 7 of CWRMA provides for the District to operate the groundwater basin upstream of the Gorge on a safe-yield basis. As indicated above, Section 7(d) of CWRMA specifies that the District and Camp Pendleton will develop and utilize a monitoring program and the CWRMA Groundwater Model to assess safe-yield operations. The CWRMA Groundwater Model was

developed by the TAC as part of the negotiations between the District and Camp Pendleton that resulted in the final CWRMA and is jointly owned by the two parties. The CWRMA Groundwater Model was developed over the period 1995 through early 2003, with the final model documentation report prepared on January 31, 2003. The computer code used for the CWRMA Groundwater Model is MODFLOW, which is a three-dimensional finite difference groundwater flow model developed and maintained by the USGS. The CWRMA Groundwater Model extends throughout the Murrieta-Temecula Groundwater Basin, which is the groundwater basin upstream of the Gorge, and is defined in pertinent interlocutory judgments and exhibits as adjudicated in the Fallbrook Case.

The CWRMA Groundwater Model is used for assessing safe-yield operations pursuant to Section 7(d) and is also used by the District on an ongoing basis as a management tool to assess groundwater pumping impacts and to set annual pumping amounts for managing the groundwater basin. Section 7(d) of CWRMA specifies that the CWRMA Groundwater Model shall be updated periodically, and in no event less frequently than every five years.

Accordingly, in 2007, Camp Pendleton and the District initiated an effort to update the CWRMA Groundwater Model. Work on updating the groundwater model was completed in 2014 and 2015 with publication of the April 25, 2014 (revised January 8, 2015) report prepared by GEOSCIENCE Support Services, Inc., entitled Surface and Ground Water Model of the Murrieta-Temecula Ground Water Basin, California, Model Update and Refinement Report. The model update included the following: (1) development of GSFLOW which is a coupled surface water and groundwater model that includes a Precipitation-Runoff Modeling System (PRMS) and MODFLOW, (2) refinement of the groundwater model cell size, active/inactive boundaries and locations of recharge and discharge, (3) development of a three-dimensional lithologic model based on lithologic and geophysical borehole logs from wells in the area, (4) refinement of groundwater model layer elevations based on the results from the lithologic model, and (5) update of the surface water and groundwater model with data through 2008.

In 2016, Camp Pendleton and the District continued efforts to update the CWRMA Groundwater Model and conduct groundwater model runs to evaluate various aspects of the management of the Murrieta-Temecula Groundwater Basin. Further model updates will include the following: (1) update the model with the most recent version of GSFLOW, (2) augment the model with solute transport model capability, (3) extend the model with updated hydrogeologic data for the period from January 2009 through September 2014, (4) update water application rates and return flow factors and distributions, and (5) re-calibrate the model. The anticipated groundwater management model runs include evaluation of groundwater storage calculations, return flow factors, and credit accounts used by the Watermaster for accounting and reporting practices for Vail Lake and groundwater operations. The anticipated model runs will also include an evaluation of the safe yield of the groundwater basin.



## **7. Other Items Related to CWRMA**

Other items of note for 2017 related to CWRMA include the continued implementation of the State of California groundwater elevation monitoring program for the groundwater basin upstream of the Gorge and the California Sustainable Groundwater Management Act. These items are included in the Annual CWRMA Report for informational purposes.

### **7.1 CASGEM Program**

On November 6, 2009, the Governor for the State of California approved Senate Bill SBX7 6 Groundwater Elevation Monitoring (SBX7 6). SBX7 6 provides for a statewide program of reporting groundwater elevation data for groundwater basins and is implemented by the California Department of Water Resources (DWR). The program is referred to as the California Statewide Groundwater Elevation Monitoring (CASGEM) Program. The Bill defines “basins” or “sub-basins” to mean a groundwater basin or sub-basin identified and defined in DWR Bulletin No. 118. Three such basins are identified in Bulletin No. 118 for the Santa Margarita River Watershed including Basin Nos. 9-4 (Santa Margarita Valley) located in the Lower Santa Margarita River and 9-5 (Temecula Valley) located in the Murrieta-Temecula Groundwater Basin. Basin No. 9-5 generally corresponds to the groundwater basin upstream of the Gorge as specified in CWRMA and the Murrieta-Temecula Groundwater Basin as defined in the Fallbrook Case.

SBX7 6 establishes a procedure for a Monitoring Entity to coordinate the monitoring activities for a basin and on September 24, 2012, DWR notified the District that Rancho California Water District is designated as the Monitoring Entity for Basin No. 9-5. The District developed the CASGEM monitoring plan for Basin No. 9-5 in consultation with the TAC. Camp Pendleton was accepted as the monitoring entity for Basin 9-4 on October 14, 2015. Camp Pendleton also developed a CASGEM monitoring plan for Basin 9-4. Additional information for the CASGEM program, the approved monitoring plans, and groundwater monitoring data posted for Basin Nos. 9-4 and 9-5 can be found at the following website:

<https://www.water.ca.gov/Programs/Groundwater-Management/Groundwater-Elevation-Monitoring--CASGEM>

### **7.2 Sustainable Groundwater Management Act**

On September 16, 2014, Governor Brown signed the California Sustainable Groundwater Management Act (Act or SGMA) that was established as part of a comprehensive three-bill package that includes AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley) to provide the framework for statewide groundwater management by local authorities. The state agencies charged with administration of the Act are both the Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB).

The Act pertains to all groundwater basins identified and defined in DWR Bulletin 118. However, the Act includes an exemption for adjudicated basins as provided in §10720.8(a) that

specifically lists the Santa Margarita River Watershed as an exempted adjudicated area. Thus, the three Bulletin 118 basins located within the Watershed are not subject to the general requirements of the Act. However, as specified in §10720.8(f), the Watermaster must comply with certain requirements under the Act, including reporting to DWR annually, on or before April 1.

As part of the annual reporting requirements, the Watermaster submits to DWR copies of the Annual Watermaster Report and the Annual CWRMA Report to provide information for the DWR Bulletin No. 118 basins within the Watershed. In addition, the groundwater monitoring data for the basins under the CASGEM Program fulfills a portion of the reporting requirements specified in §10720.8(f)(3)(A).

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX A**

**HYDROLOGIC CONDITION DETERMINATION**





# FINAL TECHNICAL MEMORANDUM 041717.1

2171 E. Francisco Blvd., Suite K • San Rafael, California • 94901  
TEL: (415) 457-0701 FAX: (415) 457-1638 e-mail: mollyp@stetsonengineers.com

TO: CWRMA Technical Advisory Committee      DATE: May 9, 2017  
FROM: Stetson Engineers      JOB NO: 2628-1002  
RE: Hydrologic Conditions in the Santa Margarita River Watershed for the 2017 Calendar Year

---

## INTRODUCTION

This technical memorandum outlines the process of calculating the hydrologic index (HI) that describes the current hydrologic condition in the Santa Margarita River watershed and subsequently establishes the required flows at the Gorge. Appendix C of the Cooperative Water Resource Management Agreement (CWRMA) was followed in order to determine the Section 5 flow requirements for the period January 1, 2017 through December 31, 2017.

## DATA SOURCES

Two sets of observed data are necessary to calculate the HI. The first set includes October through April monthly precipitation from the Wildomar Precipitation Station (Station #246). This information is available through the Riverside County Flood Control and Water Conservation District, courtesy of:

Mr. Robert Laag  
ph. # (951) 955-1232,  
email: relaag@rcflood.org

Table 1 shows rainfall at the Wildomar Station for October 2016 through April 2017. Riverside County Flood Control and Water Conservation District provided data for October 1, 2016 through April 30, 2017.

The second set of observed data used for the calculation of the HI is the streamflow at Temecula Creek near Aguanga. The pertinent period of record from October 2016 through April 30, 2017, as recorded by USGS gage # 11042400, is shown in Table 2. The raw data are available through the USGS database as average daily streamflow in cubic feet per second (cfs) and are classified as provisional. To perform the HI calculation, streamflow was converted to acre-feet by multiplying the daily values by a conversion factor of 1.983 acre-feet/cfs/day.

**TABLE 1. MONTHLY PRECIPITATION AT WILDOMAR [INCHES]**

<b>Month</b>	<b>Precipitation (in)</b>
Oct-16	0.17
Nov-16	0.92
Dec-16	3.98
Jan-17	6.93
Feb-17	2.92
Mar-17	0.04
Apr-17	0.00
<b>Water Year Total</b>	<b>14.96</b>

Source: Riverside County Flood Control and Water Conservation District (May 2, 2017).

**TABLE 2. DAILY STREAMFLOW AT TEMECULA CREEK NEAR AGUANGA [ACRE-FEET/DAY]**

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	
1	0.0	0.0	0.0	8.3	38.4	138.8	9.3	
2	0.0	0.0	0.0	7.7	25.4	97.2	8.7	
3	0.0	0.0	0.0	6.3	12.5	69.4	8.1	
4	0.0	0.0	0.0	5.2	11.5	55.5	7.9	
5	0.0	0.0	0.0	4.6	10.7	51.3	7.3	
6	0.0	0.0	0.0	4.4	10.1	47.1	6.9	
7	0.0	0.0	0.0	3.8	14.5	42.9	6.7	
8	0.0	0.0	0.0	3.8	17.3	38.7	6.7	
9	0.0	0.0	0.0	4.4	14.3	34.5	6.7	
10	0.0	0.0	0.0	5.0	12.3	30.2	6.4	
11	0.0	0.0	0.0	4.6	11.5	26.0	6.1	
12	0.0	0.0	0.0	4.8	10.7	21.8	6.0	
13	0.0	0.0	0.0	15.9	9.5	19.6	5.8	
14	0.0	0.0	0.0	17.9	8.9	18.6	5.6	
15	0.0	0.0	0.0	12.5	8.3	17.9	5.4	
16	0.0	0.0	0.2	9.3	7.9	17.3	5.2	
17	0.0	0.0	1.6	7.7	10.1	17.1	5.0	
18	0.0	0.0	2.8	6.7	29.8	15.9	5.0	
19	0.0	0.0	2.2	15.7	17.9	15.1	4.9	
20	0.0	0.0	1.8	222.1	15.3	14.5	4.6	
21	0.0	0.0	2.0	190.4	13.5	14.1	4.3	
22	0.0	0.0	5.0	251.9	11.7	13.9	4.0	
23	0.0	0.0	5.0	486.0	10.5	13.5	3.7	
24	0.0	0.0	15.9	216.2	9.7	12.9	3.8	
25	0.0	0.0	13.3	128.9	9.3	12.5	4.0	
26	0.0	0.0	7.3	116.0	9.3	12.3	3.7	
27	0.0	0.0	5.0	103.1	361.0	11.7	3.5	
28	0.0	0.0	4.0	90.1	331.2	11.5	3.3	
29	0.0	0.0	3.4	77.2		10.9	3.1	
30	0.0	0.0	3.2	64.2		9.9	2.9	
31	0.0		3.8	51.3		9.7		
								<b>TOTAL</b>
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>76.5</b>	<b>2,146.0</b>	<b>1,053.1</b>	<b>922.3</b>	<b>164.6</b>	<b>4,362.5</b>
<b>Mean</b>	0.0	0.0	2.5	69.2	37.6	29.8	5.5	<b>20.6</b>
<b>Maximum</b>	0.0	0.0	15.9	486.0	361.0	138.8	9.3	<b>486.0</b>
<b>Minimum</b>	0.0	0.0	0.0	3.8	7.9	9.7	2.9	<b>0.0</b>

Source: USGS Station #11042400 (<http://waterdata.usgs.gov/nwis/dv>). Data downloaded 5/2/2017. Data from November 2, 2016 through April 30, 2017 are provisional. Values in italics were missing in USGS record and were estimated by Stetson.

## DATA ANALYSIS/PROCEDURE

The HI is defined as the sum of October through April natural streamflow at Murrieta, natural streamflow at Vail Lake, and natural streamflow from the Pauba and Wolf Valleys. Depending on the results of the HI, the hydrologic condition in the Santa Margarita River watershed may be categorized as Critically Dry, Below Normal, Above Normal, or Very Wet.

The natural streamflow at Murrieta is calculated using the rainfall/runoff relationship between precipitation at the Wildomar station and natural streamflow at Murrieta, as determined by the Hydrologic Simulation Program Fortran (HSPF) model. The polynomial relationship is described in equation (1), where Y is the average monthly natural streamflow at Murrieta in cfs per day, and X is the monthly precipitation in inches at Wildomar. The natural streamflow at Murrieta is converted to volume, in acre-feet, by multiplying the average monthly streamflow by the number of days per month to get the monthly volume of streamflow, then summing the monthly volumes.

$$\begin{aligned} Y &= 9.068 - 34.798 * X + 11.339 * X^2 && \text{(Where } X \geq 2.79 \text{ inches)} && (1) \\ Y &= 0 && \text{(Where } X < 2.79 \text{ inches)} \end{aligned}$$

The natural streamflow at Vail Lake is a function of the observed streamflow from USGS Gage # 11042400, Temecula Creek at Aguanga. Equation (2) describes the relationship, where S is the monthly observed stream flow at Aguanga from October through April, in acre-feet, and V is the monthly natural October through April stream flow at Vail Lake, also in units of acre-feet.

$$V = 1.38 * S \quad (2)$$

Equation (3) describes the estimated contributions from Pauba and Wolf Valleys, where V is the October through April stream flow at Vail Lake (equation (2)), and Z is the Pauba and Wolf Valley October through April contribution in units of acre-feet.

$$Z = 0.5 * V \quad (3)$$

The HI is the sum of the results of Equations (1), (2), and (3):  $HI = Y + V + Z$ .

## RESULTS

The results of the calculations of the hydrologic index for the 2017 calendar year are summarized in Table 3. According to Figure C-1 in the CWRMA, Above Normal hydrologic conditions are defined as years in which the HI is greater than 14,510 acre-feet but less than 47,810 acre-feet. The HI for the 2017 calendar year is 31,560 acre-feet, which falls into the Above Normal hydrologic category.

The guaranteed flows that must be maintained at the Gorge are established based on the general hydrologic condition of the Santa Margarita River Basin and stipulated in Section 5 of the CWRMA. Guaranteed flows are defined as two-thirds of the median natural flows during the period of record (1931-1996), to be maintained by RCWD at the Gorge. The use of the median value of streamflow eliminates the impact of large storm flows from the requirements at the Gorge. The Actual Flow requirements at the Gorge for 2017 for an Above Normal year are listed in Table 4.



**TABLE 3. HYDROLOGIC INDEX CALCULATIONS  
CALENDAR YEAR 2017**

Month	[1]	[2]	[3]	[4]	[5]	[6]
	Precipitation at Wildomar [inch]	Natural Flow at Murrieta [Acre-Feet]	Observed Flow at Aguanga [Acre-Feet]	Calculated Flow at Vail Lake [Acre-Feet]	Estimated Contributions from Pauba and Wolf Valleys [Acre-Feet]	Hydrologic Index [Acre-Feet]
Oct 2016	0.17	0.0	0.0	0.0	0.0	0.0
Nov 2016	0.92	0.0	0.0	0.0	0.0	0.0
Dec 2016	3.98	3,085.8	76.5	105.6	52.8	3,244.2
Jan 2017	6.93	19,213.2	2,146.0	2,961.5	1,480.8	23,655.5
Feb 2017	2.92	229.9	1,053.1	1,453.3	726.7	2,409.9
Mar 2017	0.04	0.0	922.3	1,272.8	636.4	1,909.2
Apr 2017	0.00	0.0	164.6	227.1	113.6	340.7
<b>Totals</b>	<b>14.96</b>	<b>22,528.9</b>	<b>4,362.5</b>	<b>6,020.3</b>	<b>3,010.3</b>	<b>31,559.5</b>

- Notes: [1] Precipitation at Wildomar Station #246 from Riverside County Flood Control and Water Conservation District (May 2, 2017).
- [2] If Monthly Precipitation at Wildomar is less than 2.79 inches, the Natural Streamflow at Murrieta is 0 Acre-Feet. Otherwise, Natural Streamflow at Murrieta [Acre-Feet] is =  $(9.068 - 34.798 * [1] + 11.339 * [1]^2) * (86400 / 43560) * (\text{days in month})$
- [3] The sum of provisional daily values from USGS Station #11042400 Temecula Creek near Aguanga
- [4] Flow at Vail Lake Estimated to be  $1.38 * [3]$
- [5] Contributions from Pauba and Wolf Valley Estimated to be 50% of Vail Lake Inflow, calculated as  $0.5 * [4]$
- [6]  $[2] + [4] + [5] = \text{HI}$      HI Determination  
 $\text{HI} \leq 3,230$  ~ Critically Dry  
 $\text{HI} \leq 14,510$  ~ Below Normal  
 $\text{HI} \leq 47,810$  ~ Above Normal  
 $\text{HI} > 47,810$  ~ Very Wet

**TABLE 4. ACTUAL FLOW REQUIREMENT AT THE GORGE FOR CALENDAR YEAR 2017**

*Above Normal Hydrologic Year*

Month	2/3 Natural Flow at the Gorge <sup>[1]</sup>	Actual Flow Requirement at the Gorge
	[cfs]	[cfs]
Jan-Apr	17.8	11.5
May	11.7	11.5
June	9.4	9.4
July	7.8	7.8
August	7.6	7.6
September	7.4	7.4
October	7.7	7.7
November	8.8	8.8
December	10.4	10.4

<sup>[1]</sup> 2/3 Natural flow at the Gorge is based on the median flow during Above Normal conditions from 1931 through 1996.

Page Intentionally Blank

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX B-1**

**FEBRUARY 21, 2017 MEMORANDUM FROM  
STETSON ENGINEERS, INC.**





## FINAL MEMORANDUM 011618.1

2171 E. Francisco Blvd., Suite K • San Rafael, California • 94901  
TEL: (415) 457-0701 FAX: (415) 457-1638 e-mail: mollyp@stetsonengineers.com

TO: CWRMA Technical Advisory Committee      DATE: March 30, 2018  
FROM: Stetson Engineers      JOB NO: 2628-0002  
RE: Summary of Climatic, CAP, and Groundwater Bank Credits as of December 31, 2017

The purpose of this memorandum is to provide an update to flows and credits stipulated under the Cooperative Water Resource Management Agreement (CWRMA) as of December 31, 2017. Mr. Rich Ottolini on behalf of Rancho California Water District (District) provided Stetson Engineers with an updated "Tracking Model" on December 28, 2017. Table 1 summarizes the 2003 through 2017 Hydrologic Conditions, Climatic Credits, CAP Credits, and Groundwater Bank Credits either earned or used by the two parties.

Through December 31, 2017, the District earned no new Climatic Credit due to the Above Normal conditions, but did earn a CAP credit of 1,069 AF in 2017. Based on applying 50% of the CAP credit to the winter of 2018, the equivalent winter-time flow rate of the Cap Credit is 2.2 cfs. The CWRMA provides for the determination of the next winter's flow requirement and the application of credits in the section that states:

"In all years following the first winter period... the Minimum Daily Flow Requirement for each winter period shall be 11.5 cfs, less any credit unused in a previous year, and less any credit established by the May 1<sup>st</sup> accounting of the prior year" [§5(e)].

Applying the 2.2-cfs CAP Credit and no Climatic Credit, the Minimum Daily Flow Requirement at the Gorge during the 2018 winter period is determined to be 9.3 cfs. Consistent with previous years, the Minimum Daily Flow Requirement may be adjusted in the future to account for any necessary operational changes that are agreed to by both parties.

The total releases by the District to meet the Actual Flow Requirement in 2017 were 5,069 AF. In the May 9, 2017 memorandum from Stetson Engineers to the Technical Advisory Committee, the Hydrologic Condition for 2017 was determined to be Above Normal. Camp Pendleton earned 1,944 AF of Groundwater Bank Credit due to maximum flow requirements stipulated in the CWRMA, but did not accrue those credits because the Groundwater Bank balance was already at its maximum value of 5,000 AF at the start of 2017. The streamflow measured at the Gorge was 23,100 AF during the 2017 calendar year. During this period, total releases by the District accounted for 22% of the total flow measured at the Gorge during the Above Normal Hydrologic Conditions of 2017. Figure 1 is a hydrograph of the daily flow measured by the USGS at the Gorge (Station 11044000).

**TABLE 1. SUMMARY OF CLIMATIC, CAP, AND GROUNDWATER BANK CREDITS  
2003 THROUGH 2017**

Credit	Calendar Year											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		
Hydrologic Condition	Above Normal	Critically Dry	Very Wet	Below Normal	Critically Dry	Above Normal	Above Normal	Very Wet	Very Wet	Critically Dry		
Previous Year's Climatic Credit (AF)	0	0	678	0	477	1,212	0	0	0	0		
Climatic Credit Used (AF)	0	0	678	0	477	1,212	0	0	0	0		
Climatic Credit Earned (AF)	0	678	0	477	1,212	0	0	0	0	0	1,248	
Climatic Credits Remaining (AF)	0	678	0	477	1,212	0	0	0	0	0	1,248	
Previous Year's CAP Credit (AF)	0	1,485	483	397	206	0	432	1,011	397	296		
CAP Credit Used (AF)	0	1,002	483	191	206	0	216	614	397	148		
CAP Credit Earned (AF)	1,485	0	397	0	0	432	795	0	296	0		
CAP Credits Remaining (AF)	1,485	483	397	206	0	432	1,011	397	296	148		
Previous Year's												
Groundwater Bank Credit (AF)	0	2,096	2,456	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
Groundwater Bank Credit Used (AF)	0	0	0	0	0	0	0	0	0	0	0	
Groundwater Bank Credit Earned (AF)	2,096	360	2,544	0	0	2,087	3,092	5,372	5,275	148		
Groundwater Bank Credit Remaining (AF)	2,096	2,456	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
Minimum Required Winter Flow at the Gorge <sup>1</sup> (cfs)	11.5	8.4/7.1	6.6	10.7	8.6	6.4	10.6	8.9	9.8	10.9		

<sup>1</sup> Required flow converted to a cfs equivalent for a winter period of 120 days. In 2004, from January 1-22, 50% CAP Credit was applied and for the remainder of the winter period 70% of CAP Credit was applied.

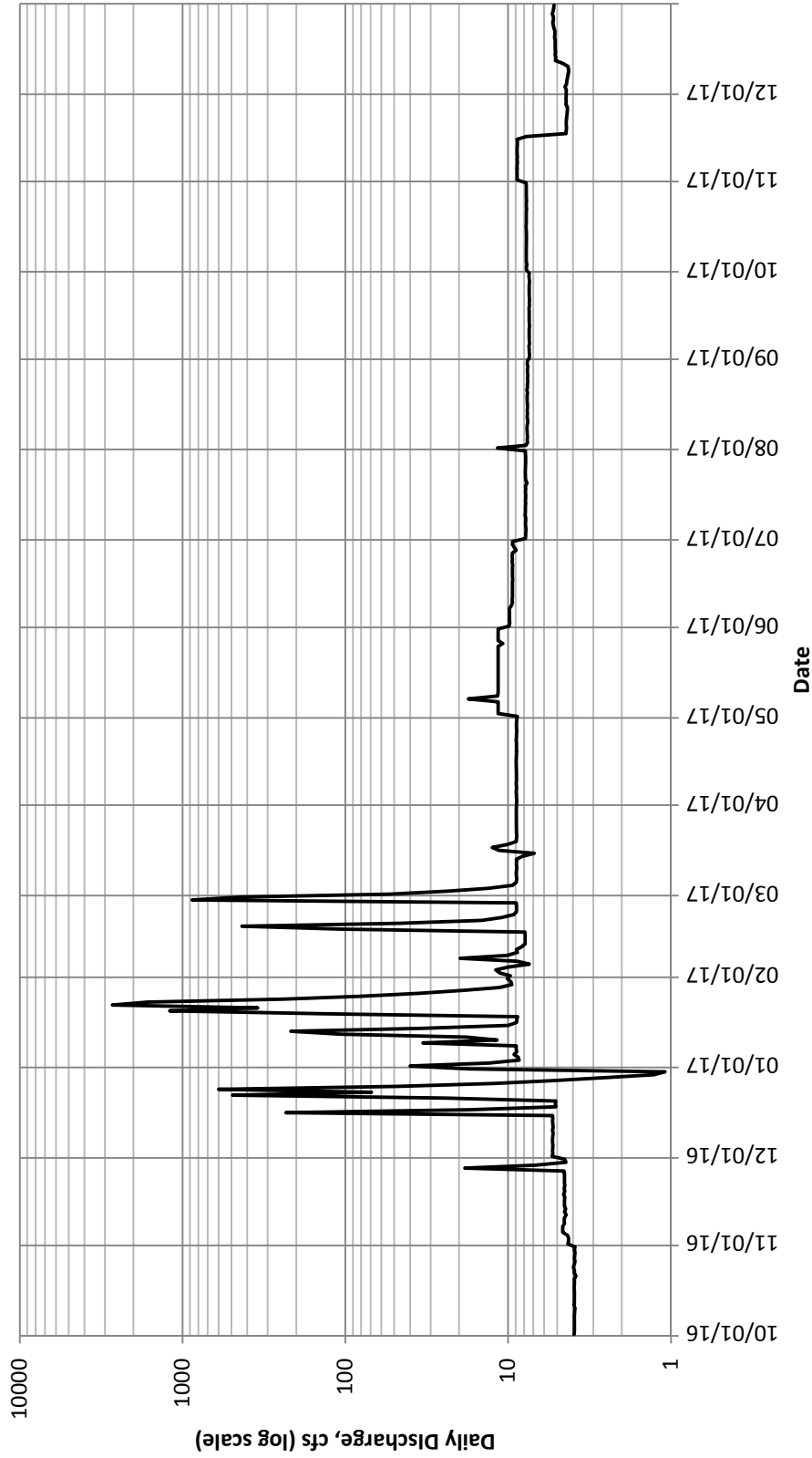
**(TABLE CONTINUED ON NEXT PAGE)**

**TABLE 1. SUMMARY OF CLIMATIC, CAP, AND GROUNDWATER BANK CREDITS  
2003 THROUGH 2017 (CONTINUED FROM PREVIOUS PAGE)**

Hydrologic Condition	Credit	Calendar Year						
		2013	2014	2015	2016	2017	2018	
		Critically Dry	Below Normal	Below Normal	Below Normal	Above Normal	Above Normal	TBD
Previous Year's Climatic Credit (AF)		1,248	406	749	563	623	623	0
Climatic Credit Used (AF)		1,248	406	749	563	623	623	0
Climatic Credit Earned (AF)		406	749	563	623	0	0	n/a
Climatic Credits Remaining (AF)		406	749	563	623	0	0	n/a
Previous Year's CAP Credit (AF)		148	0	9	4.5	0	0	1,069
CAP Credit Used (AF)		148	0	4.5	4.5	0	0	535
CAP Credit Earned (AF)		0	9	0	0	1,069	0	n/a
CAP Credits Remaining (AF)		0	4.5	4.5	0	535	0	n/a
Previous Year's Groundwater Bank Credit (AF)		5,000	5,000	5,000	5,000	5,000	5,000	5,000
Groundwater Bank Credit Used (AF)		0	0	0	0	0	0	n/a
Groundwater Bank Credit Earned (AF)		360	622	756	569	1,944	1,944	n/a
Groundwater Bank Credit Remaining (AF)		5,000	5,000	5,000	5,000	5,000	5,000	n/a
Minimum Required Winter Flow at the Gorge <sup>1</sup> (cfs)		5.6	9.8	8.3	9.1	8.9	8.9	9.3

<sup>1</sup>Required flow converted to a cfs equivalent for a winter period of 120 days.

**Figure 1**  
**Daily Discharge at the Gorge**  
**USGS Gage 11044000 - Santa Margarita River near Temecula**  
**October 2016 - December 2017**



Notes:  
 All values are daily published values from USGS at gage 11044000.  
 CWRMA releases were made to meet flow requirements as measured using the provisional USGS daily website discharge; subsequent rating shifts or adjustments at the gage may increase or decrease the published values when compared to the provisional ones. Daily published and provisional values are given in the Annual Watermaster Report Appendix E.



## **CREDITS, FOREGONE WATER, AND RELEASE SOURCES**

Due to Above Normal Hydrologic Conditions, the District did not earn any Climatic Credit in 2017. The District made releases in excess of 4,000 AF, so a CAP credit of 1,069 AF was earned. No CAP credit was carried over from the previous year.

On November 16, 2017, Camp Pendleton requested that the District reduce flow augmentation to minimize CAP credits for the year. The District implemented the request on November 17, 2017 and reduced flow requirements from Above Normal to Below Normal conditions for the remainder of November and all of December. The total amount of foregone water was 432 AF.

Camp Pendleton earned input to the Groundwater Bank in 2017, but the balance did not increase since the bank was at its maximum value of 5,000 AF at the beginning of the year. If Camp Pendleton's Groundwater Bank had not already been at the maximum allowable storage volume, 1,944 AF would have been credited to the Groundwater Bank. Of this, 1,512 AF would have been earned due to the District's Actual Flow Maintenance Requirements being less than the flows in accordance with the Section 5 Flow Requirement (see CWRMA Art. 17) and 432 AF would have been earned due to foregone water in November and December.

In 2017, the District released a total of 5,069 AF. All water was released from the MWD raw water source at WR-34.

## **OPERATIONS**

Based on review of the release data, recorded flow at the Gorge, and the Minimum Daily Flow Requirement, 42 AF of excess water was released. Previously termed operational inefficiency, any excess represents a quantity of water released at the Gorge greater than required under CWRMA. In previous years, the operational inefficiency has been as high as 220 AF.

There were 43 days during 2017 when the Section 5 Flow Requirement was not met. In the tracking model, violation days are determined by calculating a 10-day running average of the provisional USGS daily website discharge at the Gorge. Each time the flow requirement changes, e.g. on January 1, April 1, May 1, etc., the running average resets and flow violation days are not assessed until the tenth day following the change. A violation day occurs when the 10-day running average flow rate is less than the flow requirement.

## **SUMMARY**

Table 2 quantifies the monthly flow releases at the Gorge, credits earned, and credits applied from 2003 through 2017. Both monthly and daily summaries of CWRMA accounting of flows and credits are given in the attached tables intended for use in the Annual Watermaster Report (Table 11.1 and Appendix E).

In 2017, Camp Pendleton maintained the maximum amount of water available in its Groundwater Bank; the District accumulated CAP Credit in 2017. Applying 50% of the CAP Credit from 2017, the 2018 winter-time flow requirement was determined to be 9.3 cfs. The Hydrologic Condition for 2018 will be established on May 1, 2018 following this winter's rainfall events. The hydrologic determination and the amount of water released will establish the Minimum Daily Flow Requirements for May through December and credits earned.

\\Jobs\2628\0002-CWRMA\Memos\TAC Status of CWRMA Flows 2017- v02.docx

**Table 2.  
Monthly Credit Accounting**

(1) Month	(2) Hydrologic Index [type]	(3) Table 5 Flow Requirement [cfs]	(4) Section 5 Flow Requirement [cfs]	(5) Climatic Credit Applied [cfs]	(6) CAP Credit Applied [cfs]	(7) Augmentation at WR-34 [AF]	(8) Climatic Credit Earned [AF]	(9) CAP Credit Earned [AF]	(10) Operations Data [AF]	(11) Section 5 Flow Violation [# of days]	(12) Groundwater Bank Input [AF]	(13) Foregone Make-Up Water [AF]	(14) Emergency Flows [AF]
Winter 2003	AN	17.8	11.5	-	-	2,005.4	0.0		240	0	1,499.5	0.0	0.0
May-03	AN	11.7	11.5			564.8			53	0	12.3	0.0	0.0
Jun-03	AN	9.4	9.4			513.4			34	1	0.0	0.0	0.0
Jul-03	AN	7.8	7.8			498.7			53	0	0.0	0.0	0.0
Aug-03	AN	7.6	7.6			485.0			6	0	0.0	0.0	0.0
Sep-03	AN	7.4	7.4			454.9			25	0	0.0	0.0	0.0
Oct-03	AN	7.7	7.7			465.6			24	0	15.1	15.1	0.0
Nov-03	AN	8.8	8.8			226.2			10	1	255.9	255.9	0.0
Dec-03	AN	10.4	10.4			270.6			-2	0	313.6	313.6	0.0
<b>Calendar Year 2003</b>						<b>5,484.5</b>	<b>0.0</b>	<b>1,484.5</b>	<b>443</b>	<b>2</b>	<b>2,096.3</b>	<b>584.5</b>	<b>0.0</b>
Winter 2004	CD	4.5	7.3	0.0	4.2	1,299.4	677.7		32	11	360.0	0.0	0.0
May-04	CD	3.8	3.8			205.6			2	0	0.0	0.0	0.0
Jun-04	CD	3.3	3.3			154.5			6	1	0.0	0.0	0.0
Jul-04	CD	3.0	3.0			166.7			4	0	0.0	0.0	0.0
Aug-04	CD	3.0	3.0			184.0			1	0	0.0	0.0	0.0
Sep-04	CD	3.0	3.0			177.4			1	0	0.0	0.0	0.0
Oct-04	CD	3.0	3.0			111.2			10	0	0.0	0.0	0.0
Nov-04	CD	3.0	3.0			103.0			4	0	0.0	0.0	0.0
Dec-04	CD	3.3	3.3			122.8			6	0	0.0	0.0	0.0
<b>Calendar Year 2004</b>						<b>2,524.6</b>	<b>677.7</b>	<b>0.0</b>	<b>66</b>	<b>12</b>	<b>360.0</b>	<b>0.0</b>	<b>0.0</b>
Winter 2005	VW	24.1	6.62	2.8	2.0	24.0	0.0		-23	5	2,543.7	0.0	0.0
May-05	VW	15.7	11.50			583.8			-1	1	0.0	0.0	0.0
Jun-05	VW	12.2	11.50			666.8			34	1	0.0	0.0	0.0
Jul-05	VW	9.7	9.70			601.9			55	0	0.0	0.0	0.0
Aug-05	VW	9.2	9.20			554.6			6	0	0.0	0.0	0.0
Sep-05	VW	9.4	9.40			543.4			5	0	0.0	0.0	0.0
Oct-05	VW	10.1	10.10			550.7			26	0	0.0	0.0	0.0
Nov-05	VW	11.5	11.50			509.5			-10	3	0.0	111.1	0.0
Dec-05	VW	13.5	11.50			362.2			2	0	0.0	381.2	0.0
<b>Calendar Year 2005</b>						<b>4,396.9</b>	<b>0.0</b>	<b>396.9</b>	<b>94</b>	<b>10</b>	<b>2,543.7</b>	<b>492.3</b>	<b>0.0</b>

**Table 2. (continued)  
Monthly Credit Accounting**

(1) Month	(2) Hydrologic Index [type]	(3) Table 5 Flow Requirement [cfs]	(4) Section 5 Flow Requirement [cfs]	(5) Climatic Credit Applied [cfs]	(6) CAP Credit Applied [cfs]	(7) Augmentation at WR-34 [AF]	(8) Climatic Credit Earned [AF]	(9) CAP Credit Earned [AF]	(10) Operations Data [AF]	(11) Section 5 Flow Violation [# of days]	(12) Groundwater Bank Input [AF]	(13) Foregone Make-Up Water [AF]	(14) Emergency Flows [AF]
Winter 2006	BN	8.0	10.7	0.0	0.8	1,990.9	476.5		180	18	0.0	0.0	0.0
May-06	BN	5.7	5.7			320.6			7	0	0.0	0.0	0.0
Jun-06	BN	4.9	4.9			274.9			2	0	0.0	0.0	0.0
Jul-06	BN	4.3	4.3			260.5			2	0	0.0	0.0	0.0
Aug-06	BN	4.4	4.4			256.0			6	0	0.0	0.0	0.0
Sep-06	BN	4.1	4.1			241.1			1	0	0.0	0.0	0.0
Oct-06	BN	3.9	3.9			232.7			5	0	0.0	0.0	0.0
Nov-06	BN	4.5	4.5			235.5			3	1	0.0	0.0	0.0
Dec-06	BN	5.3	5.3			185.0			15	0	0.0	111.1	0.0
<b>Calendar Year 2006</b>						<b>3,997.2</b>	<b>476.5</b>	<b>0.0</b>	<b>220</b>	<b>19</b>	<b>0.0</b>	<b>111.1</b>	<b>0.0</b>
Winter 2007	CD	4.5	8.6	2.0	0.9	1,882.9	1,212.3		-8	24	0.0	0.0	0.0
May-07	CD	3.8	3.8			249.0			2	0	0.0	0.0	0.0
Jun-07	CD	3.3	3.3			159.4			2	0	0.0	0.0	0.0
Jul-07	CD	3.0	3.0			218.6			2	0	0.0	0.0	0.0
Aug-07	CD	3.0	3.0			208.5			2	0	0.0	0.0	0.0
Sep-07	CD	3.0	3.0			203.6			1	0	0.0	0.0	0.0
Oct-07	CD	3.0	3.0			207.5			1	0	0.0	0.0	0.0
Nov-07	CD	3.0	3.0			196.4			4	0	0.0	0.0	0.0
Dec-07	CD	3.3	3.3			153.8			6	0	0.0	0.0	0.0
<b>Calendar Year 2007</b>						<b>3,479.7</b>	<b>1,212.3</b>	<b>0.0</b>	<b>11</b>	<b>24</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Winter 2008	AN	17.8	6.4	5.1	0.0	999.0	0.0		55	0	1,512.0	0.0	0.0
May-08	AN	11.7	11.5			494.2			-93	0	12.3	0.0	0.0
Jun-08	AN	9.4	9.4			532.4			14	0	0.0	0.0	0.0
Jul-08	AN	7.8	7.8			473.6			15	0	0.0	0.0	0.0
Aug-08	AN	7.6	7.6			480.2			12	0	0.0	0.0	0.0
Sep-08	AN	7.4	7.4			456.5			8	0	0.0	0.0	0.0
Oct-08	AN	7.7	7.7			481.3			6	1	0.0	0.0	0.0
Nov-08	AN	8.8	8.8			407.4			1	1	126.0	0.0	0.0
Dec-08	AN	10.4	10.4			107.0			10	0	436.6	436.6	0.0
<b>Calendar Year 2008</b>						<b>4,431.7</b>	<b>0.0</b>	<b>431.7</b>	<b>28</b>	<b>2</b>	<b>2,087.4</b>	<b>563.1</b>	<b>0.0</b>

**Table 2. (continued)  
Monthly Credit Accounting**

(1) Month	(2) Hydrologic Index [type]	(3) Table 5 Flow Requirement [cfs]	(4) Section 5 Flow Requirement [cfs]	(5) Climatic Credit Applied [cfs]	(6) CAP Credit Applied [cfs]	(7) Augmentation at WR-34 [AF]	(8) Climatic Credit Earned [AF]	(9) CAP Credit Earned [AF]	(10) Operations Data [AF]	(11) Section 5 Flow Violation [# of days]	(12) Groundwater Bank Input [AF]	(13) Foregone Make-Up Water [AF]	(14) Emergency Flows [AF]
Winter 2009	AN	17.8	10.6	0.0	0.9	2,145.5	0.0		51	0	1,499.5	0.0	0.0
May-09	AN	11.7	11.5			227.8			17	0	12.3	0.0	0.0
Jun-09	AN	9.4	9.4			709.1			2	0	0.0	0.0	0.0
Jul-09	AN	7.8	7.8			746.0			1	0	0.0	0.0	0.0
Aug-09	AN	7.6	7.6			254.0			7	0	248.1	248.1	0.0
Sep-09	AN	7.4	7.4			186.7			0	0	261.8	261.8	0.0
Oct-09	AN	7.7	7.7			202.6			0	0	289.0	289.0	0.0
Nov-09	AN	8.8	8.8			189.3			0	0	345.1	345.1	0.0
Dec-09	AN	10.4	10.4			133.7			1	0	436.6	436.6	0.0
<b>Calendar Year 2009</b>						<b>4,794.6</b>	<b>0.0</b>	<b>794.6</b>	<b>79</b>	<b>0</b>	<b>3,092.4</b>	<b>1,580.6</b>	<b>0.0</b>
Winter 2010	VW	24.1	8.9	0.0	2.6	1,201.9	0.0		-59	0	2,999.0	0.0	0.0
May-10	VW	15.7	11.5			417.0			20	0	258.2	0.0	0.0
Jun-10	VW	12.2	11.5			667.9			2	0	41.7	0.0	0.0
Jul-10	VW	9.7	9.7			488.7			7	0	160.7	160.7	0.0
Aug-10	VW	9.2	9.2			290.3			0	0	295.1	295.1	0.0
Sep-10	VW	9.4	9.4			278.7			0	0	315.4	315.4	0.0
Oct-10	VW	10.1	10.1			243.0			4	0	381.2	381.2	0.0
Nov-10	VW	11.5	11.5			195.7			-53	0	416.5	416.5	0.0
Dec-10	VW	13.5	11.5			191.0			4	0	504.2	504.2	0.0
<b>Calendar Year 2010</b>						<b>3,974.2</b>	<b>0.0</b>	<b>0.0</b>	<b>-73</b>	<b>0</b>	<b>5,372.0</b>	<b>2,073.1</b>	<b>0.0</b>
Winter 2011	VW	24.1	9.8	0.0	1.7	1,115.9	0.0		26	0	2,999.0	0.0	0.0
May-11	VW	15.7	11.5			652.1			1	0	258.2	0.0	0.0
Jun-11	VW	12.2	11.5			688.4			0	0	41.7	0.0	0.0
Jul-11	VW	9.7	9.7			607.5			22	0	64.3	64.3	0.0
Aug-11	VW	9.2	9.2			277.9			6	0	295.0	295.1	0.0
Sep-11	VW	9.4	9.4			318.8			25	0	315.4	315.4	0.0
Oct-11	VW	10.1	10.1			243.6			12	0	381.2	381.2	0.0
Nov-11	VW	11.5	11.5			142.3			-42	0	416.5	416.5	0.0
Dec-11	VW	13.5	11.5			249.1			7	0	504.2	504.2	0.0
<b>Calendar Year 2011</b>						<b>4,295.6</b>	<b>0.0</b>	<b>295.6</b>	<b>57</b>	<b>0</b>	<b>5,275.5</b>	<b>1,976.0</b>	<b>0.0</b>

**Table 2. (continued)  
Monthly Credit Accounting**

(1) Month	(2) Hydrologic Index [type]	(3) Table 5 Flow Requirement [cfs]	(4) Section 5 Flow Requirement [cfs]	(5) Climatic Credit Applied [cfs]	(6) CAP Credit Applied [cfs]	(7) Augmentation at WR-34 [AF]	(8) Climatic Credit Earned [AF]	(9) CAP Credit Earned [AF]	(10) Operations Data [AF]	(11) Section 5 Flow Violation [# of days]	(12) Groundwater Bank Input [AF]	(13) Foregone Make-Up Water [AF]	(14) Emergency Flows [AF]
Winter 2012	CD	4.5	10.9	0.0	0.6	1,848.0	1,247.8		115	0	147.8	0.0	0.0
May-12	CD	3.8	3.8			285.2			2	0	0.0	0.0	0.0
Jun-12	CD	3.3	3.3			314.4			0	0	0.0	0.0	0.0
Jul-12	CD	3.0	3.0			178.0			6	0	0.0	0.0	0.0
Aug-12	CD	3.0	3.0			179.1			1	0	0.0	0.0	0.0
Sep-12	CD	3.0	3.0			180.6			0	0	0.0	0.0	0.0
Oct-12	CD	3.0	3.0			178.1			5	0	0.0	0.0	0.0
Nov-12	CD	3.0	3.0			163.6			1	0	0.0	0.0	0.0
Dec-12	CD	3.3	3.3			107.3			-2	0	0.0	0.0	0.0
<b>Calendar Year 2012</b>						<b>3,434.3</b>	<b>1,247.8</b>	<b>0.0</b>	<b>128</b>	<b>0</b>	<b>147.8</b>	<b>0.0</b>	<b>0.0</b>
Winter 2013	CD	4.5	5.6	5.2	0.6	1,083.6	406.1		20.4	0	360.0	0.0	0.0
May-13	CD	3.8	3.8			220.7			0.6	0	0.0	0.0	0.0
Jun-13	CD	3.3	3.3			186.3			1.0	0	0.0	0.0	0.0
Jul-13	CD	3.0	3.0			167.7			1.6	0	0.0	0.0	0.0
Aug-13	CD	3.0	3.0			184.9			0.6	0	0.0	0.0	0.0
Sep-13	CD	3.0	3.0			185.5			0.8	0	0.0	0.0	0.0
Oct-13	CD	3.0	3.0			161.3			0.1	0	0.0	0.0	0.0
Nov-13	CD	3.0	3.0			170.5			0.8	0	0.0	0.0	0.0
Dec-13	CD	3.3	3.3			201.2			0.4	0	0.0	0.0	0.0
<b>Calendar Year 2013</b>						<b>2,561.7</b>	<b>406.1</b>	<b>0.0</b>	<b>26.3</b>	<b>0</b>	<b>360.0</b>	<b>0.0</b>	<b>0.0</b>
Winter 2014	BN	8.0	9.8	1.7	0.0	2,186.4	749.2		5.3	0	408.0	0.0	0.0
May-14	BN	5.7	5.7			336.0			0.4	0	0.0	0.0	0.0
Jun-14	BN	4.9	4.9			270.7			0.0	0	0.0	0.0	0.0
Jul-14	BN	4.3	4.3			248.1			0.2	0	0.0	0.0	0.0
Aug-14	BN	4.4	4.4			252.3			1.6	0	0.0	0.0	0.0
Sep-14	BN	4.1	4.1			224.9			-0.4	0	0.0	0.0	0.0
Oct-14	BN	3.9	3.9			216.5			0.0	0	0.0	0.0	0.0
Nov-14	BN	4.5	3.0			164.4			0.0	0	90.0	0.0	0.0
Dec-14	BN	5.3	3.3			109.5			8.9	0	124.0	0.0	0.0
<b>Calendar Year 2014</b>						<b>4,008.8</b>	<b>749.2</b>	<b>8.8</b>	<b>16.0</b>	<b>0</b>	<b>622.0</b>	<b>0.0</b>	<b>0.0</b>

**Table 2. (continued)  
Monthly Credit Accounting**

(1) Month	(2) Hydrologic Index [type]	(3) Table 5 Flow Requirement [cfs]	(4) Section 5 Flow Requirement [cfs]	(5) Climatic Credit Applied [cfs]	(6) CAP Credit Applied [cfs]	(7) Augmentation at WR-34 [AF]	(8) Climatic Credit Earned [AF]	(9) CAP Credit Earned [AF]	(10) Operations Data [AF]	(11) Section 5 Flow Violation [# of days]	(12) Groundwater Bank Input [AF]	(13) Forgone Make-Up Water [AF]	(14) Emergency Flows [AF]
Winter 2015	BN	8.0	8.3	3.1	0.02	1,661.3	562.7		2.0	0	756.0	0.0	0.0
May-15	BN	5.7	5.7			286.0			8.0	0	0.0	0.0	0.0
Jun-15	BN	4.9	4.9			282.5			8.8	0	0.0	0.0	0.0
Jul-15	BN	4.3	4.3			215.8			6.0	0	0.0	0.0	0.0
Aug-15	BN	4.4	4.4			252.3			0.2	0	0.0	0.0	0.0
Sep-15	BN	4.1	4.1			217.6			5.8	0	0.0	0.0	0.0
Oct-15	BN	3.9	3.9			233.0			3.5	0	0.0	0.0	0.0
Nov-15	BN	4.5	4.5			257.3			0.2	0	0.0	0.0	0.0
Dec-15	BN	5.3	5.3			330.6			-0.2	0	0.0	0.0	0.0
<b>Calendar Year 2015</b>						<b>3,736.4</b>	<b>562.7</b>	<b>0.0</b>	<b>34.3</b>	<b>0</b>	<b>756.0</b>	<b>0.0</b>	<b>0.0</b>
Winter 2016	BN	8.0	9.1	2.3	0.04	1,897.5	623.3		24.2	0	568.7	0.0	0.0
May-16	BN	5.7	5.7			333.7			0.4	0	0.0	0.0	0.0
Jun-16	BN	4.9	4.9			285.7			0.0	0	0.0	0.0	0.0
Jul-16	BN	4.3	4.3			264.0			0.0	0	0.0	0.0	0.0
Aug-16	BN	4.4	4.4			255.4			1.8	0	0.0	0.0	0.0
Sep-16	BN	4.1	4.1			232.2			0.2	0	0.0	0.0	0.0
Oct-16	BN	3.9	3.9			222.0			0.0	0	0.0	0.0	0.0
Nov-16	BN	4.5	4.5			233.1			3.4	0	0.0	0.0	0.0
Dec-16	BN	5.3	5.3			182.1			-11.5	0	0.0	0.0	0.0
<b>Calendar Year 2016</b>						<b>3,905.7</b>	<b>623.3</b>	<b>0.0</b>	<b>18.5</b>	<b>0</b>	<b>568.7</b>	<b>0.0</b>	<b>0.0</b>
Winter 2017	AN	17.8	8.9	2.6	0.00	1,369.2	0.0		61.7	0	1,500.0	0.0	0.0
May-17	AN	11.7	11.5			650.1			1.9	6	12.4	0.0	0.0
Jun-17	AN	9.4	9.4			521.6			0.1	3	0.0	0.0	0.0
Jul-17	AN	7.8	7.8			464.8			0.0	0	0.0	0.0	0.0
Aug-17	AN	7.6	7.6			451.3			8.8	0	0.0	0.0	0.0
Sep-17	AN	7.4	7.4			433.6			0.5	0	0.0	0.0	0.0
Oct-17	AN	7.7	7.7			476.7			-0.9	9	0.0	0.0	0.0
Nov-17	AN	8.8	4.5			393.0			-5.6	6	119.0	119.0	0.0
Dec-17	AN	10.4	5.3			308.9			-24.9	19	313.1	313.1	0.0
<b>Calendar Year 2017</b>						<b>5,069.2</b>	<b>0.0</b>	<b>1,069.2</b>	<b>41.6</b>	<b>43</b>	<b>1,944.5</b>	<b>432.1</b>	<b>0.0</b>
<b>Total Groundwater Bank =</b>													<b>5,000.0</b>
<b>Initial Conditions for Winter 2018</b>	<b>TBD</b>	<b>TBD</b>	<b>9.3</b>		<b>-</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>	<b>5,000.0</b>	<b>TBD</b>	<b>TBD</b>

## Table 2. (continued) Monthly Credit Accounting LEGEND

Column	Description
(1) Month	Winter period (Jan-April), Non-Winter period (May-Dec)
(2) Hydrologic Index	Hydrologic Index as determined on May 1st: CD (Critically Dry), BN (Below Normal), AN (Above Normal), VW (Very Wet)
(3) Table 5 Flow Requirement	Table 5 Flow Requirement for the winter and non-winter period determined after May 1st
(4) Section 5 Flow Requirement	Section 5 Flow Requirement (or Minimum Flow Requirement) for the winter period before May 1st <i>Winter Section 5 Flow Requirement = 11.5 - Climatic Credit Applied - CAP Credit Applied</i> <i>Non-Winter Section 5 Flow Requirement = the minimum of 11.5 and the Table 5 Flow Requirement</i> The 2013 Minimum Daily Flow Requirement was computed based on credits equal to 1,396 AF. The total credit of 1,396 AF was converted to an equivalent winter-time flow rate in cfs (5.9 cfs), which was then subtracted from 11.5 cfs for a Minimum Daily Flow Requirement of 5.6 cfs. In the Calendar Year 2013 section of this table, the cfs-equivalent flow rates for Climatic Credit (5.2 cfs, Column 5) and CAP Credit (0.6 cfs, Column 6) do not add up to 5.9 cfs due to rounding.
(5) Climatic Credit Applied	Sum of the daily Climatic Credits Applied in the winter of the calendar year.
(6) CAP Credit Applied	Sum of the daily CAP Credits Applied in the winter of the calendar year.
(7) Augmentation at WR-34	Augmentation at WR-34 by the District. Note that Augmentation is never greater than the daily WEB flows at Gorge.
(8) Climatic Credit Earned	Sum of the daily Climatic Credits earned in the winter of a BN or CD year, as calculated after May 1st.
(9) CAP Credit Earned	CAP Credit earned on years when > 4,000 AF of Augmentation, as calculated at the end of the year.
(10) Operations Data	Operations Data is a measure of operational efficiency calculated as the sum of all daily shortages and daily excess.
(11) Section 5 Flow Violation	Section 5 flow violation is the number of days when the 10-day running average is less than the Minimum Flow Requirement.
(12) Groundwater Bank	Groundwater Bank = 2/3 Natural Flow at Gorge (Section 5 Table) – Actual Flow Requirement as determined on May 1st – emergency flow deliveries requested by Camp Pendleton. The Actual Flow Requirement reveals the flow that the District would have released during the winter period if the Hydrologic Index was known at the beginning of the year.
(13) Fore gone Make-Up Water	Camp Pendleton may acquire rights to groundwater above the Gorge by foregoing its right to Make-up Water from the District. Camp Pendleton took action on October 23, 2003 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from AN to BN conditions. Camp Pendleton took action on November 23, 2005 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from VW to BN conditions. Camp Pendleton took action on December 4, 2006 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from BN to CD conditions. Camp Pendleton took action on November 20, 2008 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from AN to CD conditions. Camp Pendleton took action on August 1, 2009 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from AN to CD conditions. Camp Pendleton took action on July 16, 2010 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from VW to BN conditions. Camp Pendleton took action on July 25, 2011 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from VW to BN conditions. Camp Pendleton took action on August 20, 2014 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from BN to CD conditions. The District implemented this change on November 1, 2014. Camp Pendleton took action on November 16, 2017 to reduce the impact of the CAP Credit by requesting the District reduce flow Augmentation at the Gorge from AN to BN conditions. The District implemented this change on November 17, 2017.
(14) Emergency Flows	Emergency flows may be called upon by the Commanding General of Camp Pendleton when there is a water supply emergency.



# **ATTACHMENTS FOR ANNUAL WATERMASTER REPORT**

## **TABLE 11.1**

**SANTA MARGARITA RIVER WATERSHED: MONTHLY SUMMARY OF REQUIRED FLOWS, DISCHARGES, CREDITS AND ACCOUNTS**

## **APPENDIX E**

**SANTA MARGARITA RIVER WATERSHED: COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS SANTA MARGARITA RIVER NEAR TEMECULA (JANUARY - DECEMBER 2017)**

TABLE 11.1

SANTA MARGARITA RIVER WATERSHED  
**MONTHLY SUMMARY OF REQUIRED FLOWS,  
DISCHARGES, CREDITS AND ACCOUNTS  
COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT**

**2017 CALENDAR YEAR - ABOVE NORMAL YEAR**

Month	USGS Official Discharge AF	USGS Website Daily Discharge AF	Minimum Flow Maintenance Requirement cfs /1	Section 5 Flows cfs /2	No. of Days 10-day Running Average is Less than Required Flow	Discharge from WR-34 AF /3	Climatic Credits Earned AF /4	Camp Pendleton Groundwater Bank /5	
								Input AF	Cumulative Balance AF
Jan	13,846.8	13,443.0	8.9	17.8	0	157.9	0.0	387.5	5,000.0
Feb	4,198.7	4,196.0	8.9	17.8	0	294.1	0.0	350.0	5,000.0
Mar	682.7	688.9	8.9	17.8	0	429.2	0.0	387.5	5,000.0
Apr	529.3	529.0	8.9	17.8	0	488.0	0.0	375.0	5,000.0
May	712.4	712.5	11.5	11.7	6	650.1	0.0	12.4	5,000.0
Jun	564.5	559.5	9.4	9.4	3	521.6	0.0	0.0	5,000.0
Jul	479.7	479.4	7.8	7.8	0	464.8	0.0	0.0	5,000.0
Aug	476.3	475.8	7.6	7.6	0	451.3	0.0	0.0	5,000.0
Sep	441.2	440.3	7.4	7.4	0	433.6	0.0	0.0	5,000.0
Oct	475.0	472.1	7.7	7.7	9	476.7	0.0	0.0	5,000.0
Nov	398.7	398.9	8.8	8.8	6	393.0	0.0	119.0	5,000.0
Dec	301.4	301.9	5.3	10.4	19	309.0	0.0	313.1	5,000.0
<b>CALENDAR YEAR TOTAL</b>	<b>23,106.7</b>	<b>22,697.3</b>			<b>43</b>	<b>5,069.3</b>	<b>0.0</b>	<b>1,944.5</b>	<b>FULL</b>

- 1 - Required flows for January through April are equal to 11.5 cfs less 2.6 cfs of credits (623 AF of Climatic Credit earned in 2016).
- 2 - The Table in Section 5 of the CWRMA sets forth guaranteed monthly flows at the Gorge once the Hydrologic Condition for the calendar year is established
- 3 - CAP Credits equal the WR-34 discharge in excess of 4,000 AF. CAP Credit of 1,069 AF earned in 2017.
- 4 - Climatic Credits equal the WR-34 discharges less actual Flow Requirements, which is the flow indicated in Section 5 of the CWRMA less applicable credits but not less than 3.0 cfs. No Climatic Credits earned in 2017.
- 5 - Camp Pendleton's rights to groundwater equal the flow indicated in Section 5 of the CWRMA less the Actual Flow Maintenance Requirement, which cannot be less than 3.0 cfs. Input to the Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

JANUARY 2017 - ABOVE NORMAL YEAR

Day	Minimum Flow										CAMP PENDLETON GROUNDWATER BANK			
	USGS Official Discharge cfs	USGS Daily Website Discharge cfs	10-Day Running Average of Website Discharge cfs	Running Average Less Required Flow cfs	WR-34 Make-Up Discharge cfs	Climatic Credit Earned AF	Input /2 cfs	Input AF	Output cfs	Output AF	Cumulative Balance AF			
1	39.9	41.0			0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
2	13.1	14.0			0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
3	8.57	8.9			5.3	10.5	6.3	12.5	0.0	0.0	5,000.0			
4	8.66	9.0			7.4	14.7	6.3	12.5	0.0	0.0	5,000.0			
5	9.17	9.5			6.4	12.6	6.3	12.5	0.0	0.0	5,000.0			
6	8.86	8.9			4.6	9.1	6.3	12.5	0.0	0.0	5,000.0			
7	8.93	8.9			7.9	15.7	6.3	12.5	0.0	0.0	5,000.0			
8	8.91	8.9			8.3	16.5	6.3	12.5	0.0	0.0	5,000.0			
9	33.3	33.0			3.3	6.5	6.3	12.5	0.0	0.0	5,000.0			
10	11.7	12.0			0.8	1.5	6.3	12.5	0.0	0.0	5,000.0			
11	18.0	18.0	13.1	8.9	1.5	3.0	6.3	12.5	0.0	0.0	5,000.0			
12	107.	107.0	22.4	8.9	0.4	0.8	6.3	12.5	0.0	0.0	5,000.0			
13	216.	216.0	43.1	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
14	33.8	34.0	45.6	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
15	10.0	10.0	45.7	8.9	1.1	2.2	6.3	12.5	0.0	0.0	5,000.0			
16	8.90	8.9	45.7	8.9	5.7	11.3	6.3	12.5	0.0	0.0	5,000.0			
17	8.86	8.9	45.7	8.9	7.4	14.6	6.3	12.5	0.0	0.0	5,000.0			
18	8.73	8.7	45.7	8.9	7.9	15.6	6.3	12.5	0.0	0.0	5,000.0			
19	136.	136.0	56.0	8.9	2.6	5.2	6.3	12.5	0.0	0.0	5,000.0			
20	1,200.	1,190.0	173.8	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
21	346.	346.0	206.6	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
22	2,690.	2,690.0	464.9	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
23	1,630.	1,510.0	594.3	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
24	242.	192.0	610.1	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
25	79.9	65.0	615.6	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
26	35.3	30.0	617.7	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
27	19.0	17.0	618.5	8.9	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0			
28	11.3	10.0	618.6	8.9	0.2	0.3	6.3	12.5	0.0	0.0	5,000.0			
29	9.48	8.4	605.8	8.9	2.0	3.9	6.3	12.5	0.0	0.0	5,000.0			
30	9.62	8.5	487.7	8.9	3.7	7.3	6.3	12.5	0.0	0.0	5,000.0			
31	10.1	9.0	454.0	8.9	3.3	6.6	6.3	12.5	0.0	0.0	5,000.0			
<b>TOTAL SFD</b>	6,981.1	6,777.5	6,430.6	186.9	79.8	6,243.7	195.3	387.5	0.0	0.0	5,000.0			
<b>TOTAL AF</b>	13,846.8	13,443.0	12,754.9	370.7	157.9	12,384.2								

1 - Required flows for January through April are equal to 11.5 cfs less 2.6 cfs of credits (623 AF of Climatic Credit earned in 2016).

2 - Art. 17 - Camp Pendleton rights to groundwater equal the flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

FEBRUARY 2017 - ABOVE NORMAL YEAR

Day	Minimum Flow										CAMP PENDLETON GROUNDWATER BANK			
	USGS Official Discharge cfs	USGS Daily Website Discharge cfs	10-Day Running Average of Website Discharge cfs	Maintenance Requirement /1 cfs	Running Average Less Required Flow cfs	WR-34 Make-Up Discharge cfs	Climatic Credit Earned cfs	AF	Input /2 cfs	Input AF	Output cfs	Output AF	Cumulative Balance AF	
1	9.70	8.6	185.9	8.9	177.0	6.7	13.2	0.0	6.3	12.5	0.0	0.0	5,000.0	
2	11.3	10.0	35.9	8.9	27.0	8.5	16.8	0.0	6.3	12.5	0.0	0.0	5,000.0	
3	11.9	11.0	17.8	8.9	8.9	9.6	19.1	0.0	6.3	12.5	0.0	0.0	5,000.0	
4	9.96	8.8	12.1	8.9	3.2	8.2	16.3	0.0	6.3	12.5	0.0	0.0	5,000.0	
5	7.42	6.5	9.8	8.9	0.9	6.0	11.9	0.0	6.3	12.5	0.0	0.0	5,000.0	
6	8.80	7.8	8.9	8.9	0.0	7.1	14.1	0.0	6.3	12.5	0.0	0.0	5,000.0	
7	19.7	18.0	9.7	8.9	0.8	2.1	4.2	0.0	6.3	12.5	0.0	0.0	5,000.0	
8	10.1	10.0	9.8	8.9	0.9	0.7	1.3	0.0	6.3	12.5	0.0	0.0	5,000.0	
9	8.77	8.8	9.9	8.9	1.0	3.2	6.3	0.0	6.3	12.5	0.0	0.0	5,000.0	
10	8.87	10.0	10.0	8.9	1.1	7.6	15.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
11	8.22	9.7	10.1	8.9	1.2	7.6	15.1	0.0	6.3	12.5	0.0	0.0	5,000.0	
12	7.87	8.9	10.0	8.9	1.1	7.2	14.2	0.0	6.3	12.5	0.0	0.0	5,000.0	
13	7.85	8.9	9.7	8.9	0.8	7.3	14.5	0.0	6.3	12.5	0.0	0.0	5,000.0	
14	7.85	8.9	9.8	8.9	0.9	7.4	14.7	0.0	6.3	12.5	0.0	0.0	5,000.0	
15	7.86	8.9	10.0	8.9	1.1	7.5	14.8	0.0	6.3	12.5	0.0	0.0	5,000.0	
16	7.89	8.9	10.1	8.9	1.2	7.5	14.8	0.0	6.3	12.5	0.0	0.0	5,000.0	
17	106.	106.0	18.9	8.9	10.0	5.9	11.8	0.0	6.3	12.5	0.0	0.0	5,000.0	
18	431.	430.0	60.9	8.9	52.0	0.0	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
19	46.6	47.0	64.7	8.9	55.8	0.0	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
20	14.5	14.0	65.1	8.9	56.2	0.0	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
21	10.9	11.0	65.3	8.9	56.4	1.2	2.3	0.0	6.3	12.5	0.0	0.0	5,000.0	
22	9.24	9.2	65.3	8.9	56.4	5.0	10.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
23	8.87	8.9	65.3	8.9	56.4	6.6	13.1	0.0	6.3	12.5	0.0	0.0	5,000.0	
24	8.89	8.9	65.3	8.9	56.4	7.6	15.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
25	8.89	8.9	65.3	8.9	56.4	8.0	15.8	0.0	6.3	12.5	0.0	0.0	5,000.0	
26	8.91	8.9	65.3	8.9	56.4	7.9	15.7	0.0	6.3	12.5	0.0	0.0	5,000.0	
27	872.	872.0	141.9	8.9	133.0	2.1	4.1	0.0	6.3	12.5	0.0	0.0	5,000.0	
28	437.	437.0	142.6	8.9	133.7	0.0	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0	
<b>TOTAL SFD</b>	2,116.9	2,115.5	1,255.4	249.2	1,006.2	148.5	294.1	0.0	176.4	350.0	0.0	0.0	5,000.0	
<b>TOTAL AF</b>	4,198.7	4,196.0	2,490.0	494.3	1,995.8									

1 - Required flows for January through April are equal to 11.5 cfs less 2.6 cfs of credits (623 AF of Climatic Credit earned in 2016).  
 2 - Art. 17 - Camp Pendleton rights to groundwater equal the flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

MARCH 2017 - ABOVE NORMAL YEAR

Day	CAMP PENDLETON GROUNDWATER BANK											
	USGS Official Discharge cfs	USGS Daily Website Discharge cfs	10-Day Running Average of Website Discharge cfs	Minimum Flow Maintenance Requirement /1 cfs	Running Average Less Required Flow cfs	WR-34 Make-Up Discharge cfs	Climatic Credit Earned AF	Input /2 cfs	Input AF	Output cfs	Output AF	Cumulative Balance AF
1	53.2	53.0	143.2	8.9	134.3	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0
2	23.8	24.0	144.2	8.9	135.3	0.0	0.0	6.3	12.5	0.0	0.0	5,000.0
3	13.2	13.0	144.4	8.9	135.5	0.1	0.2	6.3	12.5	0.0	0.0	5,000.0
4	9.41	9.4	144.4	8.9	135.5	1.4	2.8	6.3	12.5	0.0	0.0	5,000.0
5	8.93	8.9	144.4	8.9	135.5	4.7	9.4	6.3	12.5	0.0	0.0	5,000.0
6	8.84	8.8	144.4	8.9	135.5	5.6	11.2	6.3	12.5	0.0	0.0	5,000.0
7	8.88	8.9	144.4	8.9	135.5	6.6	13.1	6.3	12.5	0.0	0.0	5,000.0
8	8.94	12.1	144.7	8.9	135.8	4.5	8.9	6.3	12.5	0.0	0.0	5,000.0
9	8.87	8.9	58.4	8.9	49.5	7.0	13.8	6.3	12.5	0.0	0.0	5,000.0
10	8.85	8.8	15.6	8.9	6.7	7.5	14.8	6.3	12.5	0.0	0.0	5,000.0
11	8.89	8.9	11.2	8.9	2.3	7.7	15.3	6.3	12.5	0.0	0.0	5,000.0
12	8.89	8.9	9.7	8.9	0.8	7.9	15.7	6.3	12.5	0.0	0.0	5,000.0
13	8.89	8.9	9.3	8.9	0.4	8.0	15.8	6.3	12.5	0.0	0.0	5,000.0
14	8.13	8.2	9.1	8.9	0.2	9.5	18.9	6.3	12.5	0.0	0.0	5,000.0
15	6.90	6.9	8.9	8.9	0.0	9.5	18.8	6.3	12.5	0.0	0.0	5,000.0
16	11.4	11.0	9.2	8.9	0.3	10.4	20.7	6.3	12.5	0.0	0.0	5,000.0
17	12.5	13.0	9.6	8.9	0.7	11.5	22.8	6.3	12.5	0.0	0.0	5,000.0
18	10.1	10.0	9.4	8.9	0.5	9.2	18.3	6.3	12.5	0.0	0.0	5,000.0
19	8.91	8.9	9.4	8.9	0.5	8.2	16.2	6.3	12.5	0.0	0.0	5,000.0
20	8.90	8.9	9.4	8.9	0.5	8.2	16.2	6.3	12.5	0.0	0.0	5,000.0
21	8.86	8.9	9.4	8.9	0.5	8.0	15.9	6.3	12.5	0.0	0.0	5,000.0
22	8.87	8.9	9.4	8.9	0.5	8.0	15.8	6.3	12.5	0.0	0.0	5,000.0
23	8.89	8.9	9.4	8.9	0.5	8.1	16.0	6.3	12.5	0.0	0.0	5,000.0
24	8.87	8.9	9.4	8.9	0.5	8.2	16.2	6.3	12.5	0.0	0.0	5,000.0
25	8.91	8.9	9.6	8.9	0.7	8.2	16.2	6.3	12.5	0.0	0.0	5,000.0
26	8.91	8.9	9.4	8.9	0.5	8.2	16.2	6.3	12.5	0.0	0.0	5,000.0
27	8.87	8.9	9.0	8.9	0.1	8.1	16.1	6.3	12.5	0.0	0.0	5,000.0
28	8.89	8.9	8.9	8.9	0.0	8.1	16.0	6.3	12.5	0.0	0.0	5,000.0
29	8.92	8.9	8.9	8.9	0.0	8.2	16.3	6.3	12.5	0.0	0.0	5,000.0
30	8.92	8.9	8.9	8.9	0.0	8.1	16.1	6.3	12.5	0.0	0.0	5,000.0
31	8.87	8.9	8.9	8.9	0.0	7.8	15.5	6.3	12.5	0.0	0.0	5,000.0
<b>TOTAL SFD</b>	344.2	347.3	1,424.5	275.9	1,148.6	216.5	429.2	195.3	387.5	0.0	0.0	5,000.0
<b>TOTAL AF</b>	682.7	688.9	2,825.5	547.2	2,278.2							

1 - Required flows for January through April are equal to 11.5 cfs less 2.6 cfs of credits (623 AF of Climatic Credit earned in 2016).

2 - Art. 17 - Camp Pendleton rights to groundwater equal the flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

APRIL 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input /2	Input	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	AF	cfs	AF	Balance
	cfs	cfs	Website	Requirement /1	Flow	cfs	AF	cfs	AF	cfs	AF	AF
1	8.90	8.9	8.9	8.9	0.0	7.6	15.1	0.0	6.3	12.5	0.0	5,000.0
2	8.84	8.8	8.9	8.9	0.0	7.7	15.2	0.0	6.3	12.5	0.0	5,000.0
3	8.88	8.9	8.9	8.9	0.0	8.3	16.4	0.0	6.3	12.5	0.0	5,000.0
4	8.87	8.9	8.9	8.9	0.0	8.3	16.4	0.0	6.3	12.5	0.0	5,000.0
5	8.94	8.9	8.9	8.9	0.0	8.2	16.3	0.0	6.3	12.5	0.0	5,000.0
6	8.89	8.9	8.9	8.9	0.0	7.9	15.7	0.0	6.3	12.5	0.0	5,000.0
7	8.90	8.9	8.9	8.9	0.0	8.3	16.5	0.0	6.3	12.5	0.0	5,000.0
8	8.92	8.9	8.9	8.9	0.0	8.3	16.5	0.0	6.3	12.5	0.0	5,000.0
9	8.90	8.9	8.9	8.9	0.0	8.3	16.4	0.0	6.3	12.5	0.0	5,000.0
10	8.90	8.9	8.9	8.9	0.0	8.3	16.4	0.0	6.3	12.5	0.0	5,000.0
11	8.89	8.9	8.9	8.9	0.0	8.4	16.7	0.0	6.3	12.5	0.0	5,000.0
12	8.89	8.9	8.9	8.9	0.0	8.4	16.7	0.0	6.3	12.5	0.0	5,000.0
13	8.94	8.9	8.9	8.9	0.0	8.6	17.1	0.0	6.3	12.5	0.0	5,000.0
14	8.91	8.9	8.9	8.9	0.0	8.5	16.8	0.0	6.3	12.5	0.0	5,000.0
15	8.94	8.9	8.9	8.9	0.0	8.4	16.6	0.0	6.3	12.5	0.0	5,000.0
16	8.92	8.9	8.9	8.9	0.0	8.5	16.8	0.0	6.3	12.5	0.0	5,000.0
17	8.90	8.9	8.9	8.9	0.0	8.5	16.8	0.0	6.3	12.5	0.0	5,000.0
18	8.88	8.9	8.9	8.9	0.0	8.4	16.6	0.0	6.3	12.5	0.0	5,000.0
19	8.90	8.9	8.9	8.9	0.0	8.2	16.3	0.0	6.3	12.5	0.0	5,000.0
20	8.90	8.9	8.9	8.9	0.0	8.2	16.3	0.0	6.3	12.5	0.0	5,000.0
21	8.90	8.9	8.9	8.9	0.0	8.1	16.1	0.0	6.3	12.5	0.0	5,000.0
22	8.89	8.9	8.9	8.9	0.0	8.1	16.1	0.0	6.3	12.5	0.0	5,000.0
23	8.92	8.9	8.9	8.9	0.0	8.3	16.4	0.0	6.3	12.5	0.0	5,000.0
24	8.88	8.9	8.9	8.9	0.0	8.2	16.2	0.0	6.3	12.5	0.0	5,000.0
25	8.88	8.9	8.9	8.9	0.0	8.2	16.3	0.0	6.3	12.5	0.0	5,000.0
26	8.86	8.9	8.9	8.9	0.0	8.2	16.2	0.0	6.3	12.5	0.0	5,000.0
27	8.90	8.9	8.9	8.9	0.0	8.0	15.8	0.0	6.3	12.5	0.0	5,000.0
28	8.89	8.9	8.9	8.9	0.0	7.8	15.4	0.0	6.3	12.5	0.0	5,000.0
29	8.90	8.9	8.9	8.9	0.0	8.1	16.0	0.0	6.3	12.5	0.0	5,000.0
30	8.84	8.8	8.9	8.9	0.0	8.1	16.0	0.0	6.3	12.5	0.0	5,000.0
TOTAL SFD	266.9	266.7	267.0	267.0	0.0	246.4	488.0	0.0	189.0	375.0	0.0	5,000.0
TOTAL AF	529.3	529.0	529.6	529.6	0.0			0.0				

1 - Required flows for January through April are equal to 11.5 cfs less 2.6 cfs of credits (623 AF of Climatic Credit earned in 2016).  
 2 - Art. 17 - Camp Pendleton rights to groundwater equal the flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

MAY 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input /2	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	cfs	Website	Requirement/1	Flow	cfs	AF	cfs	cfs	cfs	AF	AF
1	8.78	8.8				7.8	15.5	0.0	0.0	0.0	0.0	5,000.0
2	11.5	11.5				10.4	20.7	0.0	0.0	0.0	0.0	5,000.0
3	11.5	11.5				10.3	20.4	0.0	0.0	0.0	0.0	5,000.0
4	11.5	11.5				10.2	20.2	0.0	0.0	0.0	0.0	5,000.0
5	11.5	11.5				10.2	20.2	0.0	0.0	0.0	0.0	5,000.0
6	11.5	11.5				10.1	20.0	0.0	0.0	0.0	0.0	5,000.0
7	17.5	17.5				4.3	8.5	0.0	0.0	0.0	0.0	5,000.0
8	11.6	11.6				9.8	19.4	0.0	0.0	0.0	0.0	5,000.0
9	11.5	11.5				10.3	20.4	0.0	0.0	0.0	0.0	5,000.0
10	11.5	11.5				10.5	20.8	0.0	0.0	0.0	0.0	5,000.0
11	11.5	11.5	12.1	11.5	0.6	10.9	21.6	0.0	0.0	0.0	0.0	5,000.0
12	11.5	11.5	12.1	11.5	0.6	11.0	21.8	0.0	0.0	0.0	0.0	5,000.0
13	11.5	11.5	12.1	11.5	0.6	11.0	21.9	0.0	0.0	0.0	0.0	5,000.0
14	11.5	11.5	12.1	11.5	0.6	11.0	21.9	0.0	0.0	0.0	0.0	5,000.0
15	11.5	11.5	12.1	11.5	0.6	15.8	31.3	0.0	0.0	0.0	0.0	5,000.0
16	11.5	11.5	12.1	11.5	0.6	11.0	21.8	0.0	0.0	0.0	0.0	5,000.0
17	11.5	11.5	11.5	11.5	0.0	10.9	21.6	0.0	0.0	0.0	0.0	5,000.0
18	11.5	11.5	11.5	11.5	0.0	10.9	21.7	0.0	0.0	0.0	0.0	5,000.0
19	11.5	11.5	11.5	11.5	0.0	11.0	21.9	0.0	0.0	0.0	0.0	5,000.0
20	11.5	11.5	11.5	11.5	0.0	11.1	22.1	0.0	0.0	0.0	0.0	5,000.0
21	11.5	11.5	11.5	11.5	0.0	11.2	22.3	0.0	0.0	0.0	0.0	5,000.0
22	11.5	11.5	11.5	11.5	0.0	11.4	22.6	0.0	0.0	0.0	0.0	5,000.0
23	11.5	11.5	11.5	11.5	0.0	11.0	21.8	0.0	0.0	0.0	0.0	5,000.0
24	11.5	11.5	11.5	11.5	0.0	11.0	21.8	0.0	0.0	0.0	0.0	5,000.0
25	11.5	11.5	11.5	11.5	0.0	10.9	21.7	0.0	0.0	0.0	0.0	5,000.0
26	10.8	10.8	11.4	11.5	-0.1	9.3	18.4	0.0	0.0	0.0	0.0	5,000.0
27	11.5	11.5	11.4	11.5	-0.1	10.9	21.6	0.0	0.0	0.0	0.0	5,000.0
28	11.5	11.5	11.4	11.5	-0.1	10.9	21.6	0.0	0.0	0.0	0.0	5,000.0
29	11.5	11.5	11.4	11.5	-0.1	10.9	21.6	0.0	0.0	0.0	0.0	5,000.0
30	11.5	11.5	11.4	11.5	-0.1	10.8	21.5	0.0	0.0	0.0	0.0	5,000.0
31	11.5	11.5	11.4	11.5	-0.1	10.8	21.5	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	359.2	359.2	244.5	241.5	3.0	327.6	650.1	0.0	0.0	0.0	0.0	5,000.0
TOTAL AF	712.4	712.5	485.0	479.0	6.0						12.4	

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.  
 2 - Art. 17 - Camp Pendleton rights to groundwater equal the flow indicated in Section 5 of the CWRMA minus the Actual Flow Maintenance Requirement which cannot be less than 3.0 cfs. Input to Groundwater Bank shown but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

JUNE 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	cfs	Website	Requirement/1	Flow	cfs	AF				AF	AF
1	9.85	9.5				8.9	17.6	0.0	0.0	0.0	0.0	5,000.0
2	9.77	9.4				8.8	17.4	0.0	0.0	0.0	0.0	5,000.0
3	9.83	9.5				8.8	17.5	0.0	0.0	0.0	0.0	5,000.0
4	9.83	9.5				8.9	17.6	0.0	0.0	0.0	0.0	5,000.0
5	9.82	9.4				9.0	17.8	0.0	0.0	0.0	0.0	5,000.0
6	9.80	9.4				9.1	18.1	0.0	0.0	0.0	0.0	5,000.0
7	9.82	9.8				8.9	17.6	0.0	0.0	0.0	0.0	5,000.0
8	9.52	9.5				8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
9	9.43	9.4				8.9	17.6	0.0	0.0	0.0	0.0	5,000.0
10	9.44	9.4				8.8	17.5	0.0	0.0	0.0	0.0	5,000.0
11	9.42	9.4		9.4	0.1	8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
12	9.42	9.4		9.4	0.1	8.6	17.0	0.0	0.0	0.0	0.0	5,000.0
13	9.42	9.4		9.4	0.1	8.9	17.7	0.0	0.0	0.0	0.0	5,000.0
14	9.43	9.4		9.4	0.1	8.9	17.7	0.0	0.0	0.0	0.0	5,000.0
15	9.42	9.4		9.4	0.1	8.8	17.4	0.0	0.0	0.0	0.0	5,000.0
16	9.41	9.4		9.4	0.1	8.6	17.0	0.0	0.0	0.0	0.0	5,000.0
17	9.36	9.3		9.4	0.0	8.5	16.9	0.0	0.0	0.0	0.0	5,000.0
18	9.40	9.4		9.4	0.0	8.8	17.4	0.0	0.0	0.0	0.0	5,000.0
19	9.42	9.4		9.4	0.0	8.8	17.4	0.0	0.0	0.0	0.0	5,000.0
20	9.40	9.4		9.4	0.0	8.8	17.5	0.0	0.0	0.0	0.0	5,000.0
21	9.42	9.4		9.4	0.0	8.9	17.7	0.0	0.0	0.0	0.0	5,000.0
22	9.39	9.4		9.4	0.0	8.6	17.0	0.0	0.0	0.0	0.0	5,000.0
23	9.46	9.5		9.4	0.0	8.7	17.2	0.0	0.0	0.0	0.0	5,000.0
24	9.43	9.4		9.4	0.0	8.4	16.7	0.0	0.0	0.0	0.0	5,000.0
25	9.44	9.4		9.4	0.0	8.8	17.4	0.0	0.0	0.0	0.0	5,000.0
26	9.40	9.4		9.4	0.0	8.8	17.5	0.0	0.0	0.0	0.0	5,000.0
27	8.91	8.9		9.4	0.0	8.6	17.0	0.0	0.0	0.0	0.0	5,000.0
28	9.18	9.2		9.4	-0.1	8.7	17.3	0.0	0.0	0.0	0.0	5,000.0
29	9.41	9.4		9.4	-0.1	8.8	17.5	0.0	0.0	0.0	0.0	5,000.0
30	9.37	9.4		9.4	-0.1	8.8	17.4	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL SFD</b>	284.6	282.1	188.3	188.0	0.3	263.1	521.6	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL AF</b>	564.5	559.5	373.5	372.9	0.6							

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.



APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

JULY 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	cfs	Website	Requirement/1	Flow	cfs	AF				AF	AF
1	7.81	7.8	7.8			7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
2	7.80	7.8	7.8			7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
3	7.79	7.8	7.8			7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
4	7.77	7.8	7.8			7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
5	7.80	7.8	7.8			7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
6	7.81	7.8	7.8			7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
7	7.80	7.8	7.8			7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
8	7.79	7.8	7.8			7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
9	7.84	7.8	7.8			7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
10	7.81	7.8	7.8			7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
11	7.83	7.8	7.8	7.8	0.0	7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
12	7.81	7.8	7.8	7.8	0.0	7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
13	7.80	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
14	7.81	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
15	7.80	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
16	7.79	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
17	7.81	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
18	7.80	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
19	7.82	7.8	7.8	7.8	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
20	7.66	7.7	7.8	7.8	0.0	7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
21	7.80	7.8	7.8	7.8	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
22	7.83	7.8	7.8	7.8	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
23	7.81	7.8	7.8	7.8	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
24	7.81	7.8	7.8	7.8	0.0	7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
25	7.81	7.8	7.8	7.8	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
26	7.82	7.8	7.8	7.8	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
27	7.80	7.8	7.8	7.8	0.0	7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
28	7.79	7.8	7.8	7.8	0.0	7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
29	7.80	7.8	7.8	7.8	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
30	7.81	7.8	7.8	7.8	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
31	7.81	7.8	7.8	7.8	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL SFD</b>	241.8	241.7	163.8	163.8	0.0	234.8	464.8	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL AF</b>	479.7	479.4	324.9	324.9	0.0							

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

AUGUST 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	Discharge	Website	Requirement/1	Flow	cfs	AF	cfs	cfs	cfs	AF	AF
1	11.6	11.6				7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
2	7.79	7.8				7.1	14.1	0.0	0.0	0.0	0.0	5,000.0
3	7.61	7.6				7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
4	7.64	7.6				7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
5	7.60	7.6				7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
6	7.63	7.6				7.4	14.7	0.0	0.0	0.0	0.0	5,000.0
7	7.63	7.6				7.4	14.7	0.0	0.0	0.0	0.0	5,000.0
8	7.65	7.7				7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
9	7.62	7.6				7.1	14.1	0.0	0.0	0.0	0.0	5,000.0
10	7.58	7.6				7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
11	7.61	7.6		7.6	0.0	7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
12	7.62	7.6		7.6	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
13	7.60	7.6		7.6	0.0	7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
14	7.63	7.6		7.6	0.0	7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
15	7.60	7.6		7.6	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
16	7.61	7.6		7.6	0.0	7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
17	7.63	7.6		7.6	0.0	7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
18	7.62	7.6		7.6	0.0	7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
19	7.63	7.6		7.6	0.0	7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
20	7.61	7.6		7.6	0.0	7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
21	7.65	7.6		7.6	0.0	7.4	14.7	0.0	0.0	0.0	0.0	5,000.0
22	7.59	7.6		7.6	0.0	7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
23	7.59	7.6		7.6	0.0	7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
24	7.58	7.6		7.6	0.0	7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
25	7.61	7.6		7.6	0.0	7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
26	7.57	7.6		7.6	0.0	7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
27	7.60	7.6		7.6	0.0	7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
28	7.60	7.6		7.6	0.0	7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
29	7.58	7.6		7.6	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
30	7.63	7.6		7.6	0.0	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
31	7.61	7.6		7.6	0.0	7.6	15.1	0.0	0.0	0.0	0.0	5,000.0
TOTAL SFD	240.1	239.9	159.6	159.6	0.0	228.0	451.3	0.0	0.0	0.0	0.0	5,000.0
TOTAL AF	476.3	475.8	316.6	316.6	0.0							

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

SEPTEMBER 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	Discharge	Website	Requirement/1	Flow	cfs	AF				AF	AF
1	7.41	7.4				7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
2	7.39	7.4				7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
3	7.41	7.4				7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
4	7.43	7.4				7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
5	7.44	7.4				7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
6	7.40	7.4				7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
7	7.42	7.4				7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
8	7.42	7.4				7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
9	7.41	7.4				7.2	14.2	0.0	0.0	0.0	0.0	5,000.0
10	7.42	7.4				7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
11	7.42	7.4		7.4	0.0	7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
12	7.40	7.4		7.4	0.0	7.3	14.4	0.0	0.0	0.0	0.0	5,000.0
13	7.41	7.4		7.4	0.0	7.1	14.0	0.0	0.0	0.0	0.0	5,000.0
14	7.43	7.4		7.4	0.0	7.1	14.1	0.0	0.0	0.0	0.0	5,000.0
15	7.41	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
16	7.42	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
17	7.42	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
18	7.44	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
19	7.39	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
20	7.43	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
21	7.38	7.4		7.4	0.0	7.2	14.2	0.0	0.0	0.0	0.0	5,000.0
22	7.41	7.4		7.4	0.0	7.2	14.2	0.0	0.0	0.0	0.0	5,000.0
23	7.41	7.4		7.4	0.0	7.2	14.3	0.0	0.0	0.0	0.0	5,000.0
24	7.41	7.4		7.4	0.0	7.3	14.5	0.0	0.0	0.0	0.0	5,000.0
25	7.41	7.4		7.4	0.0	7.4	14.6	0.0	0.0	0.0	0.0	5,000.0
26	7.42	7.4		7.4	0.0	7.4	14.7	0.0	0.0	0.0	0.0	5,000.0
27	7.40	7.4		7.4	0.0	7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
28	7.42	7.4		7.4	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
29	7.44	7.4		7.4	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
30	7.43	7.4		7.4	0.0	7.5	14.9	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL SFD</b>	222.5	222.0	148.0	148.0	0.0	218.9	433.6	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL AF</b>	441.2	440.3	293.6	293.6	0.0							

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

OCTOBER 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	Discharge	Website	Requirement/1	Flow	cfs	AF				AF	AF
1	7.71	7.7	7.7			7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
2	7.74	7.7	7.7			7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
3	7.67	7.6	7.6			7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
4	7.73	7.7	7.7			7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
5	7.72	7.7	7.7			7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
6	7.74	7.7	7.7			7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
7	7.72	7.7	7.7			7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
8	7.72	7.2	7.7			7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
9	7.73	7.3	7.7			7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
10	7.74	7.4	7.7			7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
11	7.71	7.1	7.7	7.7	-0.2	7.5	14.8	0.0	0.0	0.0	0.0	5,000.0
12	7.71	7.7	7.7	7.7	-0.2	7.5	15.1	0.0	0.0	0.0	0.0	5,000.0
13	7.72	7.7	7.7	7.7	-0.2	7.5	15.2	0.0	0.0	0.0	0.0	5,000.0
14	7.73	7.7	7.7	7.7	-0.2	7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
15	7.72	7.7	7.7	7.7	-0.2	7.8	15.5	0.0	0.0	0.0	0.0	5,000.0
16	7.75	7.8	7.7	7.7	-0.2	7.9	15.6	0.0	0.0	0.0	0.0	5,000.0
17	7.73	7.7	7.7	7.7	-0.2	7.9	15.6	0.0	0.0	0.0	0.0	5,000.0
18	7.74	7.7	7.7	7.7	-0.1	7.9	15.6	0.0	0.0	0.0	0.0	5,000.0
19	7.73	7.7	7.7	7.7	-0.1	7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
20	7.72	7.7	7.7	7.7	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
21	7.72	7.7	7.7	7.7	0.0	7.7	15.3	0.0	0.0	0.0	0.0	5,000.0
22	7.70	7.7	7.7	7.7	0.0	7.8	15.4	0.0	0.0	0.0	0.0	5,000.0
23	7.73	7.7	7.7	7.7	0.0	7.8	15.5	0.0	0.0	0.0	0.0	5,000.0
24	7.73	7.7	7.7	7.7	0.0	7.9	15.6	0.0	0.0	0.0	0.0	5,000.0
25	7.71	7.7	7.7	7.7	0.0	7.9	15.7	0.0	0.0	0.0	0.0	5,000.0
26	7.73	7.7	7.7	7.7	0.0	7.9	15.7	0.0	0.0	0.0	0.0	5,000.0
27	7.72	7.7	7.7	7.7	0.0	7.9	15.7	0.0	0.0	0.0	0.0	5,000.0
28	7.74	7.7	7.7	7.7	0.0	7.9	15.7	0.0	0.0	0.0	0.0	5,000.0
29	7.72	7.7	7.7	7.7	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
30	7.74	7.7	7.7	7.7	0.0	7.7	15.2	0.0	0.0	0.0	0.0	5,000.0
31	7.75	8.8	7.8	7.7	0.1	8.7	17.2	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL SFD</b>	239.5	238.0	160.2	161.7	-1.5	240.8	476.7	0.0	0.0	0.0	0.0	5,000.0
<b>TOTAL AF</b>	475.0	472.1	317.8	320.7	-3.0							

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

NOVEMBER 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official	USGS Daily	10-Day Running	Minimum Flow	Running Average	WR-34 Make-Up	Climatic Credit Earned	Input /2	Output	Output	Output	Cumulative
	Discharge	Website	Average of	Maintenance	Less Required	Discharge	cfs	cfs	cfs	cfs	AF	Balance
	cfs	cfs	Website	Requirement /1	Flow	cfs	AF				AF	AF
1	8.80	8.8				8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
2	8.81	8.8				8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
3	8.81	8.8				8.4	16.7	0.0	0.0	0.0	0.0	5,000.0
4	8.83	8.8				8.4	16.7	0.0	0.0	0.0	0.0	5,000.0
5	8.81	8.8				8.4	16.7	0.0	0.0	0.0	0.0	5,000.0
6	8.80	8.8				8.4	16.6	0.0	0.0	0.0	0.0	5,000.0
7	8.78	8.8				8.3	16.5	0.0	0.0	0.0	0.0	5,000.0
8	8.80	8.8				8.4	16.6	0.0	0.0	0.0	0.0	5,000.0
9	8.78	8.8				8.4	16.7	0.0	0.0	0.0	0.0	5,000.0
10	8.82	8.8				8.7	17.2	0.0	0.0	0.0	0.0	5,000.0
11	8.80	8.8		8.8	0.0	8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
12	8.81	8.8		8.8	0.0	8.6	17.0	0.0	0.0	0.0	0.0	5,000.0
13	8.79	8.8		8.8	0.0	8.6	17.0	0.0	0.0	0.0	0.0	5,000.0
14	8.79	8.8		8.8	0.0	8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
15	8.80	8.8		8.8	0.0	8.6	17.1	0.0	0.0	0.0	0.0	5,000.0
16	7.68	7.7		8.8	-0.1	7.6	15.0	0.0	0.0	0.0	0.0	5,000.0
17	4.41	4.4		4.5	3.7	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
18	4.40	4.4		4.5	3.3	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
19	4.38	4.4		4.5	2.9	4.5	9.0	0.0	4.3	8.5	0.0	5,000.0
20	4.39	4.4		4.5	2.4	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
21	4.40	4.4		4.5	2.0	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
22	4.37	4.4		4.5	1.5	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
23	4.36	4.4		4.5	1.1	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
24	4.35	4.4		4.5	0.7	4.5	9.0	0.0	4.3	8.5	0.0	5,000.0
25	4.32	4.3		4.5	0.2	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
26	4.33	4.3		4.5	-0.1	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
27	4.41	4.4		4.5	-0.1	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
28	4.40	4.4		4.5	-0.1	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
29	4.41	4.4		4.5	-0.1	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
30	4.39	4.4		4.5	-0.1	4.5	8.9	0.0	4.3	8.5	0.0	5,000.0
<b>TOTAL SFD</b>	201.0	201.1	133.0	115.8	17.2	198.2	393.0	0.0	60.2	119.0	0.0	5,000.0
<b>TOTAL AF</b>	398.7	398.9	263.8	229.7	34.1							

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.  
 2 - Foregone make-up water credited to groundwater account but cumulative balance did not increase due to account balance maximum of 5,000 AF.

APPENDIX E

SANTA MARGARITA RIVER WATERSHED  
 COOPERATIVE WATER RESOURCE MANAGEMENT AGREEMENT REQUIRED FLOWS AND ACCOUNTS  
 SANTA MARGARITA RIVER NEAR TEMECULA

DECEMBER 2017 - ABOVE NORMAL YEAR

CAMP PENDLETON  
 GROUNDWATER BANK

Day	USGS Official Discharge cfs	USGS Daily Website Discharge cfs	10-Day Running Average of Website Discharge cfs	Minimum Flow Maintenance Requirement/1 cfs	Running Average Less Required Flow cfs	WR-34 Make-Up Discharge cfs	Climatic Credit Earned cfs	AF	Input /2 cfs	Input cfs	Output cfs	Output AF	Cumulative Balance AF
1	4.40	4.4				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
2	4.40	4.4				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
3	4.46	4.4				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
4	4.38	4.4				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
5	4.36	4.4				4.5	0.0	9.0	5.1	10.1	0.0	0.0	5,000.0
6	4.32	4.3				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
7	4.28	4.3				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
8	4.25	4.3				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
9	4.26	4.3				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
10	4.29	4.3				4.5	0.0	8.9	5.1	10.1	0.0	0.0	5,000.0
11	4.60	4.6	4.4	5.3	-0.9	4.8	0.0	9.6	5.1	10.1	0.0	0.0	5,000.0
12	5.11	5.1	4.4	5.3	-0.9	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
13	5.09	5.1	4.5	5.3	-0.8	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
14	5.13	5.1	4.6	5.3	-0.7	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
15	5.12	5.1	4.6	5.3	-0.7	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
16	5.14	5.1	4.7	5.3	-0.6	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
17	5.15	5.2	4.8	5.3	-0.5	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
18	5.14	5.1	4.9	5.3	-0.4	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
19	5.15	5.2	5.0	5.3	-0.3	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
20	5.18	5.2	5.1	5.3	-0.2	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
21	5.17	5.2	5.1	5.3	-0.2	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
22	5.17	5.2	5.1	5.3	-0.2	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
23	5.22	5.2	5.1	5.3	-0.2	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
24	5.27	5.3	5.2	5.3	-0.1	5.3	0.0	10.6	5.1	10.1	0.0	0.0	5,000.0
25	5.31	5.3	5.2	5.3	-0.1	5.3	0.0	10.6	5.1	10.1	0.0	0.0	5,000.0
26	5.26	5.3	5.2	5.3	-0.1	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
27	5.27	5.3	5.2	5.3	-0.1	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
28	5.35	5.4	5.2	5.3	-0.1	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
29	5.28	5.3	5.2	5.3	-0.1	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
30	5.24	5.2	5.3	5.3	0.0	5.3	0.0	10.5	5.1	10.1	0.0	0.0	5,000.0
31	5.23	5.2	5.3	5.3	0.0	5.3	0.0	10.6	5.1	10.1	0.0	0.0	5,000.0
<b>TOTAL SFD</b>	152.0	152.2	104.1	111.3	-7.2	155.8	0.0	309.0	158.1	313.1	0.0	0.0	5,000.0
<b>TOTAL AF</b>	301.4	301.9	206.5	220.8	-14.3								

1 - Minimum Flow Maintenance Requirement equals the Section 5 flow for an Above Normal year.  
 2 - Foregone make-up water credited to groundwater account but cumulative balance did not increase due to account balance maximum of 5,000 AF.

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX B-2**

**2017 REQUESTED MODIFICATIONS FOR  
REQUIRED MINIMUM DAILY FLOWS**





**Robert Heather**

---

**From:** Michael J. Preszler <MPreszler@smrwm.org>  
**Sent:** Friday, November 17, 2017 9:20 AM  
**To:** rheather@smrwm.org  
**Subject:** FW: CWRMA Flow Augmentation at the Gorge for the Remainder of Calendar Year 2017

FYI....

Watermaster - Santa Margarita River Watershed

-----Original Message-----

From: Rich Ottolini [mailto:ottolinir@ranchowater.com]  
Sent: Thursday, November 16, 2017 4:54 PM  
To: Bartu CIV Daniel P <daniel.bartu@usmc.mil>  
Cc: Michael J. Preszler <MPreszler@smrwm.org>; Boughman CIV Paul R <paul.boughman@usmc.mil>; Simpson CIV John O <john.o.simpson@usmc.mil>; Eva Plajzer <plajzere@ranchowater.com>; Kevin Marcoux <marcouxk@ranchowater.com>  
Subject: RE: CWRMA Flow Augmentation at the Gorge for the Remainder of Calendar Year 2017

Dan,

We have received MCB Camp Pendleton's request for reduction of release at WR34 to the Santa Margarita River. RCWD will reduce flows from the above normal rate to below normal rate as outlined in Stetson Engineers Memorandum, dated November 16, 2017. Flow reduction will be as follows

November 17-30	4.5 cfs
December	5.3 cfs

Thanks Rich

Rich Ottolini, R.E.H.S. MSL  
Water Operations Manager  
Rancho California Water District  
(951) 296-6954  
ottolinir@ranchowater.com

-----Original Message-----

From: Bartu CIV Daniel P [mailto:daniel.bartu@usmc.mil]  
Sent: Thursday, November 16, 2017 4:29 PM  
To: Rich Ottolini <ottolinir@ranchowater.com>  
Cc: Michael J. Preszler <MPreszler@smrwm.org>; Boughman CIV Paul R <paul.boughman@usmc.mil>; Simpson CIV John O <john.o.simpson@usmc.mil>; Eva Plajzer <plajzere@ranchowater.com>  
Subject: CWRMA Flow Augmentation at the Gorge for the Remainder of Calendar Year 2017

Rich,

MCB Camp Pendleton would like to minimize CAP credits earned by Rancho California Water District by means of a reduction in CWRMA rates for the rest of the year (November 17 - December 31). The change would go from that of

an above normal to a below normal rate and is outlined in the attached recommendation by Stetson Engineers. Please review and let us know if you agree that it would be beneficial to all parties to make such a change.

Dan Bartu  
Water Resources Division  
MCB CPEN

-----Original Message-----

From: Rich Ottolini [mailto:ottolinir@ranchowater.com]  
Sent: Wednesday, November 15, 2017 9:02 AM  
To: Bartu CIV Daniel P <daniel.bartu@usmc.mil>  
Subject: [Non-DoD Source] RE: CWRMA flow needs

Dan:

Have you come to a decision as to a flow adjustment for the Base? We calculate the current total release at 4,595 acft.

Rich

-----Original Message-----

From: Bartu CIV Daniel P [mailto:daniel.bartu@usmc.mil]  
Sent: Wednesday, November 8, 2017 12:07 PM  
To: Eva Plajzer <plajzere@ranchowater.com>; Rich Ottolini <ottolinir@ranchowater.com>  
Cc: Simpson CIV John O <john.o.simpson@usmc.mil>  
Subject: RE: CWRMA flow needs

Eva,

WRD is reviewing the potential benefit to the Base of a CWRMA flow augmentation applied starting in November and resulting in a lessening of CAP credits.

Dan Bartu

-----Original Message-----

From: Simpson CIV John O  
Sent: Wednesday, November 8, 2017 10:30 AM  
To: Bartu CIV Daniel P <daniel.bartu@usmc.mil>  
Subject: FW: CWRMA flow needs

Respectfully,

John Simpson, D.PPD., P.E.  
Director, Water Resources Division  
Camp Pendleton, CA  
(O) 760-725-1059  
(C) 760-846-2273  
john.o.simpson@usmc.mil

-----Original Message-----

From: Eva Plajzer [mailto:plajzere@ranchowater.com]

Sent: Wednesday, November 08, 2017 8:16 AM

To: Simpson CIV John O

Cc: Rich Ottolini

Subject: [Non-DoD Source] CWRMA flow needs

John,

I left you a message in regards to where we are at with CWRMA flows. We are moving past the 4,000 acre-feet for this calendar year. Based on the Stetson report, we are releasing 8.9 cfs right now and to date have released about 4,359 acre-feet. If we continue at this rate for the rest of the year, we will release about 5,244 ac-ft. This could give us significant CAP credits. We would like to curtail the flows to 3 cfs for the rest of the year if that would be agreeable to Pendleton.

In 2014, we received a request from Pendleton to minimize flows in similar fashion.

Please let us know if you have thoughts on this.

Regards

Eva

RCWD

Page Intentionally Blank



## MEMORANDUM

2171 E. Francisco Blvd., Suite K • San Rafael, California • 94901  
TEL: (415) 457-0701 FAX: (415) 457-1638 e-mail: mollyp@stetsonengineers.com

TO: Dan Bartu, Water Resources Division                      DATE: November 16, 2017  
FROM: Stetson Engineers    JOB NO: 2628-1000-1002  
RE: Flow Augmentation at the Gorge for the Remainder of Calendar Year 2017

Stetson Engineers (Stetson) has reviewed this year's observed flow at the Gorge and augmentation to the Santa Margarita River by the Rancho California Water District (District) as stipulated in the Cooperative Water Resource Management Agreement (CWRMA). District augmentation releases from January 1, 2017 through November 16, 2017 are projected to be 4,630 acre-feet (AF)<sup>1</sup>, consistent with calendar year 2017 Above Normal conditions. Between November 17, 2017 and December 31, 2017, up to 884 AF of water may be required to meet the CWRMA non-winter Section 5 flow requirements for Above Normal hydrologic conditions. Therefore, total augmentation by the District could reach up to 5,514 AF, which would lead to a 1,514 AF CAP credit<sup>2</sup>. CAP credits may then be applied to reduce the winter-time flow requirements of the next two years resulting in a reduction of up to 3.2 cfs per year of winter flow releases in 2018 and 2019.

In order to minimize CAP credits earned by the District and the resulting impact of reduced winter period flows at the Gorge, Stetson recommends foregoing a portion of the Section 5 flow requirement for the remainder of calendar year 2017. Camp Pendleton may request that the District reduce flow augmentation at the Gorge from Above Normal flow requirements to Below Normal flow requirements to minimize future CAP credits.

Table 1 summarizes the current Section 5 flow requirements for Above Normal conditions and the proposed Below Normal flow requirements for the rest of the year. Reducing to Below Normal flow requirements on November 17 will lead to a maximum augmentation release of 5,081 AF, and a maximum CAP credit of 1,081 AF. Both of these amounts may be reduced if precipitation-driven streamflow occurs at the Gorge prior to January 1, 2018.

<sup>1</sup> Releases for January 1 through November 15 from measurements at WR-34 meter; releases for November 16 estimated based on Above Normal flow requirement.

<sup>2</sup> The District earns CAP credit for releases made in excess of 4,000 AF in a calendar year.

**TABLE 1. SUMMARY OF 2017 SECTION 5 FLOW REQUIREMENT AND PROPOSED FLOW REQUIREMENTS FOR THE REMAINDER OF 2017**

Release Period	Section 5 Flow Requirements – Above Normal (current)		Section 5 Flow Requirements – Below Normal (proposed)		Foregone Quantity of Makeup Water
	(cfs)	(AF)	(cfs)	(AF)	(AF)
Jan. 1 – Nov. 16		4,630 <sup>a</sup>		4,630 <sup>a</sup>	
November 17-30	8.8	245	4.5	125	120
December	10.4	639	5.3	326	313
Calendar Year Total <sup>b</sup>		5,514		5,081	433
CAP Credit <sup>c</sup>		1,514 <sup>d</sup>		1,081 <sup>e</sup>	

Notes:

- a. Releases for January 1 through November 15 based on recorded releases at WR-34 meter; Flows for November 16 estimated based on Above Normal flow requirement.
- b. Calendar Year Total and resulting CAP credits may be reduced if precipitation-driven streamflow occurs at the Gorge between now and December 31, 2017.
- c. CAP credit is volume of releases in excess of 4,000 AF in the calendar year. Any earned CAP credits may be applied by the District to reduce winter-time streamflow in 2018 and 2019.
- d. CAP credit of 1,519 AF is equivalent to a 3.2 cfs reduction in winter-time flow requirement during the 2018 and 2019 winter-time periods (January 1 - April 30).
- e. CAP credit of 1,086 AF is equivalent to a 2.3 cfs reduction in winter-time flow requirement during the 2018 and 2019 winter-time periods (January 1 - April 30).

Stetson recommends that Camp Pendleton request that the District reduce releases to meet Below Normal flow requirements beginning November 17, 2017, or as soon as possible, using a three-day ramp down period to reach 4.5 cfs. If you have any questions regarding our recommendation to reduce the CWRMA flow requirement for the remainder of the 2017 calendar year, please feel free to contact us at our Carlsbad office. The flow reduction should benefit all parties of the agreement and satisfy the ecological demands of the Santa Margarita River consistent with Below Normal conditions. Any precipitation-driven streamflow events that occur between today and December 31 will act to reduce or eliminate CAP credits under either the existing or proposed CWRMA flow requirements.

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX C-1**

**PALA PARK GROUNDWATER MONITORING WELL**





## Site Description

### Pala Park Groundwater Monitoring Well (8S/2W-19A1-6)

**LOCATION:** Latitude 33° 28' 19.67", longitude 117° 07' 06.86" (NAD83) in Riverside County, California. Well is located off Temecula Lane just south of Pala Community Park in Temecula, California.

**SITE INFORMATION:** Land-surface altitude is 1016.24 feet above mean sea level (NAVD88).

**WATER-LEVEL RECORD:** The period of record for intermittent and daily water-level measurements is listed below.

State well number	USGS station number	Intermittent water-level	Daily water-level
8S/2W-19A1	332819117070601	09/30/2006 to present	12/27/2006 to present
8S/2W-19A2	332819117070602	09/30/2006 to present	12/27/2006 to present
8S/2W-19A3	332819117070603	09/30/2006 to present	12/27/2006 to present
8S/2W-19A4	332819117070604	09/30/2006 to present	12/27/2006 to present
8S/2W-19A5	332819117070605	09/30/2006 to present	12/27/2006 to present
8S/2W-19A6	332819117070606	12/1/2008 to present	2/19/2009 to present

**TOPOGRAPHIC MAP:** USGS Pechanga, California, 7.5 minute series.

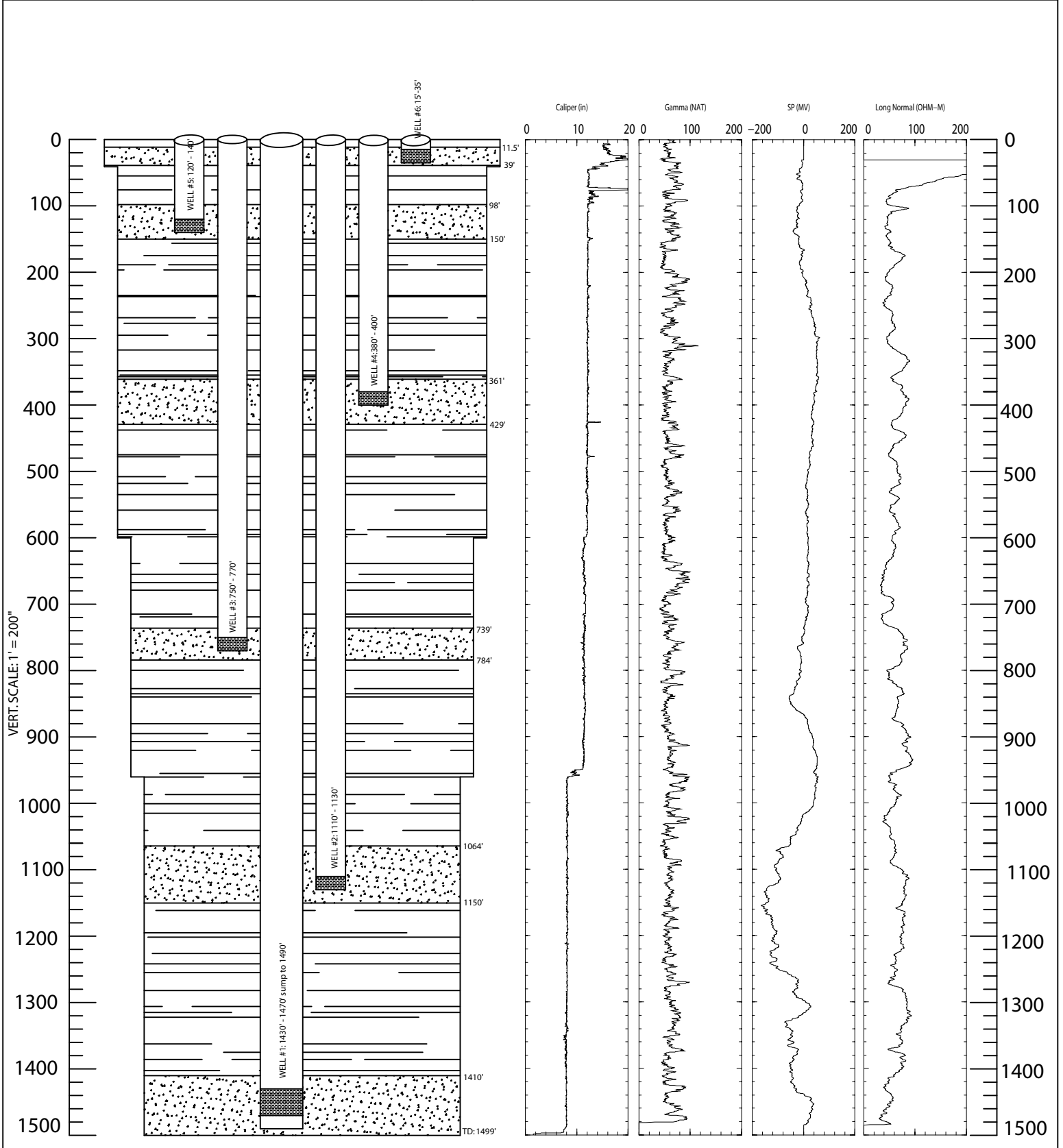
**WELL SUMMARY INFORMATION:**

State well number	USGS station number	Hole depth (ft)	Perforation depth (ft)	Casing size and type	Date drilled
8S/2W-19A1	332819117070601	1499	1430-1470	3" PVC	9/30/06
8S/2W-19A2	332819117070602	1499	1110-1130	2" PVC	9/30/06
8S/2W-19A3	332819117070603	1499	750-770	2" PVC	9/30/06
8S/2W-19A4	332819117070604	1499	380-400	2" PVC	9/30/06
8S/2W-19A5	332819117070605	1499	120-140	2" PVC	9/30/06
8S/2W-19A6	332819117070606	1499	15-35	2" PVC	9/30/06

**ADDITIONAL INFORMATION:**

Additional information for Pala Park Groundwater Monitoring Well can be found in Santa Margarita River Watershed 2007 Annual Watermaster Report including geophysical logs; core, shaker, and sieve lithological logs; and well completion reports. Information can also be found at the following web site: <http://ca.water.usgs.gov/temecula/>.

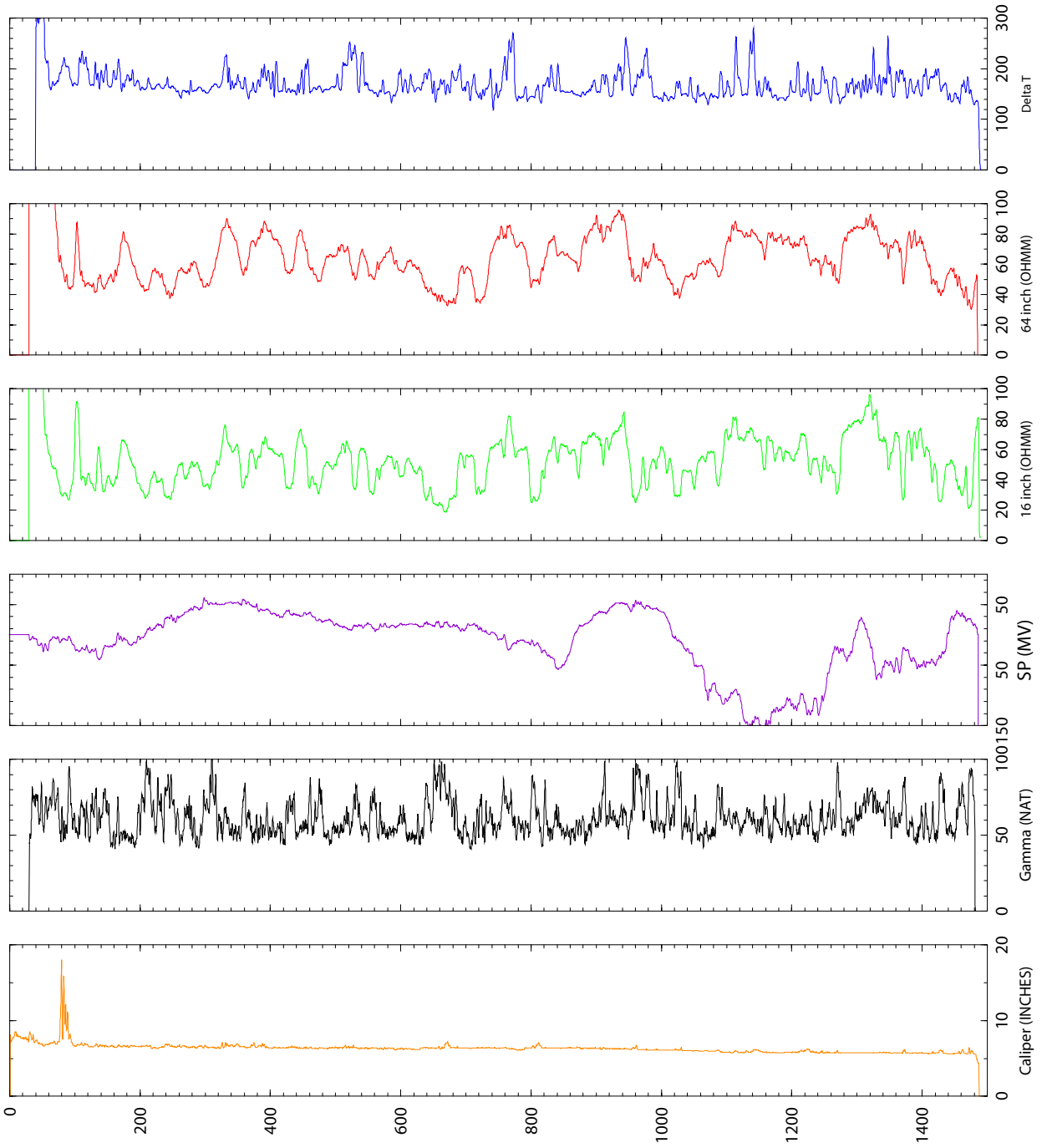
SITE I.D.: 3328191170706 01-06	COMPLETION DATE: 9/30/06
STATION NAME: 08S/02W-19A 01-06	TOTAL DEPTH: 1499'
USGS SITE: TMPP- Temecula Pala Park	WELL FINISH: VAULT
OWNER: Rancho California Water Agency	



DRILL TYPE: HYDRAULIC MUD ROTARY	DRILLER: USGS WESTERN REGION CREW
CASING TYPE: SCHD.80 PVC 20' SEC.	SCREEN TYPE: SCHD.80 1.5"x0.02"SLOTS
GROUT: PUREGOLD GROUT @ 30% SOLIDS	SAND: RMC LONESTAR #3
BOREHOLE DIA: 15":0'- 41'; 12.25":41'-600'; 10.5":600'-960'; 8.5":960'-1499'	C-1 Page 3

# TMPP

## Pacific Surveys Logs



**End-of Month Piezometric Head for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
(elevation in feet, MSL)**

**October 2006 through December 2017**

<b>Month</b>	<b>Well A1</b>	<b>Well A2</b>	<b>Well A3</b>	<b>Well A4</b>	<b>Well A5</b>	<b>Well A6</b>
Oct 06	---	---	---	---	---	---
Nov	---	---	---	---	---	---
Dec	970.21	953.97	944.19	940.78	925.55	---
Jan 07	969.89	953.07	943.31	940.00	922.45	---
Feb	969.68	952.35	942.17	938.89	920.01	---
Mar	969.04	951.26	941.35	937.97	917.71	---
Apr	968.84	950.61	940.37	936.85	922.89	---
May	967.37	948.55	939.28	936.40	918.52	---
Jun	966.56	947.64	939.26	936.53	916.65	---
Jul	966.04	947.62	938.49	935.47	914.84	---
Aug	965.68	947.12	937.37	934.17	912.90	---
Sep	965.39	946.61	936.40	933.08	911.11	---
Oct	965.71	946.51	936.06	932.21	909.40	---
Nov	964.80	945.15	934.01	930.41	907.17	---
Dec	965.43	944.77	934.11	930.75	938.11	---
Jan 08	965.82	944.81	934.92	931.42	---	---
Feb	965.88	944.98	935.58	932.16	989.94	---
Mar	963.78	943.59	934.03	930.95	962.46	---
Apr	963.39	943.15	932.69	929.80	947.48	---
May	963.02	942.36	931.76	928.82	960.12	---
Jun	962.20	941.24	930.79	928.27	944.88	---
Jul	961.59	940.61	930.61	928.07	937.51	---
Aug	961.12	940.10	929.98	927.42	932.44	---
Sep	960.48	939.36	929.45	926.88	927.61	---
Oct	959.97	938.86	928.69	925.98	922.94	---
Nov	960.61	939.25	929.15	926.08	940.57	---
Dec	961.41	939.60	929.68	926.65	975.38	---
Jan 09	960.12	938.38	929.58	927.25	952.55	---
Feb	960.48	939.08	930.62	928.26	982.18	---
Mar	959.58	938.88	931.00	928.77	959.70	---
Apr	959.22	939.16	930.63	928.34	947.76	---
May	958.85	938.80	930.49	928.35	940.85	---
Jun	958.70	939.07	930.44	928.06	936.30	---
Jul	958.07	938.22	929.67	927.63	932.18	---
Aug	957.48	937.81	929.74	927.92	928.57	---
Sep	956.44	937.11	929.67	928.05	925.86	---
Oct	955.94	937.00	930.37	928.85	924.09	---
Nov	955.70	937.27	931.27	929.85	923.54	---
Dec	956.44	938.37	932.63	931.08	947.15	---
Jan 10	958.12	940.62	934.88	932.98	987.33	---
Feb	958.30	941.16	935.99	934.53	1000.20	---
Mar	957.39	941.23	936.94	935.78	973.96	---
Apr	957.31	941.82	936.78	936.37	981.43	---
May	957.13	942.30	937.22	936.81	964.51	---
Jun	957.56	942.96	937.31	937.02	956.53	---
Jul	957.38	943.04	937.35	937.12	950.82	---
Aug	957.68	943.50	937.65	937.39	947.11	---
Sep	957.79	943.75	937.81	937.44	944.16	---
Oct	958.02	943.82	938.09	937.85	958.25	---
Nov	959.06	944.92	939.69	939.11	961.49	---
Dec	960.31	946.27	941.49	941.05	999.57	992.04

**End-of Month Piezometric Head for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
(elevation in feet, MSL)**

**October 2006 through December 2017**

<b>Month</b>	<b>Well A1</b>	<b>Well A2</b>	<b>Well A3</b>	<b>Well A4</b>	<b>Well A5</b>	<b>Well A6</b>
Jan 11	959.48	946.04	942.22	942.24	982.16	---
Feb	959.81	946.94	942.67	943.04	996.72	991.56
Mar	960.32	947.70	943.87	944.55	992.96	990.82
Apr	959.54	947.67	944.28	945.30	979.90	985.07
May	959.49	948.03	944.74	946.07	971.92	---
Jun	960.59	949.74	946.08	946.70	966.51	---
Jul	960.63	950.13	944.62	945.09	959.44	---
Aug	960.72	949.74	943.91	944.55	955.25	---
Sep	960.36	949.05	944.22	945.16	954.00	---
Oct	961.23	949.88	945.92	946.76	957.56	---
Nov	961.88	950.66	947.62	948.63	976.20	---
Dec	961.56	950.93	948.77	950.20	976.65	986.55
Jan 12	962.29	952.43	950.81	951.89	971.73	986.23
Feb	962.58	953.66	950.83	951.88	993.63	989.09
Mar	963.98	955.00	952.20	953.42	995.52	993.88
Apr	963.26	954.66	952.53	955.32	994.18	992.68
May	963.08	955.17	953.43	957.89	989.88	990.66
Jun	963.48	955.95	954.48	959.25	988.40	989.70
Jul	964.07	957.07	955.13	959.35	986.53	989.47
Aug	964.08	957.24	954.48	958.54	982.95	989.34
Sep	964.36	957.66	954.64	958.17	979.23	988.83
Oct	964.53	957.65	955.01	958.37	977.49	988.68
Nov	964.57	957.70	955.86	959.43	977.90	989.80
Dec	966.85	960.15	957.99	961.11	990.99	991.54
Jan 13	967.70	961.35	959.01	962.77	990.23	991.72
Feb	967.29	961.03	959.27	964.54	993.57	993.78
Mar	966.81	961.02	960.51	970.43	993.38	993.86
Apr	966.88	961.71	961.91	972.78	993.23	994.21
May	968.53	963.81	963.40	973.26	992.76	993.69
Jun	969.56	965.24	964.01	973.54	992.79	993.93
Jul	968.74	964.64	963.48	972.67	991.73	992.70
Aug	968.91	964.98	963.18	971.35	989.71	991.21
Sep	968.95	964.73	962.44	969.41	987.51	990.74
Oct	969.06	964.62	962.58	968.55	986.92	990.61
Nov	969.52	964.88	963.18	968.71	988.27	991.07
Dec	969.47	964.82	963.70	969.62	990.15	991.82
Jan 14	969.59	965.27	964.70	972.00	991.37	992.47
Feb	970.44	966.47	966.65	975.30	996.35	993.52
Mar	970.48	966.94	967.84	978.40	996.68	996.80
Apr	971.51	968.64	969.79	979.80	996.73	996.83
May	973.22	970.76	970.39	979.06	995.25	995.15
Jun	974.31	971.64	970.64	978.70	994.55	994.99
Jul	973.96	971.47	969.85	977.12	992.51	992.94
Aug	973.70	971.05	969.05	975.90	990.64	991.55
Sep	973.86	970.96	968.81	974.84	989.22	990.68
Oct	973.85	970.56	967.88	972.86	985.97	989.95
Nov	973.99	970.20	967.63	971.89	982.93	990.18
Dec	975.70	971.26	969.49	977.05	995.09	995.82

**End-of Month Piezometric Head for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
(elevation in feet, MSL)**

**October 2006 through December 2017**

<b>Month</b>	<b>Well A1</b>	<b>Well A2</b>	<b>Well A3</b>	<b>Well A4</b>	<b>Well A5</b>	<b>Well A6</b>
Jan 15	975.30	971.09	970.53	979.01	995.18	995.27
Feb	975.29	971.58	971.03	979.26	994.84	995.22
Mar	974.94	971.51	971.14	979.56	995.19	995.41
Apr	975.29	972.20	971.59	979.40	994.29	994.55
May	976.28	973.32	972.37	979.48	994.82	994.71
Jun	975.99	972.87	970.98	977.87	992.41	993.07
Jul	976.65	973.53	971.38	977.04	990.93	991.69
Aug	976.73	973.08	970.06	975.08	988.39	990.44
Sep	976.55	972.33	969.05	973.30	984.20	990.08
Oct	976.24	971.53	968.75	972.95	987.03	991.13
Nov	976.11	971.31	969.33	973.99	989.68	991.99
Dec	976.86	972.04	970.74	976.67	991.81	993.11
Jan 16	977.55	972.83	972.73	980.88	996.05	996.23
Feb	977.24	973.18	973.17	981.40	996.62	996.87
Mar	977.69	974.13	974.02	982.05	997.06	997.13
Apr	977.86	974.80	973.90	981.01	995.25	995.37
May	977.95	974.93	973.31	979.84	993.42	993.85
Jun	977.98	974.64	972.07	978.07	991.67	992.56
Jul	979.27	975.80	972.78	977.29	989.21	990.37
Aug	978.59	974.42	970.65	974.20	---	989.05
Sep	978.33	973.65	969.68	972.29	978.68	988.47
Oct	978.34	973.14	969.41	971.30	976.17	988.20
Nov	978.68	973.05	969.24	970.78	974.79	987.98
Dec	979.35	973.09	969.88	972.42	996.47	995.75
Jan 17	979.75	973.59	972.72	981.34	1001.30	1000.70
Feb	980.53	974.97	974.38	982.64	1008.39	1003.32
Mar	979.46	974.53	974.61	983.52	999.38	999.34
Apr	979.32	975.09	975.18	983.38	998.04	997.87
May	979.61	975.93	975.42	982.96	997.39	997.44
Jun	979.74	976.30	974.74	981.54	995.83	996.06
Jul	979.88	976.46	974.38	980.33	993.42	993.83
Aug	980.24	976.24	973.87	980.01	993.41	994.38
Sep	979.93	976.04	973.85	979.34	992.11	992.69
Oct	979.76	975.85	973.28	978.00	989.75	991.40
Nov	979.45	975.08	971.46	975.81	985.56	990.49
Dec	980.81	975.66	972.07	975.70	983.33	990.23

Notes:

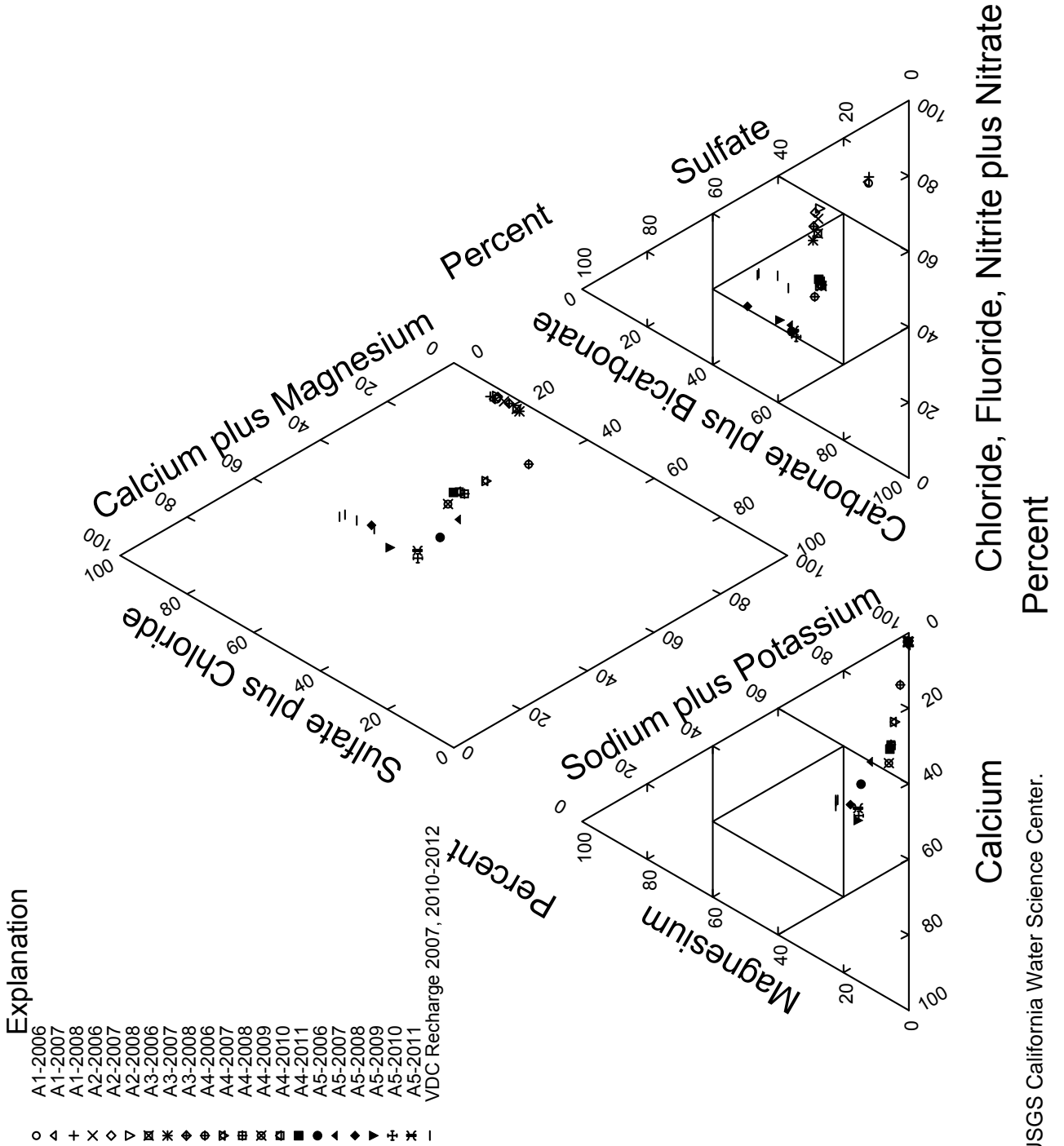
- (1) Data reported as 12:00 PM reading for period December 2006 through September 2010.
- (2) Data reported as daily median value for period October 2010 to present.

Source: USGS California Water Science Center.

Page Intentionally Blank



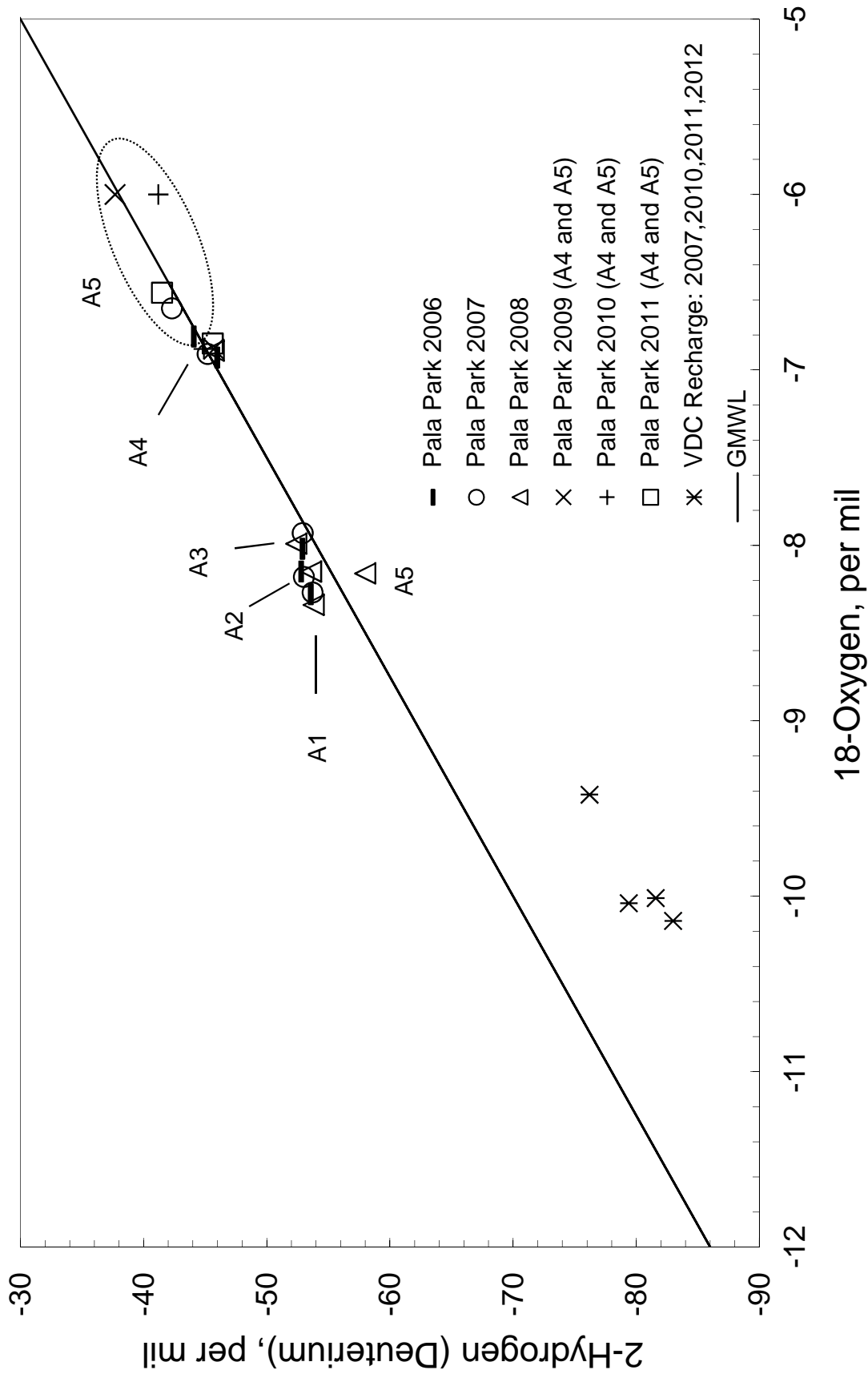
# Tri-Linear Diagram Pala Park Well (8S/2W-19A1-6)



Source: USGS California Water Science Center.

# Stable Isotope Diagram

## Pala Park Monitoring Wells



Source: USGS California Water Science Center.

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
November 2006**

Code	Parameter	MCL	Well A1 11/8/2006	Well A2 11/2/2006	Well A3 11/1/2006	Well A4 11/6/2006	Well A5 11/8/2006
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius		22.3	20.5	21.4	22.9	20.8
28	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		665	821	750	831	687
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		M	M	M	M	0.0002
300	Dissolved oxygen, water, unfiltered, milligrams per liter		0.40	0.29	0.30	0.53	6.2
400	pH, water, unfiltered, field, standard units		9.4	9.7	9.4	8.6	7.8
403	pH, water, unfiltered, laboratory, standard units		9.5	9.7	9.4	8.6	8
602	Total nitrogen, water, filtered, milligrams per liter				0.14 E	0.14 E	2.7
607	Organic nitrogen, water, filtered, milligrams per liter			0.08	0.04 E	0.05 E	
608	Ammonia, water, filtered, milligrams per liter as nitrogen		0.028	0.041	0.046	0.041	< 0.020
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)		0.010	0.011	0.008	0.004
618	Nitrate, water, filtered, milligrams per liter as nitrogen				0.04 E	0.04 E	2.59
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen			0.12	0.09 E	0.09 E	0.13
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen			< 0.06	0.05 E	0.05 E	2.60
660	Orthophosphate, water, filtered, milligrams per liter			2.41	3.33	1.88	0.741
666	Phosphorus, water, filtered, milligrams per liter			1.02	1.32	0.67	0.33
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			0.785	1.08	0.614	0.242
900	Hardness, water, milligrams per liter as calcium carbonate		8	9	8	57	160
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						
915	Calcium, water, filtered, milligrams per liter		3.14	3.32	2.62	18.7	44.9
925	Magnesium, water, filtered, milligrams per liter		0.106	0.058	0.288	2.45	12.1
930	Sodium, water, filtered, milligrams per liter		127	152	138	145	81.4
931	Sodium adsorption ratio, water, number		19	23	22	8.4	2.8
932	Sodium fraction of cations, water, percent in equivalents of major cations		97	97	97	84	52
935	Potassium, water, filtered, milligrams per liter		0.62	0.96	1.26	2.39	2.10
940	Chloride, water, filtered, milligrams per liter	600	138	131	112	87.1	40.1
945	Sulfate, water, filtered, milligrams per liter	600	34.1	95.3	84.7	102	110
950	Fluoride, water, filtered, milligrams per liter	2 (b)	4.56	4.18	1.09	0.38	0.42
955	Silica, water, filtered, milligrams per liter	10 (c)	17.3	19.0	14.6	17.2	28.3
1000	Arsenic, water, filtered, micrograms per liter		25.7	20.4	17.1	6.0	2.4
1005	Barium, water, filtered, micrograms per liter	1000 (d)	2.9	2.6	2.3	10.4	31.9
1010	Beryllium, micrograms per liter	4 (e)					
1020	Boron, water, filtered, micrograms per liter		128	138	97	120	150
1025	Cadmium, micrograms per liter	5 (f)					
1030	Chromium, micrograms per liter	50 (g)					
1035	Cobalt, micrograms per liter						
1040	Copper, micrograms per liter	1000 (h)					
1046	Iron, water, filtered, micrograms per liter	300	< 6	3 E	3 E	< 6	< 6
1049	Lead, micrograms per liter						
1056	Manganese, water, filtered, micrograms per liter	50	0.5 E	0.7	1.6	7.6	1.7
1057	Thallium, micrograms per liter	2 (i)					
1060	Molybdenum, micrograms per liter						
1065	Nickel, micrograms per liter	100 (j)					
1075	Silver, micrograms per liter	100 (k)					
1080	Strontium, water, filtered, micrograms per liter		23.0	16.8	17.8	161	202
1085	Vanadium, micrograms per liter						
1090	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	95.3	127	82.4	54.3	4.1
1130	Lithium, water, filtered, micrograms per liter		4	5	4	7	6
1145	Selenium, micrograms per liter	50 (o)					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
November 2006**

Code	Parameter	MCL	Well A1 11/8/2006	Well A2 11/2/2006	Well A3 11/1/2006	Well A4 11/6/2006	Well A5 11/8/2006
	Sampling date						
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter					< 0.01	< 0.01
4025	Hexazinone, water, filtered, recoverable, micrograms per liter					< 0.026	< 0.026
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter					< 0.006	0.036
4036	Prometryn, water, filtered, recoverable, micrograms per liter					< 0.006	< 0.006
4037	Prometon, water, filtered, recoverable, micrograms per liter					< 0.01	< 0.01
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter					< 0.014	< 0.014
4095	Fonofos, water, filtered, recoverable, micrograms per liter		-0.19	0.35	0.45	< 0.006	< 0.006
7000	Tritium, water, unfiltered, picocuries per liter					0.58	11.14
22703	Uranium, natural, micrograms per liter						
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		50	65	74	165	168
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.08	< 0.08
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	0.03 E
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150				< 0.02	< 0.02
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1				< 0.02	< 0.02
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter						
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70				< 0.02	< 0.02
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300				< 0.02	< 0.02
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
34409	Isophorone, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150				< 0.08	< 0.08
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5				< 0.06	< 0.06
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6				< 0.02	< 0.02
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200				< 0.04	< 0.04
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1				< 0.10	< 0.10
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600				< 0.04	< 0.04
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5				< 0.02	< 0.02
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10				< 0.02	< 0.02
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5				< 0.1	< 0.1
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter						
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter					< 0.14	< 0.14

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
November 2006**

Code	Parameter	MCL	Well A1 11/8/2006	Well A2 11/2/2006	Well A3 11/1/2006	Well A4 11/6/2006	Well A5 11/8/2006
	Sampling date						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.1	< 0.1
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.06	< 0.06
38454	Dicrotophos, water, filtered, recoverable, micrograms per liter					< 0.08	< 0.08
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter					< 0.01	< 0.01
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					< 0.005	< 0.005
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate		61				
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.1	< 0.1
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5				< 0.02	< 0.02
39381	Dieldrin, water, filtered, recoverable, micrograms per liter					< 0.009	< 0.009
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					< 0.010	< 0.010
39532	Malathion, water, filtered, recoverable, micrograms per liter					< 0.016	< 0.016
39572	Diazinon, water, filtered, recoverable, micrograms per liter					< 0.005	< 0.005
39632	Atrazine, water, filtered, recoverable, micrograms per liter					< 0.007	< 0.007
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
46342	Alachlor, water, filtered, recoverable, micrograms per liter					< 0.005	< 0.005
49260	Acetochlor, water, filtered, recoverable, micrograms per liter					< 0.006	< 0.006
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.09	< 0.09
49933	C-14, water, filtered, percent modern			17.27	13.56		
49934	C-14, counting error, water, filtered, percent modern					63.16	
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter					< 0.053	< 0.053
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter					< 0.046	< 0.046
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter					< 0.03	< 0.03
61593	Iprodione, water, filtered, recoverable, micrograms per liter					< 0.026	< 0.026
61594	Isofenphos, water, filtered, recoverable, micrograms per liter					< 0.011	< 0.011
61596	Metaxyl, water, filtered, recoverable, micrograms per liter					< 0.007	< 0.007
61598	Methidathion, water, filtered, recoverable, micrograms per liter					< 0.009	< 0.009
61599	Myclobutaniil, water, filtered, recoverable, micrograms per liter					< 0.033	< 0.033
61601	Phosmet, water, filtered, recoverable, micrograms per liter					< 0.008	< 0.008
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					< 0.035	< 0.035
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter					< 0.006	< 0.006
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter					< 0.01	< 0.01
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter					< 0.004	< 0.004
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter					< 0.005	< 0.005
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.04	< 0.04
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.06	< 0.06
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter					< 0.02	< 0.02
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter					< 0.053	< 0.053
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter					< 0.04	< 0.04
61652	Malaoxon, water, filtered, recoverable, micrograms per liter					< 0.039	< 0.039
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter					< 0.02	< 0.02
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.03	< 0.03
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.05	< 0.05
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter					< 0.04	< 0.04

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
November 2006**

Code	Parameter	MCL	Well A1 11/8/2006	Well A2 11/2/2006	Well A3 11/1/2006	Well A4 11/6/2006	Well A5 11/8/2006
	Sampling date						
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monoethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter						
63790	Perchlorate, water, filtered, recoverable, micrograms per liter						
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	360	473	416	493	433
70301	Residue, water, filtered, sum of constituents, milligrams per liter		356 E	446 E	404 E	477 E	433
70303	Residue, water, filtered, tons per acre-foot		0.04	0.05	0.06	0.05	
71846	Ammonia, water, filtered, milligrams per liter as NH4						
71851	Nitrate, water, filtered, milligrams per liter	45 (q)			0.184 E	0.174 E	11.5

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
November 2006**

Code	Parameter	MCL	Well A1 11/8/2006	Well A2 11/2/2006	Well A3 11/1/2006	Well A4 11/6/2006	Well A5 11/8/2006
	Sampling date						
71856	Nitrite, water, filtered, milligrams per liter			0.032	0.038	0.025	0.012
71865	Iodide, water, filtered, milligrams per liter		0.310	0.517	0.390	0.025	0.003
71870	Bromide, water, filtered, milligrams per liter		0.31	0.42	0.37	0.028	0.06
72019	Depth to water level, feet below land surface		46.61	60.97	70.00	73.36	83.74
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter					< 0.6	< 0.6
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		0.58	0.58	0.58	0.58	0.70
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
77041	Carbon disulfide, water, unfiltered, micrograms per liter					0.10	< 0.06
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6				< 0.02	< 0.02
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100				< 0.04	< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter					< 0.40	< 0.40
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.12	< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05				< 0.04	< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.2	< 0.2
81552	Acetone, water, unfiltered, recoverable, micrograms per liter					< 6	< 6
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.02	< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 1.6	< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.2	< 0.2
82081	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter					< 1	< 1
82082	C-13/C-12 ratio, water, unfiltered, per mil			-16.29	-16.37	-10.71	
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-53.60	-52.80	-46.00	-46.00	-44.10
82303	Rn-222, water, unfiltered, picocuries per liter		-8.28	-8.15	-8.02	-6.93	-6.81
82346	Ethion, water, filtered, recoverable, micrograms per liter					< 0.016	< 0.016
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.5	< 0.5
82630	Metribuzin, water, filtered, recoverable, micrograms per liter					< 0.012	< 0.012

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
November 2006**

Code	Parameter	MCL	Well A1 11/8/2006	Well A2 11/2/2006	Well A3 11/1/2006	Well A4 11/6/2006	Well A5 11/8/2006
	Sampling date						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.006	< 0.006
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.009	< 0.009
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.006	< 0.006
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.02	< 0.02
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.008	< 0.008
82670	Tebuuthuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.02	< 0.02
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.01	< 0.01
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.01	< 0.01
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.004	< 0.004
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.06	< 0.06
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.003	< 0.003
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.02	< 0.02
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.08	< 0.08
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.01	< 0.01
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		647	820	727	810	674
90851	Triholoethanes, water, unfiltered, calcd, micrograms per liter						M
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					126	136
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					89.8	92.5
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					62.5	62.3
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					120	119
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					93.5	93.1

Notes:

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.



**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
September 2007**

Code	Parameter	MCL	Well A1 9/27/2007	Well A2 9/20/2007	Well A3 9/25/2007	Well A4 9/25/2007	Well A5 9/20/2007
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius		25.5	21.0	21.1	21.1	21.0
28	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		653	789	786	686	685
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		M	M	M	0.00001	0.00001
300	Dissolved oxygen, water, unfiltered, milligrams per liter		< 0.2	< 0.2	0.1	0.1	5.7
400	pH, water, unfiltered, field, standard units		9.5	9.4	9.1	8.3	7.9
403	pH, water, unfiltered, laboratory, standard units		9.6	9.4	9.2	8.3	7.9
602	Total nitrogen, water, filtered, milligrams per liter						
607	Organic nitrogen, water, filtered, milligrams per liter						
608	Ammonia, water, filtered, milligrams per liter as nitrogen		0.026	0.021	0.051	0.031	< 0.020
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.002	< 0.002	< 0.002	< 0.002	0.002
618	Nitrate, water, filtered, milligrams per liter as nitrogen						2.12
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen						
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		< 0.06	< 0.06	< 0.06	< 0.06	2.12
660	Orthophosphate, water, filtered, milligrams per liter		0.066	1.41	6.03	1.02	3.07
666	Phosphorus, water, filtered, milligrams per liter						
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.021	0.459	1.97	0.332	1.00
900	Hardness, water, milligrams per liter as calcium carbonate		10	8	10	89	130
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						
915	Calcium, water, filtered, milligrams per liter		3.87	2.87	3.64	29.5	38.0
925	Magnesium, water, filtered, milligrams per liter		0.029	0.078	0.337	3.56	9.29
930	Sodium, water, filtered, milligrams per liter		132	151	169	116	90.7
931	Sodium adsorption ratio, water, number		18	24	23	5.3	3.4
932	Sodium fraction of cations, water, percent in equivalents of major cations		97	97	97	73	59
935	Potassium, water, filtered, milligrams per liter		0.33	0.76	1.39	2.32	2.58
940	Chloride, water, filtered, milligrams per liter	600	133	131	121	80.8	44.1
945	Sulfate, water, filtered, milligrams per liter	600	33.3	95.2	101	79.9	108
950	Fluoride, water, filtered, milligrams per liter	2 (b)	4.42	3.44	0.92	0.28	0.31
955	Silica, water, filtered, milligrams per liter		18.2	17.6	14.8	17.7	24.3
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	31.3	18.7	13.1	4.5	4.0
1005	Barium, water, filtered, micrograms per liter	1000 (d)	4	3	3	14	22
1010	Beryllium, micrograms per liter	4 (e)	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
1020	Boron, water, filtered, micrograms per liter		102	158	147	153	143
1025	Cadmium, micrograms per liter	5 (f)	0.35	0.49	0.31	0.03 E	0.02 E
1030	Chromium, micrograms per liter	50 (g)	0.09 E	0.31	0.2	0.21	1.10
1035	Cobalt, micrograms per liter		< 0.04	< 0.04	0.04 E	0.03 E	0.08
1040	Copper, micrograms per liter	1000 (h)	< 0.4	0.22 E	0.70	0.87	1.70
1046	Iron, water, filtered, micrograms per liter	300	3 E	< 6	10	4 E	< 6
1049	Lead, micrograms per liter		< 0.12	< 0.12	0.08 E	< 0.12	< 0.12
1056	Manganese, water, filtered, micrograms per liter	50	0.4	0.9	2.8	12.4	0.7
1057	Thallium, micrograms per liter	2 (i)	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1060	Molybdenum, micrograms per liter		208	251	208	11.5	6.8
1065	Nickel, micrograms per liter	100 (j)	0.07	0.19	0.46	0.26	0.73
1075	Silver, micrograms per liter	100 (k)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1080	Strontium, water, filtered, micrograms per liter		28.1	17.3	20.3	257	201
1085	Vanadium, micrograms per liter		78.6	32.2	7.3	1.1	21.5
1090	Zinc, micrograms per liter	5000 (l)	< 0.6	0.70	0.70	1.0	2.8
1095	Antimony, micrograms per liter	6 (m)	0.06 E	0.11	0.17	0.04 E	0.07
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	43.1	100	139	27.0	3.3
1130	Lithium, water, filtered, micrograms per liter		2.0	4.0	2.7	6.8	5.1
1145	Selenium, micrograms per liter	50 (o)	< 0.08	0.08	0.09	0.05 E	7.5

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
September 2007**

Code	Parameter	MCL	Well A1 9/27/2007	Well A2 9/20/2007	Well A3 9/25/2007	Well A4 9/25/2007	Well A5 9/20/2007
	Sampling date						
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter		0.6	0.3	-0.6	0.3	8.3
7000	Tritium, water, unfiltered, picocuries per liter		0.06	0.13	0.43	2.17	2.16
22703	Uranium, natural, micrograms per liter		46	58	92	132	158
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.02	< 0.04	< 0.04	< 0.04	0.04 V
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150	< 0.02	0.04 E	0.04 E	< 0.02	< 0.02
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1	< 0.02	0.03 E	0.02 E	< 0.02	< 0.02
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	0.1 E	< 0.1	< 0.1
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300	< 0.04	< 0.02	< 0.02	< 0.02	< 0.02
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	0.6 E	< 0.1	< 0.1
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.06	< 0.06	< 0.06	< 0.06
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200	< 0.02	< 0.04	< 0.04	< 0.04	< 0.04
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.06	< 0.04	< 0.04	< 0.04	< 0.04
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600	< 0.02	< 0.04	< 0.04	< 0.04	< 0.04
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.02	< 0.04	< 0.04	< 0.04	< 0.04
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter						
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
September 2007**

Code	Parameter	MCL	Well A1 9/27/2007	Well A2 9/20/2007	Well A3 9/25/2007	Well A4 9/25/2007	Well A5 9/20/2007
	Sampling date						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.4	< 0.4	< 0.4	< 0.4
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.10	< 0.06	< 0.06	< 0.06	< 0.06
38454	Dicofthos, water, filtered, recoverable, micrograms per liter						
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate						
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern						
49934	C-14, counting error, water, filtered, percent modern		3.44	17.52	17.52	67.68	88.09
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter		0.12	0.22	0.22	0.31	0.37
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.6	< 0.4	< 0.4	< 0.4	< 0.4
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.04	< 0.04	< 0.04	< 0.04
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metolaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6	< 0.5	< 0.5	< 1	< 1	< 0.5
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isofenphos, water, filtered, recoverable, micrograms per liter						
61596	Metolaxyl, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfide, water, filtered, recoverable, micrograms per liter						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter						
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
September 2007**

Code	Parameter	MCL	Well A1 9/27/2007	Well A2 9/20/2007	Well A3 9/25/2007	Well A4 9/25/2007	Well A5 9/20/2007
	Sampling date						
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monoethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter		0.04 E	0.06	0.11	0.04 E	2.21
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6	< 0.1	0.7	0.26	< 0.1	0.23
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	358	460	471	397	429
70301	Residue, water, filtered, sum of constituents, milligrams per liter		354 E	439 E	475 E	410 E	425 E
70303	Residue, water, filtered, tons per acre-foot						
71846	Ammonia, water, filtered, milligrams per liter as NH4		0.03	0.03	0.07	0.04	9.37
71851	Nitrate, water, filtered, milligrams per liter	45 (q)					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
September 2007**

Code	Parameter	MCL	Well A1 9/27/2007	Well A2 9/20/2007	Well A3 9/25/2007	Well A4 9/25/2007	Well A5 9/20/2007
	Sampling date						
71856	Nitrite, water, filtered, milligrams per liter						0.008
71865	Iodide, water, filtered, milligrams per liter						
71870	Bromide, water, filtered, milligrams per liter		0.31	0.40	0.36	0.26	0.12
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter		< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		1.0	1.0	1.0	1.0	1.0
76002	Rn-222 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		20	21	18	19	21
77041	Carbon disulfide, water, unfiltered, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.06	< 0.06	< 0.02	< 0.02	< 0.02
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.6	< 0.4	< 0.4	< 0.4	< 0.4
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	0.02 E	0.02 E	< 0.04	0.03 E
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.08	< 0.08	< 0.08	< 0.08
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter		< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.2	< 0.2	< 0.2	< 0.2
81552	Acetone, water, unfiltered, recoverable, micrograms per liter		< 4	< 6	< 6	< 6	< 6
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.77	< 0.06	< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.4	< 0.4	< 0.4	< 0.4
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
82081	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1	< 1
82081	C-13/C-12 ratio, water, unfiltered, per mil		-19.11	< 1	< 1	< 1	< 1
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-53.70	-53.00	-14.90	-14.87	-15.57
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-8.27	-8.18	-52.90	-45.20	-42.30
82303	Rn-222, water, unfiltered, picocuries per liter		320	270	200	210	280
82346	Ethion, water, filtered, recoverable, micrograms per liter						
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
82630	Metribuzin, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
September 2007**

Code	Parameter	MCL	Well A1 9/27/2007	Well A2 9/20/2007	Well A3 9/25/2007	Well A4 9/25/2007	Well A5 9/20/2007
	Sampling date						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuuthuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		667	794	805	694	686
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter						M
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery		127	130	134	133	131
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery		93.6	95.0	96.8	97.6	93.6
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery		71.0	72.1	73.4	73.9	73.8
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
April 2008**

Code	Parameter	MCL	Well A1 4/22/2008	Well A2 4/23/2008	Well A3 4/23/2008	Well A4 4/23/2008	Well A5 4/23/2008
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius		22.4	24.9	24.4	22.5	20.1
28	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		656	772	756	670	642
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		M	M	M	0.00001	0.00003 E
300	Dissolved oxygen, water, unfiltered, milligrams per liter						
400	pH, water, unfiltered, field, standard units		9.2	9.3	9.3	8.1	7.6
403	pH, water, unfiltered, laboratory, standard units		9.6	9.5	9.3	8.2	7.7
602	Total nitrogen, water, filtered, milligrams per liter						2.5 E
607	Organic nitrogen, water, filtered, milligrams per liter				0.05 E		
608	Ammonia, water, filtered, milligrams per liter as nitrogen		0.027	0.029	0.045	0.023	< 0.020
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.002	< 0.002	0.002 E	< 0.002	< 0.002
618	Nitrate, water, filtered, milligrams per liter as nitrogen						
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		< 0.14	< 0.14	0.09 E	< 0.14	0.08 E
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		< 0.04	< 0.04	< 0.04	< 0.04	2.41
660	Orthophosphate, water, filtered, milligrams per liter		0.044	0.771	1.78	1.29	0.533
666	Phosphorus, water, filtered, milligrams per liter		< 0.04	0.24	0.56	0.41	0.17
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.014	0.251	0.579	0.420	0.174
900	Hardness, water, milligrams per liter as calcium carbonate		9 E	7	7	100	160
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						61
915	Calcium, water, filtered, milligrams per liter		3.48	2.60	2.58	33.0	44.2
925	Magnesium, water, filtered, milligrams per liter		0.014 E	0.079	0.180	4.13	13.1
930	Sodium, water, filtered, milligrams per liter		119	144	141	94.0	61.8
931	Sodium adsorption ratio, water, number		18 E	24	23	4.1	2.1
932	Potassium fraction of cations, water, percent in equivalents of major cations		97 E	98	97	67	45
935	Potassium, water, filtered, milligrams per liter		0.33	0.72	0.99	2.17	1.99
940	Chloride, water, filtered, milligrams per liter	600	140	130	118	79.8	36.9
945	Sulfate, water, filtered, milligrams per liter	600	33.3	86.5	90.5	76.4	141
950	Fluoride, water, filtered, milligrams per liter	2 (b)	4.62	3.39	0.94	0.29	0.39
955	Silica, water, filtered, milligrams per liter	10 (c)	19.3	18.4	14.1	18.1	28.6
1000	Arsenic, water, filtered, micrograms per liter		31.2	19.3	13.1	4.7	1.1
1005	Barium, water, filtered, micrograms per liter	1000 (d)	4.7	4.0	2.3	14.9	40.8
1010	Beryllium, micrograms per liter	4 (e)					
1020	Boron, water, filtered, micrograms per liter		125	130	91	98	120
1025	Cadmium, micrograms per liter						
1030	Chromium, micrograms per liter	5 (f)					
1035	Cobalt, micrograms per liter	50 (g)					
1040	Copper, micrograms per liter						
1046	Iron, water, filtered, micrograms per liter	1000 (h)					
1049	Lead, micrograms per liter	300	< 8	9	< 8	5 E	< 8
1056	Manganese, water, filtered, micrograms per liter	50	0.4	1.5	1.0	16.4	0.5
1057	Thallium, micrograms per liter	2 (i)					
1060	Molybdenum, micrograms per liter						
1065	Nickel, micrograms per liter	100 (j)					
1075	Silver, micrograms per liter	100 (k)					
1080	Strontium, water, filtered, micrograms per liter		27.3	18.1	19.4	299	226
1085	Vanadium, micrograms per liter						
1090	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	35.6	115	87.8	10.8	1.4 E
1130	Lithium, water, filtered, micrograms per liter		5	5	4	8	6
1145	Selenium, micrograms per liter	50 (o)					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
April 2008**

Code	Parameter	MCL	Well A1 4/22/2008	Well A2 4/23/2008	Well A3 4/23/2008	Well A4 4/23/2008	Well A5 4/23/2008
	Sampling date						
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter					< 0.4	< 0.4
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter		-0.35	-0.13	0.32	0.26	10.78
7000	Tritium, water, unfiltered, picocuries per liter						
22703	Uranium, natural, micrograms per liter		46	56	68	129	108
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate					< 0.04	< 0.04
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.1	< 0.1
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.02	0.04 E
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150				< 0.02	< 0.02
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1				< 0.02	< 0.02
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
34221	Anthracene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter	0.2 (p)				< 0.1	< 0.1
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70				< 0.02	< 0.02
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300				< 0.04	< 0.04
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
34409	Isophorone, water, filtered, recoverable, micrograms per liter					M	M
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34443	Naphthalene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34466	Phenol, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
34470	Pyrene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150				< 0.08	< 0.08
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5				< 0.04	< 0.04
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6				< 0.02	< 0.02
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200				< 0.02	< 0.02
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5				< 0.06	< 0.06
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1				< 0.10	< 0.10
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600				< 0.02	< 0.02
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5				< 0.02	< 0.02
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10				< 0.02	< 0.02
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5				< 0.1	< 0.1
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5				< 0.02	< 0.02
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter					< 0.14	< 0.14



**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
April 2008**

Code	Parameter	MCL	Well A1 4/22/2008	Well A2 4/23/2008	Well A3 4/23/2008	Well A4 4/23/2008	Well A5 4/23/2008
	Sampling date						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter					< 0.2	< 0.2
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.10	< 0.10
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.10	< 0.10
38454	Dicofthos, water, filtered, recoverable, micrograms per liter						
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate		43	52	68	122	104
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5				< 0.1	< 0.1
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5				< 0.02	< 0.02
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern		2.91	14.29		69.32	88.12
49934	C-14, counting error, water, filtered, percent modern		0.11	0.21		0.35	0.41
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter					< 0.6	< 0.6
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
50305	Caffeine, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
50359	Metaxyl, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isofenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaxyl, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutaniil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfide, water, filtered, recoverable, micrograms per liter						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter						
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
April 2008**

Code	Parameter	MCL	Well A1 4/22/2008	Well A2 4/23/2008	Well A3 4/23/2008	Well A4 4/23/2008	Well A5 4/23/2008
	Sampling date						
61705	Diethoxydiphenol, water, filtered, recoverable, micrograms per liter					< 1	< 1
61706	Monoethoxydiphenol, water, filtered, recoverable, micrograms per liter					< 1	< 1
62005	Cotinine, water, filtered, recoverable, micrograms per liter					< 0.400	< 0.400
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62058	3-Methyl-1H-Indole, water, filtered, recoverable, micrograms per liter					< 0.08	< 0.08
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter					< 0.6	< 0.6
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter					< 0.16	< 0.16
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter					< 1	< 1
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter					< 0.08	< 0.08
62064	Acetophenone, water, filtered, recoverable, micrograms per liter					< 0.4	< 0.4
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62067	Benzophenone, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter					< 2	< 2
62070	Camphor, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62071	Carbazole, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62072	Cholesterol, water, filtered, recoverable, micrograms per liter					< 1	< 1
62073	D-Limonene, water, filtered, recoverable, micrograms per liter					< 0.04	< 0.04
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter					< 0.5	< 0.5
62076	Indole, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62077	Isoborneol, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62080	Menthol, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62082	DEET, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter					< 5	< 5
62084	p-Cresol, water, filtered, recoverable, micrograms per liter					< 0.18	< 0.18
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter					< 1	< 1
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter					< 1	< 1
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62090	Triclosan, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter					< 0.2	< 0.2
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter					< 0.1	< 0.1
62166	Fipronil, water, filtered, recoverable, micrograms per liter					< 0.4	< 0.4
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter						
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6					
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	356	437	430	407	429
70301	Residue, water, filtered, sum of constituents, milligrams per liter		347 E	419	412 E	383 E	402 E
71846	Residue, water, filtered, milligrams per liter as NH4		0.04	0.04	0.06	0.03	
71851	Nitrate, water, filtered, milligrams per liter	45 (q)					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
April 2008**

Code	Parameter	MCL	Well A1 4/22/2008	Well A2 4/23/2008	Well A3 4/23/2008	Well A4 4/23/2008	Well A5 4/23/2008
	Sampling date						
71856	Nitrite, water, filtered, milligrams per liter				0.006 E		
71865	Iodide, water, filtered, milligrams per liter		0.399	0.666	0.489	0.025	0.005
71870	Bromide, water, filtered, milligrams per liter		0.33	0.40	0.38	0.27	0.06
72019	Depth to water level, feet below land surface		53.42	72.96	83.30	86.32	66.09
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter					< 0.6	< 0.6
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		0.58	0.58	0.58	0.58	0.64
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					< 0.06	< 0.06
77041	Carbon disulfide, water, unfiltered, micrograms per liter					< 0.02	< 0.02
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6				< 0.6	< 0.6
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100				< 0.04	< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.12	< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05				< 0.04	< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04	< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.08	< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.4	< 0.4
81552	Acetone, water, unfiltered, recoverable, micrograms per liter					< 4	< 4
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.02	< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.06	< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter					< 0.2	< 0.2
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 1.6	< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.2	< 0.2
82081	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter					< 1	< 1
82082	C-13/C-12 ratio, water, unfiltered, per mil		-19.70	-16.90		-14.89	-16.88
82085	Deuterium/Protium ratio, water, unfiltered, per mil		-53.80	-53.60	-52.40	-45.70	-58.00
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-8.34	-8.15	-7.99	-6.89	-8.16
82303	Rn-222, water, unfiltered, picocuries per liter						
82346	Ethion, water, filtered, recoverable, micrograms per liter						
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metribuzin, water, filtered, recoverable, micrograms per liter					< 0.5	< 0.5

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
April 2008**

Code	Parameter	MCL	Well A1 4/22/2008	Well A2 4/23/2008	Well A3 4/23/2008	Well A4 4/23/2008	Well A5 4/23/2008
	Sampling date						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuuthuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter						
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		645	757	732	668	631
90851	Trihalomethanes, water, unfiltered, calcd, micrograms per liter						M
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					129	130
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					90.9	91.5
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					78.9	75.6
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

- (a) U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (b) MCL shown for U.S. EPA STORET No. 620.
- (c) MCL shown for U.S. EPA STORET No. 951.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2009**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4 8/4/2009	Well A5 8/4/2009
3	Sampling date						
10	Sampling depth, feet						
10	Temperature, water, degrees Celsius					20.8	19
28	Agency analyzing sample, code					80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius					660	601
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter					0.00001	0.00002
300	Dissolved oxygen, water, unfiltered, milligrams per liter						
400	pH, water, unfiltered, field, standard units					8.1	7.7
403	pH, water, unfiltered, laboratory, standard units					8.2	7.7
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter					151	148
602	Total nitrogen, water, filtered, milligrams per liter						2.9 E
607	Organic nitrogen, water, filtered, milligrams per liter						0.07 E
608	Ammonia, water, filtered, milligrams per liter as nitrogen					0.024	0.01 E
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)				< 0.002	< 0.002
618	Nitrate, water, filtered, milligrams per liter as nitrogen						
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen					< 0.1	0.08 E
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen					< 0.04	2.86
660	Orthophosphate, water, filtered, milligrams per liter					1.28	0.870
666	Phosphorus, water, filtered, milligrams per liter					0.41	0.29
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus					0.419	0.284
900	Hardness, water, milligrams per liter as calcium carbonate					110	170
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						44
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate						38
915	Calcium, water, filtered, milligrams per liter					38.4	48.3
925	Magnesium, water, filtered, milligrams per liter					4.54	10.8
930	Sodium, water, filtered, milligrams per liter					86.2	55.0
931	Sodium adsorption ratio, water, number					3.5	1.9
932	Sodium fraction of cations, water, percent in equivalents of major cations					62	42
935	Potassium, water, filtered, milligrams per liter					1.98	1.86
940	Chloride, water, filtered, milligrams per liter	600				78.5	35.1
945	Sulfate, water, filtered, milligrams per liter	600				76.3	103
950	Fluoride, water, filtered, milligrams per liter	2 (b)				0.23	0.21
955	Silica, water, filtered, milligrams per liter					18.5	26.6
1000	Arsenic, water, filtered, micrograms per liter	10 (c)				4.7	1.4
1005	Barium, water, filtered, micrograms per liter	1000 (d)				21.0	49.7
1010	Beryllium, micrograms per liter	4 (e)					
1020	Boron, water, filtered, micrograms per liter					105	128
1025	Cadmium, micrograms per liter	5 (f)					
1030	Chromium, micrograms per liter	50 (g)					
1035	Cobalt, micrograms per liter	1000 (h)					
1040	Copper, micrograms per liter	300				5	< 4
1046	Iron, water, filtered, micrograms per liter						
1049	Lead, micrograms per liter						
1056	Manganese, water, filtered, micrograms per liter	50				20.3	< 0.2
1057	Thallium, micrograms per liter	2 (i)					
1060	Molybdenum, micrograms per liter						
1065	Nickel, micrograms per liter	100 (j)					
1075	Silver, micrograms per liter	100 (k)					
1080	Strontium, water, filtered, micrograms per liter					343	257
1085	Vanadium, micrograms per liter						
1090	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)				6.6	< 4

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2009**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
1130	Lithium, water, filtered, micrograms per liter					7	7
1145	Selenium, micrograms per liter	50 (o)					
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter						
22703	Uranium, natural, micrograms per liter					129	127
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate						
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter						
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter						
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5					
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter						
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter						
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter						
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter						
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150					
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1					
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70					
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter						
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300					
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter						
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter						
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter						
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter						
34443	Naphthalene, water, filtered, recoverable, micrograms per liter	5					
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5					
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150					
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200					
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1					
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600					
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5					
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10					
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2009**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter						
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter						
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
38454	Dicrtophos, water, filtered, recoverable, micrograms per liter						
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate					124	121
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5					
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5					
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter						
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern						
49934	C-14, counting error, water, filtered, percent modern						
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter						
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter						
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter						
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter						
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isofenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaxyl, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2',6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2009**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					8/4/2009	8/4/2009
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						
61705	Diethoxyctyphenol, water, filtered, recoverable, micrograms per liter						
61706	Monocethoxyctyphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxyphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Tricosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfnylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfnylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter						
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6					
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500					
70301	Residue, water, filtered, sum of constituents, milligrams per liter					389	396
70303	Residue, water, filtered, tons per acre-foot					381	368 E



**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2009**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
71846	Ammonia, water, filtered, milligrams per liter as NH4					8/4/2009	8/4/2009
71851	Nitrate, water, filtered, milligrams per liter					0.03	0.01 E
71856	Nitrite, water, filtered, milligrams per liter	45 (c)					
71865	Iodide, water, filtered, milligrams per liter					0.035	0.004
71870	Bromide, water, filtered, milligrams per liter					0.27	0.06
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter						
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
77041	Carbon disulfide, water, unfiltered, micrograms per liter						
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100					
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter						
77168	1,1-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77173	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter						
77220	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77221	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter						
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter						
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77275	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77277	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter						
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter						
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter						
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter						
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter						
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05					
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter						
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter						
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter						
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81552	Acetone, water, unfiltered, recoverable, micrograms per liter						
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter						
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter						
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter						
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter						
82081	C-13/C-12 ratio, water, unfiltered, per mil						
82082	Deuterium/Protium ratio, water, unfiltered, per mil						
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil						
82303	Rn-222, water, unfiltered, picocuries per liter					-45.30	-37.70
82346	Ethion, water, filtered, recoverable, micrograms per liter					-6.88	-6.00

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2009**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						8/4/2009
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metribuzin, water, filtered, recoverable, micrograms per liter						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter					676	611
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius						
90851	Trihometanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
July 2010**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4 7/26/2010	Well A5 7/26/2010
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius					22.5	19.5
28	Agency analyzing sample, code					80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius					670	720
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter					0.00001	0.00003
300	Dissolved oxygen, water, unfiltered, milligrams per liter						
400	pH, water, unfiltered, field, standard units					8.0	7.6
403	pH, water, unfiltered, laboratory, standard units					8.2	7.6
405	Carbon dioxide, water, unfiltered, milligrams per liter					2.2	9.1
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter					149	224
602	Total nitrogen, water, filtered, milligrams per liter					< 0.14	3.8 E
607	Organic nitrogen, water, filtered, milligrams per liter					< 0.08	< 0.09
608	Ammonia, water, filtered, milligrams per liter as nitrogen					0.025	< 0.020
613	Nitrite, water, filtered, milligrams per liter as nitrogen					0.001 E	0.001 E
618	Nitrate, water, filtered, milligrams per liter as nitrogen					< 0.039	3.66 E
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen	1 (a)				< 0.10	0.09 E
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen					< 0.04	3.66
660	Orthophosphate, water, filtered, milligrams per liter					1.10	4.36
666	Phosphorus, water, filtered, milligrams per liter					0.35	1.40
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus					0.359	1.42
900	Hardness, water, milligrams per liter as calcium carbonate					104	211
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						27
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate						22
915	Calcium, water, filtered, milligrams per liter					34.5	61.4
925	Magnesium, water, filtered, milligrams per liter					4.18	14.0
930	Sodium, water, filtered, milligrams per liter					96.8	74.3
931	Sodium adsorption ratio, water, number					4.14	2.23
932	Sodium fraction of cations, water, percent in equivalents of major cations					67	43
935	Potassium, water, filtered, milligrams per liter					2.03	2.34
940	Chloride, water, filtered, milligrams per liter	600				83.9	39.5
945	Sulfate, water, filtered, milligrams per liter	600				79.9	114
950	Fluoride, water, filtered, milligrams per liter	2 (b)				0.26	0.12
955	Silica, water, filtered, milligrams per liter					16.9	28.4
1000	Arsenic, water, filtered, micrograms per liter	10 (c)				4.6	2.8
1005	Barium, water, filtered, micrograms per liter	1000 (d)				19.4	54.0
1010	Beryllium, micrograms per liter	4 (e)				106	145
1020	Boron, water, filtered, micrograms per liter						
1025	Cadmium, micrograms per liter	5 (f)					
1030	Chromium, micrograms per liter	50 (g)					
1035	Cobalt, micrograms per liter						
1040	Copper, micrograms per liter	1000 (h)					
1046	Iron, water, filtered, micrograms per liter	300				6 E	< 6
1049	Lead, micrograms per liter						
1056	Manganese, water, filtered, micrograms per liter	50				20.0	< 0.2
1057	Thallium, micrograms per liter	2 (i)					
1060	Molybdenum, micrograms per liter						
1065	Nickel, micrograms per liter	100 (j)					
1075	Silver, micrograms per liter	100 (k)					
1080	Strontium, water, filtered, micrograms per liter						
1085	Vanadium, micrograms per liter					309	344
1090	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
July 2010**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)				12.5	2.4
1130	Lithium, water, filtered, micrograms per liter					7	7
1145	Selenium, micrograms per liter	50 (o)					
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4035	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter						
22703	Uranium, natural, micrograms per liter						
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate					128	190
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter						
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter						
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5					
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter						
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter						
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter						
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter						
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150					
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1					
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70					
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter						
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300					
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter						
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter						
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter						
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5					
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5					
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150					
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6					
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200					
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1					
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600					
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5					
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10					
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
July 2010**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5					
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter						
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
38454	Dicropthos, water, filtered, recoverable, micrograms per liter						
38775	Chlorovos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate						
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5				124	185
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5					
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter						
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern						
49934	C-14, counting error, water, filtered, percent modern						
49981	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter						
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter						
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter						
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter						
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isfenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaxyl, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfide, water, filtered, recoverable, micrograms per liter						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
July 2010**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
61666	Phosphate oxygen analog, water, filtered, recoverable, micrograms per liter					7/26/2010	7/26/2010
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monothoxyethylphenol, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Triethyl phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinyfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinyfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter	6					
63790	Perchlorate, water, filtered, recoverable, micrograms per liter						
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500				379	465
70301	Residue, water, filtered, sum of constituents, milligrams per liter					395 E	466 E

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
July 2010**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4 7/26/2010	Well A5 7/26/2010
	Sampling date						
70303	Residue, water, filtered, tons per acre-foot						
71846	Ammonia, water, filtered, milligrams per liter as NH4					0.032	< 0.026
71851	Nitrate, water, filtered, milligrams per liter	45 (q)				< 0.173	16.2 E
71856	Nitrite, water, filtered, milligrams per liter					0.003 E	0.003 E
71865	Iodide, water, filtered, milligrams per liter					0.025	0.002
71870	Bromide, water, filtered, milligrams per liter					0.26	0.09
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter						
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
77041	Carbon disulfide, water, unfiltered, micrograms per liter						
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100					
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter						
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter						
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter						
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter						
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter						
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter						
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter						
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter						
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter						
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter						
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05					
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter						
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter						
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter						
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81552	Acetone, water, unfiltered, recoverable, micrograms per liter						
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter						
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter						
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter						
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter						
82081	C-13/C-12 ratio, water, unfiltered, per mil						
82082	Deuterium/Protium ratio, water, unfiltered, per mil						
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil					-44.90	-41.20
82303	Rn-222, water, unfiltered, picocuries per liter					-6.86	-6.76

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
July 2010**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
82346	Ethion, water, filtered, recoverable, micrograms per liter					7/26/2010	7/26/2010
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metribuzin, water, filtered, recoverable, micrograms per liter						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propylamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter					679	737
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius						
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.



**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2011**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4 8/22/2011	Well A5 8/22/2011
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius					22.8	19.8
28	Agency analyzing sample, code					80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius					670	647
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter					0.00001	0.00002
300	Dissolved oxygen, water, unfiltered, milligrams per liter						
400	pH, water, unfiltered, field, standard units					8.0	7.7
403	pH, water, unfiltered, laboratory, standard units					8.2	7.8
405	Carbon dioxide, water, unfiltered, milligrams per liter					2.4	6.3
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter					147	195
602	Total nitrogen, water, filtered, milligrams per liter					< 0.07	3.6
607	Organic nitrogen, water, filtered, milligrams per liter					< 0.02	0.05
608	Ammonia, water, filtered, milligrams per liter as nitrogen					0.031	0.011
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)				< 0.001	< 0.001
618	Nitrate, water, filtered, milligrams per liter as nitrogen					< 0.020	3.52
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen					< 0.05	0.06
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen					< 0.02	3.52
660	Orthophosphate, water, filtered, milligrams per liter					0.57	1.74
666	Phosphorus, water, filtered, milligrams per liter					0.17	0.54
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus					0.186	0.569
900	Hardness, water, milligrams per liter as calcium carbonate					107	178
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate						
915	Calcium, water, filtered, milligrams per liter					35.3	50.6
925	Magnesium, water, filtered, milligrams per liter					4.43	12.4
930	Sodium, water, filtered, milligrams per liter					95.0	67.5
931	Sodium adsorption ratio, water, number					4.01	2.20
932	Sodium fraction of cations, water, percent in equivalents of major cations					66	45
935	Potassium, water, filtered, milligrams per liter					2.01	2.14
940	Chloride, water, filtered, milligrams per liter	600				79.5	35.0
945	Sulfate, water, filtered, milligrams per liter	600				76.7	98.0
950	Fluoride, water, filtered, milligrams per liter	2 (b)				0.22	0.16
955	Silica, water, filtered, milligrams per liter					17.2	29.4
1000	Arsenic, water, filtered, micrograms per liter	10 (c)				3.6	2.0
1005	Barium, water, filtered, micrograms per liter	1000 (d)				20.0	45.9
1010	Beryllium, micrograms per liter	4 (e)				100	131
1020	Boron, water, filtered, micrograms per liter						
1025	Cadmium, micrograms per liter	5 (f)					
1030	Chromium, micrograms per liter	50 (g)					
1035	Cobalt, micrograms per liter						
1040	Copper, micrograms per liter	1000 (h)					
1046	Iron, water, filtered, micrograms per liter	300				3.3	3.7
1049	Lead, micrograms per liter						
1056	Manganese, water, filtered, micrograms per liter	50				21.6	< 0.16
1057	Thallium, micrograms per liter	2 (i)					
1060	Molybdenum, micrograms per liter						
1065	Nickel, micrograms per liter	100 (j)					
1075	Silver, micrograms per liter	100 (k)					
1080	Strontium, water, filtered, micrograms per liter						
1085	Vanadium, micrograms per liter					321	295
1090	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2011**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)				5.5	1.8
1130	Lithium, water, filtered, micrograms per liter					8.15	7.16
1145	Selenium, micrograms per liter	50 (o)					
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter						
22703	Uranium, natural, micrograms per liter						
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate					118	153
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter						
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter						
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5					
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter						
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter						
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter						
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter						
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150					
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1					
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70					
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter						
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300					
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter						
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter						
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter						
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5					
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5					
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150					
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200					
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1					
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600					
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5					
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10					
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2011**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5				8/22/2011	
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter						
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter						
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
38454	Dicropthos, water, filtered, recoverable, micrograms per liter						
38775	Chlorovos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate						
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5				122	161
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5					
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter						
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern						
49934	C-14, counting error, water, filtered, percent modern						
49981	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter						
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter						
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter						
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter						
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isfenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaxyl, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfide, water, filtered, recoverable, micrograms per liter						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2011**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
61666	Phosphate oxygen analog, water, filtered, recoverable, micrograms per liter					8/22/2011	8/22/2011
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monothoxyethylphenol, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62089	Triclosan, water, filtered, recoverable, micrograms per liter						
62090	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62091	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62092	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinyfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinyfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter						
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6					
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500				418	412
70301	Residue, water, filtered, sum of constituents, milligrams per liter					385	410

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2011**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
70303	Residue, water, filtered, tons per acre-foot						
71846	Ammonia, water, filtered, milligrams per liter as NH4					0.040	0.015
71851	Nitrate, water, filtered, milligrams per liter	45 (q)				< 0.089	15.6
71856	Nitrite, water, filtered, milligrams per liter					< 0.003	< 0.003
71865	Iodide, water, filtered, milligrams per liter					0.021	0.002
71870	Bromide, water, filtered, milligrams per liter					0.267	0.069
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter						
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
77041	Carbon disulfide, water, unfiltered, micrograms per liter						
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100					
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter						
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter						
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter						
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter						
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter						
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter						
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter						
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter						
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter						
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter						
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05					
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter						
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter						
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter						
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81552	Acetone, water, unfiltered, recoverable, micrograms per liter						
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter						
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter						
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter						
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter						
82081	C-13/C-12 ratio, water, unfiltered, per mil						
82082	Deuterium/Protium ratio, water, unfiltered, per mil						
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil					-45.61	-41.48
82303	Rn-222, water, unfiltered, picocuries per liter					-6.85	-6.56

**Water Quality Data for Multiple Depth Monitoring Well  
Pala Park Well (8S/2W-19A1-6)  
August 2011**

Code	Parameter	MCL	Well A1	Well A2	Well A3	Well A4	Well A5
	Sampling date						
82346	Ethion, water, filtered, recoverable, micrograms per liter					8/22/2011	8/22/2011
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metribuzin, water, filtered, recoverable, micrograms per liter						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propylamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter					653	634
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius						
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**ANNUAL REPORT**  
**COOPERATIVE WATER RESOURCE**  
**MANAGEMENT AGREEMENT**  
**CALENDAR YEAR 2017**

**APPENDIX C-2**  
**WOLF VALLEY GROUNDWATER MONITORING WELL**





## Site Description

### Wolf Valley Groundwater Monitoring Well (8S/2W-20J1-2)

**LOCATION:** Latitude 33° 27' 47.53", longitude 117° 06' 15.58" (NAD83) in Riverside County, California. Well is located southeast of Temecula in Wolf Valley, adjacent to the north side of Wolf Valley Road, approximately 1,670 feet east of Pala-Temecula Highway.

**SITE INFORMATION:** Land-surface altitude is 1078.78 feet above mean sea level (NAVD88).

#### WATER-LEVEL RECORD:

State well number	USGS station number	Intermittent water-level	Daily water-level
8S/2W-20J1	332747117061101	03/05/1990 to present	10/18/2006 to present
8S/2W-20J2	332747117061102	03/05/1990 to present	10/23/2010 to present

**TOPOGRAPHIC MAP:** USGS Pechanga, California, 7.5 minute series.

#### WELL SUMMARY INFORMATION:

State well number	USGS station number	Hole depth (ft)	Perforation depth (ft)	Casing size and type	Date drilled
8S/2W-20J1	332747117061101	590	555-575	2" PVC	2/17/1990
8S/2W-20J2	332747117061102	590	160-180	2" PVC	2/18/1990

#### ADDITIONAL INFORMATION:

Additional information can be found at the following web site:  
<http://ca.water.usgs.gov/temecula/>.

Page Intentionally Blank

# WELL CONSTRUCTION MONITORING WELLS WV5-20J1 and WV5-20J2

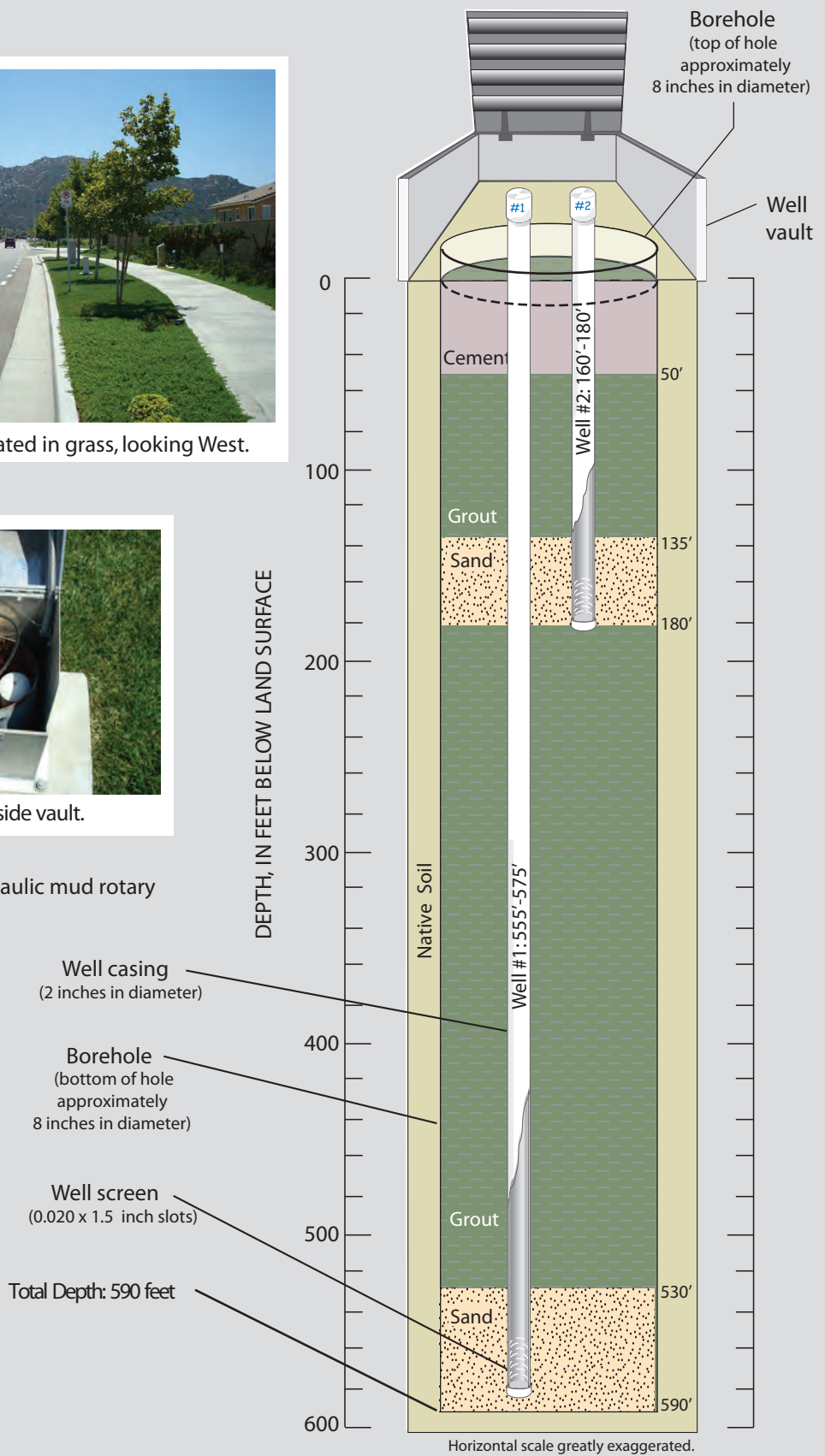


View of vault located in grass, looking West.

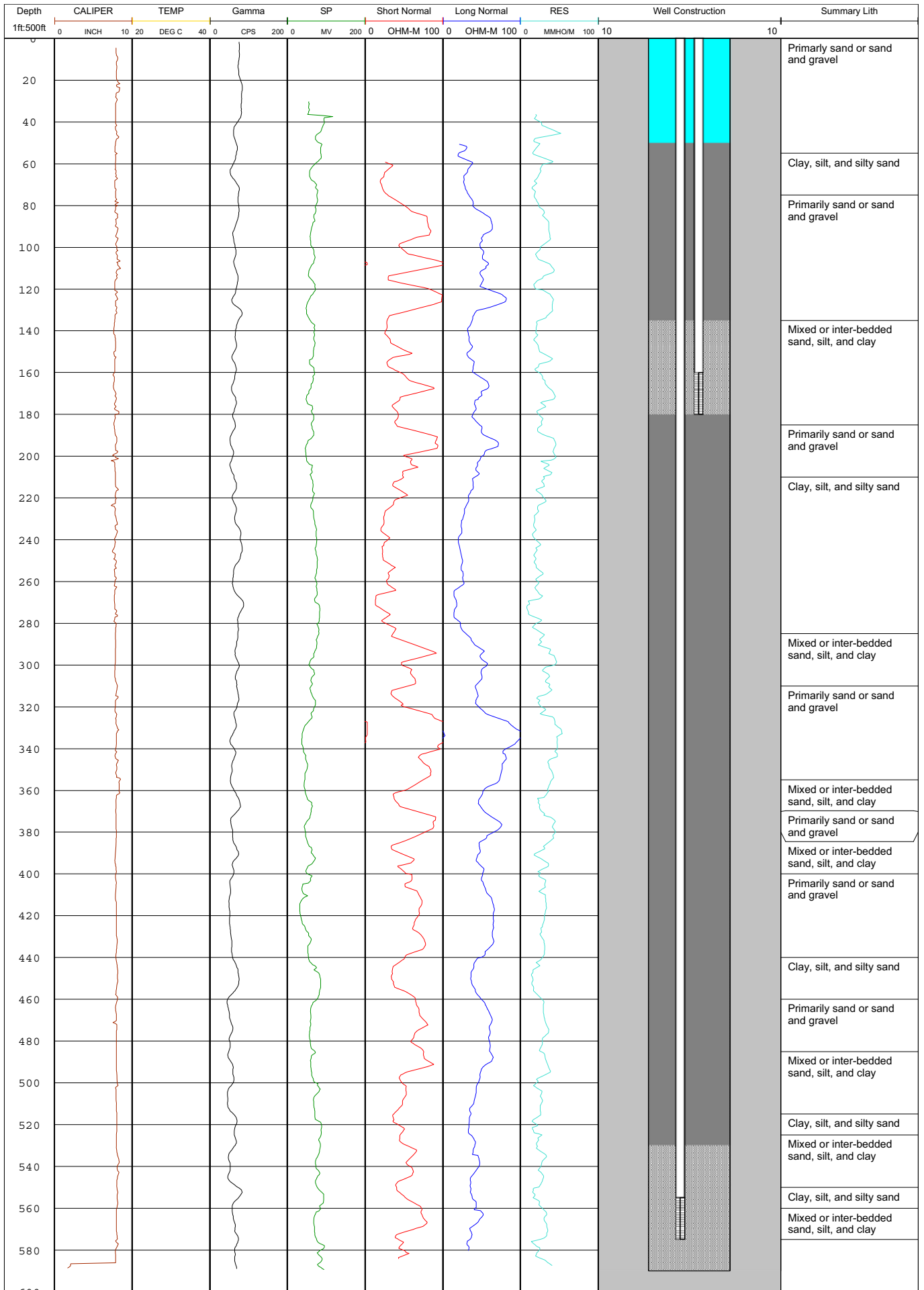


View of wells inside vault.

Drill method: hydraulic mud rotary

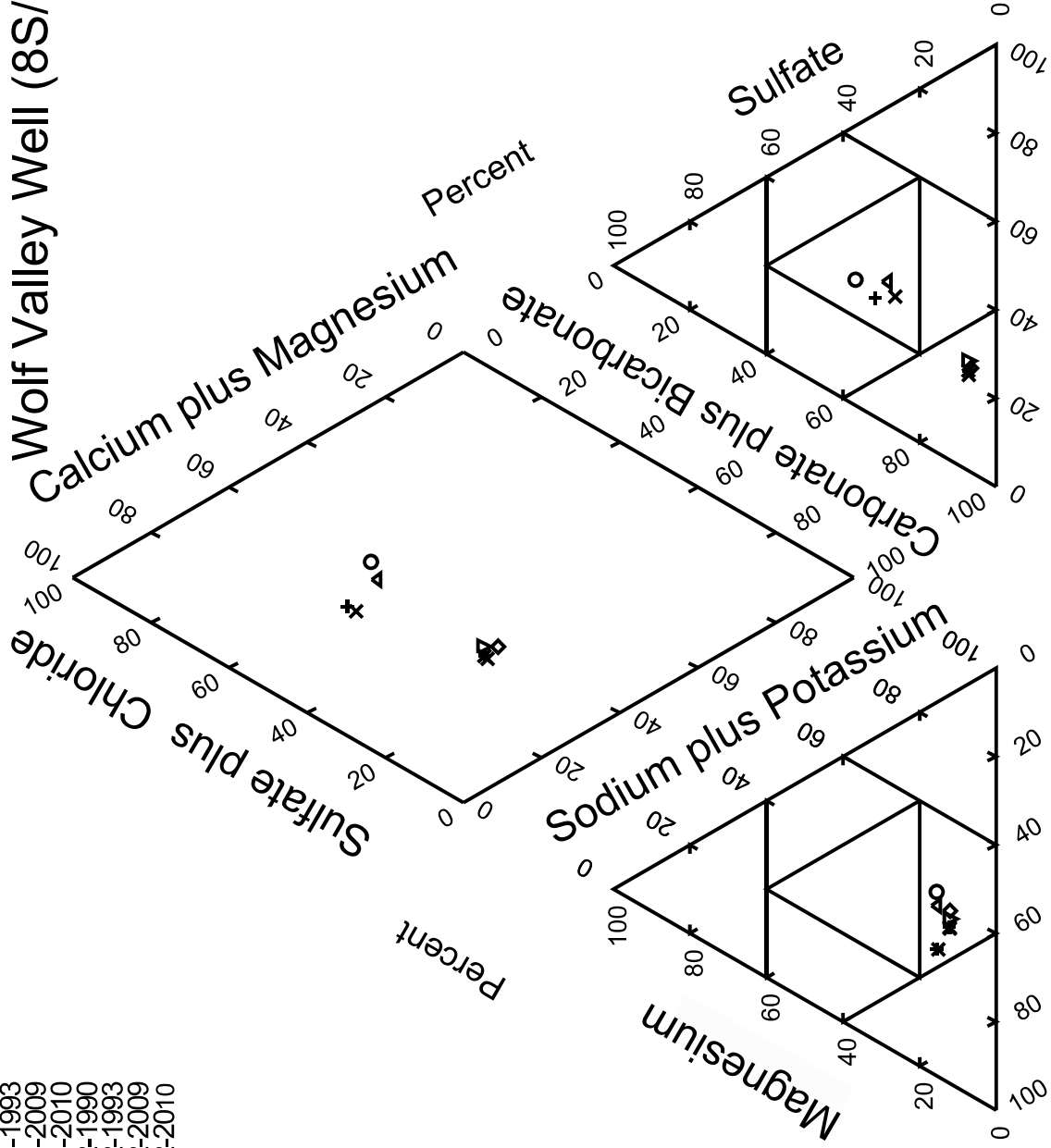


Source: USGS California Water Science Center.



# Tri-Linear Diagram Wolf Valley Well (8S/2W-20J1-2)

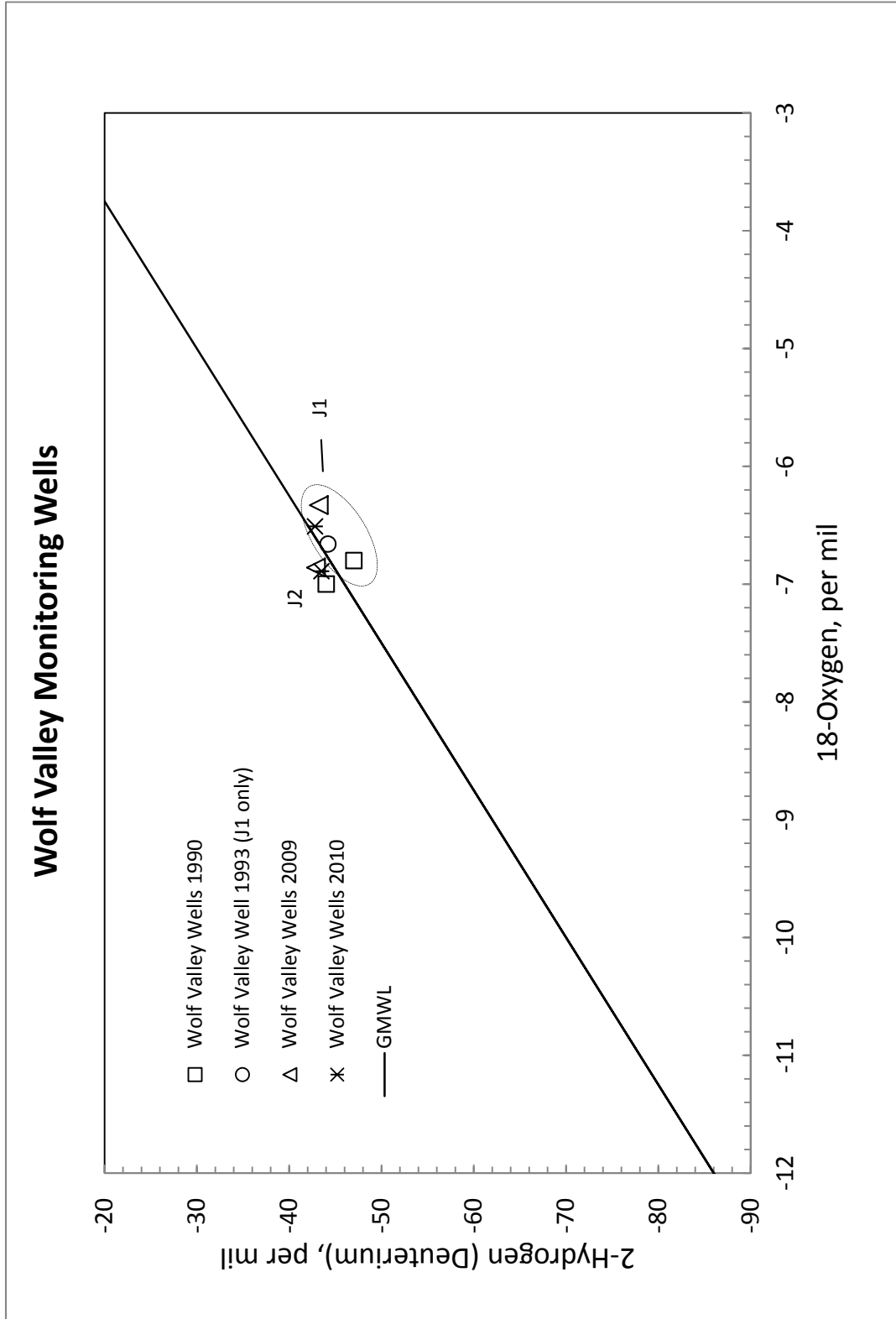
- Explanation**
- J1-1990
  - ◄ J1-1993
  - + J1-2009
  - × J1-2010
  - ◊ J2-1990
  - ◄ J2-1993
  - × J2-2009
  - ✱ J2-2010



Chloride, Fluoride, Nitrite plus Nitrate  
Percent

Source: USGS California Water Science Center.

# Stable Isotope Diagram



Source: USGS California Water Science Center.

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Mar 5 1990	73.70	1005.08	Mar 5 1990	62.47	1016.31
Mar 15 1990	73.93	1004.85	Mar 15 1990	62.41	1016.37
May 3 1990			May 3 1990	62.21	1016.57
May 18 1990	72.93	1005.85			
Jul 3 1990	72.52	1006.26	Jul 3 1990	61.88	1016.90
Aug 2 1990	72.44	1006.34	Aug 2 1990	61.80	1016.98
Aug 15 1990	72.28	1006.50	Aug 15 1990	61.65	1017.13
Oct 31 1990	72.03	1006.75	Oct 31 1990	61.32	1017.46
Nov 14 1990	71.86	1006.92	Nov 14 1990	61.23	1017.55
Nov 29 1990	71.84	1006.94	Nov 29 1990	61.20	1017.58
Dec 10 1990	71.69	1007.09	Dec 10 1990	61.13	1017.65
Dec 19 1990			Dec 19 1990	61.12	1017.66
Jan 18 1991	71.48	1007.30	Jan 18 1991	61.06	1017.72
Jan 22 1991	71.43	1007.35	Jan 22 1991	61.05	1017.73
Jan 24 1991			Jan 24 1991	61.09	1017.69
Feb 6 1991	71.43	1007.35	Feb 6 1991	61.03	1017.75
Feb 22 1991	71.47	1007.31	Feb 22 1991	61.05	1017.73
Mar 6 1991	70.81	1007.97	Mar 6 1991	61.03	1017.75
Apr 12 1991	69.62	1009.16	Apr 12 1991	60.64	1018.14
Apr 26 1991			Apr 26 1991	60.50	1018.28
May 24 1991	69.40	1009.38	May 24 1991	60.43	1018.35
May 30 1991	69.43	1009.35	May 30 1991	60.38	1018.40
Jun 13 1991	69.62	1009.16	Jun 13 1991	60.40	1018.38
Jul 31 1991	69.76	1009.02	Jul 31 1991	60.35	1018.43
Aug 20 1991	69.76	1009.02	Aug 20 1991	60.29	1018.49
Nov 8 1991	70.15	1008.63	Nov 8 1991	60.49	1018.29
Nov 26 1991	70.17	1008.61	Nov 26 1991	60.57	1018.21
Dec 12 1991	70.28	1008.50	Dec 12 1991	60.67	1018.11
Jan 10 1992	70.03	1008.75	Jan 10 1992	60.68	1018.10
Jan 27 1992	70.01	1008.77	Jan 27 1992	60.74	1018.04
Feb 7 1992	69.81	1008.97	Feb 7 1992	60.73	1018.05
Feb 23 1992			Feb 23 1992	60.65	1018.13
Feb 28 1992	68.56	1010.22	Feb 28 1992		
Mar 13 1992	69.30	1009.48	Mar 13 1992	60.61	1018.17
Apr 10 1992	68.90	1009.88	Apr 10 1992	60.47	1018.31
May 1 1992	68.87	1009.91	May 1 1992	60.39	1018.39
May 28 1992	68.84	1009.94	May 28 1992	60.33	1018.45
Jun 19 1992	69.05	1009.73	Jun 19 1992	60.33	1018.45
Jul 15 1992	69.44	1009.34	Jul 15 1992	60.42	1018.36
Jul 23 1992	69.41	1009.37	Jul 23 1992	60.46	1018.32
Sep 1 1992	69.77	1009.01	Sep 1 1992	60.61	1018.17
Sep 17 1992	69.86	1008.92	Sep 17 1992	60.67	1018.11
Oct 15 1992	70.26	1008.52	Oct 15 1992	60.93	1017.85
Nov 17 1992	70.08	1008.70	Nov 17 1992	60.85	1017.93
Dec 30 1992	69.85	1008.93	Dec 30 1992	60.95	1017.83

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Mar 16 1993	63.73	1015.05	Mar 16 1993	58.84	1019.94
Mar 22 1993	63.61	1015.17	Mar 22 1993	58.58	1020.20
Apr 13 1993	63.65	1015.13	Apr 13 1993	57.55	1021.23
Apr 22 1993	63.74	1015.04	Apr 22 1993	57.15	1021.63
Jul 1 1994	62.34	1016.44	Jul 1 1994		
Jul 28 1994	62.55	1016.23	Jul 28 1994		
Aug 17 1994	65.62	1013.16	Aug 17 1994		
Sep 1 1994	66.45	1012.33	Sep 1 1994		
Oct 3 1994	65.90	1012.88	Oct 3 1994		
Nov 1 1994	66.99	1011.79	Nov 1 1994		
Dec 6 1994	63.50	1015.28	Dec 6 1994		
Jan 4 1995	64.40	1014.38	Jan 4 1995		
Feb 7 1995	64.18	1014.60	Feb 7 1995		
Jul 21 1995	72.10	1006.68	Jul 21 1995		
Aug 11 1995	73.65	1005.13	Aug 11 1995		
Sep 5 1995	73.00	1005.78	Sep 5 1995		
Oct 3 1995	72.00	1006.78	Oct 3 1995		
Nov 3 1995	74.02	1004.76	Nov 3 1995		
Dec 4 1995	67.87	1010.91	Dec 4 1995		
Jan 3 1996	69.95	1008.83	Jan 3 1996		
Feb 8 1996	67.85	1010.93	Feb 8 1996		
Mar 18 1996	66.94	1011.84	Mar 18 1996		
Apr 15 1996	72.15	1006.63	Apr 15 1996		
May 1 1996	73.02	1005.76	May 1 1996		
Jun 3 1996	74.82	1003.96	Jun 3 1996		
Jul 10 1996	68.73	1010.05	Jul 10 1996		
Aug 2 1996	71.06	1007.72	Aug 2 1996		
Sep 3 1996	76.29	1002.49	Sep 3 1996		
Oct 18 1996	70.85	1007.93	Oct 18 1996	48.14	1030.64
Nov 4 1996	71.23	1007.55	Nov 4 1996	48.35	1030.43
Dec 3 1996	75.12	1003.66	Dec 3 1996	48.21	1030.57
Jan 24 1997	69.65	1009.13	Jan 24 1997	48.72	1030.06
Feb 19 1997	75.90	1002.88	Feb 19 1997	48.63	1030.15
Mar 13 1997	81.92	996.86	Mar 13 1997	48.99	1029.79
Apr 9 1997	83.98	994.80	Apr 9 1997	49.62	1029.16
May 5 1997	87.42	991.36	May 5 1997	50.33	1028.45
Jun 2 1997	81.72	997.06	Jun 2 1997	51.06	1027.72
Jul 21 1997	86.62	992.16	Jul 21 1997	51.95	1026.83
Aug 15 1997	91.15	987.63	Aug 15 1997	52.58	1026.20
Sep 9 1997	87.44	991.34	Sep 9 1997	52.67	1026.11
Oct 16 1997	84.70	994.08	Oct 16 1997	53.58	1025.20
Nov 7 1997	91.69	987.09	Nov 7 1997	53.87	1024.91
Dec 12 1997	86.83	991.95	Dec 12 1997	54.82	1023.96



**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Jan 23 1998	92.59	986.19	Jan 23 1998	55.23	1023.55
Mar 2 1998	86.91	991.87	Mar 2 1998	55.80	1022.98
Apr 8 1998	80.32	998.46	Apr 8 1998	55.09	1023.69
May 1 1998	91.32	987.46	May 1 1998	54.99	1023.79
Jun 2 1998	86.85	991.93	Jun 2 1998	55.38	1023.40
Jul 2 1998	87.34	991.44	Jul 2 1998	55.59	1023.19
Aug 11 1998	95.88	982.90	Aug 11 1998	56.08	1022.70
Sep 10 1998	92.12	986.66	Sep 10 1998	56.83	1021.95
Oct 16 1998	92.14	986.64	Oct 16 1998	57.39	1021.39
Nov 23 1998	100.48	978.30	Nov 23 1998	57.68	1021.10
Dec 7 1998	103.96	974.82	Dec 7 1998	57.95	1020.83
Jan 5 1999	107.46	971.32	Jan 5 1999	58.41	1020.37
Feb 1 1999	111.16	967.62	Feb 1 1999	59.07	1019.71
Mar 1 1999	102.08	976.70	Mar 1 1999	59.73	1019.05
Apr 8 1999	111.12	967.66	Apr 8 1999	60.67	1018.11
May 3 1999	119.83	958.95	May 3 1999		
Jun 10 1999	106.93	971.85	Jun 10 1999	62.43	1016.35
Jul 1 1999	111.31	967.47	Jul 1 1999	62.71	1016.07
Aug 3 1999	113.81	964.97	Aug 3 1999	63.75	1015.03
Sep 8 1999	113.84	964.94	Sep 8 1999	65.02	1013.76
Oct 15 1999	119.21	959.57	Oct 15 1999	65.73	1013.05
Nov 12 1999	116.71	962.07	Nov 12 1999	66.63	1012.15
Dec 14 1999	108.04	970.74	Dec 14 1999	66.94	1011.84
Jan 6 2000	109.89	968.89	Jan 6 2000	67.48	1011.30
Feb 9 2000	132.67	946.11	Feb 9 2000	67.99	1010.79
Mar 13 2000	121.62	957.16	Mar 13 2000	68.27	1010.51
Apr 3 2000	129.77	949.01	Apr 3 2000	68.94	1009.84
May 9 2000	143.04	935.74	May 9 2000	69.66	1009.12
Jun 5 2000	150.23	928.55	Jun 5 2000	70.35	1008.43
Jul 6 2000	134.48	944.30	Jul 6 2000	71.36	1007.42
Aug 1 2000	135.96	942.82	Aug 1 2000	71.74	1007.04
Sep 6 2000	135.44	943.34	Sep 6 2000	72.77	1006.01
Oct 4 2000	134.43	944.35	Oct 4 2000	72.36	1006.42
Nov 7 2000	153.91	924.87	Nov 7 2000	73.74	1005.04
Dec 6 2000	146.64	932.14	Dec 6 2000	74.68	1004.10
Jan 4 2001	143.95	934.83	Jan 4 2001	75.26	1003.52
Feb 1 2001	132.28	946.50	Feb 1 2001	75.66	1003.12
Mar 13 2001	124.13	954.65	Mar 13 2001	75.94	1002.84
Apr 6 2001	129.01	949.77	Apr 6 2001	76.32	1002.46
May 4 2001	130.43	948.35	May 4 2001	76.64	1002.14
Jun 7 2001	135.71	943.07	Jun 7 2001	76.81	1001.97
Jul 3 2001	137.36	941.42	Jul 3 2001	77.23	1001.55
Aug 2 2001	140.92	937.86	Aug 2 2001	77.96	1000.82
Sep 6 2001	158.00	920.78	Sep 6 2001	78.55	1000.23
Oct 3 2001	152.81	925.97	Oct 3 2001	78.94	999.84
Nov 1 2001	151.35	927.43	Nov 1 2001	79.48	999.30
Dec 5 2001	143.25	935.53	Dec 5 2001	80.14	998.64

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Jan 4 2002	143.98	934.80	Jan 4 2002	80.69	998.09
Feb 13 2002	150.03	928.75	Feb 13 2002	81.22	997.56
Mar 5 2002	147.77	931.01	Mar 5 2002	81.47	997.31
Apr 2 2002	152.97	925.81	Apr 2 2002	82.04	996.74
May 1 2002	150.81	927.97	May 1 2002	82.23	996.55
Jun 3 2002	155.46	923.32	Jun 3 2002	82.63	996.15
Jul 2 2002	158.38	920.40	Jul 2 2002	83.15	995.63
Aug 1 2002	162.28	916.50	Aug 1 2002	83.44	995.34
Sep 3 2002	159.45	919.33	Sep 3 2002	83.88	994.90
Oct 3 2002	160.66	918.12	Oct 3 2002	84.35	994.43
Nov 1 2002	162.89	915.89	Nov 1 2002	84.83	993.95
Dec 2 2002	156.42	922.36	Dec 2 2002	85.20	993.58
Jan 10 2003	155.53	923.25	Jan 10 2003	85.75	993.03
Feb 4 2003	164.96	913.82	Feb 4 2003	86.02	992.76
Mar 3 2003	155.96	922.82	Mar 3 2003	86.33	992.45
Apr 2 2003	159.33	919.45	Apr 2 2003	86.72	992.06
May 1 2003	158.53	920.25	May 1 2003	86.98	991.80
Jun 2 2003	149.29	929.49	Jun 2 2003	87.22	991.56
Jul 7 2003	143.93	934.85	Jul 7 2003	87.60	991.18
Aug 1 2003	141.10	937.68	Aug 1 2003	87.79	990.99
Sep 2 2003	136.78	942.00	Sep 2 2003	88.02	990.76
Oct 3 2003	134.60	944.18	Oct 3 2003	88.15	990.63
Nov 3 2003	133.73	945.05	Nov 3 2003	88.33	990.45
Dec 5 2003	139.10	939.68	Dec 5 2003	88.40	990.38
Jan 15 2004	129.79	948.99	Jan 15 2004	88.51	990.27
Feb 12 2004	125.73	953.05	Feb 12 2004	88.70	990.08
Mar 8 2004	123.92	954.86	Mar 8 2004	88.62	990.16
Apr 13 2004	123.18	955.60	Apr 13 2004	88.61	990.17
May 10 2004	141.40	937.38	May 10 2004	88.82	989.96
Jun 1 2004	150.23	928.55	Jun 1 2004	88.68	990.10
Jul 1 2004	149.29	929.49	Jul 1 2004	88.93	989.85
Aug 2 2004	158.11	920.67	Aug 2 2004	89.15	989.63
Sep 1 2004	165.49	913.29	Sep 1 2004	89.40	989.38
Oct 1 2004	166.51	912.27	Oct 1 2004	89.69	989.09
Nov 3 2004	161.96	916.82	Nov 3 2004	89.87	988.91
Dec 8 2004	156.68	922.10	Dec 8 2004	90.29	988.49
Jan 4 2005	152.09	926.69	Jan 4 2005	90.31	988.47
Feb 4 2005	147.52	931.26	Feb 4 2005	90.28	988.50
Mar 2 2005	137.32	941.46	Mar 2 2005	90.02	988.76
Apr 8 2005	143.64	935.14	Apr 8 2005	89.22	989.56
May 9 2005	145.00	933.78	May 9 2005	88.24	990.54
Jun 9 2005	168.88	909.90	Jun 9 2005	87.40	991.38
Jul 11 2005	161.44	917.34	Jul 11 2005	86.73	992.05
Aug 2 2005	161.15	917.63	Aug 2 2005	86.31	992.47
Sep 2 2005	144.41	934.37	Sep 2 2005	85.83	992.95
Oct 7 2005	145.01	933.77	Oct 7 2005	85.22	993.56
Nov 4 2005	140.62	938.16	Nov 4 2005	84.82	993.96
Dec 9 2005	132.75	946.03	Dec 9 2005	84.31	994.47

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Jan 11 2006	128.07	950.71	Jan 11 2006	83.96	994.82
Feb 10 2006	141.72	937.06	Feb 10 2006	83.74	995.04
Mar 7 2006	129.78	949.00	Mar 7 2006	83.45	995.33
Apr 7 2006	123.89	954.89	Apr 7 2006	83.21	995.57
May 5 2006	133.10	945.68	May 5 2006	82.92	995.86
Jun 1 2006	126.68	952.10	Jun 1 2006	82.56	996.22
Jul 6 2006	142.38	936.40	Jul 6 2006	82.18	996.60
Aug 3 2006	145.94	932.84	Aug 3 2006	82.01	996.77
Sep 7 2006	156.98	921.80	Sep 7 2006	81.75	997.03
Sep 26 2006	157.61	921.17	Sep 26 2006		
Oct 13 2006	157.53	921.25	Oct 13 2006	81.70	997.08
Nov 7 2006	158.94	919.84	Nov 7 2006	81.71	997.07
Nov 17 2006	160.83	917.95	Nov 17 2006		
Dec 7 2006	178.24	900.54	Dec 7 2006	81.81	996.97
Dec 21 2006	161.13	917.65	Dec 21 2006		
Jan 3 2007	158.33	920.45	Jan 3 2007	81.96	996.82
Feb 2 2007	167.16	911.62	Feb 2 2007	82.13	996.65
Mar 7 2007	159.04	919.74	Mar 7 2007	82.21	996.57
Apr 5 2007	170.12	908.66	Apr 5 2007	82.21	996.57
Apr 5 2007	169.77	909.01	Apr 5 2007		
Apr 6 2007	167.92	910.86	Apr 6 2007		
Apr 9 2007	167.88	910.90	Apr 9 2007		
May 1 2007	171.87	906.91	May 1 2007	82.20	996.58
Jun 1 2007	156.08	922.70	Jun 1 2007	82.21	996.57
Jul 10 2007	164.26	914.52	Jul 10 2007		
Jul 11 2007			Jul 11 2007	82.19	996.59
Aug 6 2007	168.06	910.72	Aug 6 2007	82.12	996.66
Sep 14 2007	174.97	903.81	Sep 14 2007	82.37	996.41
Oct 3 2007	173.28	905.50	Oct 3 2007	82.36	996.42
Nov 7 2007	180.53	898.25	Nov 7 2007	82.63	996.15
Dec 4 2007	179.45	899.33	Dec 4 2007	82.67	996.11
Jan 15 2008	163.43	915.35	Jan 15 2008	82.97	995.81
Feb 21 2008	164.67	914.11	Feb 21 2008		
Mar 12 2008	169.01	909.77	Mar 12 2008	83.08	995.70
Apr 9 2008	167.88	910.90	Apr 9 2008		
Apr 18 2008	178.07	900.71	Apr 18 2008	83.16	995.62
May 1 2008	177.39	901.39	May 1 2008	83.22	995.56
May 6 2008	169.97	908.81	May 6 2008		
May 28 2008	175.04	903.74	May 28 2008		
May 30 2008	174.62	904.16	May 30 2008		
Jun 2 2008	165.15	913.63	Jun 2 2008		
Jun 3 2008	173.91	904.87	Jun 3 2008	83.14	995.64
Jun 12 2008	174.22	904.56	Jun 12 2008		
Jul 2 2008	166.87	911.91	Jul 2 2008	83.29	995.49
Jul 30 2008	168.32	910.46	Jul 30 2008	83.37	995.41
Aug 8 2008	171.04	907.74	Aug 8 2008		
Sep 4 2008	171.07	907.71	Sep 4 2008	83.43	995.35
Oct 2 2008	172.10	906.68	Oct 2 2008	83.54	995.24
Nov 4 2008	173.31	905.47	Nov 4 2008	83.69	995.09
Dec 3 2008	169.48	909.30	Dec 3 2008	83.80	994.98

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Jan 6 2009	159.51	919.27	Jan 6 2009	83.94	994.84
Jan 29 2009	157.55	921.23	Jan 29 2009	83.97	994.81
Mar 4 2009	157.14	921.64	Mar 4 2009	84.12	994.66
Apr 2 2009	165.09	913.69	Apr 2 2009	84.08	994.70
May 6 2009	169.97	908.81	May 6 2009	84.10	994.68
Jun 2 2009	165.15	913.63	Jun 2 2009	84.10	994.68
Jun 24 2009	177.81	900.97	Jun 24 2009	84.44	994.34
Aug 4 2009	167.70	911.08	Aug 4 2009	84.61	994.17
Aug 4 2009	167.36	911.42	Aug 4 2009		
Aug 27 2009	165.44	913.34	Aug 27 2009	84.65	994.13
Oct 2 2009	158.97	919.81	Oct 2 2009	84.82	993.96
Nov 3 2009	152.46	926.32	Nov 3 2009	84.76	994.02
Nov 30 2009	148.13	930.65	Nov 30 2009		
Jan 5 2010	141.72	937.06	Jan 5 2010	84.66	994.12
Feb 4 2010	135.75	943.03	Feb 4 2010	84.56	994.22
Mar 2 2010	129.56	949.22	Mar 2 2010	84.19	994.59
Mar 31 2010	135.54	943.24	Mar 31 2010	83.83	994.95
May 5 2010	135.05	943.73	May 5 2010	83.51	995.27
Jun 2 2010	136.83	941.95	Jun 2 2010	83.25	995.53
Jun 30 2010	136.29	942.49	Jun 30 2010	83.00	995.78
Jul 28 2010	138.64	940.14	Jul 28 2010	82.96	995.82
Aug 23 2010	138.86	939.92	Aug 23 2010	82.81	995.97
Sep 30 2010	141.18	937.60	Sep 30 2010	82.69	996.09
Oct 31 2010	131.83	946.95	Oct 31 2010	82.59	996.19
Nov 30 2010	128.89	949.89	Nov 30 2010	82.51	996.27
Dec 31 2010	122.00	956.78	Dec 31 2010	82.40	996.38
Jan 31 2011	122.34	956.44	Jan 31 2011	81.96	996.82
Feb 28 2011	115.97	962.81	Feb 28 2011	81.59	997.19
Mar 31 2011	111.73	967.05	Mar 31 2011	80.81	997.97
Apr 30 2011	114.10	964.68	Apr 30 2011	80.14	998.64
May 31 2011	108.96	969.82	May 31 2011	79.43	999.35
Jun 30 2011	115.91	962.87	Jun 30 2011	78.67	1000.11
Jul 31 2011	126.74	952.04	Jul 31 2011	78.31	1000.47
Aug 31 2011	121.32	957.46	Aug 31 2011	78.02	1000.76
Sep 30 2011	112.47	966.31	Sep 30 2011	77.45	1001.33
Oct 28 2011	106.64	972.14	Oct 28 2011	76.89	1001.89
Nov 30 2011	99.89	978.89	Nov 30 2011	75.83	1002.95
Dec 31 2011	95.89	982.89	Dec 31 2011	75.06	1003.72
Jan 31 2012	100.27	978.51	Jan 31 2012	74.45	1004.33
Feb 29 2012	102.56	976.22	Feb 29 2012	74.12	1004.66
Mar 31 2012	95.82	982.96	Mar 31 2012	73.43	1005.35
Apr 30 2012	94.62	984.16	Apr 30 2012	72.93	1005.85
May 31 2012	97.42	981.36	May 31 2012	72.19	1006.59
Jun 30 2012	95.64	983.14	Jun 30 2012	71.72	1007.06
Jul 31 2012	100.16	978.62	Jul 31 2012	71.40	1007.38
Aug 31 2012	100.80	977.98	Aug 31 2012	71.21	1007.57
Sep 30 2012	101.82	976.96	Sep 30 2012	71.09	1007.69
Oct 28 2012	101.44	977.34	Oct 28 2012	70.97	1007.81
Nov 30 2012	93.16	985.62	Nov 30 2012	70.50	1008.28
Dec 31 2012	94.90	983.88	Dec 31 2012	70.45	1008.33
Jan 31 2013	96.72	982.06	Jan 31 2013	70.07	1008.71
Feb 28 2013	101.55	977.23	Feb 28 2013	70.07	1008.71

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Mar 31 2013	95.07	983.71	Mar 31 2013	69.56	1009.22
Apr 30 2013	91.12	987.66	Apr 30 2013	68.86	1009.92
May 31 2013	100.46	978.32	May 31 2013	68.99	1009.79
Jun 30 2013	92.76	986.02	Jun 30 2013	68.48	1010.30
Jul 31 2013	103.60	975.18	Jul 31 2013	69.06	1009.72
Aug 31 2013	106.38	972.40	Aug 31 2013	69.37	1009.41
Sep 30 2013	100.63	978.15	Sep 30 2013	69.42	1009.36
Oct 28 2013	100.75	978.03	Oct 28 2013	69.66	1009.12
Nov 30 2013	97.40	981.38	Nov 30 2013	69.73	1009.05
Dec 31 2013	92.44	986.34	Dec 31 2013	69.57	1009.21
Jan 31 2014	91.68	987.10	Jan 31 2014	69.36	1009.42
Feb 28 2014	88.53	990.25	Feb 28 2014	68.94	1009.84
Mar 31 2014	85.27	993.51	Mar 31 2014	68.56	1010.22
Apr 30 2014	88.08	990.70	Apr 30 2014	68.29	1010.49
May 31 2014	97.71	981.07	May 31 2014	68.74	1010.04
Jun 30 2014	91.32	987.46	Jun 30 2014	68.57	1010.21
Jul 31 2014	104.65	974.13	Jul 31 2014	69.42	1009.36
Aug 31 2014	101.14	977.64	Aug 31 2014	69.88	1008.90
Sep 30 2014	105.86	972.92	Sep 30 2014	70.38	1008.40
Oct 31 2014	101.55	977.23	Oct 31 2014	70.81	1007.97
Nov 30 2014	98.06	980.72	Nov 30 2014	70.99	1007.79
Dec 31 2014	92.03	986.75	Dec 31 2014	70.63	1008.15
Jan 31 2015	92.82	985.96	Jan 31 2015	70.43	1008.35
Feb 28 2015	91.05	987.73	Feb 28 2015	70.19	1008.59
Mar 31 2015	91.23	987.55	Mar 31 2015	70.31	1008.47
Apr 30 2015	96.81	981.97	Apr 30 2015	70.44	1008.34
May 31 2015	103.71	975.07	May 31 2015	70.82	1007.96
Jun 30 2015	97.77	981.01	Jun 30 2015	70.94	1007.84
Jul 31 2015	112.23	966.55	Jul 31 2015	71.70	1007.08
Aug 31 2015	110.43	968.35	Aug 31 2015	72.12	1006.66
Sep 30 2015	102.79	975.99	Sep 30 2015	72.45	1006.33
Oct 31 2015	96.19	982.59	Oct 31 2015	72.49	1006.29
Nov 30 2015	92.48	986.30	Nov 30 2015	72.26	1006.52
Dec 31 2015	90.73	988.05	Dec 31 2015	72.03	1006.75
Jan 31 2016	87.41	991.37	Jan 31 2016	71.47	1007.31
Feb 29 2016	87.33	991.45	Feb 29 2016	71.19	1007.59
Mar 31 2016	93.73	985.05	Mar 31 2016	71.78	1007.00
Apr 30 2016	98.41	980.37	Apr 30 2016	71.74	1007.04
May 31 2016	103.08	975.70	May 31 2016	72.15	1006.63
Jun 30 2016	107.66	971.12	Jun 30 2016	72.54	1006.24
Jul 31 2016	112.88	965.90	Jul 31 2016	73.43	1005.35
Aug 31 2016	109.49	969.29	Aug 31 2016	73.96	1004.82
Sep 30 2016	106.14	972.64	Sep 30 2016	74.43	1004.35
Oct 31 2016	106.48	972.30	Oct 31 2016	74.81	1003.97
Nov 30 2016	102.72	976.06	Nov 30 2016	74.99	1003.79
Dec 31 2016	93.38	985.40	Dec 31 2016	74.87	1003.91
Jan 31 2017	88.60	990.18	Jan 31 2017	74.25	1004.53
Feb 28 2017	88.19	990.59	Feb 28 2017	73.72	1005.06
Mar 31 2017	86.76	992.02	Mar 31 2017	72.98	1005.80
Apr 30 2017	89.10	989.68	Apr 30 2017	72.88	1005.90
May 31 2017	98.84	979.94	May 31 2017	72.31	1006.47
Jun 30 2017	97.82	980.96	Jun 30 2017	72.60	1006.18

**Piezometric Head for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1-2)**

**March 1990 through December 2017**

Well 20J1			Well 20J2		
Date	Depth (feet)	Elevation (feet, MSL)	Date	Depth (feet)	Elevation (feet, MSL)
Jul 31 2017	106.56	972.22	Jul 31 2017	73.08	1005.70
Aug 31 2017	94.27	984.51	Aug 31 2017	72.86	1005.92
Sep 30 2017	113.84	964.94	Sep 30 2017	73.46	1005.32
Oct 31 2017	115.45	963.33	Oct 31 2017	74.38	1004.40
Nov 30 2017	104.71	974.07	Nov 30 2017	74.76	1004.02
Dec 31 2017	101.32	977.46	Dec 31 2017	75.05	1003.73

Notes:

- (1) Data reported as 12:00 PM reading for period March 1990 through September 2010.
- (2) Data reported as daily median value for period October 2010 to present.

Source: USGS California Water Science Center.

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1)**

Code	Parameter	MCL	Well J1			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
3	Sampling depth, feet					
10	Temperature, water, degrees Celsius		20.5	20	21.8	21.7
28	Agency analyzing sample, code		80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute					
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		1150	863	898	775
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00002	0.00002		0.00003
300	Dissolved oxygen, water, unfiltered, milligrams per liter					
400	pH, water, unfiltered, field, standard units		7.8	7.8	7.5	7.5
403	pH, water, unfiltered, laboratory, standard units		8.1	7.7	7.6	7.6
405	Carbon dioxide, water, unfiltered, milligrams per liter		7.2			12
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter				253	223
602	Total nitrogen, water, filtered, milligrams per liter		1.5			< 4.1
607	Organic nitrogen, water, filtered, milligrams per liter					< 0.10
608	Ammonia, water, filtered, milligrams per liter as nitrogen		< 0.01	< 0.01	< 0.020	< 0.020
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (e)		< 0.01	< 0.002	0.001 E
618	Nitrate, water, filtered, milligrams per liter as nitrogen					4.05 E
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		0.2		< 0.01	< 0.10
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		1.3	3.6	3.42	4.05
660	Orthophosphate, water, filtered, milligrams per liter		0.123	0.092		0.114
666	Phosphorus, water, filtered, milligrams per liter		0.04		0.03 E	0.03 E
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.04	0.03	0.029	0.037
900	Hardness, water, milligrams per liter as calcium carbonate		340	270		282
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate		110	71		99
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate					94
915	Calcium, water, filtered, milligrams per liter		100	80	102	88.8
925	Magnesium, water, filtered, milligrams per liter		22	16	17.1	14.60
930	Sodium, water, filtered, milligrams per liter		110	76	59.2	51.5
931	Sodium adsorption ratio, water, number		2.6	2		1.34
932	Sodium fraction of cations, water, percent in equivalents of major cations		41	38		28
935	Potassium, water, filtered, milligrams per liter		2.3	1.4	1.51	1.35
940	Chloride, water, filtered, milligrams per liter		110	86	71.9	64.4
945	Sulfate, water, filtered, milligrams per liter		200	112	129	89.5
950	Fluoride, water, filtered, milligrams per liter		0.5		0.08 E	0.12
955	Silica, water, filtered, milligrams per liter		25	23	29.0	26.7
1000	Arsenic, water, filtered, micrograms per liter	10 (c)		2	1.2	1.1
1005	Barium, water, filtered, micrograms per liter	1000 (d)		61	65.9	56.6
1010	Beryllium, micrograms per liter	4 (e)		< 0.5		
1020	Boron, water, filtered, micrograms per liter		110	70	59	55
1025	Cadmium, micrograms per liter			< 1		
1030	Chromium, micrograms per liter	5 (f)		< 5		
1035	Cobalt, micrograms per liter	50 (g)		< 3		
1040	Copper, micrograms per liter	1000 (h)		< 10		
1046	Iron, water, filtered, micrograms per liter	300	< 3	< 3	2 E	< 6
1049	Lead, micrograms per liter			< 10		
1056	Manganese, water, filtered, micrograms per liter	50	51	5	< 0.2	< 0.2
1057	Thallium, micrograms per liter	2 (i)				
1060	Molybdenum, micrograms per liter			< 10		
1065	Nickel, micrograms per liter	100 (j)		< 10		
1075	Silver, micrograms per liter	100 (k)		1		
1080	Strontium, water, filtered, micrograms per liter			310	479	413
1085	Vanadium, micrograms per liter			18		
1090	Zinc, micrograms per liter	5000 (l)		< 3		
1095	Antimony, micrograms per liter	6 (m)				
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)			< 4.0	4.1

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1)**

Code	Parameter	MCL	Well J1			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
1130	Lithium, water, filtered, micrograms per liter			7	8	8
1145	Selenium, micrograms per liter	50 (c)		< 1		
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter					
4025	Hexazinone, water, filtered, recoverable, micrograms per liter					
4029	Bromacil, water, filtered, recoverable, micrograms per liter					
4035	Simazine, water, filtered, recoverable, micrograms per liter					
4036	Prometryn, water, filtered, recoverable, micrograms per liter					
4037	Prometon, water, filtered, recoverable, micrograms per liter					
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter					
4095	Fonofos, water, filtered, recoverable, micrograms per liter			4.0	3.9	
7000	Tritium, water, unfiltered, picocuries per liter					
22703	Uranium, natural, micrograms per liter					
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, lab, milligrams per liter as calcium carbonate			215	189	
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5		< 0.06		
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter			< 0.10		
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150		< 0.02		
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1		< 0.02		
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter			< 0.4		
34221	Anthracene, water, filtered, recoverable, micrograms per liter					
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)				
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter					
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70		< 0.02		
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300		< 0.04		
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter					
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
34409	Isophorone, water, filtered, recoverable, micrograms per liter					
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter			< 0.4		
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter	5		< 0.1		
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
34443	Naphthalene, water, filtered, recoverable, micrograms per liter					
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter					
34466	Phenol, water, filtered, recoverable, micrograms per liter					
34470	Pyrene, water, filtered, recoverable, micrograms per liter					
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5		< 0.04		
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter					
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150		0.05 E		
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5		< 0.04		
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6		< 0.02		
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200		< 0.02		
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5		< 0.06		
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1		< 0.10		
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600		< 0.02		
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5		< 0.02		
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10		< 0.02		
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		< 0.04		
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter			< 0.02		
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		< 0.02		
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter					



**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1)**

Code	Parameter	MCL	Well J1			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter				< 0.10	
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter				< 0.2	
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			< 0.10	
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			< 0.10	
38454	Dicropthos, water, filtered, recoverable, micrograms per liter					
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter					
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					
39036	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		240	200	207	184
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate					
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5			< 0.1	
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter				< 0.02	
39381	Dieldrin, water, filtered, recoverable, micrograms per liter	5				
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					
39532	Malathion, water, filtered, recoverable, micrograms per liter					
39572	Diazinon, water, filtered, recoverable, micrograms per liter				< 0.2	
39632	Atrazine, water, filtered, recoverable, micrograms per liter					
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
46342	Alachlor, water, filtered, recoverable, micrograms per liter					
49260	Acetochlor, water, filtered, recoverable, micrograms per liter					
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				96.47	98.33
49933	C-14, water, filtered, percent modern				0.320	0.320
49934	C-14, counting error, water, filtered, percent modern				< 0.6	
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter				< 0.1	
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter				< 0.04	
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter				< 0.06	
50305	Caffeine, water, filtered, recoverable, micrograms per liter					
50359	Metolaxyl, water, filtered, recoverable, micrograms per liter					
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6				
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter					
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter					
61593	Iprodione, water, filtered, recoverable, micrograms per liter					
61594	Isofenphos, water, filtered, recoverable, micrograms per liter					
61596	Metolaxyl, water, filtered, recoverable, micrograms per liter					
61598	Methidathion, water, filtered, recoverable, micrograms per liter					
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter					
61601	Phosmet, water, filtered, recoverable, micrograms per liter					
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					
61618	2-Chloro-2',6'-diethylacetamide, water, filtered, recoverable, micrograms per liter					
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter					
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter					
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter					
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter					
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter					
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter					
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter					
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter					
61652	Malaoxon, water, filtered, recoverable, micrograms per liter					
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter					
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter					
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1)**

Code	Parameter	MCL	Well J1			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
61674	Sampling date					
	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter					
61705	Diethoxydiphenol, water, filtered, recoverable, micrograms per liter					
61706	Monoethoxydiphenol, water, filtered, recoverable, micrograms per liter					
62005	Cotinine, water, filtered, recoverable, micrograms per liter					
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter					
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter					
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter					
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter					
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter					
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter					
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter					
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter					
62064	Acetophenone, water, filtered, recoverable, micrograms per liter					
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter					
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter					
62067	Benzophenone, water, filtered, recoverable, micrograms per liter					
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter					
62070	Camphor, water, filtered, recoverable, micrograms per liter					
62071	Carbazole, water, filtered, recoverable, micrograms per liter					
62072	Cholesterol, water, filtered, recoverable, micrograms per liter					
62073	D-Limonene, water, filtered, recoverable, micrograms per liter					
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter					
62076	Indole, water, filtered, recoverable, micrograms per liter					
62077	Isoborneol, water, filtered, recoverable, micrograms per liter					
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter					
62079	Isouinolone, water, filtered, recoverable, micrograms per liter					
62080	Menthol, water, filtered, recoverable, micrograms per liter					
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter					
62082	DEET, water, filtered, recoverable, micrograms per liter					
62083	Diethoxydiphenol, water, filtered, recoverable, micrograms per liter					
62084	p-Cresol, water, filtered, recoverable, micrograms per liter					
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter					
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter					
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter					
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter					
62090	Triclosan, water, filtered, recoverable, micrograms per liter					
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter					
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter					
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62166	Flpronil, water, filtered, recoverable, micrograms per liter					
62168	Flpronil sulfide, water, filtered, recoverable, micrograms per liter					
62169	Desulfinylflpronil amide, water, filtered, recoverable, micrograms per liter					
62170	Desulfinylflpronil, water, filtered, recoverable, micrograms per liter					
62854	Total nitrogen, (NH3+NO3+Organic), filtered, milligrams per liter	6				
63790	Perchlorate, water, filtered, recoverable, micrograms per liter					
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	596	531	482	
70301	Residue, water, filtered, sum of constituents, milligrams per liter		717	528	466 E	
70303	Residue, water, filtered, tons per acre-foot					
71846	Ammonia, water, filtered, milligrams per liter as NH4					
71851	Nitrate, water, filtered, milligrams per liter	45 (q)				17.9 E

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1)**

Code	Parameter	MCL	Well J1			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
71856	Nitrite, water, filtered, milligrams per liter					0.004 E
71865	Iodide, water, filtered, milligrams per liter					0.003
71870	Bromide, water, filtered, milligrams per liter					0.36
72019	Depth to water level, feet below land surface		72.28			
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter					< 0.4
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.1
75985	Triium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					
77041	Carbon disulfide, water, unfiltered, micrograms per liter					< 0.04
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6				< 0.02
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.6
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100				< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.06
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.1
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.02
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.02
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.02
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.02
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.06
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.06
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter					< 0.80
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05				< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.4
81552	Acetone, water, unfiltered, recoverable, micrograms per liter					< 4
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter					< 0.2
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.2
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter					< 1
82081	C-13/C-12 ratio, water, unfiltered, per mil					< 15.29
82082	Deuterium/Protium ratio, water, unfiltered, per mil					-15.56
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil					-42.80
82303	Rn-222, water, unfiltered, picocuries per liter					-44.2
82346	Ethion, water, filtered, recoverable, micrograms per liter					-6.66
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter					-6.8
82630	Metribuzin, water, filtered, recoverable, micrograms per liter					< 1.0
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J1)**

Code	Parameter	MCL	Well J1			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
85795	m-Xylene plus p-xylene, water, unfiltered, laboratory, micrograms per liter					
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		1130		< 0.08	
90851	Trihalomethanes, water, unfiltered, calcd, micrograms per liter			868		787
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					131
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					86.4
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					85.9
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery					
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					

**Notes:**

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J2)**

Code	Parameter	MCL	Well J2			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
3	Sampling depth, feet					
10	Temperature, water, degrees Celsius		19	19	20.8	20.8
28	Agency analyzing sample, code		80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute					
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius			400	423	422
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00003	0.00003		0.00003
300	Dissolved oxygen, water, unfiltered, milligrams per liter					
400	pH, water, unfiltered, field, standard units		7.6	7.6	7.5	7.5
403	pH, water, unfiltered, laboratory, standard units		8.6	7.6	7.5	7.6
405	Carbon dioxide, water, unfiltered, milligrams per liter		7.7			9.7
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter				193	193
602	Total nitrogen, water, filtered, milligrams per liter		1.7			< 1.7
607	Organic nitrogen, water, filtered, milligrams per liter					< 0.10
608	Ammonia, water, filtered, milligrams per liter as nitrogen		< 0.01	< 0.01	0.012 E	< 0.020
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (e)	< 0.01	< 0.01	< 0.002	0.001 E
618	Nitrate, water, filtered, milligrams per liter as nitrogen					1.57 E
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		0.5		< 0.01	< 0.10
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		1.2	1.2	1.58	1.57
660	Orthophosphate, water, filtered, milligrams per liter		0.675	0.307		0.306
666	Phosphorus, water, filtered, milligrams per liter		0.23		0.09	0.09
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.22	0.1	0.096	0.100
900	Hardness, water, milligrams per liter as calcium carbonate		130	130		141
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate					
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate					
915	Calcium, water, filtered, milligrams per liter		42	42	43.5	45.6
925	Magnesium, water, filtered, milligrams per liter		6.3	6	6.02	6.42
930	Sodium, water, filtered, milligrams per liter		38	35	32.6	34.7
931	Sodium adsorption ratio, water, number		1.4	1.3		1.27
932	Sodium fraction of cations, water, percent in equivalents of major cations		39	37		35
935	Potassium, water, filtered, milligrams per liter		0.8	0.8	0.84	0.83
940	Chloride, water, filtered, milligrams per liter		27	29	24.4	25.9
945	Sulfate, water, filtered, milligrams per liter		12	12	13.0	13.2
950	Fluoride, water, filtered, milligrams per liter		0.7		0.28	0.31
955	Silica, water, filtered, milligrams per liter		28	25	28.3	25.7
1000	Arsenic, water, filtered, micrograms per liter			1	1.0	0.96
1005	Barium, water, filtered, micrograms per liter			40	42.8	42.5
1010	Beryllium, micrograms per liter			< 0.5		
1020	Boron, water, filtered, micrograms per liter		60	50	37	37
1025	Cadmium, micrograms per liter			< 1		
1030	Chromium, micrograms per liter			< 5		
1035	Cobalt, micrograms per liter			< 3		
1040	Copper, micrograms per liter			< 10		
1046	Iron, water, filtered, micrograms per liter		< 3	< 3	< 4	< 6
1049	Lead, micrograms per liter			< 10		
1056	Manganese, water, filtered, micrograms per liter		< 1	< 1	0.2 E	0.1 E
1057	Thallium, micrograms per liter					
1060	Molybdenum, micrograms per liter			< 10		
1065	Nickel, micrograms per liter			< 10		
1075	Silver, micrograms per liter			< 1		
1080	Strontium, water, filtered, micrograms per liter			170	175	183
1085	Vanadium, micrograms per liter			15		
1090	Zinc, micrograms per liter			4		
1095	Antimony, micrograms per liter					
1106	Aluminum, water, filtered, micrograms per liter				< 4.0	6.3

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J2)**

Code	Parameter	MCL	Well J2			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
1130	Lithium, water, filtered, micrograms per liter			5	5	6
1145	Selenium, micrograms per liter	50 (c)		< 1		
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter					
4025	Hexazinone, water, filtered, recoverable, micrograms per liter					
4029	Bromacil, water, filtered, recoverable, micrograms per liter					
4035	Simazine, water, filtered, recoverable, micrograms per liter					
4036	Prometryn, water, filtered, recoverable, micrograms per liter					
4037	Prometon, water, filtered, recoverable, micrograms per liter					
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter					
4095	Fonofos, water, filtered, recoverable, micrograms per liter			5.5	5.2	
7000	Tritium, water, unfiltered, picocuries per liter					
22703	Uranium, natural, micrograms per liter					
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, lab, milligrams per liter as calcium carbonate			163	162	
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5		< 0.06		
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter			< 0.10		
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150		< 0.02		
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1		< 0.02		
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter			< 0.4		
34221	Anthracene, water, filtered, recoverable, micrograms per liter					
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)				
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter					
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70		< 0.02		
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300		< 0.04		
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter					
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter			< 0.1		
34409	Isophorone, water, filtered, recoverable, micrograms per liter					
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter			< 0.4		
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter	5		< 0.1		
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter			< 0.04		
34443	Naphthalene, water, filtered, recoverable, micrograms per liter					
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter					
34466	Phenol, water, filtered, recoverable, micrograms per liter					
34470	Pyrene, water, filtered, recoverable, micrograms per liter					
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5		< 0.04		
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter					
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150		0.15		
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5		< 0.04		
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6		< 0.02		
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200		< 0.02		
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5		< 0.06		
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1		< 0.10		
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600		< 0.02		
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5		< 0.02		
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10		< 0.02		
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		< 0.04		
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter			< 0.02		
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		< 0.02		
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter					

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J2)**

Code	Parameter	MCL	Well J2			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter				< 0.10	
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter				< 0.2	
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			< 0.10	
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			< 0.10	
38454	Dicropthos, water, filtered, recoverable, micrograms per liter					
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter					
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					
39036	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		160	150	158	159
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate					
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5			< 0.1	
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5			< 0.02	
39381	Dieldrin, water, filtered, recoverable, micrograms per liter					
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					
39532	Malathion, water, filtered, recoverable, micrograms per liter					
39572	Diazinon, water, filtered, recoverable, micrograms per liter					
39632	Atrazine, water, filtered, recoverable, micrograms per liter					
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
46342	Alachlor, water, filtered, recoverable, micrograms per liter					
49260	Acetochlor, water, filtered, recoverable, micrograms per liter					
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				103.4	103.3
49933	C-14, water, filtered, percent modern				0.360	0.400
49934	C-14, counting error, water, filtered, percent modern				< 0.6	
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter				< 0.1	
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter				< 0.1	
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter				< 0.04	
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter				< 0.06	
50305	Caffeine, water, filtered, recoverable, micrograms per liter					
50359	Metolaxyl, water, filtered, recoverable, micrograms per liter					
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6				
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter					
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter					
61593	Iprodione, water, filtered, recoverable, micrograms per liter					
61594	Isofenphos, water, filtered, recoverable, micrograms per liter					
61596	Metolaxyl, water, filtered, recoverable, micrograms per liter					
61598	Methidathion, water, filtered, recoverable, micrograms per liter					
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter					
61601	Phosmet, water, filtered, recoverable, micrograms per liter					
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					
61618	2-Chloro-2',6'-diethylacetamide, water, filtered, recoverable, micrograms per liter					
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter					
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter					
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter					
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter					
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter					
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter					
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter					
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter					
61652	Malaoxon, water, filtered, recoverable, micrograms per liter					
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter					
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter					
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J2)**

Code	Parameter	MCL	Well J2			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
61674	Sampling date					
	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter					
61705	Diethoxydiphenol, water, filtered, recoverable, micrograms per liter					
61706	Monoethoxydiphenol, water, filtered, recoverable, micrograms per liter					
62005	Cotinine, water, filtered, recoverable, micrograms per liter					
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter					
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter					
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter					
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter					
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter					
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter					
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter					
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter					
62064	Acetophenone, water, filtered, recoverable, micrograms per liter					
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter					
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter					
62067	Benzophenone, water, filtered, recoverable, micrograms per liter					
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter					
62070	Camphor, water, filtered, recoverable, micrograms per liter					
62071	Carbazole, water, filtered, recoverable, micrograms per liter					
62072	Cholesterol, water, filtered, recoverable, micrograms per liter					
62073	D-Limonene, water, filtered, recoverable, micrograms per liter					
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter					
62076	Indole, water, filtered, recoverable, micrograms per liter					
62077	Isoborneol, water, filtered, recoverable, micrograms per liter					
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter					
62079	Isouinolone, water, filtered, recoverable, micrograms per liter					
62080	Menthol, water, filtered, recoverable, micrograms per liter					
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter					
62082	DEET, water, filtered, recoverable, micrograms per liter					
62083	Diethoxydiphenol, water, filtered, recoverable, micrograms per liter					
62084	p-Cresol, water, filtered, recoverable, micrograms per liter					
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter					
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter					
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter					
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter					
62090	Triclosan, water, filtered, recoverable, micrograms per liter					
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter					
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter					
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62166	Fipronil, water, filtered, recoverable, micrograms per liter					
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter					
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter					
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter					
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter					
62854	Total nitrogen, (NH3+NO3+Organic), filtered, milligrams per liter	6				
63790	Perchlorate, water, filtered, recoverable, micrograms per liter					
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	216	265	250	
70301	Residue, water, filtered, sum of constituents, milligrams per liter		255	247	256 E	
70303	Residue, water, filtered, tons per acre-foot					
71846	Ammonia, water, filtered, milligrams per liter as NH4					
71851	Nitrate, water, filtered, milligrams per liter	45 (q)				6.94 E



**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J2)**

Code	Parameter	MCL	Well J2			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
71856	Nitrite, water, filtered, milligrams per liter					0.003 E
71865	Iodide, water, filtered, milligrams per liter					< 0.002
71870	Bromide, water, filtered, milligrams per liter					0.09
72019	Depth to water level, feet below land surface		61.65			
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter					< 0.4
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.1
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					
77041	Carbon disulfide, water, unfiltered, micrograms per liter					< 0.04
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6				< 0.02
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.6
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100				< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.06
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.1
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.02
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.02
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					< 0.02
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter					< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.02
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					< 0.06
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter					< 0.06
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter					< 0.80
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter					< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.1
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05				< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter					< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter					< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 0.4
81552	Acetone, water, unfiltered, recoverable, micrograms per liter					< 4
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter					< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter					< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter					< 0.2
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter					< 0.2
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter					< 1
82081	C-13/C-12 ratio, water, unfiltered, per mil					< 1
82082	Deuterium/Protium ratio, water, unfiltered, per mil					-14.99
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil					-42.90
82303	Rn-222, water, unfiltered, picocuries per liter					-44
82346	Ethion, water, filtered, recoverable, micrograms per liter					-7
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter					< 1.0
82630	Metribuzin, water, filtered, recoverable, micrograms per liter					
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					

**Water Quality Data for Multiple Depth Monitoring Well  
Wolf Valley Well (8S/2W-20J2)**

Code	Parameter	MCL	Well J2			
			8/15/1990	12/20/1993	8/4/2009	7/26/2010
	Sampling date					
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
85795	m-Xylene plus p-xylene, water, unfiltered, laboratory, micrograms per liter					
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		404	< 0.08	433	422
90851	Trihalomethanes, water, unfiltered, calcd, micrograms per liter			408		
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery				133	
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery				85.7	
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery				87.2	
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery					
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					

**Notes:**

U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX C-3**

**TEMECULA CREEK  
GROUNDWATER MONITORING WELL**



## Site Description

### Temecula Creek Groundwater Monitoring Well (8S/2W-15F1-5)

**LOCATION:** Latitude 33° 28' 57.8", longitude 117° 04' 33.2" (NAD83) in SE1/4 SE1/4 NW1/4 Section 15, T8S, R2W, Riverside County, California. Well is located off Butterfield Stage Road on Channel Street near Temecula Creek Trail Park in Temecula, California.

**SITE INFORMATION:** Land-surface altitude is 1110.53 feet above mean sea level (NAVD88).

**WATER-LEVEL RECORD:** The period of record for intermittent and daily water-level measurements is listed below.

State well number	USGS station number	Intermittent water-level	Daily water-level
8S/2W-15F1	332857117043301	7/11/2013 to present	9/28/2013 to present
8S/2W-15F2	332857117043302	7/11/2013 to present	10/1/2013 to present
8S/2W-15F3	332857117043303	7/11/2013 to present	10/19/2013 to present
8S/2W-15F4	332857117043304	7/11/2013 to present	9/28/2013 to present
8S/2W-15F5	332857117043305	7/11/2013 to present	10/1/2013 to present

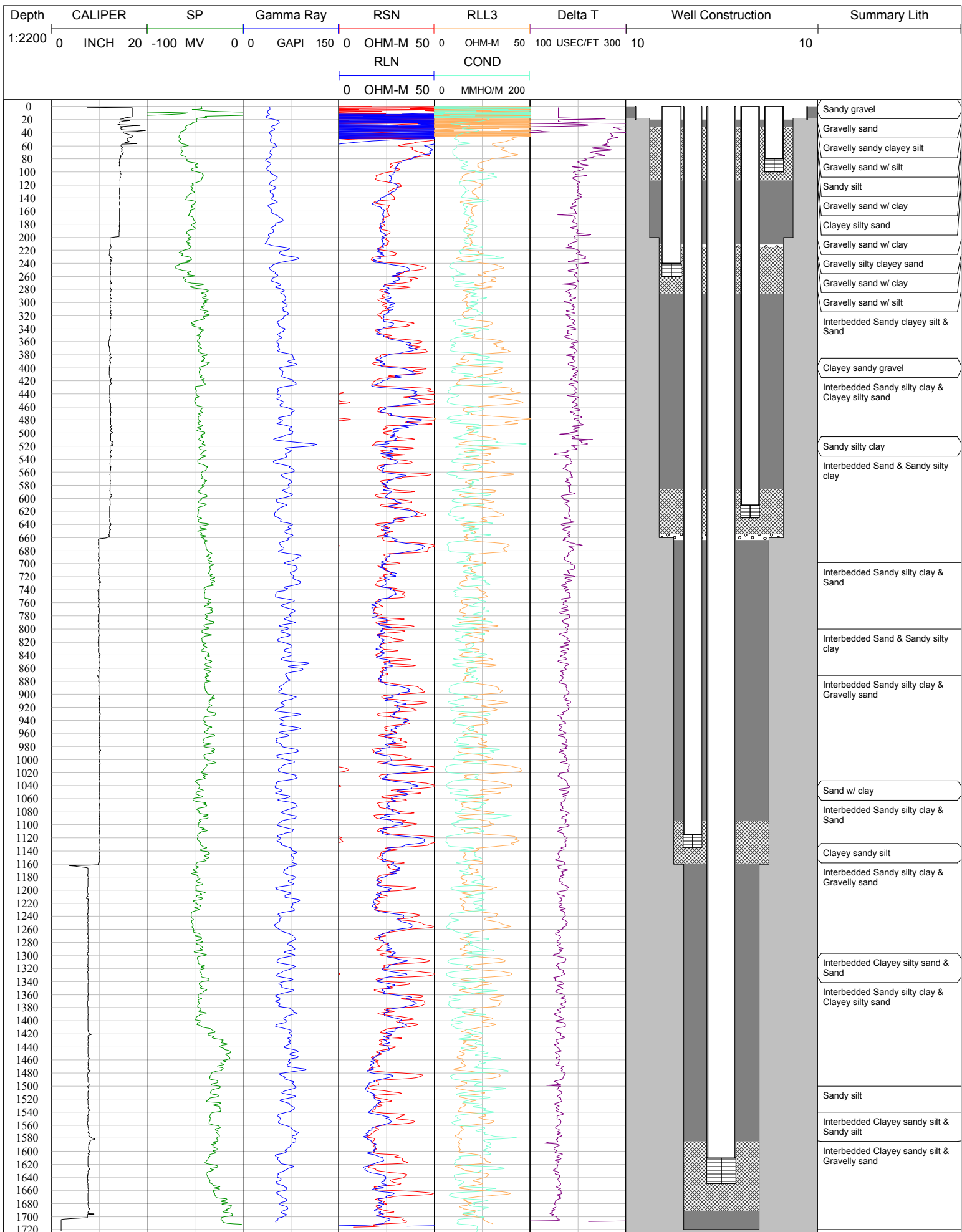
**TOPOGRAPHIC MAP:** USGS Pechanga, California, 7.5 minute series.

**WELL SUMMARY INFORMATION:**

<b>State well number</b>	<b>USGS station number</b>	<b>Hole depth (ft)</b>	<b>Perforation depth (ft)</b>	<b>Casing size and type</b>	<b>Date drilled</b>
8S/2W-15F1	332857117043301	1720	1610-1650	3" PVC	4/2/13
8S/2W-15F2	332857117043302	1720	1115-1135	2" PVC	4/2/13
8S/2W-15F3	332857117043303	1720	610-630	2" PVC	4/2/13
8S/2W-15F4	332857117043304	1720	240-260	2" PVC	4/2/13
8S/2W-15F5	332857117043305	1720	80-100	2" PVC	4/2/13

**ADDITIONAL INFORMATION:**

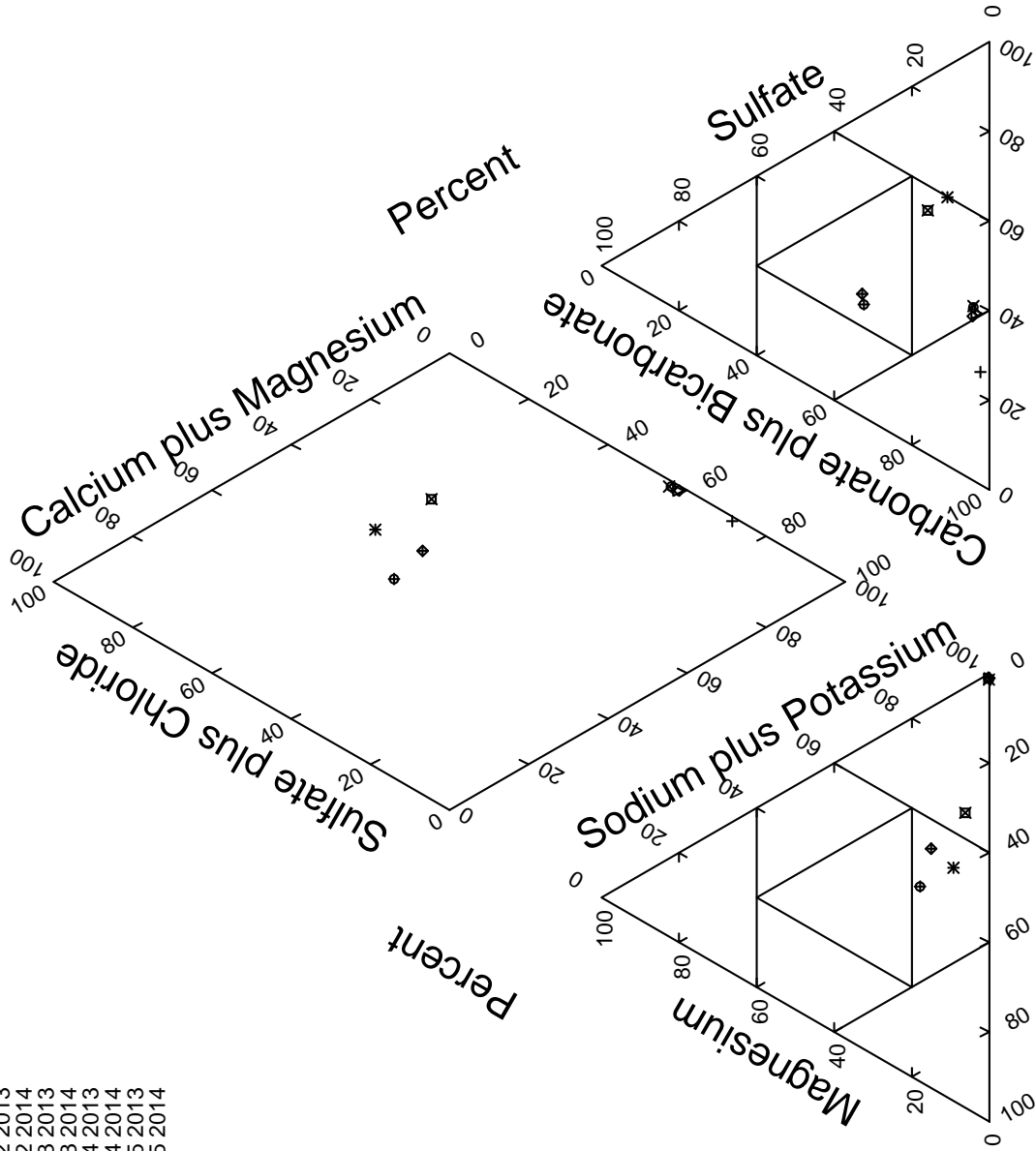
Additional information can also be found at the following web site:  
<http://ca.water.usgs.gov/temecula/>.



Page Intentionally Blank

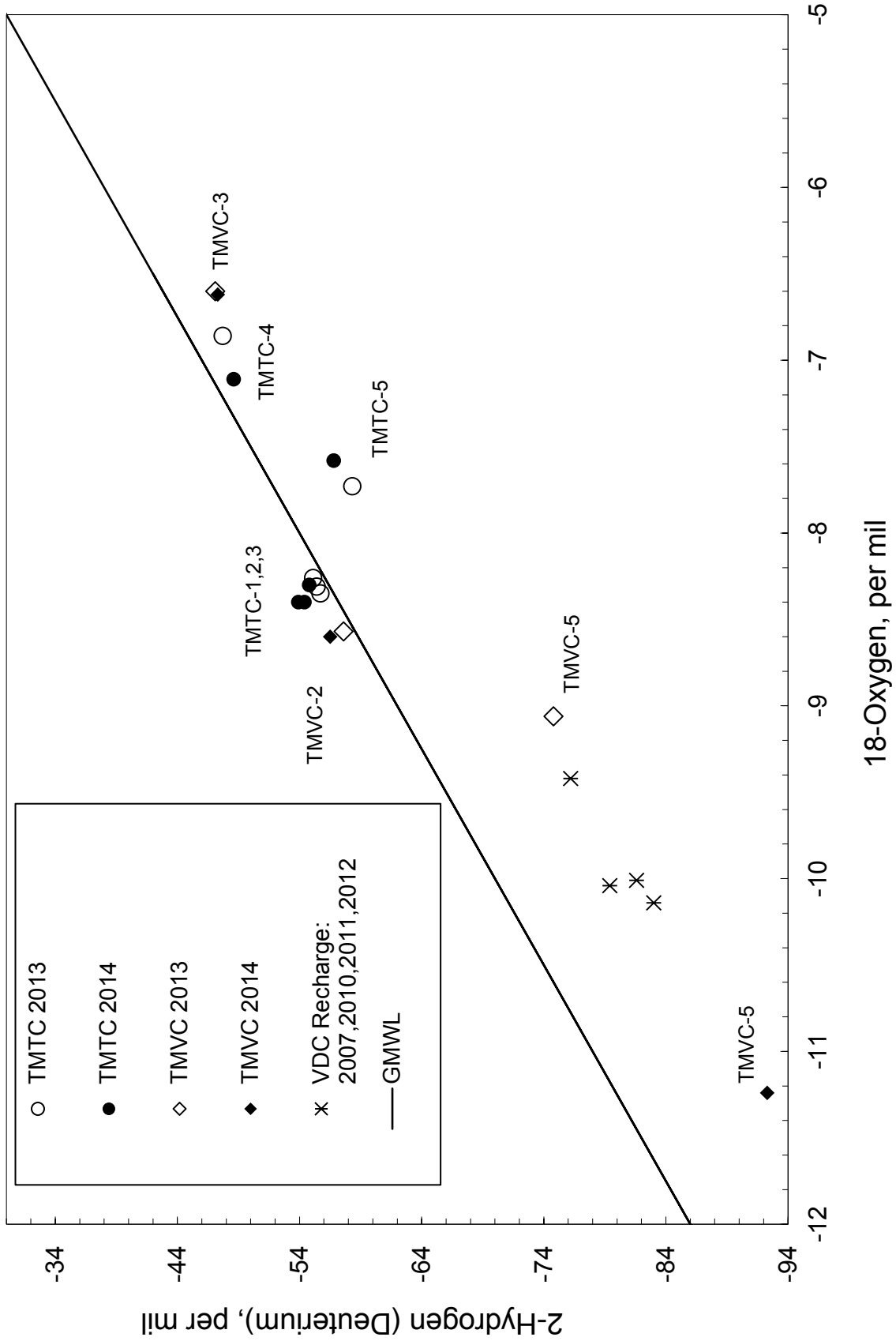


- Explanation
- TMTC-1 2013
  - △ TMTC-1 2014
  - + TMTC-2 2013
  - × TMTC-2 2014
  - ◇ TMTC-3 2013
  - ▽ TMTC-3 2014
  - ⊠ TMTC-4 2013
  - \* TMTC-4 2014
  - ◆ TMTC-5 2013
  - ⊕ TMTC-5 2014



# Stable Isotope Diagram

## Temecula Creek and VDC Recharge Basin Monitoring Wells



Source: USGS California Water Science Center.

**End-of Month Piezometric Head for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
(elevation in feet, MSL)**

**September 2013 through December 2017**

<b>Month</b>	<b>Well F1</b>	<b>Well F2</b>	<b>Well F3</b>	<b>Well F4</b>	<b>Well F5</b>
Jan 13	---	---	---	---	---
Feb	---	---	---	---	---
Mar	---	---	---	---	---
Apr	---	---	---	---	---
May	---	---	---	---	---
Jun	---	---	---	---	---
Jul	---	---	---	---	---
Aug	---	---	---	---	---
Sep	822.19	---	---	1021.91	---
Oct	820.46	784.40	788.85	1020.74	1065.59
Nov	821.41	792.71	812.22	1020.69	1065.36
Dec	823.06	797.23	772.46	1020.07	1065.21
Jan 14	823.71	793.07	771.38	1019.72	1064.92
Feb	822.19	792.53	799.75	1019.48	1064.81
Mar	820.85	800.28	837.25	1020.12	1064.55
Apr	819.56	801.09	843.54	1019.75	1064.38
May	818.59	802.22	850.94	1020.04	1064.20
Jun	818.29	803.56	821.98	1020.99	1064.02
Jul	817.53	798.31	772.47	1020.86	1063.83
Aug	816.73	790.42	757.13	1019.66	1063.63
Sep	815.67	783.98	746.93	1019.39	1063.40
Oct	814.43	782.65	755.14	1021.15	1063.25
Nov	813.25	788.38	786.82	1020.53	1062.97
Dec	814.85	798.97	836.89	1022.24	1062.93
Jan 15	813.87	798.69	829.96	1020.63	1062.97
Feb	813.57	790.07	783.60	1019.66	1062.85
Mar	813.89	788.12	756.86	1020.06	1062.81
Apr	811.97	785.97	789.51	1019.11	1062.64
May	811.28	785.63	776.32	1017.84	1062.42
Jun	810.25	782.50	754.94	1016.68	1062.27
Jul	808.87	781.65	796.33	1014.28	1062.06
Aug	807.86	781.57	790.97	1014.37	1061.86
Sep	807.40	782.21	770.46	1014.73	1061.68
Oct	806.55	785.05	782.19	1013.40	1061.33
Nov	805.81	782.95	797.00	1012.36	1061.15
Dec	805.90	787.74	823.31	1013.51	1060.97
Jan 16	806.82	789.65	806.22	1014.11	1061.01
Feb	806.44	789.81	803.72	1014.61	1060.76
Mar	806.99	791.03	791.46	1014.73	1060.60
Apr	808.63	791.09	775.12	1014.73	1060.60
May	809.85	789.45	763.31	1013.82	1060.36
Jun	809.73	786.72	766.72	1014.26	1060.11
Jul	810.33	789.06	792.33	1014.37	1059.84
Aug	811.23	791.71	784.09	1014.58	1059.64
Sep	812.04	791.43	780.75	1013.49	1059.36
Oct	813.01	793.25	773.50	1012.82	1059.09
Nov	813.35	795.08	812.64	1012.75	1058.88
Dec	813.21	800.80	830.48	1013.72	1058.77

**End-of Month Piezometric Head for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
(elevation in feet, MSL)**

**September 2013 through December 2017**

<b>Month</b>	<b>Well F1</b>	<b>Well F2</b>	<b>Well F3</b>	<b>Well F4</b>	<b>Well F5</b>
Jan 17	814.25	806.49	829.07	1014.89	1058.81
Feb	815.05	809.21	838.93	1015.33	1058.86
Mar	815.42	807.66	813.81	1015.67	1059.47
Apr	815.00	806.40	820.07	1015.36	1059.35
May	814.67	804.60	820.72	1015.05	1059.29
Jun	814.23	803.22	814.63	1014.88	1059.04
Jul	813.79	802.84	815.64	1014.71	1058.85
Aug	813.91	802.79	815.81	1014.99	1058.62
Sep	813.25	801.71	814.33	1014.55	1058.39
Oct	812.78	800.45	812.72	1014.08	1058.14
Nov	812.30	800.18	812.66	1013.59	1057.87
Dec	812.19	797.80	815.52	1012.89	1057.68

Notes:

(1) Data reported as daily median value for period of record.

Source: USGS California Water Science Center.

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
May 2013**

Code	Parameter	MCL	Well F1 5/16/2013	Well F2 5/14/2013	Well F3 5/13/2013	Well F4 5/14/2013	Well F5 5/14/2013
3	Sampling date						
10	Sampling depth, feet						
28	Temperature, water, degrees Celsius		22.0	21.9	24.8	23.4	21.2
59	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		480	483	504	717	1060
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter					0.00001	0.00003
300	Dissolved oxygen, water, unfiltered, milligrams per liter		0.9	2.4	2.4	3.1	3.1
400	pH, water, unfiltered, field, standard units		9.6	9.5	9.5	8.0	7.5
403	pH, water, unfiltered, laboratory, standard units		9.5	9.5	9.5	8.2	7.9
405	Carbon dioxide, water, unfiltered, milligrams per liter		M	0.1	0.1	2.1	1.2
452	Carbonate, water filtered, inflection-point titration method, field, milligrams per liter						
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter						
602	Total nitrogen, water, filtered, milligrams per liter		< 0.12	0.71	< 0.16	3.5	5.4
607	Organic nitrogen, water, filtered, milligrams per liter		0.05	0.37	0.10	0.10	0.52
608	Ammonia, water, filtered, milligrams per liter as nitrogen		0.04	0.05	0.01	0.02	0.01
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	0.003	< 0.001	< 0.001	0.148	0.014
618	Nitrate, water, filtered, milligrams per liter as nitrogen		< 0.037	0.3	< 0.040	3.26	4.82
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		0.09	0.41	0.12	0.12	0.53
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		< 0.040	0.30	< 0.040	3.41	4.84
660	Orthophosphate, water, filtered, milligrams per liter		0.117	0.502	1.12	0.409	1.07
666	Phosphorus, water, filtered, milligrams per liter		0.03	0.15	0.47	0.14	0.35
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.038	0.164	0.366	0.133	0.350
681	Organic carbon, water, filtered, milligrams per liter		0.58	1.12	0.83	0.85	1.82
900	Hardness, water, milligrams per liter as calcium carbonate					116	242
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate					17	38
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate					9	18
915	Calcium, water, filtered, milligrams per liter		1.03	0.924	0.777	37.8	65.6
925	Magnesium, water, filtered, milligrams per liter						
930	Sodium, water, filtered, milligrams per liter		100	102	105	100	125
932	Sodium adsorption ratio, water, number					4.06	3.50
935	Sodium fraction of cations, water, percent in equivalents of major cations					65	52
945	Potassium, water, filtered, milligrams per liter		0.34	0.50	0.55	2.95	4.19
945	Chloride, water, filtered, milligrams per liter	600	48.2	48.4	48.1	120	86.2
950	Sulfate, water, filtered, milligrams per liter	600	8.91	8.18	10.0	50.9	161
955	Fluoride, water, filtered, milligrams per liter	2 (b)	7.56	7.94	7.89	0.14	0.49
1000	Silica, water, filtered, milligrams per liter		22.4	19.5	15.1	22.3	27.0
1005	Arsenic, water, filtered, micrograms per liter	10 (c)	41.2	53.6	42.3	1.4	3.5
1010	Barium, water, filtered, micrograms per liter	1000 (d)		2.4		126	32.5
1020	Beryllium, micrograms per liter	4 (e)					
1025	Boron, water, filtered, micrograms per liter		2080	1860	1900	91	201
1030	Cadmium, micrograms per liter	5 (f)					
1035	Chromium, micrograms per liter	50 (g)					
1040	Cobalt, micrograms per liter						
1046	Copper, micrograms per liter	1000 (h)					
1049	Iron, water, filtered, micrograms per liter	300	10.2	46.3	22.4	< 4.0	5.8
1056	Lead, micrograms per liter						
1057	Manganese, water, filtered, micrograms per liter	50		1.46	2.31	5.56	4.97
1060	Thallium, micrograms per liter	2 (i)					
1065	Molybdenum, micrograms per liter						
1075	Nickel, micrograms per liter	100 (j)					
1080	Silver, micrograms per liter	100 (k)					
1085	Strontium, water, filtered, micrograms per liter		6.9	7.6	8.7	511	366
1085	Vanadium, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
May 2013**

Code	Parameter	MCL	Well F1 5/16/2013	Well F2 5/14/2013	Well F3 5/13/2013	Well F4 5/14/2013	Well F5 5/14/2013
	Sampling date						
1090	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					
1106	Aluminum, water, filtered, recoverable, micrograms per liter	1000 (n)	69.0	181	88.6	5.2	11.6
1130	Lithium, water, filtered, micrograms per liter		E6.19	E3.73	E2.99	E5.99	E4.35
1145	Selenium, micrograms per liter	50 (o)					
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter		R -0.2	R 0.0	R 0.2	R 0.2	6.5
22703	Uranium, natural, micrograms per liter						
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		138	136	148	107	224
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter						
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter						
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5					
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter						
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter						
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter						
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter						
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150					
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1					
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70					
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter						
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300					
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter						
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter						
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter						
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5					
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5					
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150					
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200					
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1					
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600					
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10					

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
May 2013**

Code	Parameter	MCL	Well F1 5/16/2013	Well F2 5/14/2013	Well F3 5/13/2013	Well F4 5/14/2013	Well F5 5/14/2013
	Sampling date						
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter						
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter						
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
38454	Dicropthos, water, filtered, recoverable, micrograms per liter						
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate		132	262	145	99	204
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5					
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5					
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter						
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern		0.66	3.17	2.11	55.26	94.5
49934	C-14, counting error, water, filtered, percent modern		0.05	0.07	0.06	0.23	0.29
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter						
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter						
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter						
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter						
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isofenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaxyl, water, filtered, recoverable, micrograms per liter						
61598	Metidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
May 2013**

Code	Parameter	MCL	Well F1 5/16/2013	Well F2 5/14/2013	Well F3 5/13/2013	Well F4 5/14/2013	Well F5 5/14/2013
	Sampling date						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter						
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						
61705	Diethoxyoctylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monoethoxyoctylphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthyl, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Sigmandanol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter						
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6					



**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
May 2013**

Code	Parameter	MCL	Well F1 5/16/2013	Well F2 5/14/2013	Well F3 5/13/2013	Well F4 5/14/2013	Well F5 5/14/2013
	Sampling date						
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	293	267	299	422	668
70301	Residue, water, filtered, sum of constituents, milligrams per liter					E 415	E 634
70303	Residue, water, filtered, tons per acre-foot						
71846	Ammonia, water, filtered, milligrams per liter as NH4		0.047	0.058	0.019	0.021	0.016
71851	Nitrate, water, filtered, milligrams per liter	45 (c)	< 0.162	1.33	< 0.177	14.4	21.4
71856	Nitrite, water, filtered, milligrams per liter		0.011	< 0.003	< 0.003	0.485	0.047
71865	Iodide, water, filtered, milligrams per liter		0.078	0.085	0.075	0.013	0.008
71870	Bromide, water, filtered, milligrams per liter		0.108	0.129	0.131	0.401	0.308
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter						
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
77041	Carbon disulfide, water, unfiltered, micrograms per liter						
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100					
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter						
77168	1,1-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter						
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter						
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter						
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter						
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter						
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter						
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter						
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter						
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05					
77652	1,1,2-Trichloro-1,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter						
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter						
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter						
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81562	Acetone, water, unfiltered, recoverable, micrograms per liter						
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter						
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter						
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter						
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter						
82081	C-13/C-12 ratio, water, unfiltered, per mil		-9.44	-10.68	-10.94	-14.91	-13.49
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-55.40	-55.70	-55.10	-47.70	-58.30

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
May 2013**

Code	Parameter	MCL	Well F1 5/16/2013	Well F2 5/14/2013	Well F3 5/13/2013	Well F4 5/14/2013	Well F5 5/14/2013
	Sampling date						
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-8.31	-8.35	-8.26	-6.86	-7.73
82303	Rn-222, water, unfiltered, picocuries per liter						
82346	Ethion, water, filtered, recoverable, micrograms per liter						
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metricbuzin, water, filtered, recoverable, micrograms per liter						
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
87995	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter						
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		472	450	496	720	1040
90851	Triholmehtanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 1067.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
October 2014**

Code	Parameter	MCL	Well F1 10/14/2014	Well F2 10/15/2014	Well F3 10/15/2014	Well F4 10/14/2014	Well F5 10/14/2014
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius		23.9	23.2		22.2	20.9
28	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		442	451	442	638	1160
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter					0.00003	0.00008
300	Dissolved oxygen, water, unfiltered, milligrams per liter		1.1	0.2	0.2	1.1	1.4
400	pH, water, unfiltered, field, standard units		9.4	9.5	9.6	7.6	7.1
403	pH, water, unfiltered, laboratory, standard units		9.3	9.4	9.4	7.9	7.5
405	Carbon dioxide, water, unfiltered, milligrams per liter		0.1	0.1	M	4.4	39
452	Carbonate, water filtered, inflection-point titration method, field, milligrams per liter		19	24	24.2	0.4	0.3
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter		124	122	116	109	306
602	Total nitrogen, water, filtered, milligrams per liter		< 0.20	< 0.23	< 0.11	3.8	4.8
607	Organic nitrogen, water, filtered, milligrams per liter		0.12	0.15	< 0.05	< 0.07	< 0.07
608	Ammonia, water, filtered, milligrams per liter as nitrogen		0.04	0.04	0.02	< 0.01	< 0.01
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
618	Nitrate, water, filtered, milligrams per liter as nitrogen		< 0.040	< 0.040	< 0.040	3.73	4.73
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		0.15	0.19	< 0.07	0.07	0.07
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		< 0.040	< 0.040	< 0.040	3.73	4.73
660	Orthophosphate, water, filtered, milligrams per liter		0.095	0.496	0.169	0.238	0.304
666	Phosphorus, water, filtered, milligrams per liter		0.04	0.16	0.06	0.09	0.10
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.031	0.162	0.055	0.078	0.099
681	Organic carbon, water, filtered, milligrams per liter						
900	Hardness, water, milligrams per liter as calcium carbonate		3.28	3.51	2.66	1.49	358
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate					59	106
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate					56	101
915	Calcium, water, filtered, milligrams per liter		1.26	1.26	0.986	48.0	97.8
925	Magnesium, water, filtered, milligrams per liter		0.032	0.085	0.043	6.92	27.4
930	Sodium, water, filtered, milligrams per liter		108	112	108	72.0	124
931	Sodium adsorption ratio, water, number		26.1	26.1	28.8	2.57	2.84
932	Sodium fraction of cations, water, percent in equivalents of major cations		98	98	99	51	43
935	Potassium, water, filtered, milligrams per liter		0.33	0.48	0.31	3.08	4.54
940	Chloride, water, filtered, milligrams per liter	600	50.5	53.3	48.4	121	93.2
945	Sulfate, water, filtered, milligrams per liter	600	8.99	9.65	7.37	32.0	184
950	Fluoride, water, filtered, milligrams per liter	2 (b)	6.67	7.85	7.00	0.14	0.40
955	Silica, water, filtered, milligrams per liter		20.5	18.7	14.0	20.6	26.8
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	33.1	44.3	41.0	0.7	1.1
1005	Barium, water, filtered, micrograms per liter	1000 (d)	1.8	1.9	1.7	193	46.7
1010	Beryllium, micrograms per liter	4 (e)					
1020	Boron, water, filtered, micrograms per liter		2230	2050	2080	92	202
1025	Cadmium, micrograms per liter	5 (f)					
1030	Chromium, micrograms per liter	50 (g)					
1035	Cobalt, micrograms per liter						
1040	Copper, micrograms per liter	1000 (h)					
1046	Iron, water, filtered, micrograms per liter	300	10.5	32.4	< 4.0	< 4.0	< 4.0
1049	Lead, micrograms per liter						
1056	Manganese, water, filtered, micrograms per liter	50	0.68	1.21	0.60	0.63	< 0.20
1057	Thallium, micrograms per liter	2 (i)					
1060	Molybdenum, micrograms per liter						
1065	Nickel, micrograms per liter	100 (j)					
1075	Silver, micrograms per liter	100 (k)					
1080	Strontium, water, filtered, micrograms per liter		8.2	9.0	18.5	702	529
1085	Vanadium, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
October 2014**

Code	Parameter	MCL	Well F1 10/14/2014	Well F2 10/15/2014	Well F3 10/15/2014	Well F4 10/14/2014	Well F5 10/14/2014
1090	Sampling date						
	Zinc, micrograms per liter	5000 (l)					
1095	Antimony, micrograms per liter	6 (m)					
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	53.9	163	36.2	3.2	< 3.0
1130	Lithium, water, filtered, micrograms per liter		5.93	3.80	3.11	5.30	3.92
1145	Selenium, micrograms per liter	50 (o)					
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter		0.2	R 0.1	0.2	0.3	6.8
22703	Uranium, natural, micrograms per liter						
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		138	135	142	93.3	256
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter						
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter						
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5					
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter						
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter						
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter						
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter						
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150					
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1					
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tri bromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70					
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter						
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300					
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter						
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter						
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter						
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5					
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5					
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150					
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200					
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5					
34516	1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1					
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600					
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5					
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10					

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
October 2014**

Code	Parameter	MCL	Well F1 10/14/2014	Well F2 10/15/2014	Well F3 10/15/2014	Well F4 10/14/2014	Well F5 10/14/2014
	Sampling date						
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5					
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter						
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter						
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter						
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5					
38454	Dicropfos, water, filtered, recoverable, micrograms per liter						
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate		135	141	137	90.2	251
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5					
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5					
39381	Dieldrin, water, filtered, recoverable, micrograms per liter						
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter						
46342	Alachlor, water, filtered, recoverable, micrograms per liter						
49280	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern		1.740	4.230	1.200	44.25	94.53
49934	C-14, counting error, water, filtered, percent modern		0.050	0.050	0.050	0.190	0.330
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter						
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter						
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter						
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter						
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter						
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaalxy, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter						
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isofenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaalxy, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
October 2014**

Code	Parameter	MCL	Well F1 10/14/2014	Well F2 10/15/2014	Well F3 10/15/2014	Well F4 10/14/2014	Well F5 10/14/2014
	Sampling date						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter						
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						
61705	Diethoxyoctylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monosthoxyoctylphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxyphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter						
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6					

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
October 2014**

Code	Parameter	MCL	Well F1 10/14/2014	Well F2 10/15/2014	Well F3 10/15/2014	Well F4 10/14/2014	Well F5 10/14/2014
	Sampling date						
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	289	287	288	371	751
70301	Residue, water, filtered, sum of constituents, milligrams per liter		280	290	269	376	731
70303	Residue, water, filtered, tons per acre-foot						
71846	Ammonia, water, filtered, milligrams per liter as NH4		0.047	0.048	0.021	< 0.013	< 0.013
71851	Nitrate, water, filtered, milligrams per liter	45 (g)	< 0.177	< 0.177	< 0.177	16.5	20.9
71856	Nitrite, water, filtered, milligrams per liter		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
71865	Iodide, water, filtered, milligrams per liter		0.081	0.088	0.067	0.001	0.008
71870	Bromide, water, filtered, milligrams per liter		0.104	0.133	0.125	0.401	0.322
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter						
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter						
77041	Carbon disulfide, water, unfiltered, micrograms per liter						
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6					
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100					
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter						
77168	1,1-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter						
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter						
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter						
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter						
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter						
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter						
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter						
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter						
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter						
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter						
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter						
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter						
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter						
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05					
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter						
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter						
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter						
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81562	Acetone, water, unfiltered, recoverable, micrograms per liter						
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter						
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter						
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter						
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter						
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter						
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter						
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter						
82081	C-13/C-12 ratio, water, unfiltered, per mil		-9.78	-11.09	-10.98	-15.09	-15.03
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-53.90	-54.40	-54.80	-48.60	-56.80

**Water Quality Data for Multiple Depth Monitoring Well  
Temecula Creek Well (8S/2W-15F1-5)  
October 2014**

Code	Parameter	MCL	Well F1 10/14/2014	Well F2 10/15/2014	Well F3 10/15/2014	Well F4 10/14/2014	Well F5 10/14/2014
	Sampling date						
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-8.40	-8.40	-8.30	-7.11	-7.58
82303	Rn-222, water, unfiltered, picocuries per liter						
82346	Ethion, water, filtered, recoverable, micrograms per liter						
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metribuzin, water, filtered, recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter						
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		489	502	491	673	1190
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.



**ANNUAL REPORT**  
**COOPERATIVE WATER RESOURCE**  
**MANAGEMENT AGREEMENT**  
**CALENDAR YEAR 2017**

**APPENDIX C-4**  
**VDC RECHARGE BASIN**  
**GROUNDWATER MONITORING WELL**



## Site Description

### VDC Recharge Basin Groundwater Monitoring Well (8S/1W-6R1-6)

**LOCATION:** Latitude 33° 30' 01.7", longitude 117° 00' 57.8" (NAD83) in NW1/4 SE1/4 SE1/4 Section 6, T8S, R1W, Riverside County, California. Well is located off Pauba Road on Winner's Circle near Rancho California Water District VDC Recharge Basin in Temecula, California.

**SITE INFORMATION:** Land-surface altitude is 1252.78 feet above mean sea level (NAVD88).

**WATER-LEVEL RECORD:** The period of record for intermittent and daily water-level measurements is listed below.

State well number	USGS station number	Intermittent water-level	Daily water-level
8S/1W-6R1	333001117005701	1/28/2014 to present	4/24/2014 to present
8S/1W-6R2	333001117005702	1/28/2014 to present	4/24/2014 to present
8S/1W-6R3	333001117005703	1/28/2014 to present	4/24/2014 to present
8S/1W-6R4	333001117005704	1/28/2014 to present	—
8S/1W-6R5	333001117005705	1/28/2014 to present	4/24/2014 to present
8S/1W-6R6	333001117005706	1/28/2014 to present	—

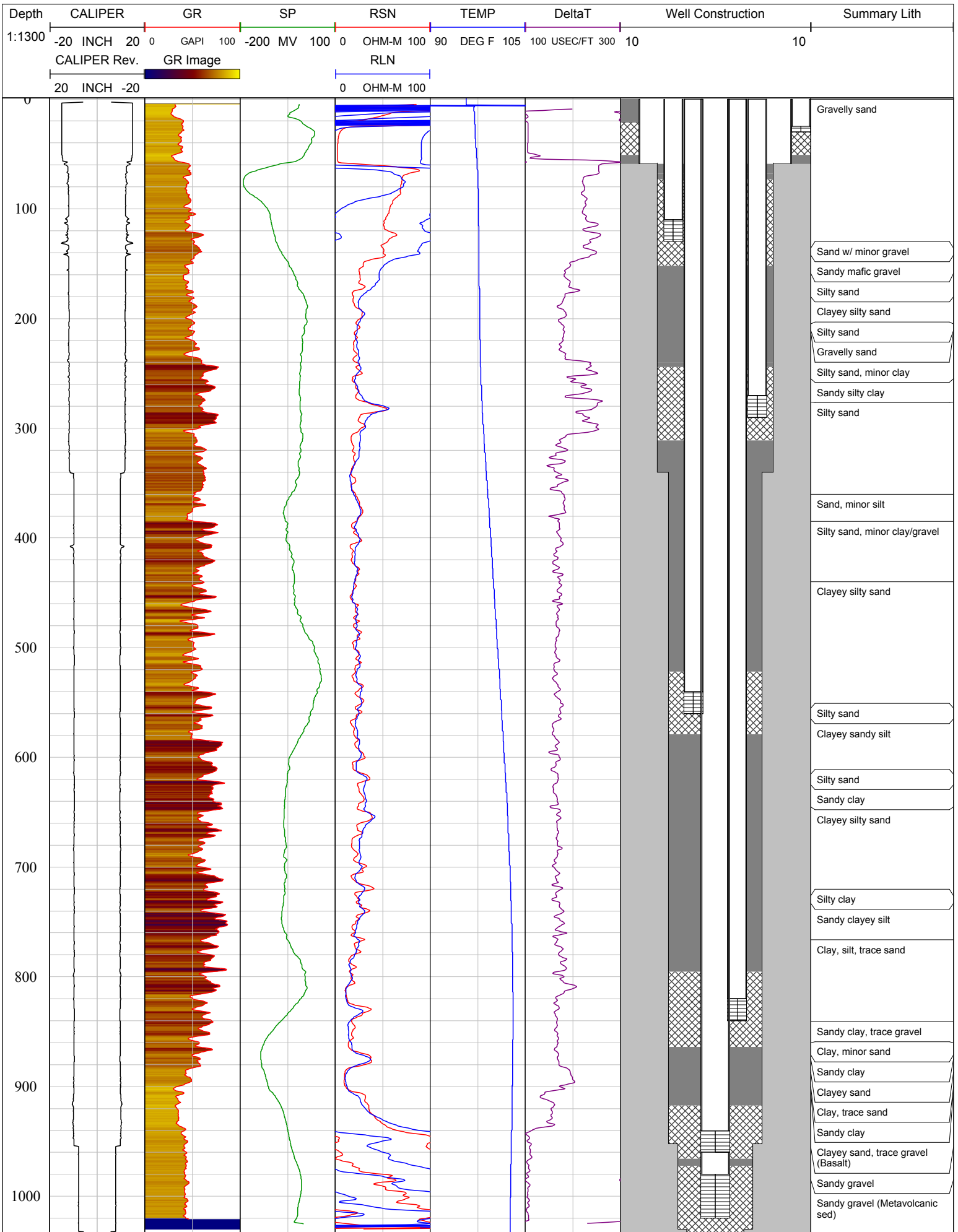
**TOPOGRAPHIC MAP:** USGS Bachelor Mountain, California, 7.5 minute series.

**WELL SUMMARY INFORMATION:**

<b>State well number</b>	<b>USGS station number</b>	<b>Hole depth (ft)</b>	<b>Perforation depth (ft)</b>	<b>Casing size and type</b>	<b>Date drilled</b>
8S/1W-6R1	333001117005701	1033	940-960, 980-1020	3" PVC	8/31/13
8S/1W-6R2	333001117005702	1033	820-840	2" PVC	8/31/13
8S/1W-6R3	333001117005703	1033	540-560	2" PVC	8/31/13
8S/1W-6R4	333001117005704	1033	270-290	2" PVC	8/31/13
8S/1W-6R5	333001117005705	1033	110-130	2" PVC	8/31/13
8S/1W-6R6	333001117005706	1033	25-30	2" PVC	8/31/13

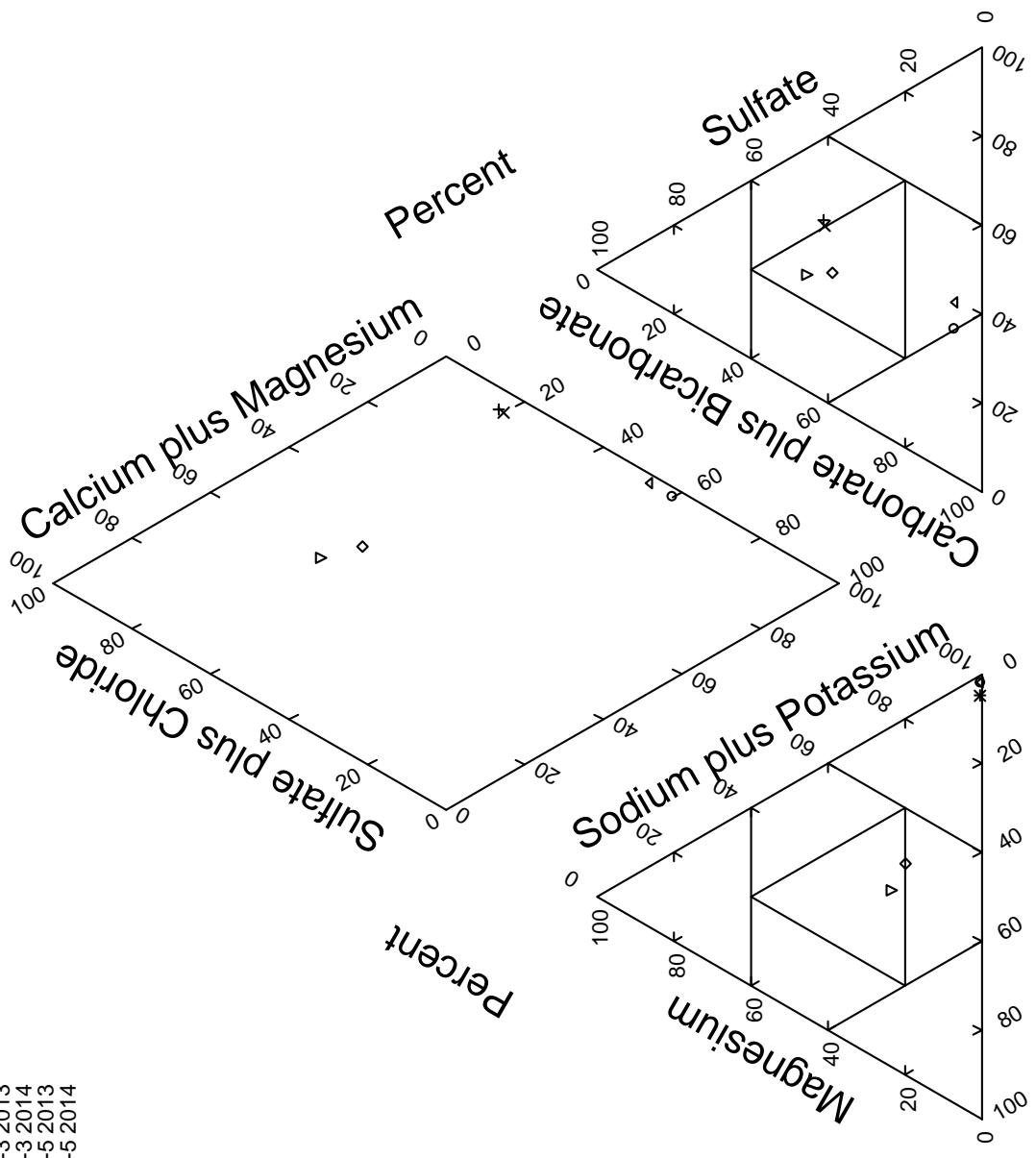
**ADDITIONAL INFORMATION:**

Additional information can also be found at the following web site:  
<http://ca.water.usgs.gov/temecula/>.



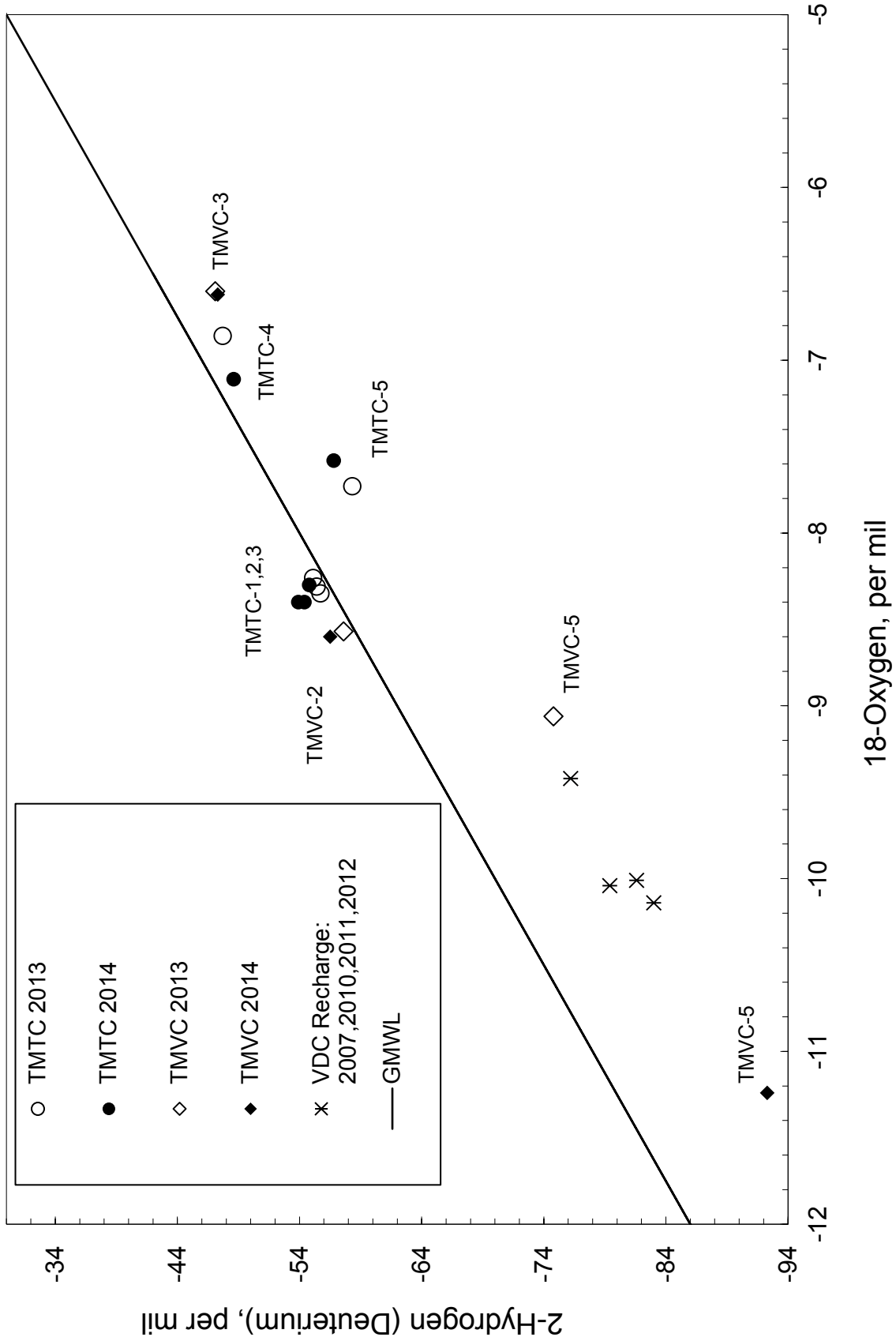
Page Intentionally Blank

- Explanation**
- TMVC-2 2013
  - △ TMVC-2 2014
  - + TMVC-3 2013
  - x TMVC-3 2014
  - ◇ TMVC-5 2013
  - ▽ TMVC-5 2014



# Stable Isotope Diagram

## Temecula Creek and VDC Recharge Basin Monitoring Wells



Source: USGS California Water Science Center.



**End-of Month Piezometric Head for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
(elevation in feet, MSL)**

**April 2014 through December 2017**

<b>Month</b>	<b>Well R1</b>	<b>Well R2</b>	<b>Well R3</b>	<b>Well R4</b>	<b>Well R5</b>	<b>Well R6</b>
Jan 14	---	---	---	---	---	---
Feb	---	---	---	---	---	---
Mar	---	---	---	---	---	---
Apr	939.73	929.94	929.69	---	1173.48	---
May	937.49	927.42	934.85	---	1171.89	---
Jun	935.77	925.67	936.91	---	1171.42	---
Jul	934.24	924.06	933.43	---	1171.62	---
Aug	932.84	922.66	934.05	---	1171.64	---
Sep	931.73	921.45	932.01	---	1171.26	---
Oct	931.08	920.88	935.28	---	1170.65	---
Nov	931.08	920.79	934.89	---	1172.75	---
Dec	931.13	920.92	948.71	---	1170.52	---
Jan 15	932.55	922.67	956.25	---	1169.29	---
Feb	933.94	923.95	953.88	---	1166.84	---
Mar	935.04	925.05	952.80	---	1166.63	---
Apr	935.14	924.92	943.37	---	1166.14	---
May	934.99	924.91	946.23	---	1166.53	---
Jun	934.91	924.71	933.17	---	1167.14	---
Jul	934.05	923.60	932.61	---	1167.88	---
Aug	932.59	921.96	932.07	---	1166.79	---
Sep	932.09	921.74	936.75	---	1164.85	---
Oct	932.41	922.12	930.72	---	1166.33	---
Nov	933.04	922.64	934.03	---	1172.76	---
Dec	933.91	923.36	944.94	---	1183.69	---
Jan 16	934.61	924.30	952.46	---	1184.30	---
Feb	935.00	924.77	945.34	---	1179.89	---
Mar	935.60	925.36	946.98	---	1178.29	---
Apr	935.78	925.47	950.56	---	1174.93	---
May	935.74	925.43	941.40	---	1173.72	---
Jun	935.29	925.08	939.42	---	1174.88	---
Jul	935.01	924.71	944.09	---	1178.05	---
Aug	934.30	923.95	940.87	---	1177.54	---
Sep	933.32	922.88	938.03	---	1177.28	---
Oct	932.55	922.09	942.87	---	1177.64	---
Nov	931.88	921.37	953.00	---	1175.88	---
Dec	932.00	921.69	966.78	971.38	1174.55	---
Jan 17	933.94	924.27	976.82	979.08	1175.22	---
Feb	936.52	926.74	981.50	982.26	1174.06	---
Mar	939.22	929.75	963.97	966.84	1173.40	---
Apr	941.61	931.89	955.30	---	1173.92	---
May	943.31	933.54	953.03	---	1175.35	---
Jun	943.92	933.80	951.81	---	1175.17	---
Jul	943.76	933.65	966.54	971.03	1178.78	---
Aug	944.01	934.09	977.79	978.38	1184.53	---
Sep	944.98	935.17	979.59	977.83	1181.31	---
Oct	946.05	936.39	979.57	977.77	1178.10	---
Nov	947.60	937.95	979.26	978.13	1182.04	---
Dec	949.13	939.48	985.26	985.35	1186.77	---

Notes:

(1) Data reported as daily median value for period of record.

Source: USGS California Water Science Center.

Page Intentionally Blank

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
November 2013**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date							
3	Sampling depth, feet							
10	Temperature, water, degrees Celsius			20.1	21.7		19.7	
28	Agency analyzing sample, code			80020	80020		80020	
59	Flow rate, instantaneous, gallons per minute							
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius			418	764		803	
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter			M	M		0.00002	
300	Dissolved oxygen, water, unfiltered, milligrams per liter			< 0.2	0.4		1.0	
400	pH, water, unfiltered, field, standard units			9.8	8.9		7.7	
403	pH, water, unfiltered, laboratory, standard units			9.8	8.8		8.0	
405	Carbon dioxide, water, unfiltered, milligrams per liter			M	0.2		4.8	
452	Carbonate, water, filtered, infection-point titration method, milligrams per liter							
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter							
602	Total nitrogen, water, filtered, milligrams per liter							
607	Organic nitrogen, water, filtered, milligrams per liter			< 0.19	< 0.11		0.32	
608	Ammonia, water, filtered, milligrams per liter as nitrogen			0.12	< 0.07		< 0.08	
613	Nitrite, water, filtered, milligrams per liter as nitrogen			0.02	< 0.01		< 0.01	
618	Nitrate, water, filtered, milligrams per liter as nitrogen			< 0.040	< 0.001		< 0.001	
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen			< 0.040	< 0.040		0.236	
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen			< 0.040	< 0.07		0.08	
660	Orthophosphate, water, filtered, milligrams per liter			< 0.040	< 0.040		0.236	
666	Phosphorus, water, filtered, milligrams per liter			6.91	0.094		0.46	
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			2.45	0.03		0.17	
681	Organic carbon, water, filtered, milligrams per liter			2.25	0.031		0.15	
900	Hardness, water, milligrams per liter as calcium carbonate			3.85	16.9		211	
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						88	
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate						76	
915	Calcium, water, filtered, milligrams per liter			1.13	5.99		52.5	
925	Magnesium, water, filtered, milligrams per liter			0.246	0.448		19.4	
930	Sodium, water, filtered, milligrams per liter			86.8	146		85.2	
931	Sodium adsorption ratio, water, number			19.3	15.6		2.55	
932	Sodium fraction of cations, water, percent in equivalents of major cations			98	95		46	
935	Potassium, water, filtered, milligrams per liter			0.50	1.14		4.14	
940	Chloride, water, filtered, milligrams per liter			600	37.5		82.1	
945	Sulfate, water, filtered, milligrams per liter			600	137		147	
950	Fluoride, water, filtered, milligrams per liter			2.26	1.57		0.34	
955	Silica, water, filtered, milligrams per liter			21.4	9.02		13.8	
1000	Arsenic, water, filtered, micrograms per liter			40.8	1.9		1.1	
1005	Barium, water, filtered, micrograms per liter			1000 (d)	22.4		14.6	
1010	Beryllium, micrograms per liter			4 (e)				
1020	Boron, water, filtered, micrograms per liter			1050	848		123	
1025	Cadmium, micrograms per liter							
1030	Chromium, micrograms per liter							
1035	Cobalt, micrograms per liter							
1040	Copper, micrograms per liter							
1046	Iron, water, filtered, micrograms per liter			334	38.2		< 4.0	
1049	Lead, micrograms per liter							
1056	Manganese, water, filtered, micrograms per liter			7.25	1.73		3.40	
1057	Thallium, micrograms per liter			2 (i)				
1060	Molybdenum, micrograms per liter							
1065	Nickel, micrograms per liter							
1075	Silver, micrograms per liter							
1080	Strontium, water, filtered, micrograms per liter			5.7	109		524	
1085	Vanadium, micrograms per liter							

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
November 2013**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date			11/6/2013	11/7/2013		11/5/2013	
1090	Zinc, micrograms per liter	5000 (l)						
1095	Antimony, micrograms per liter	6 (m)						
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)		432	79.3		8.8	
1130	Lithium, water, filtered, micrograms per liter			1.03	0.94		7.55	
1145	Selenium, micrograms per liter	50 (o)						
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter							
4025	Hexazinone, water, filtered, recoverable, micrograms per liter							
4029	Bromacil, water, filtered, recoverable, micrograms per liter							
4035	Simazine, water, filtered, recoverable, micrograms per liter							
4036	Prometryn, water, filtered, recoverable, micrograms per liter							
4037	Prometon, water, filtered, recoverable, micrograms per liter							
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter							
4095	Fonofos, water, filtered, recoverable, micrograms per liter			R-0.1	2.3		16	
7000	Tritium, water, unfiltered, picocuries per liter							
22703	Uranium, natural, micrograms per liter							
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate			121	69		136	
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter							
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter							
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5						
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter							
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter							
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter							
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter							
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150						
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1						
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter							
34221	Anthracene, water, filtered, recoverable, micrograms per liter							
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)						
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter							
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70						
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter							
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300						
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter							
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter							
34409	Isophorone, water, filtered, recoverable, micrograms per liter							
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter							
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter							
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5						
34443	Naphthalene, water, filtered, recoverable, micrograms per liter							
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter							
34466	Phenol, water, filtered, recoverable, micrograms per liter							
34470	Pyrene, water, filtered, recoverable, micrograms per liter							
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5						
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter							
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150						
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5						
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6						
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200						
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5						
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1						
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600						
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter							
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10						

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
November 2013**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date			11/6/2013	11/7/2013		11/5/2013	
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter							
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5						
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter							
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter							
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter							
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5						
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5						
38454	Dichlorvos, water, filtered, recoverable, micrograms per liter							
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter							
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter							
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate			109	64		123	
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5						
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5						
39381	Dieldrin, water, filtered, recoverable, micrograms per liter							
39415	Metolachlor, water, filtered, recoverable, micrograms per liter							
39532	Malathion, water, filtered, recoverable, micrograms per liter							
39572	Diazinon, water, filtered, recoverable, micrograms per liter							
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter							
46342	Alachlor, water, filtered, recoverable, micrograms per liter							
48260	Acetochlor, water, filtered, recoverable, micrograms per liter							
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
49933	C-14, water, filtered, percent modern			5.37	27.33		92.75	
49934	C-14, counting error, water, filtered, percent modern			0.09	0.15		0.21	
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter							
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter							
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter							
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter							
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter							
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter							
50305	Caffeine, water, filtered, recoverable, micrograms per liter							
50359	Metaxyl, water, filtered, recoverable, micrograms per liter							
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6						
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter							
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter							
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter							
61593	Iprodione, water, filtered, recoverable, micrograms per liter							
61594	Isofenphos, water, filtered, recoverable, micrograms per liter							
61596	Metaxyl, water, filtered, recoverable, micrograms per liter							
61598	Metidathion, water, filtered, recoverable, micrograms per liter							
61599	Myobutanil, water, filtered, recoverable, micrograms per liter							
61601	Phosmet, water, filtered, recoverable, micrograms per liter							
61610	Tribuphos, water, filtered, recoverable, micrograms per liter							
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter							
61620	2-Ethyl-6-methylamine, water, filtered, recoverable, micrograms per liter							
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter							
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter							
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter							
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter							
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter							
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter							
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter							

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
November 2013**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date			11/6/2013	11/7/2013		11/5/2013	
61652	Malaoxon, water, filtered, recoverable, micrograms per liter							
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter							
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter							
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter							
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter							
61705	Diethoxyctyphenol, water, filtered, recoverable, micrograms per liter							
61706	Monoethoxyctyphenol, water, filtered, recoverable, micrograms per liter							
62005	Cotinine, water, filtered, recoverable, micrograms per liter							
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter							
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter							
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter							
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter							
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter							
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter							
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter							
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter							
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter							
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter							
62064	Acetophenone, water, filtered, recoverable, micrograms per liter							
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter							
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter							
62067	Benzophenone, water, filtered, recoverable, micrograms per liter							
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter							
62070	Camphor, water, filtered, recoverable, micrograms per liter							
62071	Carbazole, water, filtered, recoverable, micrograms per liter							
62072	Cholesterol, water, filtered, recoverable, micrograms per liter							
62073	D-Limonene, water, filtered, recoverable, micrograms per liter							
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter							
62076	Indole, water, filtered, recoverable, micrograms per liter							
62077	Isoborneol, water, filtered, recoverable, micrograms per liter							
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter							
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter							
62080	Menthol, water, filtered, recoverable, micrograms per liter							
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter							
62082	DEET, water, filtered, recoverable, micrograms per liter							
62083	Diethoxyphenol, water, filtered, recoverable, micrograms per liter							
62084	p-Cresol, water, filtered, recoverable, micrograms per liter							
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter							
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter							
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter							
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter							
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter							
62090	Tricosan, water, filtered, recoverable, micrograms per liter							
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter							
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter							
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter							
62166	Fipronil, water, filtered, recoverable, micrograms per liter							
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter							
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter							
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter							
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter							
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter							
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6						

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
November 2013**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date			11/6/2013	11/7/2013		11/5/2013	
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500		253	442		481	
70301	Residue, water, filtered, sum of constituents, milligrams per liter			237	438		481	
70303	Residue, water, filtered, tons per acre-foot							
71846	Ammonia, water, filtered, milligrams per liter as NH4			0.03	< 0.013		< 0.013	
71851	Nitrate, water, filtered, milligrams per liter	45 (g)		< 0.177	< 0.177		1.04	
71856	Nitrite, water, filtered, milligrams per liter			< 0.003	< 0.003		< 0.003	
71865	Iodide, water, filtered, milligrams per liter			0.028	0.011		0.015	
71870	Bromide, water, filtered, milligrams per liter			0.096	0.352		0.151	
72019	Depth to water level, feet below land surface							
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter							
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter							
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter							
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter							
77041	Carbon disulfide, water, unfiltered, micrograms per liter							
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter							
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter	6						
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100						
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter							
77168	1,1-Dichloropropane, water, unfiltered, recoverable, micrograms per liter							
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter							
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter							
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter							
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter							
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter							
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter							
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter							
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter							
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter							
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter							
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter							
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter							
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter							
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter							
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter							
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter							
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter							
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter							
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter							
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter							
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter	0.05						
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter							
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter							
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter							
81552	Acetone, water, unfiltered, recoverable, micrograms per liter							
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter							
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter							
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter							
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter							
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter							
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter							
82081	C-13/C-12 ratio, water, unfiltered, per mil			-13.51	-13.13		-8.61	
82082	Deuterium/Protium ratio, water, unfiltered, per mil			-57.60	-47.10		-74.80	

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
November 2013**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date							
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil							
82303	Rn-222, water, unfiltered, picocuries per liter							
82346	Ethion, water, filtered, recoverable, micrograms per liter							
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter							
82630	Metricbuzin, water, filtered, recoverable, micrograms per liter							
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter							
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius			395	739		770	
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter							
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery							
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery							
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery							
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery							
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery							

Notes: U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).  
E--Estimated.  
M--Presence verified but not quantified.  
MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.  
V--Biased results from contamination.



**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
October 2014**

Code	Parameter	MCL	Well R1	Well R2 10/15/2014	Well R3 10/15/2014	Well R4	Well R5 10/15/2014	Well R6
3	Sampling date							
	Sampling depth, feet							
10	Temperature, water, degrees Celsius			21.1	21.2		20.2	
28	Agency analyzing sample, code			80020	80020		80020	
59	Flow rate, instantaneous, gallons per minute							
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius			328	586		882	
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter			M	M		0.00004	
300	Dissolved oxygen, water, unfiltered, milligrams per liter			0.2	0.2		1.9	
400	pH, water, unfiltered, field, standard units			9.7	8.8		7.4	
403	pH, water, unfiltered, laboratory, standard units						7.8	
405	Carbon dioxide, water, unfiltered, milligrams per liter			M	0.2		10	
452	Carbonate, water, filtered, inflection-point titration method, milligrams per liter			22.5	3.9		0.3	
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter			62.4	75.9		158	
602	Total nitrogen, water, filtered, milligrams per liter			< 0.12	< 0.11		0.37	
607	Organic nitrogen, water, filtered, milligrams per liter			0.07	< 0.07		< 0.08	
608	Ammonia, water, filtered, milligrams per liter as nitrogen			0.02	< 0.01		< 0.01	
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)		< 0.001	< 0.001		< 0.001	
618	Nitrate, water, filtered, milligrams per liter as nitrogen			< 0.040	< 0.040		0.291	
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen			0.09	< 0.07		0.08	
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen			< 0.040	< 0.040		0.291	
660	Orthophosphate, water, filtered, milligrams per liter			0.289	0.031		0.189	
666	Phosphorus, water, filtered, milligrams per liter			0.10	0.02		0.06	
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			0.094	0.010		0.062	
681	Organic carbon, water, filtered, milligrams per liter							
900	Hardness, water, milligrams per liter as calcium carbonate			3.29	18.2		277	
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						147	
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate						141	
915	Calcium, water, filtered, milligrams per liter			1.20	6.48		67.7	
925	Magnesium, water, filtered, milligrams per liter			0.067	0.446		26.1	
930	Sodium, water, filtered, milligrams per liter			77.4	153		80.8	
931	Sodium adsorption ratio, water, number			18.6	15.7		2.11	
932	Sodium fraction of cations, water, percent in equivalents of major cations			98	94		38	
935	Potassium, water, filtered, milligrams per liter			0.36	1.11		4.84	
940	Chloride, water, filtered, milligrams per liter	600		41.4	94.6		83.4	
945	Sulfate, water, filtered, milligrams per liter	600		10.7	137		199	
950	Fluoride, water, filtered, milligrams per liter	2 (b)		2.29	1.54		0.33	
955	Silica, water, filtered, milligrams per liter			17.6	8.03		11.6	
1000	Arsenic, water, filtered, micrograms per liter	10 (c)		36.3	1.8		0.54	
1005	Barium, water, filtered, micrograms per liter	1000 (d)		1.1	29.8		27.2	
1010	Beryllium, micrograms per liter	4 (e)						
1020	Boron, water, filtered, micrograms per liter			1270	887		96	
1025	Cadmium, micrograms per liter	5 (f)						
1030	Chromium, micrograms per liter	50 (g)						
1035	Cobalt, micrograms per liter							
1040	Copper, micrograms per liter	1000 (h)						
1046	Iron, water, filtered, micrograms per liter	300		49.6	< 4.0		< 4.0	
1049	Lead, micrograms per liter							
1056	Manganese, water, filtered, micrograms per liter	50		1.86	0.66		< 0.20	
1057	Thallium, micrograms per liter	2 (i)						
1060	Molybdenum, micrograms per liter							
1065	Nickel, micrograms per liter	100 (j)						
1075	Silver, micrograms per liter	100 (k)						
1080	Strontium, water, filtered, micrograms per liter			5.3	122		732	
1085	Vanadium, micrograms per liter							

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
October 2014**

Code	Parameter	MCL	Well R1	Well R2 10/15/2014	Well R3 10/15/2014	Well R4	Well R5 10/15/2014	Well R6
	Sampling date							
1090	Zinc, micrograms per liter	5000 (l)						
1095	Antimony, micrograms per liter	6 (m)						
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)		170	12.9		3.3	
1130	Lithium, water, filtered, micrograms per liter			0.96	1.12		8.30	
1145	Selenium, micrograms per liter	50 (o)						
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter							
4025	Hexazinone, water, filtered, recoverable, micrograms per liter							
4029	Bromacil, water, filtered, recoverable, micrograms per liter							
4035	Simazine, water, filtered, recoverable, micrograms per liter							
4036	Prometryn, water, filtered, recoverable, micrograms per liter							
4037	Prometon, water, filtered, recoverable, micrograms per liter							
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter							
4095	Fonofos, water, filtered, recoverable, micrograms per liter							
7000	Tritium, water, unfiltered, picocuries per liter			0.4	1.9		18	
22703	Uranium, natural, micrograms per liter							
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate			93.7	70.4		136	
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter							
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter							
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5						
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter							
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter							
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter							
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter							
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150						
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1						
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter							
34221	Anthracene, water, filtered, recoverable, micrograms per liter							
34248	Benzo(a)pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)						
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter							
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70						
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter							
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300						
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter							
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter							
34409	Isophorone, water, filtered, recoverable, micrograms per liter							
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter							
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter							
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5						
34443	Naphthalene, water, filtered, recoverable, micrograms per liter							
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter							
34466	Phenol, water, filtered, recoverable, micrograms per liter							
34470	Pyrene, water, filtered, recoverable, micrograms per liter							
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5						
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter							
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150						
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5						
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6						
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200						
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5						
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1						
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600						
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5						
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10						

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
October 2014**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date			10/15/2014	10/15/2014		10/15/2014	
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5						
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter							
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5						
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter							
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter							
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter							
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5						
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5						
38454	Dicropthos, water, filtered, recoverable, micrograms per liter							
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter							
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter							
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate			91.4	69.1		130	
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5						
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5						
39381	Dieldrin, water, filtered, recoverable, micrograms per liter							
39415	Metolachlor, water, filtered, recoverable, micrograms per liter							
39532	Malathion, water, filtered, recoverable, micrograms per liter							
39572	Diazinon, water, filtered, recoverable, micrograms per liter							
39632	Atrazine, water, filtered, recoverable, micrograms per liter							
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter							
46342	Alachlor, water, filtered, recoverable, micrograms per liter							
49260	Acetochlor, water, filtered, recoverable, micrograms per liter							
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
49333	C-14, water, filtered, percent modern			5.420	31.95		88.31	
49334	C-14, counting error, water, filtered, percent modern			0.080	0.120		0.210	
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter							
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter							
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter							
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter							
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter							
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter							
50305	Caffeine, water, filtered, recoverable, micrograms per liter							
50359	Metaxyl, water, filtered, recoverable, micrograms per liter							
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6						
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter							
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter							
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter							
61593	prodione, water, filtered, recoverable, micrograms per liter							
61594	isofenphos, water, filtered, recoverable, micrograms per liter							
61596	Metaxyl, water, filtered, recoverable, micrograms per liter							
61598	Methidathion, water, filtered, recoverable, micrograms per liter							
61599	Mycobutanil, water, filtered, recoverable, micrograms per liter							
61601	Phosmet, water, filtered, recoverable, micrograms per liter							
61610	Tribuphos, water, filtered, recoverable, micrograms per liter							
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter							
61620	2-Ethyl-6-methylamine, water, filtered, recoverable, micrograms per liter							
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter							
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter							
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter							
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter							
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter							
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter							
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter							

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
October 2014**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date			10/15/2014	10/15/2014		10/15/2014	
61652	Malachon, water, filtered, recoverable, micrograms per liter							
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter							
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter							
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter							
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter							
61705	Diethoxyacetylphenol, water, filtered, recoverable, micrograms per liter							
61706	Monoethoxyacetylphenol, water, filtered, recoverable, micrograms per liter							
62005	Cotinine, water, filtered, recoverable, micrograms per liter							
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter							
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter							
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter							
62057	3-beta-Coprostandol, water, filtered, recoverable, micrograms per liter							
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter							
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter							
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter							
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter							
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter							
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter							
62064	Acetophenone, water, filtered, recoverable, micrograms per liter							
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter							
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter							
62067	Benzophenone, water, filtered, recoverable, micrograms per liter							
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter							
62070	Camphor, water, filtered, recoverable, micrograms per liter							
62071	Carbazole, water, filtered, recoverable, micrograms per liter							
62072	Cholesterol, water, filtered, recoverable, micrograms per liter							
62073	D-Limonene, water, filtered, recoverable, micrograms per liter							
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter							
62076	Indole, water, filtered, recoverable, micrograms per liter							
62077	Isoborneol, water, filtered, recoverable, micrograms per liter							
62078	isopropylbenzene, water, filtered, recoverable, micrograms per liter							
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter							
62080	Menthol, water, filtered, recoverable, micrograms per liter							
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter							
62082	DEET, water, filtered, recoverable, micrograms per liter							
62083	Diethoxymethylphenol, water, filtered, recoverable, micrograms per liter							
62084	p-Cresol, water, filtered, recoverable, micrograms per liter							
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter							
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter							
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter							
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter							
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter							
62090	Triclosan, water, filtered, recoverable, micrograms per liter							
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter							
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter							
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter							
62166	Fipronil, water, filtered, recoverable, micrograms per liter							
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter							
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter							
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter							
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter							
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter							
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6						

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
October 2014**

Code	Parameter	MCL	Well R1	Well R2 10/15/2014	Well R3 10/15/2014	Well R4	Well R5 10/15/2014	Well R6
	Sampling date							
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500		221	447		577	
70301	Residue, water, filtered, sum of constituents, milligrams per liter			206	445		554	
70303	Residue, water, filtered, tons per acre-foot							
71846	Ammonia, water, filtered, milligrams per liter, as NH4			0.022	< 0.013		< 0.013	
71851	Nitrate, water, filtered, milligrams per liter	45 (q)		< 0.117	< 0.117		1.29	
71856	Nitrite, water, filtered, milligrams per liter			< 0.003	< 0.003		< 0.003	
71865	Iodide, water, filtered, milligrams per liter			0.029	0.009		0.001	
71870	Bromide, water, filtered, milligrams per liter			0.097	0.326		0.074	
72019	Depth to water level, feet below land surface							
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter							
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter							
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter							
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter							
77041	Carbon disulfide, water, unfiltered, micrograms per liter							
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6						
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter							
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100						
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter							
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter							
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter							
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter							
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter							
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter							
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter							
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter							
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter							
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter							
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter							
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter							
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter							
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter							
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter							
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter							
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter							
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter							
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter							
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter							
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter							
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05						
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter							
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter							
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter							
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter							
81552	Acetone, water, unfiltered, recoverable, micrograms per liter							
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter							
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter							
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter							
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter							
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter							
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter							
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter							
82081	C-13/C-12 ratio, water, unfiltered, per mil			-14.91	-13.32		-7.81	
82082	Deuterium/Protium ratio, water, unfiltered, per mil			-56.50	-47.30		-92.30	

**Water Quality Data for Multiple Depth Monitoring Well  
VDC Recharge Basin Well (8S/1W-6R1-6)  
October 2014**

Code	Parameter	MCL	Well R1	Well R2	Well R3	Well R4	Well R5	Well R6
	Sampling date							
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil			10/15/2014	10/15/2014		10/15/2014	
82303	Rn-222, water, unfiltered, picocuries per liter			-8.60	-6.62		-11.24	
82346	Ethion, water, filtered, recoverable, micrograms per liter							
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter							
82630	Metricibuzin, water, filtered, recoverable, micrograms per liter							
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82664	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter							
85795	m-Xylene plus p-Xylene, water, unfiltered, recoverable, micrograms per liter							
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius			365	782		911	
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter							
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery							
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery							
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery							
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery							
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery							
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery							

Notes: U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).  
E--Estimated.  
M--Presence verified but not quantified.  
MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.  
V--Biased results from contamination.

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX D-1**

**WATER QUALITY DATA FOR IMPORTED WATER  
DELIVERED TO RCWD UPPER VDC RECHARGE BASINS**

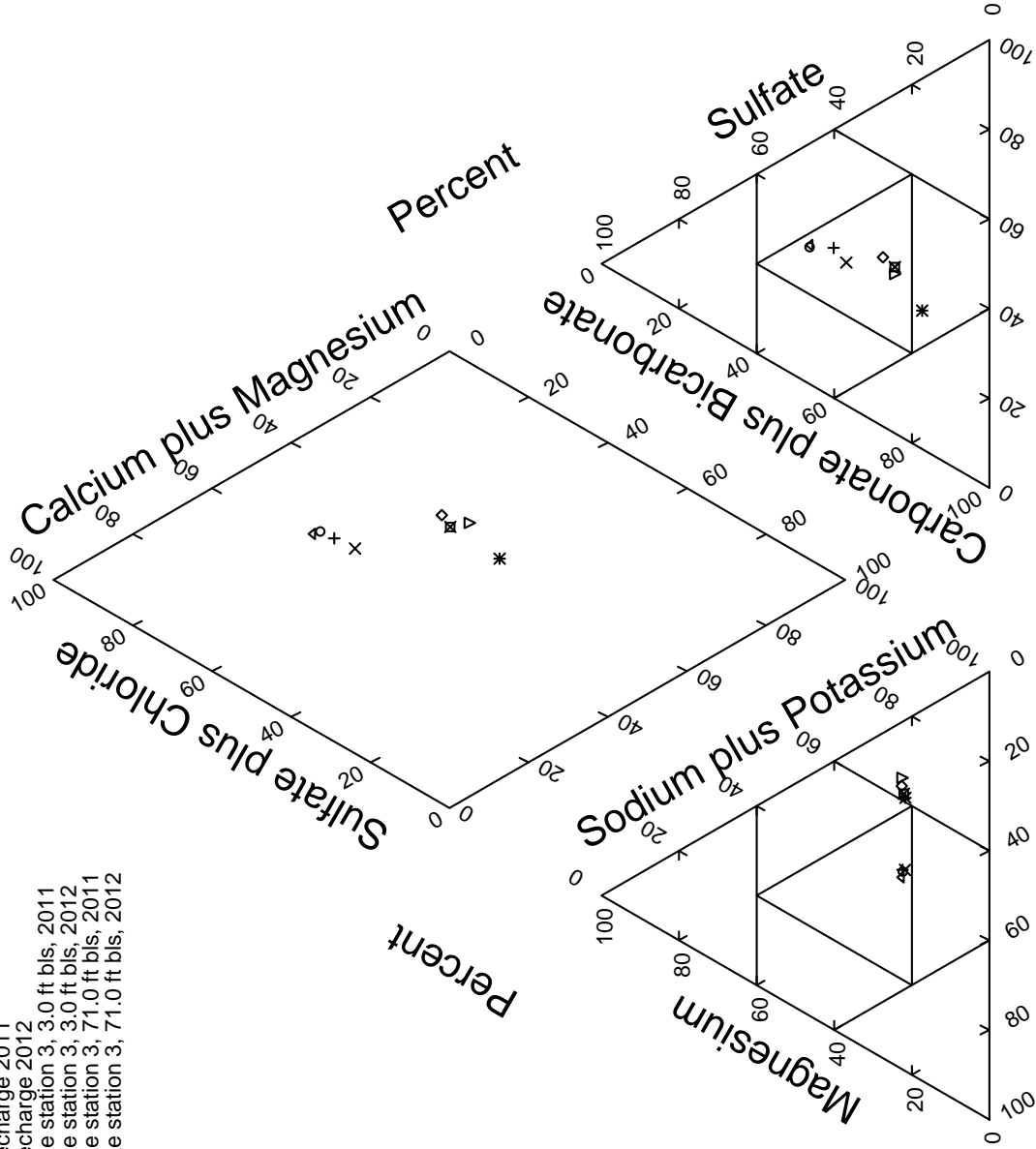




# Tri-Linear Diagram VDC Recharge and Vail Lake

## Explanation

- VDC Recharge 2007
- △ VDC Recharge 2010
- + VDC Recharge 2011
- x VDC Recharge 2012
- ◇ Vail Lake station 3, 3.0 ft bls, 2011
- ▽ Vail Lake station 3, 3.0 ft bls, 2012
- ▣ Vail Lake station 3, 71.0 ft bls, 2011
- \* Vail Lake station 3, 71.0 ft bls, 2012

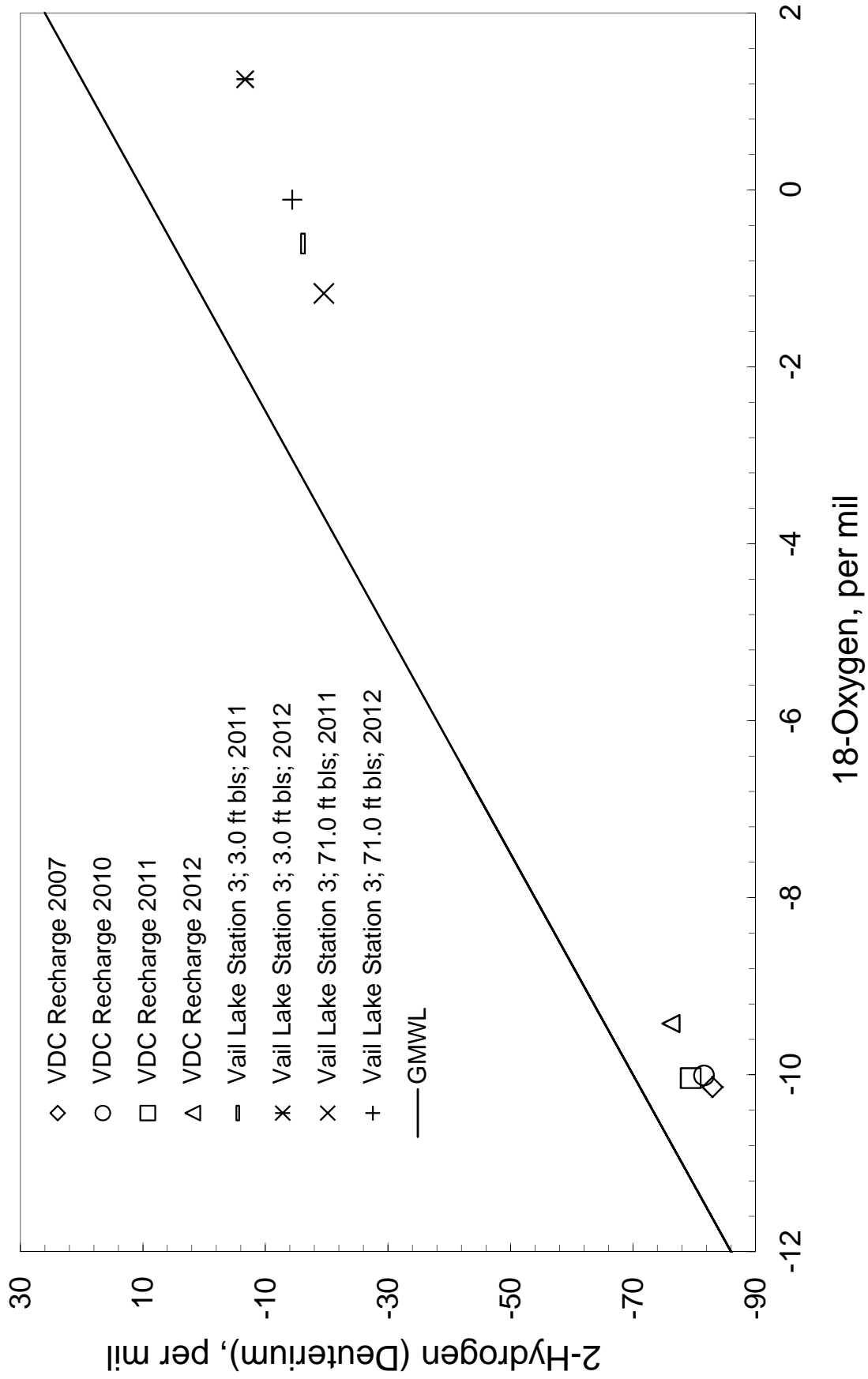


Calcium Chloride, Fluoride, Nitrite plus Nitrate  
Percent

Source: USGS California Water Science Center.

# Stable Isotope Diagram

## VDC Recharge and Vail Lake



Source: USGS California Water Science Center.

**Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basin**  
**Upper Pond 5 in Pauba Valley**  
**USGS Site No. 333024117005501**

Code	Parameter	MCL	Pond 5 9/17/2007	Pond 5 7/28/2010	Pond 5 8/22/2011	Pond 5 8/21/2012
	Sampling date					
	Estimated Percentage of State Project Water Reported by Metropolitan Water District		28%	19%	63%	51%
3	Sampling depth, feet					
10	Temperature, water, degrees Celsius		24.5	25.4	33.0	27.8
28	Agency analyzing sample, code		80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute		847	875	590	644
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		0.00001	0.00001	0.00001	0.00001
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		6.1			6.5
300	Dissolved oxygen, water, unfiltered, milligrams per liter		7.9	8.1	7.9	7.9
400	pH, water, unfiltered, field, standard units		8.0	8.1	8.1	8.1
403	pH, water, unfiltered, laboratory, standard units		2.5	1.8	2.1	2.4
405	Carbon dioxide, water, unfiltered, milligrams per liter			138	102	116
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter			0.3	0.41	0.36
602	Total nitrogen, water, filtered, milligrams per liter		< 0.18	0.14	0.2	0.19
607	Organic nitrogen, water, filtered, milligrams per liter		< 0.020	0.022	0.011	0.012
608	Ammonia, water, filtered, milligrams per liter as nitrogen		< 0.002	0.003	< 0.001	< 0.001
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.227	0.141	0.197	0.16
618	Nitrate, water, filtered, milligrams per liter as nitrogen		0.23	0.16	0.21	0.2
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		0.068	0.034	0.137	0.1
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen			< 0.04	0.05	0.04
660	Orthophosphate, water, filtered, milligrams per liter		0.022	0.011	0.045	0.033
666	Phosphorus, water, filtered, milligrams per liter		232	256	150	176
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			141	66	80
900	Hardness, water, milligrams per liter as calcium carbonate		120	138	69	76
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate		55.4	62.0	35.7	42.6
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate		22.4	24.3	14.7	16.9
915	Calcium, water, filtered, milligrams per liter		81.4	85.3	53.4	63.7
925	Magnesium, water, filtered, milligrams per liter		2.33	2.33	1.90	2.09
930	Sodium, water, filtered, milligrams per liter		43	42	43	44
931	Sodium adsorption ratio, water, number		4.49	4.36	3.06	3.45
932	Sodium fraction of cations, water, percent in equivalents of major cations		84.9	87.8	60.6	68.7
935	Potassium, water, filtered, milligrams per liter		600	600	195	109
940	Chloride, water, filtered, milligrams per liter		2 (b)	0.3	0.17	0.18
945	Sulfate, water, filtered, milligrams per liter		8.95	6.8	9.63	8.8
950	Fluoride, water, filtered, milligrams per liter		2.5	2.5	2.6	2.5
955	Silica, water, filtered, milligrams per liter		107	96.1	56.2	55.4
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	< 0.06			
1005	Barium, water, filtered, micrograms per liter	1000 (d)	138	147	122	133
1010	Beryllium, micrograms per liter	4 (e)	< 0.04			
1020	Boron, water, filtered, micrograms per liter	5 (f)	0.11 E			
1025	Cadmium, micrograms per liter	50 (g)	0.04 E			
1030	Chromium, micrograms per liter		4.9			
1035	Cobalt, micrograms per liter	1000 (h)	6	4 E	7.3	< 3.2
1040	Copper, micrograms per liter	300	0.62			
1046	Iron, water, filtered, micrograms per liter		1.1	0.4	2.26	1.94
1049	Lead, micrograms per liter	50	< 0.04			
1056	Manganese, water, filtered, micrograms per liter	2 (i)	4.7			
1057	Thallium, micrograms per liter		1.2			
1060	Molybdenum, micrograms per liter	100 (j)	< 0.10			
1065	Nickel, micrograms per liter	100 (k)	820	871	472	513
1075	Silver, micrograms per liter		3			
1080	Strontium, water, filtered, micrograms per liter		5			
1085	Vanadium, micrograms per liter	5000 (l)				
1090	Zinc, micrograms per liter					

**Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basin**  
**Upper Pond 5 in Pauba Valley**  
**USGS Site No. 333024117005501**

Code	Parameter	MCL	Pond 5 9/17/2007	Pond 5 7/28/2010	Pond 5 8/22/2011	Pond 5 8/21/2012
	Sampling date					
1095	Antimony, micrograms per liter	6 (m)	0.29			
1106	Aluminum, water, filtered, micrograms per liter					
1130	Lithium, water, filtered, micrograms per liter	1000 (n)	1.3 E	< 3.4	2	< 2.2
1145	Selenium, micrograms per liter		33.1	48	24.4	24.5
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter	50 (o)	1.4			
4025	Hexazinone, water, filtered, recoverable, micrograms per liter					
4029	Bromacil, water, filtered, recoverable, micrograms per liter					
4035	Simazine, water, filtered, recoverable, micrograms per liter					
4036	Prometryn, water, filtered, recoverable, micrograms per liter					
4037	Prometon, water, filtered, recoverable, micrograms per liter					
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter					
4095	Fonofos, water, filtered, recoverable, micrograms per liter					
7000	Tritium, water, unfiltered, picocuries per liter		19.8			
22703	Uranium, natural, micrograms per liter		3.81			
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		111	118	81.5	99.9
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter		0.12			
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter		17.2			
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.08			
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1			
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter		7.28			
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		16.1			
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter		9.69			
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150	0.06 E			
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1	< 0.02			
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4			
34221	Anthracene, water, filtered, recoverable, micrograms per liter					
34248	Benzofluoranthene, water, filtered, recoverable, micrograms per liter	0.2 (p)				
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter					
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70	< 0.02			
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1			
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300	< 0.02			
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter					
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1			
34409	Isophorone, water, filtered, recoverable, micrograms per liter					
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.4			
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1			
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5	0.1 E			
34443	Naphthalene, water, filtered, recoverable, micrograms per liter					
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter					
34466	Phenol, water, filtered, recoverable, micrograms per liter					
34470	Pyrene, water, filtered, recoverable, micrograms per liter					
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.04			
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter					
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150	< 0.08			
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.06			
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.02			
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200	< 0.04			
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04			
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1	< 0.10			
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600	< 0.04			
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5	< 0.02			
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10	< 0.02			
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.1			

**Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basin  
Upper Pond 5 in Pauba Valley  
USGS Site No. 333024117005501**

Code	Parameter	MCL	Pond 5 9/17/2007	Pond 5 7/28/2010	Pond 5 8/22/2011	Pond 5 8/21/2012
	Sampling date					
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5				
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter		< 0.14			
34699	Naphthalene, water, unfiltered, recoverable, micrograms per liter		< 0.4			
34704	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.10			
38454	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06			
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter					
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate			115	84.7	96.2
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.1			
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.02			
39381	Dieldrin, water, filtered, recoverable, micrograms per liter					
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					
39532	Malathion, water, filtered, recoverable, micrograms per liter					
39572	Diazinon, water, filtered, recoverable, micrograms per liter					
39632	Atrazine, water, filtered, recoverable, micrograms per liter					
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
46342	Alachlor, water, filtered, recoverable, micrograms per liter					
49260	Acetochlor, water, filtered, recoverable, micrograms per liter					
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
49933	C-14, water, filtered, percent modern		89.1			
49934	C-14, counting error, water, filtered, percent modern		0.38			
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter		< 0.4			
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04			
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04			
50305	Caffeine, water, filtered, recoverable, micrograms per liter					
50359	Metaxyl, water, filtered, recoverable, micrograms per liter					
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6				
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter					
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter					
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter					
61593	Iprodione, water, filtered, recoverable, micrograms per liter					
61594	Isofenphos, water, filtered, recoverable, micrograms per liter					
61596	Metaxyl, water, filtered, recoverable, micrograms per liter					
61598	Methidathion, water, filtered, recoverable, micrograms per liter					
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter					
61601	Phosmet, water, filtered, recoverable, micrograms per liter					
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter					
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter					
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter					
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter					
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter					
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter					
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter					
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter					
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter					
61652	Malaoxon, water, filtered, recoverable, micrograms per liter					

**Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basin**  
**Upper Pond 5 in Pauba Valley**  
**USGS Site No. 333024117005501**

Code	Parameter	MCL	Pond 5 9/17/2007	Pond 5 7/28/2010	Pond 5 8/22/2011	Pond 5 8/21/2012
	Sampling date					
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter					
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter					
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter					
61705	Diethoxyacetylphenol, water, filtered, recoverable, micrograms per liter					
61706	Monoethoxycetylphenol, water, filtered, recoverable, micrograms per liter					
62005	Cotinine, water, filtered, recoverable, micrograms per liter					
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter					
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter					
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter					
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter					
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter					
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter					
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter					
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter					
62064	Acetophenone, water, filtered, recoverable, micrograms per liter					
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter					
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter					
62067	Benzophenone, water, filtered, recoverable, micrograms per liter					
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter					
62070	Camphor, water, filtered, recoverable, micrograms per liter					
62071	Carbazole, water, filtered, recoverable, micrograms per liter					
62072	Cholesterol, water, filtered, recoverable, micrograms per liter					
62073	D-Limonene, water, filtered, recoverable, micrograms per liter					
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter					
62076	Indole, water, filtered, recoverable, micrograms per liter					
62077	Isoborneol, water, filtered, recoverable, micrograms per liter					
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter					
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter					
62080	Menthol, water, filtered, recoverable, micrograms per liter					
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter					
62082	DEET, water, filtered, recoverable, micrograms per liter					
62083	Diethoxyphenol, water, filtered, recoverable, micrograms per liter					
62084	p-Cresol, water, filtered, recoverable, micrograms per liter					
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter					
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter					
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter					
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter					
62090	Triclosan, water, filtered, recoverable, micrograms per liter					
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter					
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter					
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62166	Fipronil, water, filtered, recoverable, micrograms per liter					
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter					
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter					
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter					
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter					
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter		0.41			
63790	Perchlorate, water, filtered, recoverable, micrograms per liter	6	1.11			
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	526	516	362	384

**Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basin**  
**Upper Pond 5 in Pauba Valley**  
**USGS Site No. 333024117005501**

Code	Parameter	MCL	Pond 5 9/17/2007	Pond 5 7/28/2010	Pond 5 8/22/2011	Pond 5 8/21/2012
	Sampling date					
70301	Residue, water, filtered, sum of constituents, milligrams per liter		503 E	537 E	329	372
70303	Residue, water, filtered, tons per acre-foot					
71846	Ammonia, water, filtered, milligrams per liter as NH4					
71851	Nitrate, water, filtered, milligrams per liter	45 (g)	< 0.026	0.029	0.014	0.015
71856	Nitrite, water, filtered, milligrams per liter		< 1.00	0.623	0.872	0.708
71865	Iodide, water, filtered, milligrams per liter		< 0.007	0.011	< 0.003	< 0.003
71870	Bromide, water, filtered, milligrams per liter					
72019	Depth to water level, feet below land surface		0.06	0.10	0.075	0.122
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter		< 0.6			
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.1			
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		1.6			
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		15			
77041	Carbon disulfide, water, unfiltered, micrograms per liter		< 0.06			
77093	cis-1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6	< 0.02			
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.4			
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100	< 0.04			
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06			
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.1			
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter		0.09 E			
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.08			
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.08			
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter		< 0.40			
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.12			
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04			
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.1			
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05	< 0.04			
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04			
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.10			
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.08			
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.2			
81552	Acetone, water, unfiltered, recoverable, micrograms per liter		< 6			
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.02			
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1			
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.06			
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4			
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 1.6			
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.2			
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter		< 1			
82081	C-13/C-12 ratio, water, unfiltered, per mil		-6.46			
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-83			
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-10.14			
				-81.6	-79.4	-76.2
				-10.01	-10.04	-9.42

**Water Quality Data for Imported Water Delivered to RCWD Upper VDC Recharge Basin  
Upper Pond 5 in Pauba Valley  
USGS Site No. 333024117005501**

Code	Parameter	MCL	Pond 5 9/17/2007	Pond 5 7/28/2010	Pond 5 8/22/2011	Pond 5 8/21/2012
	Sampling date					
82303	Rn-222, water, unfiltered, picocuries per liter		0			
82346	Ethion, water, filtered, recoverable, micrograms per liter					
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.5			
82630	Metribuzin, water, filtered, recoverable, micrograms per liter					
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82670	Tebuuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82676	Propylamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter		< 0.08			
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		859	868	568	625
90851	Triholomehtanes, water, unfiltered, calcd, micrograms per liter		50.2			
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter		50.2			
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery					
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.



**ANNUAL REPORT**

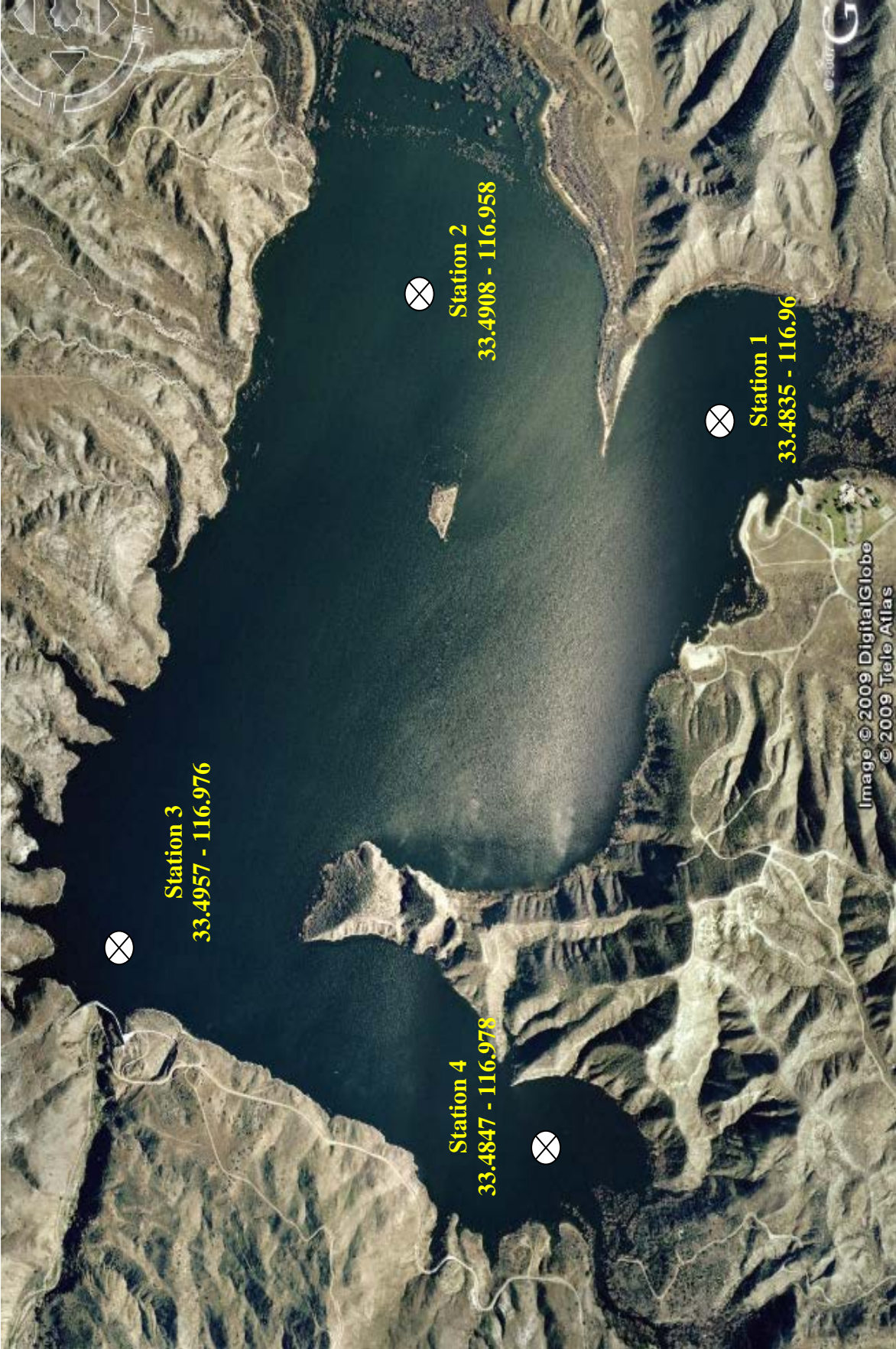
**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX D-2**

**WATER QUALITY DATA FOR VAIL LAKE**



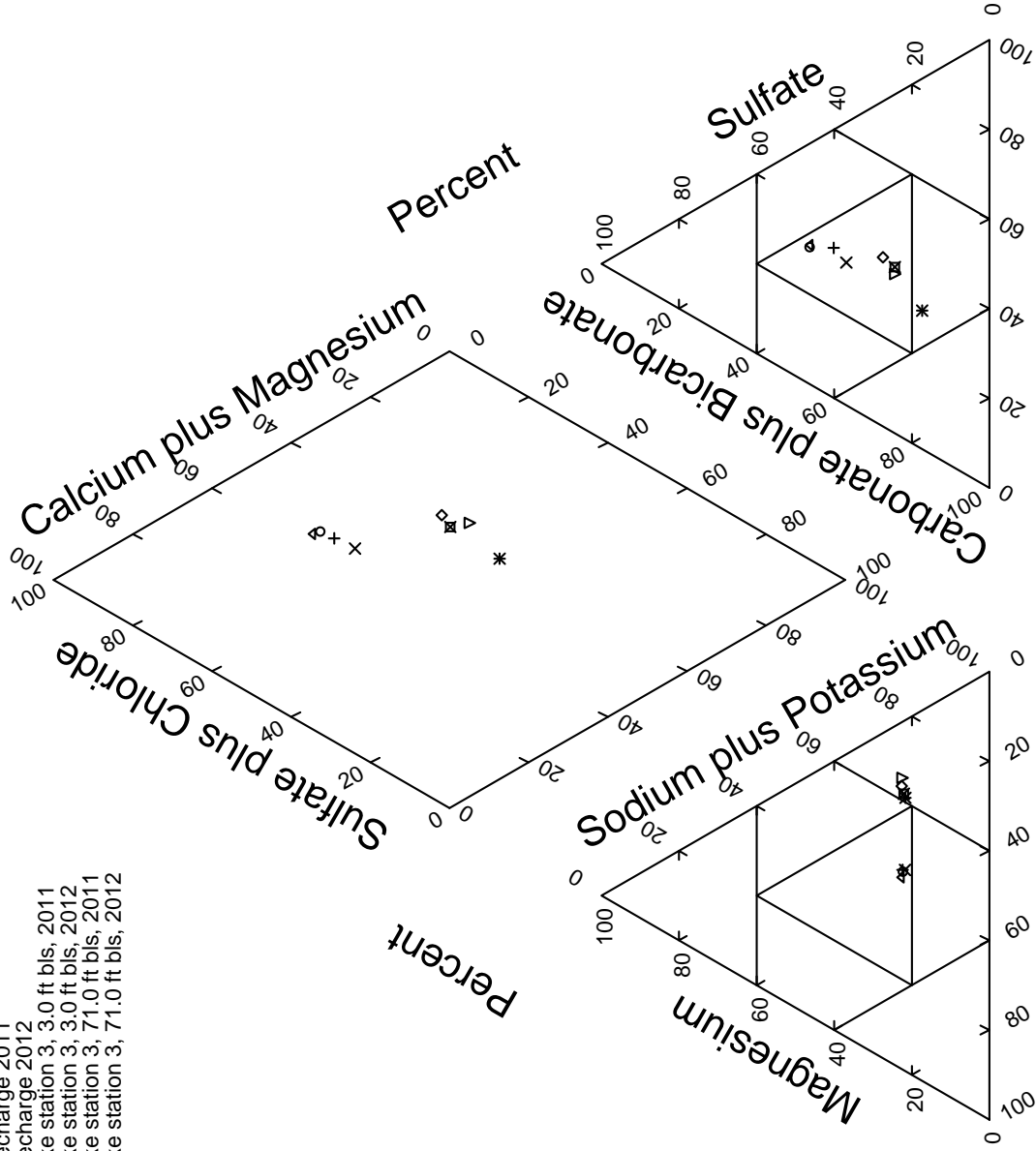




# Tri-Linear Diagram VDC Recharge and Vail Lake

## Explanation

- VDC Recharge 2007
- △ VDC Recharge 2010
- + VDC Recharge 2011
- x VDC Recharge 2012
- ◇ Vail Lake station 3, 3.0 ft bls, 2011
- ▽ Vail Lake station 3, 3.0 ft bls, 2012
- ▣ Vail Lake station 3, 71.0 ft bls, 2011
- \* Vail Lake station 3, 71.0 ft bls, 2012

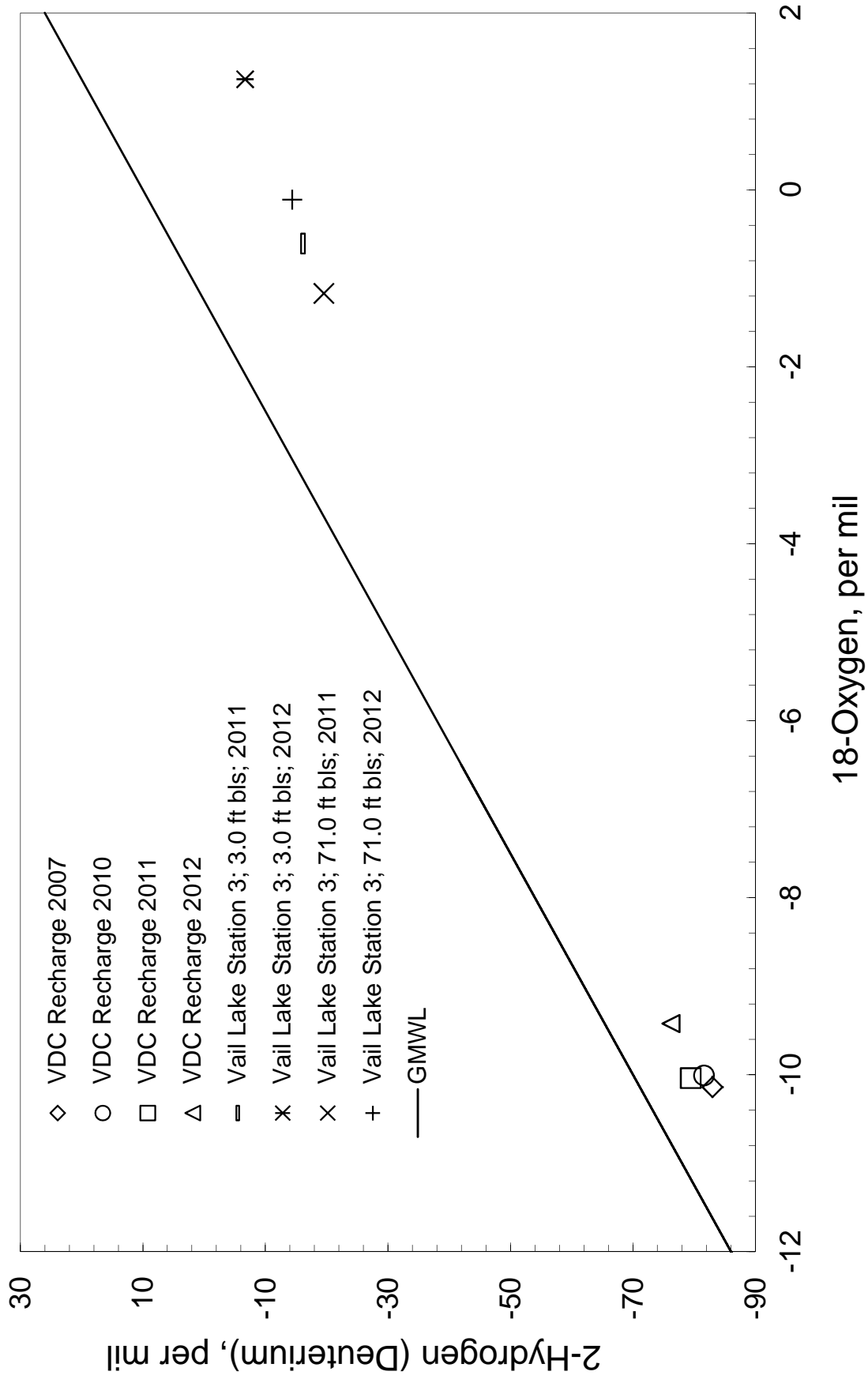


Calcium Chloride, Fluoride, Nitrite plus Nitrate  
Percent

Source: USGS California Water Science Center.

# Stable Isotope Diagram

## VDC Recharge and Vail Lake



Source: USGS California Water Science Center.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by RCWD**

Parameter	3 Vail 1M 9/22/2009	3 Vail 1M 10/21/2009	3 Vail 1M 11/18/2009	3 Vail 1M 5/26/2010	3 Vail 1M 6/17/2010	3 Vail 1M 9/18/2010
Sampling Date						
Reservoir Storage Content, acre feet	22,030	21,630	21,230	25,790	25,490	24,000
Reservoir Storage Content, percent full	44.6%	43.8%	43.0%	52.2%	51.6%	48.6%
Water Surface Elevation, feet above mean sea level	1,438.92	1,438.34	1,437.76	1,444.13	1,443.74	1,441.71
Water Surface Elevation, feet above bottom of lowest outlet	86.42	85.84	85.26	91.63	91.24	89.21
Sampling Depth, meters below water surface	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter			10.7	7.98	8.54	
pH, standard units		8.98	8.72	9.11	9.29	
Total Dissolved Solids, milligrams per liter						
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius		1274	1058	1172	1174	1210
Temperature, water, degrees Celsius		19.84	16.02	19.90	22.84	22.51
Aluminum, micrograms per liter						ND
Ammonia, milligrams per liter as nitrogen		ND	ND	ND	ND	ND
Antimony, micrograms per liter						ND
Arsenic, micrograms per liter						ND
Barium, micrograms per liter						25
Beryllium, micrograms per liter						ND
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	260	290	300	240		180
Carbonate as CO <sub>3</sub> , milligrams per liter	12	ND	ND	14		34
Chloride, milligrams per liter	180		180	130		160
Cyanide, milligrams per liter						ND
Fluoride, milligrams per liter						0.5
Hydroxide as OH, milligrams per liter	ND	ND	ND	ND	ND	ND
Inorganic Nitrogen, milligrams per liter	ND	ND	ND	ND	ND	ND
Kjeldahl Nitrogen, milligrams per liter						
Lead, micrograms per liter						ND
Mercury, micrograms per liter						ND
Nickel, micrograms per liter						ND
Nitrate Nitrogen, milligrams per liter	ND	ND	ND	ND	ND	ND
Nitrite Nitrogen, milligrams per liter	ND	ND	ND	ND	ND	ND
Ortho Phosphate Phosphorus, milligrams per liter	ND	ND	0.053	ND	ND	ND
Perchlorate, micrograms per liter						ND
Selenium, micrograms per liter						ND
Silver, micrograms per liter						ND
Sulfate, milligrams per liter	180		180	140		170
Thallium, micrograms per liter						ND
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	230	240	250	220		200
Total Chromium, micrograms per liter						ND
Total Suspended Solids, milligrams per liter	ND	ND	7	8		13

**Notes:**

Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by RCWD**

Parameter	3 Vail 1M 10/9/2010	3 Vail 1M 11/13/2010	3 Vail 1M 12/11/2010	3 Vail 1M 1/8/2011	3 Vail 1M 2/12/2011	3 Vail 1M 4/16/2011
Sampling Date						
Reservoir Storage Content, acre feet	23,640	22,510	21,960	27,740	28,060	32,120
Reservoir Storage Content, percent full	47.9%	45.6%	44.5%	56.2%	56.8%	65.1%
Water Surface Elevation, feet above mean sea level	1,441.21	1,439.61	1,438.82	1,446.68	1,447.08	1,452.03
Water Surface Elevation, feet above bottom of lowest outlet	88.71	87.11	86.32	94.18	94.58	99.53
Sampling Depth, meters below water surface	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter						
pH, standard units						
Total Dissolved Solids, milligrams per liter						
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius						
Temperature, water, degrees Celsius						
Aluminum, micrograms per liter						
Ammonia, milligrams per liter as nitrogen	0.18	0.13	0.33	0.18	ND	ND
Antimony, micrograms per liter						
Arsenic, micrograms per liter						
Barium, micrograms per liter						
Beryllium, micrograms per liter						
Bicarbonate as HCO3, milligrams per liter	260	260	270	220	230	190
Carbonate as CO3, milligrams per liter	ND	ND	ND	ND	ND	12
Chloride, milligrams per liter	150	160	160	130	120	110
Cyanide, milligrams per liter						
Fluoride, milligrams per liter						
Hydroxide as OH, milligrams per liter	ND	ND	ND	ND	ND	ND
Inorganic Nitrogen, milligrams per liter	ND	ND	0.3	0.4	ND	ND
Kjeldahl Nitrogen, milligrams per liter						
Lead, micrograms per liter						
Mercury, micrograms per liter						
Nickel, micrograms per liter						
Nitrate Nitrogen, milligrams per liter	ND	ND	ND	0.23	ND	ND
Nitrite Nitrogen, milligrams per liter	ND	ND	ND	ND	ND	ND
Ortho Phosphate Phosphorus, milligrams per liter	ND	ND	ND	0.088	ND	ND
Perchlorate, micrograms per liter						
Selenium, micrograms per liter						
Silver, micrograms per liter						
Sulfate, milligrams per liter	160	150	160	130	120	110
Thallium, micrograms per liter						
Total Alkalinity as CaCO3, milligrams per liter	210	220	220	180	190	180
Total Chromium, micrograms per liter						
Total Suspended Solids, milligrams per liter	6	10	12	8	10	6

**Notes:**

Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.



**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by RCWD**

Parameter	3 Vail 1M 5/14/2011	3 Vail 1M 6/18/2011	3 Vail 1M 7/23/2011	3 Vail 1M 8/20/2011	3 Vail 1M 9/17/2011	3 Vail 1M 11/5/2011
Sampling Date						
Reservoir Storage Content, acre feet	31,990	31,550	30,730	30,120	29,590	28,880
Reservoir Storage Content, percent full	64.8%	63.9%	62.2%	61.0%	59.9%	58.5%
Water Surface Elevation, feet above mean sea level	1,451.88	1,451.36	1,450.38	1,449.64	1,448.99	1,448.11
Water Surface Elevation, feet above bottom of lowest outlet	99.38	98.86	97.88	97.14	96.49	95.61
Sampling Depth, meters below water surface	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter			23.07			
pH, standard units			9.11			
Total Dissolved Solids, milligrams per liter		520		550	570	600
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius			984			
Temperature, water, degrees Celsius			21.7			
Aluminum, micrograms per liter						
Ammonia, milligrams per liter as nitrogen	ND	ND		ND	ND	0.14
Antimony, micrograms per liter						
Arsenic, micrograms per liter						
Barium, micrograms per liter						
Beryllium, micrograms per liter						
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	170	160		200	220	240
Carbonate as CO <sub>3</sub> , milligrams per liter	22	30		13	8.4	ND
Chloride, milligrams per liter	100	110		120	120	130
Cyanide, milligrams per liter						
Fluoride, milligrams per liter						
Hydroxide as OH, milligrams per liter	ND	ND		ND	ND	ND
Inorganic Nitrogen, milligrams per liter	ND	ND		ND	ND	ND
Kjeldahl Nitrogen, milligrams per liter						
Lead, micrograms per liter						
Mercury, micrograms per liter						
Nickel, micrograms per liter						
Nitrate Nitrogen, milligrams per liter	ND	ND		ND	ND	ND
Nitrite Nitrogen, milligrams per liter	ND	ND		ND	ND	ND
Ortho Phosphate Phosphorus, milligrams per liter	ND	ND		ND	ND	ND
Perchlorate, micrograms per liter						
Selenium, micrograms per liter						
Silver, micrograms per liter						
Sulfate, milligrams per liter	110	110		110	120	110
Thalium, micrograms per liter						
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	180	180		190	190	190
Total Chromium, micrograms per liter						
Total Suspended Solids, milligrams per liter	16	18		ND	6	8

**Notes:**

Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by RCWD**

Parameter	3 Vail 1M 12/3/2011	3 Vail 1M 1/28/2012	3 Vail 1M 2/25/2012	3 Vail 1M 3/10/2012	3 Vail 1M 4/28/2012	3 Vail 1M 6/16/2012
Sampling Date						
Reservoir Storage Content, acre feet	28,790	28,740	28,800	28,870	29,360	28,570
Reservoir Storage Content, percent full	58.3%	58.2%	58.3%	58.5%	59.5%	57.9%
Water Surface Elevation, feet above mean sea level	1,448.00	1,447.94	1,448.01	1,448.10	1,448.71	1,447.72
Water Surface Elevation, feet above bottom of lowest outlet	95.50	95.44	95.51	95.60	96.21	95.22
Sampling Depth, meters below water surface	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter						
pH, standard units						
Total Dissolved Solids, milligrams per liter	640	500	490	630	600	600
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius						
Temperature, water, degrees Celsius						
Aluminum, micrograms per liter						
Ammonia, milligrams per liter as nitrogen	0.2	ND	ND	ND	< 0.10	< 0.10
Antimony, micrograms per liter						
Arsenic, micrograms per liter						
Barium, micrograms per liter						
Beryllium, micrograms per liter						
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	240	260	220	250	240	240
Carbonate as CO <sub>3</sub> , milligrams per liter	ND	ND	18	3.6	11	7.7
Chloride, milligrams per liter	130	120	130	120	130	130
Cyanide, milligrams per liter						
Fluoride, milligrams per liter						
Hydroxide as OH, milligrams per liter	ND	ND	ND	ND	< 3.0	< 3.0
Inorganic Nitrogen, milligrams per liter	0.2	ND	ND	ND	< 0.20	< 0.20
Kjeldahl Nitrogen, milligrams per liter		2.1			1.5	1.2
Lead, micrograms per liter						
Mercury, micrograms per liter						
Nickel, micrograms per liter						
Nitrate Nitrogen, milligrams per liter	ND	ND	ND	ND	< 0.20	< 0.20
Nitrite Nitrogen, milligrams per liter	ND	ND	ND	ND	< 0.10	< 0.10
Ortho Phosphate Phosphorus, milligrams per liter	ND	ND	ND	ND	< 0.050	< 0.050
Perchlorate, micrograms per liter						
Selenium, micrograms per liter						
Silver, micrograms per liter						
Sulfate, milligrams per liter	120	110	120	120	130	120
Thallium, micrograms per liter						
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	200	210	210	210	210	210
Total Chromium, micrograms per liter						
Total Suspended Solids, milligrams per liter	11	25	14	9	8	< 5

**Notes:**

Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by RCWD**

Parameter	3 Vail 1M 7/14/2012	3 Vail 1M 8/11/2012	3 Vail 1M 9/15/2012	3 Vail 1M 10/20/2012	3 Vail 1M 11/17/2012	3 Vail 1M 1/19/2013
Sampling Date						
Reservoir Storage Content, acre feet	28,000	27,490	26,880	26,110	25,020	23,970
Reservoir Storage Content, percent full	56.7%	55.7%	54.4%	52.9%	50.7%	48.6%
Water Surface Elevation, feet above mean sea level	1,447.01	1,446.35	1,445.56	1,444.55	1,443.11	1,441.68
Water Surface Elevation, feet above bottom of lowest outlet	94.51	93.85	93.06	92.05	90.61	89.18
Sampling Depth, meters below water surface	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter						
pH, standard units						
Total Dissolved Solids, milligrams per liter	630	610	660	590	680	690
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius						
Temperature, water, degrees Celsius						
Aluminum, micrograms per liter	< 0.10	< 0.10	< 0.10	< 0.10	0.15	< 0.10
Ammonia, milligrams per liter as nitrogen						
Antimony, micrograms per liter						
Arsenic, micrograms per liter						
Barium, micrograms per liter						
Beryllium, micrograms per liter						
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	240	230	230	240	270	290
Carbonate as CO <sub>3</sub> , milligrams per liter	12	13	16	11	< 3.0	< 3.0
Chloride, milligrams per liter	130	130	140	140	140	140
Cyanide, milligrams per liter						
Fluoride, milligrams per liter						
Hydroxide as OH, milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Inorganic Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Kjeldahl Nitrogen, milligrams per liter	1.3	2.0	3.2	2.2	1.7	1.5
Lead, micrograms per liter						
Mercury, micrograms per liter						
Nickel, micrograms per liter						
Nitrate Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.15
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Perchlorate, micrograms per liter						
Selenium, micrograms per liter						
Silver, micrograms per liter						
Sulfate, milligrams per liter	120	120	120	140	120	130
Thallium, micrograms per liter						
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	220	210	220	220	230	240
Total Chromium, micrograms per liter						
Total Suspended Solids, milligrams per liter	7	12	6	11	9	20

**Notes:**

Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by RCWD**

Parameter	3 Vail 1M 2/23/2013	3 Vail 1M 3/23/2013	3 Vail 1M 4/20/2013	3 Vail 1M 5/4/2013	3 Vail 1M 6/22/2013	3 Vail 1M 10/31/2015	3 Vail 1M 5/16/2017
Sampling Date							
Reservoir Storage Content, acre feet	23,790	23,610	23,410	23,280	22,530	14,110	13,080
Reservoir Storage Content, percent full	48.2%	47.8%	47.4%	47.2%	45.6%	28.6%	26.5%
Water Surface Elevation, feet above mean sea level	1,441.43	1,441.17	1,440.90	1,440.17	1,439.64	1,425.80	1,423.71
Water Surface Elevation, feet above bottom of lowest outlet	88.93	88.67	88.40	87.67	87.14	73.30	71.21
Sampling Depth, meters below water surface	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	670	700	690	680	690	840	780
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	< 0.10	< 0.10	< 0.10	< 0.10	0.11	0.28	< 0.048
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO3, milligrams per liter	250	280	290	280	300	360	220
Carbonate as CO3, milligrams per liter	3.6	9.6	< 3.0	< 3.0	11	17	50
Chloride, milligrams per liter	140	140	150	150	150	230	190
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.7	< 1.7
Inorganic Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.28	< 0.055
Kjeldahl Nitrogen, milligrams per liter	2.1	1.5	0.77	1.1	1.6	1.8	2.4
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.11	< 0.055
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.042
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.0028	< 0.024
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter	130	130	130	140	130	180	170
Thallium, micrograms per liter							
Total Alkalinity as CaCO3, milligrams per liter	210	240	240	230	260	330	270
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	8	9	< 5	< 5	< 5	6	10

**Notes:**

Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.

Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.

ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by RCWD**

Parameter	3 Vail 1MAB 9/22/2009	3 Vail 1MAB 10/21/2009	3 Vail 1MAB 11/18/2009	3 Vail 1MAB 5/26/2010	3 Vail 1MAB 6/17/2010	3 Vail 1MAB 8/14/2010	3 Vail 1MAB 9/18/2010
Sampling Date							
Reservoir Storage Content, acre feet	22,030	21,630	21,230	25,790	25,490	24,510	24,000
Reservoir Storage Content, percent full	44.6%	43.8%	43.0%	52.2%	51.6%	49.6%	48.6%
Water Surface Elevation, feet above mean sea level	1,438.92	1,438.34	1,437.76	1,444.13	1,443.74	1,442.42	1,441.71
Water Surface Elevation, feet above bottom of lowest outlet	86.42	85.84	85.26	91.63	91.24	89.92	89.21
Sampling Depth, meters above reservoir bottom	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter							
pH, standard units		7.47	8.5	7.8	7.71	7.64	
Total Dissolved Solids, milligrams per liter						840	
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius		1212	1053	1250	1253	1243	1226
Temperature, water, degrees Celsius		15.46	15.6	12.2	12.46	13.5	16.64
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	4.10	5.50	0.12	1.90		0.28	1.80
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO3, milligrams per liter	370	360	300	300		360	420
Carbonate as CO3, milligrams per liter	ND	ND	ND	ND		17	ND
Chloride, milligrams per liter	160		180	150		230	160
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	ND	ND	ND	ND		<1.7	ND
Inorganic Nitrogen, milligrams per liter	4.10	5.50	ND	1.90		<0.28	1.80
Kjeldahl Nitrogen, milligrams per liter						1.80	
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	ND	ND	ND	ND		<0.11	ND
Nitrite Nitrogen, milligrams per liter	ND	ND	ND	ND		<0.046	ND
Ortho Phosphate Phosphorus, milligrams per liter	0.78	1.10	0.053	0.470		<0.0028	1.400
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter	110		190	140		180	69
Thalium, micrograms per liter							
Total Alkalinity as CaCO3, milligrams per liter	300	300	250	250		330	340
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	ND	ND	6	5		6	ND

Notes:  
Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by RCWD**

Parameter	3 Vail 1MAB 10/9/2010	3 Vail 1MAB 11/13/2010	3 Vail 1MAB 12/11/2010	3 Vail 1MAB 1/8/2011	3 Vail 1MAB 2/12/2011	3 Vail 1MAB 3/19/2011	3 Vail 1MAB 4/16/2011
Sampling Date							
Reservoir Storage Content, acre feet	23,640	22,510	21,960	27,740	28,060	30,740	32,120
Reservoir Storage Content, percent full	47.9%	45.6%	44.5%	56.2%	56.8%	62.3%	65.1%
Water Surface Elevation, feet above mean sea level	1,441.21	1,439.61	1,438.82	1,446.68	1,447.08	1,450.39	1,452.03
Water Surface Elevation, feet above bottom of lowest outlet	88.71	87.11	86.32	94.18	94.58	97.89	99.53
Sampling Depth, meters above reservoir bottom	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter						840	
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	7.80	9.10	0.31	0.22	ND	0.28	0.45
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO3, milligrams per liter	390	430	270	220	230	360	230
Carbonate as CO3, milligrams per liter	ND	ND	ND	ND	ND	17	ND
Chloride, milligrams per liter	150	150	160	130	120	230	120
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	ND	ND	ND	ND	ND	<1.7	ND
Inorganic Nitrogen, milligrams per liter	7.80	9.10	0.30	0.6	ND	<0.28	0.50
Kjeldahl Nitrogen, milligrams per liter						1.8	
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	ND	ND	ND	0.34	ND	<0.11	ND
Nitrite Nitrogen, milligrams per liter	ND	ND	ND	ND	ND	<0.046	ND
Ortho Phosphate Phosphorus, milligrams per liter	1.000	0.660	ND	0.09	ND	<0.0028	0.170
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter	60	45	160	130	120	180	120
Sulfate, milligrams per liter							
Thalium, micrograms per liter							
Total Alkalinity as CaCO3, milligrams per liter	320	360	220	180	190	330	180
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	6	ND	14	8	8	6	ND

Notes:  
Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by RCWD**

Parameter	3 Vail 1MAB 5/14/2011	3 Vail 1MAB 6/18/2011	3 Vail 1MAB 7/23/2011	3 Vail 1MAB 8/20/2011	3 Vail 1MAB 9/17/2011	3 Vail 1MAB 10/15/2011	3 Vail 1MAB 11/5/2011
Sampling Date							
Reservoir Storage Content, acre feet	31,990	31,550	30,730	30,120	29,590	29,140	28,880
Reservoir Storage Content, percent full	64.8%	63.9%	62.2%	61.0%	59.9%	59.0%	58.5%
Water Surface Elevation, feet above mean sea level	1,451.88	1,451.36	1,450.38	1,449.64	1,448.99	1,448.44	1,448.11
Water Surface Elevation, feet above bottom of lowest outlet	99.38	98.86	97.88	97.14	96.49	95.94	95.61
Sampling Depth, meters above reservoir bottom	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter			0				
pH, standard units			7.56				
Total Dissolved Solids, milligrams per liter		530		560	610	840	590
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius			1007				
Temperature, water, degrees Celsius			12.2				
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	0.81	1.4		3.6	5	0.3	0.13
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO3, milligrams per liter	240	240		300	330	360	230
Carbonate as CO3, milligrams per liter	ND	ND		ND	ND	17	ND
Chloride, milligrams per liter	110	130		120	120	230	130
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	ND	ND		ND	ND	<1.7	ND
Inorganic Nitrogen, milligrams per liter	0.8	1.4		3.6	5	<0.28	ND
Kjeldahl Nitrogen, milligrams per liter						1.8	
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	ND	ND		ND	ND	<0.11	ND
Nitrite Nitrogen, milligrams per liter	ND	ND		ND	ND	<0.046	ND
Ortho Phosphate Phosphorus, milligrams per liter	0.26	0.49		0.36	0.65	<0.0028	0.45
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter	110	100		74	60	180	110
Thalium, micrograms per liter							
Total Alkalinity as CaCO3, milligrams per liter	190	200		240	270	330	190
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	6	ND		ND	ND	6	6

Notes:  
Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by RCWD**

Parameter	3 Vail 1MAB 12/3/2011	3 Vail 1MAB 1/28/2012	3 Vail 1MAB 2/25/2012	3 Vail 1MAB 3/10/2012	3 Vail 1MAB 4/28/2012	3 Vail 1MAB 5/12/2012	3 Vail 1MAB 6/16/2012
Sampling Date							
Reservoir Storage Content, acre feet	28,790	28,740	28,800	28,870	29,360	29,220	28,570
Reservoir Storage Content, percent full	58.3%	58.2%	58.3%	58.5%	59.5%	59.2%	57.9%
Water Surface Elevation, feet above mean sea level	1,448.00	1,447.94	1,448.01	1,448.10	1,448.71	1,448.53	1,447.72
Water Surface Elevation, feet above bottom of lowest outlet	95.50	95.44	95.51	95.60	96.21	96.03	95.22
Sampling Depth, meters above reservoir bottom	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	670	520	510	630	590	840	600
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	0.24	ND	0.4	0.61	1.7	0.28	2.7
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO3, milligrams per liter	240	260	260	260	280	360	280
Carbonate as CO3, milligrams per liter	ND	ND	ND	ND	< 3.0	17	< 3.0
Chloride, milligrams per liter	130	120	130	120	130	230	120
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	ND	ND	ND	ND	< 3.0	< 1.7	< 3.0
Inorganic Nitrogen, milligrams per liter	0.2	ND	0.4	0.6	1.7	< 0.28	2.7
Kjeldahl Nitrogen, milligrams per liter		1.8			3.1	1.8	4.2
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	ND	ND	ND	ND	< 0.20	< 0.11	< 0.20
Nitrite Nitrogen, milligrams per liter	ND	ND	ND	ND	< 0.10	< 0.046	< 0.10
Ortho Phosphate Phosphorus, milligrams per liter	ND	ND	ND	0.13	0.31	< 0.0028	0.45
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter	120	110	120	110	110	180	87
Sulfate, milligrams per liter							
Thalium, micrograms per liter							
Total Alkalinity as CaCO3, milligrams per liter	200	210	210	210	230	330	230
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	12	23	12	11	6	6	< 5

Notes:  
Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.



**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by RCWD**

Parameter	3 Vail 1MAB 7/14/2012	3 Vail 1MAB 8/11/2012	3 Vail 1MAB 9/15/2012	3 Vail 1MAB 10/20/2012	3 Vail 1MAB 11/17/2012	3 Vail 1MAB 12/15/2012	3 Vail 1MAB 1/19/2013
Sampling Date							
Reservoir Storage Content, acre feet	28,000	27,490	26,880	26,110	25,020	24,340	23,970
Reservoir Storage Content, percent full	56.7%	55.7%	54.4%	52.9%	50.7%	49.3%	48.6%
Water Surface Elevation, feet above mean sea level	1,447.01	1,446.35	1,445.56	1,444.55	1,443.11	1,442.18	1,441.68
Water Surface Elevation, feet above bottom of lowest outlet	94.51	93.85	93.06	92.05	90.61	89.68	89.18
Sampling Depth, meters above reservoir bottom	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	620	600	610	610	700	840	700
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	2.5	4.0	4.0	8.6	0.20	0	0.15
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	280	300	340	390	270	360	290
Carbonate as CO <sub>3</sub> , milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	17	< 3.0
Chloride, milligrams per liter	120	120	120	120	130	230	140
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.7	< 3.0
Inorganic Nitrogen, milligrams per liter	2.5	4.0	4.1	8.6	0.20	< 0.28	0.31
Kjeldahl Nitrogen, milligrams per liter	3.4	6.2	6.0	10	1.9	2	2.1
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.11	< 0.20
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	0.16
Ortho Phosphate Phosphorus, milligrams per liter	0.40	< 0.14	0.49	1.1	< 0.050	< 0.0028	< 0.050
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter	87	72	63	42	120	180	130
Thalium, micrograms per liter							
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	230	250	280	320	220	330	240
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	< 5	7	< 5	6	8	6	22

**Notes:**

Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.  
Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by RCWD**

Parameter	3 Vail 1MAB 2/23/2013	3 Vail 1MAB 3/23/2013	3 Vail 1MAB 4/20/2013	3 Vail 1MAB 5/4/2013	3 Vail 1MAB 6/22/2013	3 Vail 1MAB 10/31/2015	3 Vail 1MAB 5/16/2017
Sampling Date							
Reservoir Storage Content, acre feet	23,790	23,610	23,410	23,280	22,530	14,110	13,080
Reservoir Storage Content, percent full	48.2%	47.8%	47.4%	47.2%	45.6%	28.6%	26.5%
Water Surface Elevation, feet above mean sea level	1,441.43	1,441.17	1,440.90	1,440.17	1,439.64	1,425.80	1,423.71
Water Surface Elevation, feet above bottom of lowest outlet	88.93	88.67	88.40	87.67	87.14	73.30	71.21
Sampling Depth, meters above reservoir bottom	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	680	680	650	700	690	860	-
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	0.20	0.91	1.6	2.1	3.9	10	1.7
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	290	300	290	290	310	580	320
Carbonate as CO <sub>3</sub> , milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.7	< 1.7
Chloride, milligrams per liter	140	130	140	150	140	200	210
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.7	< 1.7
Inorganic Nitrogen, milligrams per liter	0.20	0.91	1.6	2.1	3.9	10	1.7
Kjeldahl Nitrogen, milligrams per liter	1.4	2.0	2.9	3.2	4.7	15	4
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.11	< 0.055
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046	< 0.042
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	0.18	0.30	0.36	0.48	0.49	0.36
Perchlorate, micrograms per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter	130	120	130	120	96	43	150
Thallium, micrograms per liter							
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	240	240	240	240	260	470	320
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter	6	6	7	6	< 5	< 15	36

Notes:  
 Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.  
 Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.  
 ND - None detected.

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1M	
			8/20/2011	9/15/2012
	Sampling date		30.120	26.880
	Reservoir Storage Content, acre feet		61.0%	54.4%
	Reservoir Storage Content, percent full		1,449.64	1,445.37
	Water Surface Elevation, feet above mean sea level		97.14	92.87
	Water Surface Elevation, feet above bottom of lowest outlet		3.0	3.0
3	Sampling depth, feet below water surface		22.5	27.4
10	Temperature, water, degrees Celsius		80020	80020
28	Agency analyzing sample, code			
59	Flow rate, instantaneous, gallons per minute		948	1080
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		M	M
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		8.8	8.9
300	Dissolved oxygen, water, unfiltered, milligrams per liter		8.8	9.0
400	pH, water, unfiltered, field, standard units		0.5	0.5
403	pH, water, unfiltered, laboratory, standard units		203	246
405	Carbon dioxide, water, unfiltered, milligrams per liter		< 0.88	< 0.80
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter		0.79	0.75
602	Total nitrogen, water, filtered, milligrams per liter		0.073	0.012
607	Organic nitrogen, water, filtered, milligrams per liter		< 0.001	< 0.001
608	Ammonia, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.020	< 0.040
613	Nitrite, water, filtered, milligrams per liter as nitrogen		0.86	0.76
618	Nitrate, water, filtered, milligrams per liter as nitrogen		< 0.02	< 0.040
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		0.013	< 0.012
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		0.02	0.02
660	Orthophosphate, water, filtered, milligrams per liter		0.004	< 0.004
666	Phosphorus, water, filtered, milligrams per liter		169	201
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			
900	Hardness, water, milligrams per liter as calcium carbonate			
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate			
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate		26.1	28.8
915	Calcium, water, filtered, milligrams per liter		25.1	31.2
925	Magnesium, water, filtered, milligrams per liter		128	165
930	Sodium, water, filtered, milligrams per liter		4.31	5.06
931	Sodium adsorption ratio, water, number		61	63
932	Sodium fraction of cations, water, percent in equivalents of major cations		8.57	10.7
935	Potassium, water, filtered, milligrams per liter		116	139
940	Chloride, water, filtered, milligrams per liter	600	115	129
945	Sulfate, water, filtered, milligrams per liter	600	0.49	0.54
950	Fluoride, water, filtered, milligrams per liter	2 (b)	10.9	2.4
955	Silica, water, filtered, milligrams per liter		2	1.8
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	41.2	35.4
1005	Barium, water, filtered, micrograms per liter	1000 (d)		
1010	Beryllium, micrograms per liter	4 (e)		
1020	Boron, water, filtered, micrograms per liter		192	227
1025	Cadmium, micrograms per liter	5 (f)		
1030	Chromium, micrograms per liter	50 (g)		
1035	Cobalt, micrograms per liter			
1040	Copper, micrograms per liter	1000 (h)	5	< 3.2
1046	Iron, water, filtered, micrograms per liter	300		
1049	Lead, micrograms per liter	50	1.2	0.54
1056	Manganese, water, filtered, micrograms per liter	2 (i)		
1057	Thallium, micrograms per liter			
1060	Molybdenum, micrograms per liter			
1065	Nickel, micrograms per liter	100 (j)		
1075	Silver, micrograms per liter	100 (k)		
1080	Strontium, water, filtered, micrograms per liter		254	315
1085	Vanadium, micrograms per liter			
1090	Zinc, micrograms per liter	5000 (l)		

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1M	
			8/20/2011	9/15/2012
1085	Sampling date			
1085	Antimony, micrograms per liter	6 (m)		
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	3.7	7.2
1130	Lithium, water, filtered, micrograms per liter		10	7.44
1145	Selenium, micrograms per liter	50 (o)		
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter			
4025	Hexazinone, water, filtered, recoverable, micrograms per liter			
4029	Bromacil, water, filtered, recoverable, micrograms per liter			
4035	Simazine, water, filtered, recoverable, micrograms per liter			
4036	Prometryn, water, filtered, recoverable, micrograms per liter			
4037	Prometon, water, filtered, recoverable, micrograms per liter			
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter			
4095	Fonofos, water, filtered, recoverable, micrograms per liter			
7000	Tritium, water, unfiltered, picocuries per liter			
22703	Uranium, natural, micrograms per liter			
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, lab, milligrams per liter as calcium carbonate		179	223
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter			
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter			
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5		
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter			
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter			
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter			
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter			
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150		
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1		
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter			
34221	Anthracene, water, filtered, recoverable, micrograms per liter			
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)		
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter			
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70		
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter			
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300		
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter			
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter			
34409	Isophorone, water, filtered, recoverable, micrograms per liter			
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter			
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter			
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter			
34443	Naphthalene, water, filtered, recoverable, micrograms per liter	5		
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter			
34466	Phenol, water, filtered, recoverable, micrograms per liter			
34470	Pyrene, water, filtered, recoverable, micrograms per liter			
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5		
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter			
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150		
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5		
34501	1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6		
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200		
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5		
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1		
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600		
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5		
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10		
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter			
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter			

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1M	
			8/20/2011	9/15/2012
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter			
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter			
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5		
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5		
38454	Dicropthos, water, filtered, recoverable, micrograms per liter			
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter			
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter			
39036	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		180	223
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5		
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5		
39381	Dieldrin, water, filtered, recoverable, micrograms per liter			
39415	Metolachlor, water, filtered, recoverable, micrograms per liter			
39532	Malathion, water, filtered, recoverable, micrograms per liter			
39572	Diazinon, water, filtered, recoverable, micrograms per liter			
39632	Atrazine, water, filtered, recoverable, micrograms per liter			
46342	Alechlor, water, filtered, recoverable, micrograms per liter			
49260	Acetochlor, water, filtered, recoverable, micrograms per liter			
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
49933	C-14, water, filtered, percent modern			
49934	C-14, counting error, water, filtered, percent modern			
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter			
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter			
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter			
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter			
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter			
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter			
50305	Caffeine, water, filtered, recoverable, micrograms per liter			
50359	Metaxyl, water, filtered, recoverable, micrograms per liter			
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6		
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter			
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter			
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter			
61593	Iprodione, water, filtered, recoverable, micrograms per liter			
61594	Isofenphos, water, filtered, recoverable, micrograms per liter			
61596	Metaxyl, water, filtered, recoverable, micrograms per liter			
61598	Methidathion, water, filtered, recoverable, micrograms per liter			
61599	Mycobutanil, water, filtered, recoverable, micrograms per liter			
61601	Phosmet, water, filtered, recoverable, micrograms per liter			
61610	Tribufos, water, filtered, recoverable, micrograms per liter			
61618	2-Chloro-2,6-diethylacetamide, water, filtered, recoverable, micrograms per liter			
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter			
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter			
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter			
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter			
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter			
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter			
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter			
61646	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter			
61652	Malaoxon, water, filtered, recoverable, micrograms per liter			
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter			
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter			
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter			
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter			
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter			

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1M	
			8/20/2011	9/15/2012
61706	Sampling date			
62005	Monothoxyoctylphenol, water, filtered, recoverable, micrograms per liter			
62005	Cotinine, water, filtered, recoverable, micrograms per liter			
62064	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter			
62065	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter			
62065	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter			
62067	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter			
62068	3-Methyl-1H-Indole, water, filtered, recoverable, micrograms per liter			
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter			
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter			
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter			
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter			
62064	Acetophenone, water, filtered, recoverable, micrograms per liter			
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter			
62066	9,10-Antraquinone, water, filtered, recoverable, micrograms per liter			
62067	Benzophenone, water, filtered, recoverable, micrograms per liter			
62067	beta-Sitosterol, water, filtered, recoverable, micrograms per liter			
62070	Camphor, water, filtered, recoverable, micrograms per liter			
62071	Carbazole, water, filtered, recoverable, micrograms per liter			
62072	Cholesterol, water, filtered, recoverable, micrograms per liter			
62073	D-Limonene, water, filtered, recoverable, micrograms per liter			
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter			
62076	Indole, water, filtered, recoverable, micrograms per liter			
62077	Isoborneol, water, filtered, recoverable, micrograms per liter			
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter			
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter			
62080	Menthol, water, filtered, recoverable, micrograms per liter			
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter			
62082	DEET, water, filtered, recoverable, micrograms per liter			
62083	Diethoxypropylphenol, water, filtered, recoverable, micrograms per liter			
62084	p-Cresol, water, filtered, recoverable, micrograms per liter			
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter			
62086	beta-Stigmasteranol, water, filtered, recoverable, micrograms per liter			
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter			
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter			
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter			
62090	Triclosan, water, filtered, recoverable, micrograms per liter			
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter			
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter			
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter			
62166	Fipronil, water, filtered, recoverable, micrograms per liter			
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter			
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter			
62169	Desulfurylpropionil amide, water, filtered, recoverable, micrograms per liter			
62170	Desulfurylfipronil, water, filtered, recoverable, micrograms per liter			
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter			
63790	Parchlorate, water, filtered, recoverable, micrograms per liter	6		
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	587	658
70301	Residue, water, filtered, sum of constituents, milligrams per liter		539	641
70303	Residue, water, filtered, tons per acre-foot			
71846	Ammonia, water, filtered, milligrams per liter as NH4			
71851	Nitrate, water, filtered, milligrams per liter	45 (g)	0.094	0.016
71856	Nitrite, water, filtered, milligrams per liter		< 0.089	< 0.177
71865	Iodide, water, filtered, milligrams per liter		< 0.003	< 0.003
71870	Bromide, water, filtered, milligrams per liter		0.021	0.017
72019	Depth to water level, feet below land surface		0.46	0.468

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1M	
			8/20/2011	9/15/2012
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter			
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter			
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter			
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter			
77041	Carbon disulfide, water, unfiltered, micrograms per liter			
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6		
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter			
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100		
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter			
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter			
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter			
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter			
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter			
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter			
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter			
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter			
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter			
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter			
77275	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter			
77277	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter			
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter			
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter			
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter			
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter			
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter			
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter			
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter			
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter			
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter			
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05		
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter			
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter			
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter			
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter			
81552	Acetone, water, unfiltered, recoverable, micrograms per liter			
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter			
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter			
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter			
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter			
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter			
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter			
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter			
82081	C-13/C-12 ratio, water, unfiltered, per ml			
82082	Deuterium/Protium ratio, water, unfiltered, per ml			
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per ml	-16.2	-6.7	
82303	Rn-222, water, unfiltered, picocuries per liter	-0.61	1.25	
82346	Ethion, water, filtered, recoverable, micrograms per liter			
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter			
82630	Metrizolin, water, filtered, recoverable, micrograms per liter			
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82673	Bentfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1M  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1M	
			8/20/2011	9/15/2012
	Sampling date			
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter			
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius	925		1080
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter			
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99585	Decalfluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery			
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery			
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery			
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery			
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery			

**Notes:**

- Station No. 3 Vail 1M located near upstream face of Vail Dam, sample depth one meter below water surface.
- Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.
- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
  - (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).  
 E--Estimated.  
 M--Presence verified but not quantified.  
 MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.  
 V--Biased results from contamination.



**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1MAB	
			8/20/2011	9/15/2012
	Sampling date			
	Reservoir Storage Content, acre feet		30.120	26.880
	Reservoir Storage Content, percent full		61.0%	54.4%
	Water Surface Elevation, feet above mean sea level		1,449.64	1,445.37
	Water Surface Elevation, feet above bottom of lowest outlet		97.14	92.87
3	Sampling depth, feet below water surface		71.0	71.0
10	Temperature, water, degrees Celsius		15.5	23.8
28	Agency analyzing sample, code		80020	80020
59	Flow rate, instantaneous, gallons per minute			
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		1000	1080
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00002	0.00003
300	Dissolved oxygen, water, unfiltered, milligrams per liter		0.4	0.4
400	pH, water, unfiltered, field, standard units		7.7	7.6
403	pH, water, unfiltered, laboratory, standard units		7.8	7.6
405	Carbon dioxide, water, unfiltered, milligrams per liter		9.2	15
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter		284	359
602	Total nitrogen, water, filtered, milligrams per liter		< 3.7	< 6.0
607	Organic nitrogen, water, filtered, milligrams per liter		0.81	0.81
608	Ammonia, water, filtered, milligrams per liter as nitrogen		2.88	5.11
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.003	0.002
618	Nitrate, water, filtered, milligrams per liter as nitrogen		< 0.020	< 0.038
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		3.7	5.9
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		< 0.02	< 0.040
660	Orthophosphate, water, filtered, milligrams per liter		1.5	2.41
666	Phosphorus, water, filtered, milligrams per liter		0.49	0.78
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.488	0.786
900	Hardness, water, milligrams per liter as calcium carbonate		186	224
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate			
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate			
915	Calcium, water, filtered, milligrams per liter		31.5	39.7
925	Magnesium, water, filtered, milligrams per liter		26	30.1
930	Sodium, water, filtered, milligrams per liter		132	154
931	Sodium adsorption ratio, water, number		4.22	4.47
932	Sodium fraction of cations, water, percent in equivalents of major cations		59	59
935	Potassium, water, filtered, milligrams per liter		9.46	10.2
940	Chloride, water, filtered, milligrams per liter	600	117	124
945	Sulfate, water, filtered, milligrams per liter	600	105	95.5
950	Fluoride, water, filtered, milligrams per liter	2 (b)	0.48	0.53
955	Silica, water, filtered, milligrams per liter		9.6	5.84
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	1.3	1.5
1005	Barium, water, filtered, micrograms per liter	1000 (d)	58.6	96.6
1010	Beryllium, micrograms per liter	4 (e)		
1020	Boron, water, filtered, micrograms per liter		188	220
1025	Cadmium, micrograms per liter	5 (f)		
1030	Chromium, micrograms per liter	50 (g)		
1035	Cobalt, micrograms per liter			
1040	Copper, micrograms per liter	1000 (h)		
1046	Iron, water, filtered, micrograms per liter	300	28	15.6
1049	Lead, micrograms per liter			
1056	Manganese, water, filtered, micrograms per liter	50	299	423
1057	Thallium, micrograms per liter	2 (i)		
1060	Molybdenum, micrograms per liter			
1065	Nickel, micrograms per liter	100 (j)		
1075	Silver, micrograms per liter	100 (k)		
1080	Strontium, water, filtered, micrograms per liter		295	340
1085	Vanadium, micrograms per liter			
1090	Zinc, micrograms per liter	5000 (l)		

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1MAB	
			8/20/2011	9/15/2012
1085	Sampling date			
1095	Antimony, micrograms per liter	6 (m)		
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	< 1.7	< 2.2
1130	Lithium, water, filtered, micrograms per liter		9	7.2
1145	Selenium, micrograms per liter	50 (o)		
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter			
4025	Hexazinone, water, filtered, recoverable, micrograms per liter			
4029	Bromacil, water, filtered, recoverable, micrograms per liter			
4035	Simazine, water, filtered, recoverable, micrograms per liter			
4036	Prometryn, water, filtered, recoverable, micrograms per liter			
4037	Prometon, water, filtered, recoverable, micrograms per liter			
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter			
4095	Fonofos, water, filtered, recoverable, micrograms per liter			
7000	Tritium, water, unfiltered, picocuries per liter			
22703	Uranium, natural, micrograms per liter			
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, lab, milligrams per liter as calcium carbonate		210	276
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter			
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter			
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5		
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter			
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter			
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter			
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter			
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150		
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1		
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter			
34221	Anthracene, water, filtered, recoverable, micrograms per liter			
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)		
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter			
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70		
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter			
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300		
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter			
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter			
34409	Isophorone, water, filtered, recoverable, micrograms per liter			
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter			
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter			
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter			
34443	Naphthalene, water, filtered, recoverable, micrograms per liter	5		
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter			
34466	Phenol, water, filtered, recoverable, micrograms per liter			
34470	Pyrene, water, filtered, recoverable, micrograms per liter			
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5		
34476	Trichloroethene, water, filtered, recoverable, micrograms per liter			
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150		
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5		
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6		
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200		
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5		
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1		
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600		
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5		
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10		
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter			
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5		
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter			

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by USGS**

Code	Parameter	MCL	8/20/2011	9/15/2012	3 Vail 1MAB
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter				
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter				
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			
38454	Dicropthos, water, filtered, recoverable, micrograms per liter				
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter				
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter				
39036	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		234	296	
39086	Alkalinity, water, unfiltered, recoverable, micrograms per liter	0.5			
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	5			
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter				
39381	Dieldrin, water, filtered, recoverable, micrograms per liter				
39415	Metolachlor, water, filtered, recoverable, micrograms per liter				
39532	Malathion, water, filtered, recoverable, micrograms per liter				
39572	Diazinon, water, filtered, recoverable, micrograms per liter				
39632	Atrazine, water, filtered, recoverable, micrograms per liter				
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter				
46342	Alechlor, water, filtered, recoverable, micrograms per liter				
49260	Acetochlor, water, filtered, recoverable, micrograms per liter				
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
49933	C-14, water, filtered, percent modern				
49934	C-14, counting error, water, filtered, percent modern				
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter				
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter				
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter				
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter				
50305	Caffeine, water, filtered, recoverable, micrograms per liter				
50359	Metaxyl, water, filtered, recoverable, micrograms per liter				
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter	6			
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter				
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter				
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter				
61593	Iprodione, water, filtered, recoverable, micrograms per liter				
61594	Isofenphos, water, filtered, recoverable, micrograms per liter				
61596	Metaxyl, water, filtered, recoverable, micrograms per liter				
61598	Methidathion, water, filtered, recoverable, micrograms per liter				
61599	Mycobutanil, water, filtered, recoverable, micrograms per liter				
61601	Phosmet, water, filtered, recoverable, micrograms per liter				
61610	Tribufos, water, filtered, recoverable, micrograms per liter				
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter				
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter				
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter				
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter				
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter				
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter				
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter				
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter				
61646	Fenamiphos sulfide, water, filtered, recoverable, micrograms per liter				
61652	Malaoxon, water, filtered, recoverable, micrograms per liter				
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter				
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter				
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter				
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter				
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter				

Water Quality Data for Vail Lake (USGS Station No. 11042510)  
 RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
 Data Collected by USGS

Code	Parameter	MCL	3 Vail 1MAB	
			8/20/2011	9/15/2012
61706	Sampling date			
62005	Monothoxyoctylphenol, water, filtered, recoverable, micrograms per liter			
62005	Cotinine, water, filtered, recoverable, micrograms per liter			
62064	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter			
62065	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter			
62065	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter			
62067	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter			
62068	3-Methyl-1H-Indole, water, filtered, recoverable, micrograms per liter			
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter			
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter			
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter			
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter			
62064	Acetophenone, water, filtered, recoverable, micrograms per liter			
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter			
62066	9,10-Antraquinone, water, filtered, recoverable, micrograms per liter			
62067	Benzophenone, water, filtered, recoverable, micrograms per liter			
62067	beta-Sitosterol, water, filtered, recoverable, micrograms per liter			
62070	Camphor, water, filtered, recoverable, micrograms per liter			
62071	Carbazole, water, filtered, recoverable, micrograms per liter			
62072	Cholesterol, water, filtered, recoverable, micrograms per liter			
62073	D-Limonene, water, filtered, recoverable, micrograms per liter			
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter			
62076	Indole, water, filtered, recoverable, micrograms per liter			
62077	Isoborneol, water, filtered, recoverable, micrograms per liter			
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter			
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter			
62080	Menthol, water, filtered, recoverable, micrograms per liter			
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter			
62082	DEET, water, filtered, recoverable, micrograms per liter			
62083	Diethoxypropylphenol, water, filtered, recoverable, micrograms per liter			
62084	p-Cresol, water, filtered, recoverable, micrograms per liter			
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter			
62086	beta-Stigmasteranol, water, filtered, recoverable, micrograms per liter			
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter			
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter			
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter			
62090	Triclosan, water, filtered, recoverable, micrograms per liter			
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter			
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter			
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter			
62166	Fipronil, water, filtered, recoverable, micrograms per liter			
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter			
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter			
62169	Desulfurylpropionil amide, water, filtered, recoverable, micrograms per liter			
62170	Desulfurylfipronil, water, filtered, recoverable, micrograms per liter			
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter			
63790	Parchlorate, water, filtered, recoverable, micrograms per liter			
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	600	629
70301	Residue, water, filtered, sum of constituents, milligrams per liter		578	647
70303	Residue, water, filtered, tons per acre-foot			
71846	Ammonia, water, filtered, milligrams per liter as NH4		3.71	6.58
71851	Nitrate, water, filtered, milligrams per liter		< 0.089	< 0.17
71856	Nitrite, water, filtered, milligrams per liter		< 0.010	0.005
71865	Iodide, water, filtered, milligrams per liter		0.025	0.03
71870	Bromide, water, filtered, milligrams per liter		0.46	0.45
72019	Depth to water level, feet below land surface			

Water Quality Data for Vail Lake (USGS Station No. 11042510)  
 RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
 Data Collected by USGS

Code	Parameter	MCL	8/20/2011	9/15/2012	3 Vail 1MAB
	Sampling date				
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter				
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter				
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter				
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter				
77041	Carbon disulfide, water, unfiltered, micrograms per liter				
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6			
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter	100			
77128	Styrene, water, unfiltered, recoverable, micrograms per liter				
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter				
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter				
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter				
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter				
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter				
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter				
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter				
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter				
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter				
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter				
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter				
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter				
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter				
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter				
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter				
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter				
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter				
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter				
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter				
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter				
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter				
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05			
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter				
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter				
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter				
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter				
81552	Acetone, water, unfiltered, recoverable, micrograms per liter				
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter				
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter				
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter				
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter				
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter				
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter				
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter				
82081	C-13/C-12 ratio, water, unfiltered, per mil				
82082	Deuterium/Protium ratio, water, unfiltered, per mil				
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-19.5	-14.4	
82303	Rn-222, water, unfiltered, picocuries per liter		-1.17	-0.11	
82346	Ethion, water, filtered, recoverable, micrograms per liter				
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter				
82630	Metrizolin, water, filtered, recoverable, micrograms per liter				
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82673	Bentfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				

**Water Quality Data for Vail Lake (USGS Station No. 11042510)  
RCWD Water Quality Sampling Station No. 3 Vail 1MAB  
Data Collected by USGS**

Code	Parameter	MCL	3 Vail 1MAB	
			8/20/2011	9/15/2012
	Sampling date			
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter			
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter			
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		974	1070
90851	Triholmethanes, water, unfiltered, calcd, micrograms per liter			
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99586	Decalfluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery			
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery			
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery			
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery			
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery			
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery			

**Notes:**

- Station No. 3 Vail 1MAB located near upstream face of Vail Dam, sample depth one meter above reservoir bottom.
- Total capacity, 49,370 acre feet, between elevations 1,352.5 feet, bottom of lowest outlet, and 1,470 feet, crest of spillway.
- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
  - (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).  
 E--Estimated.  
 M--Presence verified but not quantified.  
 MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.  
 V--Biased results from contamination.

**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

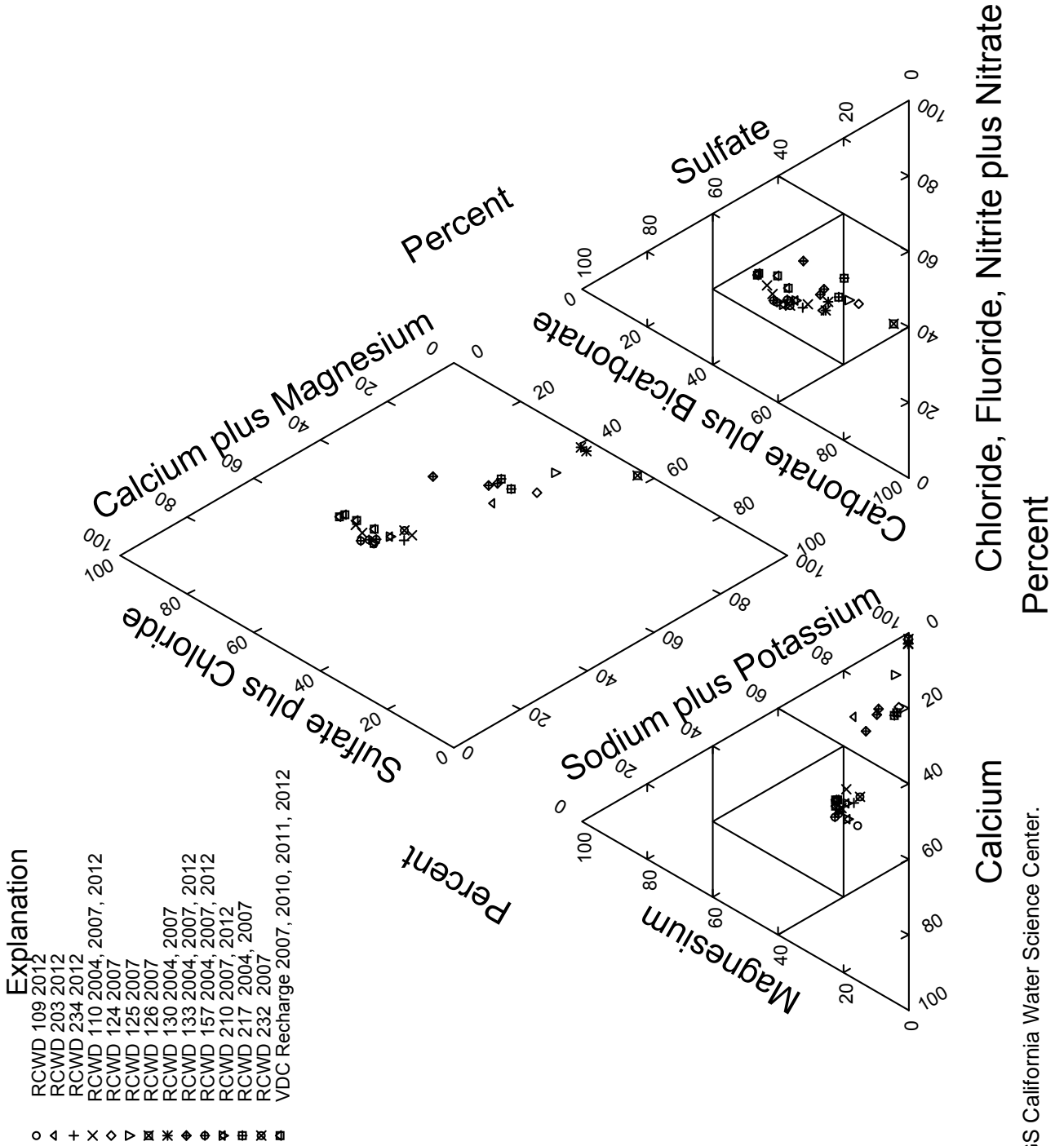
**APPENDIX E**

**WATER QUALITY DATA FOR  
SELECTED RCWD PRODUCTION WELLS**





# Tri-Linear Diagram RCWD Production Wells

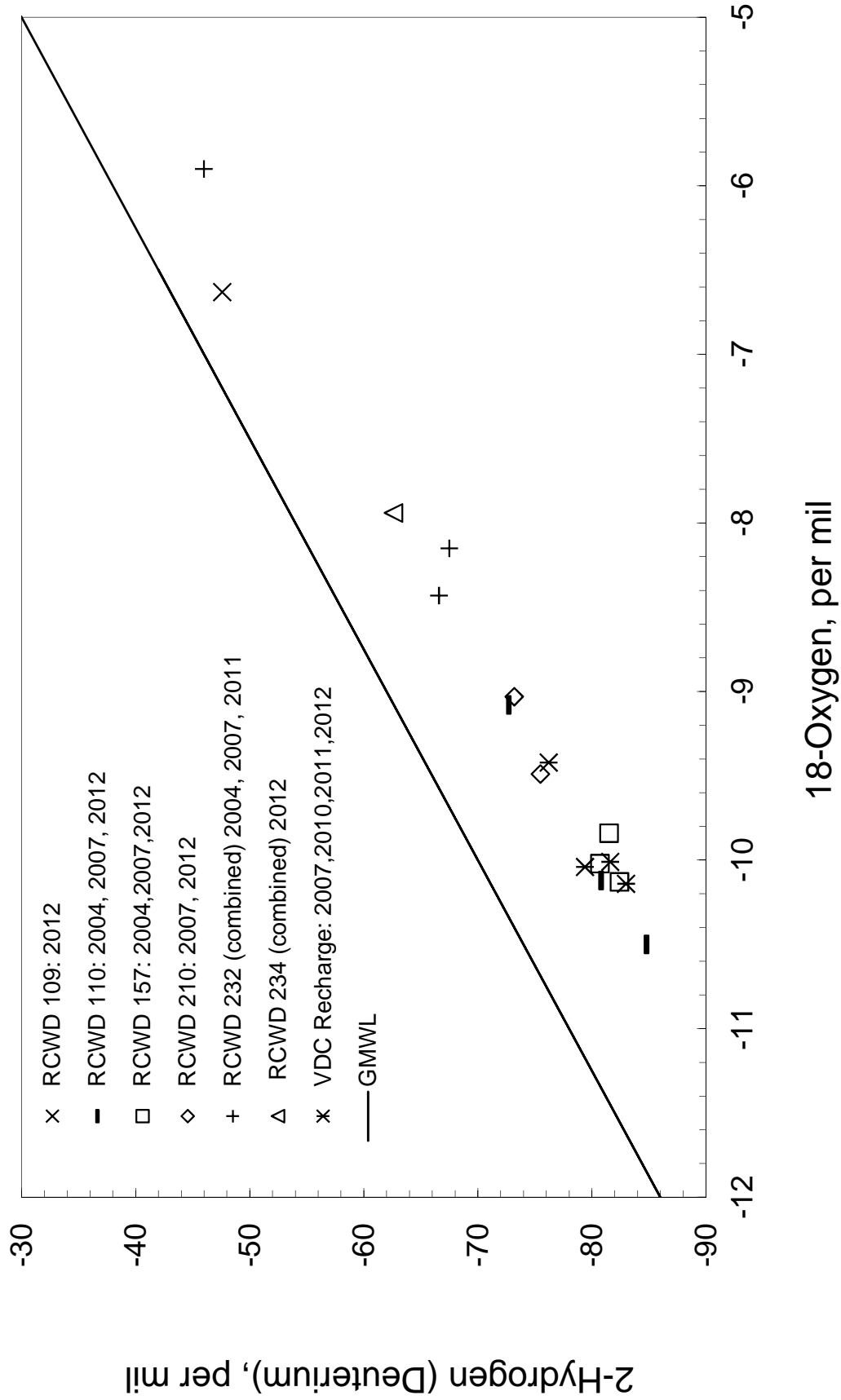


Source: USGS California Water Science Center.

Page Intentionally Blank

# Stable Isotope Diagram

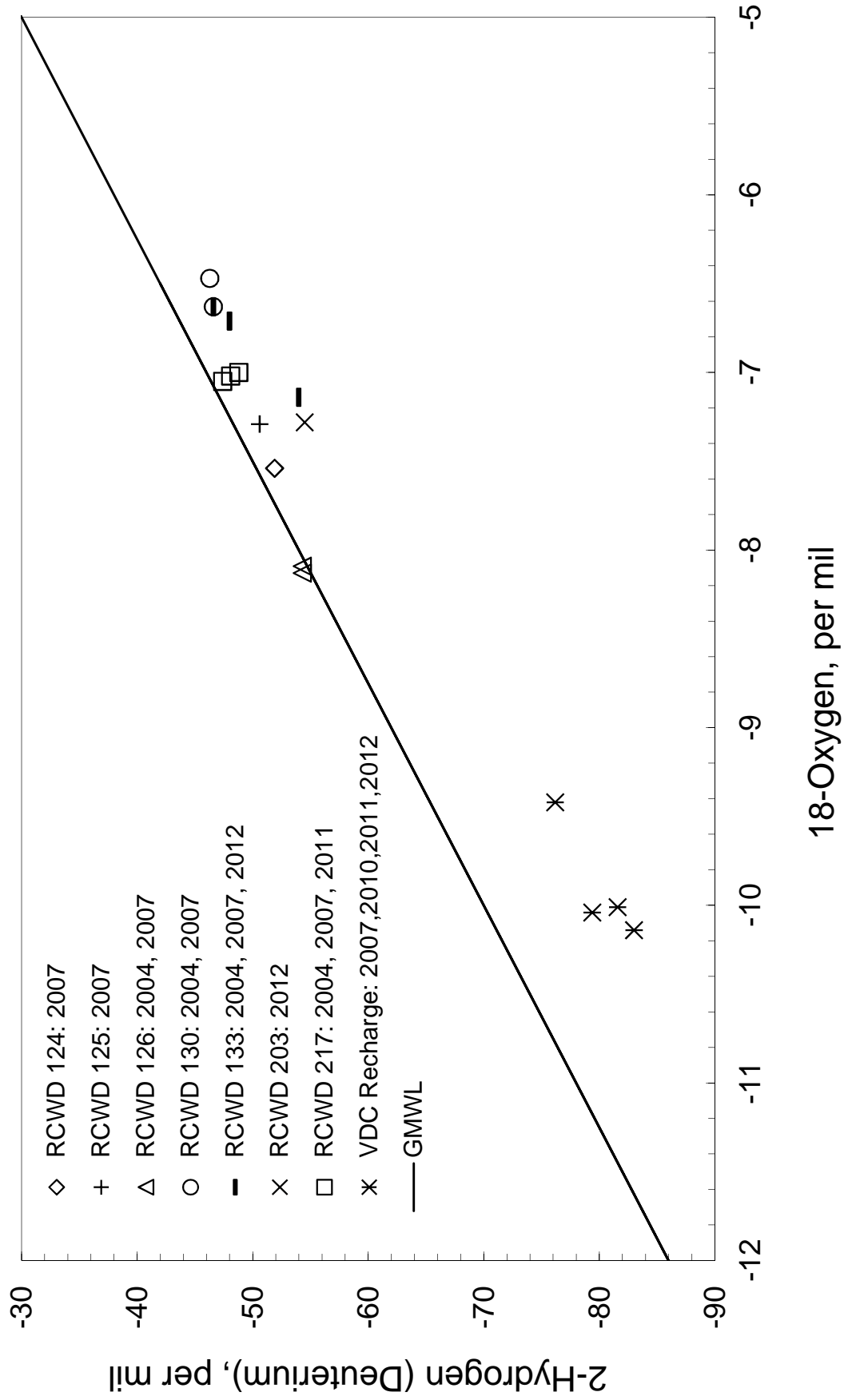
## Pauba Valley Production Wells Completed in Pauba Aquifer



Source: USGS California Water Science Center.

# Stable Isotope Diagram

## Pauba Valley Production Wells Completed in Temecula Aquifer



Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 126, 130, and 133  
2004**

Code	Parameter	MCL	No. 110 6/15/2004	No. 126 5/27/2004	No. 130 6/14/2004	No. 133 5/20/2004
	Sampling date					
3	Sampling depth, feet					
10	Temperature, water, degrees Celsius		20.2		22	21
28	Agency analyzing sample, code		80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute					
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		845	510	807	818
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00003		M	0.00001
300	Dissolved oxygen, water, unfiltered, milligrams per liter		4.5		2.3	2.1
400	pH, water, unfiltered, field, standard units		7.5		8.9	7.9
403	pH, water, unfiltered, laboratory, standard units					
405	Carbon dioxide, water, unfiltered, milligrams per liter					
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter					
602	Total nitrogen, water, filtered, milligrams per liter					
607	Organic nitrogen, water, filtered, milligrams per liter					
608	Ammonia, water, filtered, milligrams per liter as nitrogen					
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)				
618	Nitrate, water, filtered, milligrams per liter as nitrogen		0.502		1.28	0.519
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen					
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		0.5		1.28	0.52
660	Orthophosphate, water, filtered, milligrams per liter		0.224		0.04	0.031
666	Phosphorus, water, filtered, milligrams per liter					
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.073		0.013	0.01
900	Hardness, water, milligrams per liter as calcium carbonate		243		11.3	102
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate		130			
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate					
915	Calcium, water, filtered, milligrams per liter		61.9		4.17	25.6
925	Magnesium, water, filtered, milligrams per liter		21.4		0.195	9.08
930	Sodium, water, filtered, milligrams per liter		81.7		172	127
931	Sodium adsorption ratio, water, number					
932	Sodium fraction of cations, water, percent in equivalents of major cations					
935	Potassium, water, filtered, milligrams per liter		5.32		0.9	2.33
940	Chloride, water, filtered, milligrams per liter	600	80.5		84.8	98.8
945	Sulfate, water, filtered, milligrams per liter	600	165		87.1	96.6
950	Fluoride, water, filtered, milligrams per liter	2 (b)	0.5		0.59	1
955	Silica, water, filtered, milligrams per liter		20.1		14.3	22.2
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	0.9		0.9	3.1
1005	Barium, water, filtered, micrograms per liter	1000 (d)	33.9		2.95	52.6
1010	Beryllium, micrograms per liter	4 (e)	< 0.06		< 0.06	< 0.06
1020	Boron, water, filtered, micrograms per liter		105		< 8	726
1025	Cadmium, micrograms per liter	5 (f)	E 0.028		< 0.04	0.051
1030	Chromium, micrograms per liter	50 (g)	< 0.8		1	E 0.6
1035	Cobalt, micrograms per liter		0.151		0.027	0.066
1040	Copper, micrograms per liter	1000 (h)	2.4		V 0.4	V 1.1
1046	Iron, water, filtered, micrograms per liter	300	< 6.4		E 3.7	< 6.4
1049	Lead, micrograms per liter		0.118		< 0.8	0.146
1056	Manganese, water, filtered, micrograms per liter	50	< 0.2		0.65	E 0.19
1057	Thallium, micrograms per liter	2 (i)	< 0.04		< 0.04	< 0.04
1060	Molybdenum, micrograms per liter		7.96		1.65	4.58
1065	Nickel, micrograms per liter	100 (j)	0.4		0.14	0.53
1075	Silver, micrograms per liter	100 (k)	< 0.2		< 0.2	< 0.2
1080	Strontium, water, filtered, micrograms per liter		343		38.8	396
1085	Vanadium, micrograms per liter		5.8		V 0.3	43.4
1090	Zinc, micrograms per liter	5000 (l)	2.2		1.1	0.7
1095	Antimony, micrograms per liter	6 (m)	< 0.2		< 0.2	< 0.2

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 126, 130, and 133  
2004**

Code	Parameter	MCL	No. 110 6/15/2004	No. 126 5/27/2004	No. 130 6/14/2004	No. 133 5/20/2004
	Sampling date					
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	< 1.6		2.9	3.8
1130	Lithium, water, filtered, micrograms per liter		3.52		0.62	4.09
1145	Selenium, micrograms per liter	50 (o)	1.1		E 0.3	1
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter		< 0.01	< 0.01	< 0.01	< 0.01
4025	Hexazinone, water, filtered, recoverable, micrograms per liter		< 0.013	< 0.013	< 0.013	< 0.013
4029	Bromacil, water, filtered, recoverable, micrograms per liter		< 0.03	< 0.03	< 0.03	< 0.03
4035	Simazine, water, filtered, recoverable, micrograms per liter		0.007	< 0.005	< 0.005	0.006
4036	Prometryn, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
4037	Prometon, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter		E 0.006	< 0.006	< 0.006	< 0.006
4095	Fonofos, water, filtered, recoverable, micrograms per liter		< 0.003	< 0.003	< 0.003	< 0.003
7000	Tritium, water, unfiltered, picocuries per liter		21.8	2.2	2.2	3.5
22703	Uranium, natural, micrograms per liter		1.09	0.245	0.245	3.56
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate					
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter		0.13	< 0.028	< 0.028	E 0.088
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06	< 0.06	< 0.06	< 0.06
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.13	< 0.13	< 0.13	< 0.13
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter		0.48	< 0.02	E 0.02	0.11
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150	< 0.05	< 0.05	< 0.05	E 0.01
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1	< 0.021	< 0.021	< 0.021	< 0.021
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 1.2	< 1.2	< 1.2	< 1.2
34221	Anthracene, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34248	Benzol[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)	< 0.05	< 0.05	< 0.05	< 0.05
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70	< 0.028	< 0.028	< 0.028	< 0.028
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300	< 0.03	< 0.03	< 0.03	< 0.03
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14
34409	Isophorone, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.3	< 0.3	< 0.3	< 0.3
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.2	< 0.2	< 0.2
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.06	< 0.06	< 0.06	< 0.06
34443	Naphthalene, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34466	Phenol, water, filtered, recoverable, micrograms per liter		V 0.28		V 0.27	< 0.05
34470	Pyrene, water, filtered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.06	< 0.06	< 0.06	< 0.06
34476	Tetrachloroethene, water, filtered, recoverable, micrograms per liter		E 0.03	< 0.05	< 0.05	< 0.05
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150	< 0.16	< 0.16	< 0.16	< 0.16
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.035	< 0.035	< 0.035	< 0.035
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6	< 0.024	< 0.024	< 0.024	< 0.024
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200	< 0.032	< 0.032	< 0.032	< 0.032
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.064	< 0.064	< 0.064	< 0.064
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1	< 0.16	< 0.16	< 0.16	< 0.16
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600	< 0.048	< 0.048	< 0.048	< 0.048
34541	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.029	< 0.029	< 0.029	< 0.029
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10	< 0.032	< 0.032	< 0.032	< 0.032
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.12	< 0.12	< 0.12	< 0.12
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.03	< 0.03	< 0.03	< 0.03

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 126, 130, and 133  
2004**

Code	Parameter	MCL	No. 110 6/15/2004	No. 126 5/27/2004	No. 130 6/14/2004	No. 133 5/20/2004
	Sampling date					
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.034	< 0.034	< 0.034	< 0.034
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5	< 0.034	< 0.034	< 0.034	< 0.034
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter		< 0.18	< 0.18	< 0.18	< 0.18
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter		< 0.52	< 0.52	< 0.52	< 0.52
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.09	< 0.09	< 0.09	< 0.09
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.05	< 0.05	< 0.05	< 0.05
38454	Dicropthos, water, filtered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08
38775	Dichloros, water, filtered, recoverable, micrograms per liter		< 0.01	< 0.01	< 0.01	< 0.01
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate					
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06	< 0.06	< 0.06	< 0.06
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.038	< 0.038	< 0.038	< 0.038
39381	Dieldrin, water, filtered, recoverable, micrograms per liter		< 0.009	< 0.009	< 0.009	< 0.009
39415	Metolachlor, water, filtered, recoverable, micrograms per liter		< 0.013	< 0.013	< 0.013	< 0.013
39532	Malathion, water, filtered, recoverable, micrograms per liter		< 0.027	< 0.027	< 0.027	< 0.027
39572	Diazinon, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
39632	Atrazine, water, filtered, recoverable, micrograms per liter		< 0.007	< 0.007	< 0.007	< 0.007
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14
46342	Alachlor, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
49295	Acetochlor, water, filtered, recoverable, micrograms per liter		< 0.006	< 0.006	< 0.006	< 0.006
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.882	< 0.882	< 0.882	< 0.882
49933	C-14, water, filtered, percent modern		92.4	75.42	69.67	69.67
49934	C-14, counting error, water, filtered, percent modern					
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter		< 2	< 2	< 2	< 2
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
50004	tert-Butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08
50305	Caffeine, water, filtered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
50359	Metaalaxyl, water, filtered, recoverable, micrograms per liter		< 0.02	< 0.02	< 0.02	< 0.02
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter		2.2	< 0.49	< 0.25	< 0.25
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6	< 0.008	< 0.008	< 0.008	< 0.008
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter		< 0.009	< 0.009	< 0.009	< 0.009
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter		< 0.029	< 0.029	< 0.029	< 0.029
61593	Iprothione, water, filtered, recoverable, micrograms per liter		< 1.42	< 1.42	< 1.42	< 1.42
61594	Isofenphos, water, filtered, recoverable, micrograms per liter		< 0.003	< 0.003	< 0.003	< 0.003
61596	Metaalaxyl, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
61598	Methidathion, water, filtered, recoverable, micrograms per liter		< 0.006	< 0.006	< 0.006	< 0.006
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter		< 0.008	< 0.008	< 0.008	< 0.008
61601	Phosmet, water, filtered, recoverable, micrograms per liter		< 0.008	< 0.008	< 0.008	< 0.008
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
61620	2-Ethyl-6-methylaniline, water, filtered, recoverable, micrograms per liter		< 0.005	< 0.005	< 0.005	< 0.005
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter		< 0.0045	< 0.0045	< 0.0045	< 0.0045
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter		< 0.0056	< 0.0056	< 0.0056	< 0.0056
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.016	< 0.016	< 0.016	< 0.016
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter		< 0.034	< 0.034	< 0.034	< 0.034
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter		< 0.008	< 0.008	< 0.008	< 0.008
61646	Fenamiphos sulfide, water, filtered, recoverable, micrograms per liter		< 0.03	< 0.03	< 0.03	< 0.03
61652	Malaoxon, water, filtered, recoverable, micrograms per liter		< 0.008	< 0.008	< 0.008	< 0.008
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter		< 0.03	< 0.03	< 0.03	< 0.03

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 126, 130, and 133  
2004**

Code	Parameter	MCL	No. 110 6/15/2004	No. 126 5/27/2004	No. 130 6/14/2004	No. 133 5/20/2004
	Sampling date					
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.097	< 0.097	< 0.097	< 0.097
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.068	< 0.068	< 0.068	< 0.068
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
61705	Diethoxyacetylphenol, water, filtered, recoverable, micrograms per liter		< 0.019	< 0.019	< 0.019	< 0.019
61706	Monoethoxyacetylphenol, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62005	Coinine, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter		< 2	< 2	< 2	< 2
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter		< 5	< 5	< 5	< 5
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter		< 2	< 2	< 2	< 2
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62064	Acetophenone, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62067	Benzophenone, water, filtered, recoverable, micrograms per liter		< 2	< 2	< 2	< 2
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62070	Camphor, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62071	Carbazole, water, filtered, recoverable, micrograms per liter		< 2	< 2	< 2	< 2
62072	Cholesterol, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62073	D-Limonene, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62076	Indole, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62077	Isoborneol, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62080	Menthol, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter		E 0.06	< 0.5	< 0.5	< 0.5
62082	DEET, water, filtered, recoverable, micrograms per liter		< 5	< 5	< 5	< 5
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
62084	p-Cresol, water, filtered, recoverable, micrograms per liter		< 5	< 5	< 5	< 5
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter		< 2	< 2	< 2	< 2
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1
62090	Triclosan, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter		< 0.016	< 0.016	< 0.016	< 0.016
62166	Fipronil, water, filtered, recoverable, micrograms per liter		< 0.013	< 0.013	< 0.013	< 0.013
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter		< 0.024	< 0.024	< 0.024	< 0.024
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter		< 0.029	< 0.029	< 0.029	< 0.029
62169	Desulfinyfipronil amide, water, filtered, recoverable, micrograms per liter		< 0.012	< 0.012	< 0.012	< 0.012
62170	Desulfinyfipronil, water, filtered, recoverable, micrograms per liter		0.53	1.31	0.54	0.54
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter	6				
63790	Perchlorate, water, filtered, recoverable, micrograms per liter		532		478	494
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	E 508		V 460	V 473
70301	Residue, water, filtered, sum of constituents, milligrams per liter					



**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 126, 130, and 133  
2004**

Code	Parameter	MCL	No. 110 6/15/2004	No. 126 5/27/2004	No. 130 6/14/2004	No. 133 5/20/2004
	Sampling date					
70303	Residue, water, filtered, tons per acre-foot					
71846	Ammonia, water, filtered, milligrams per liter as NH4		< 0.052		< 0.052	< 0.052
71851	Nitrate, water, filtered, milligrams per liter	45 (q)	2.22		5.68	2.3
71856	Nitrite, water, filtered, milligrams per liter		< 0.026		< 0.026	< 0.026
71865	Iodide, water, filtered, milligrams per liter					
71870	Bromide, water, filtered, milligrams per liter		0.15		0.34	0.37
72019	Depth to water level, feet below land surface					
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter		< 0.7	< 0.7	< 0.7	< 0.7
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.18	< 0.18	< 0.18	< 0.18
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		1.3	0.6	1	0.6
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		28		24	23
77041	Carbon disulfide, water, unfiltered, micrograms per liter		< 0.038	< 0.038	< 0.038	< 0.038
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.024	< 0.024	< 0.024	< 0.024
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.7	< 0.7	< 0.7	< 0.7
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100	< 0.042	< 0.042	< 0.042	< 0.042
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter		< 0.038	< 0.038	< 0.038	< 0.038
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.026	< 0.026	< 0.026	< 0.026
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.056	< 0.056	< 0.056	< 0.056
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.038	< 0.038	< 0.038	< 0.038
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.042	< 0.042	< 0.042	< 0.042
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.044	< 0.044	< 0.044	< 0.044
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter		< 0.35	< 0.35	< 0.35	< 0.35
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.18	< 0.18	< 0.18	< 0.18
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.03	< 0.03	< 0.03	< 0.03
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.27	< 0.27	< 0.27	< 0.27
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05	< 0.036	< 0.036	< 0.036	< 0.036
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter		< 0.038	< 0.038	< 0.038	< 0.038
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.17	< 0.17	< 0.17	< 0.17
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.37	< 0.37	< 0.37	< 0.37
81552	Acetone, water, unfiltered, recoverable, micrograms per liter		< 6	< 6	< 6	< 6
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.028	< 0.028	< 0.028	< 0.028
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.76	< 0.76	< 0.76	< 0.76
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 4	< 4	< 4	< 4
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.35	< 0.35	< 0.35	< 0.35
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter		< 2.2	< 2.2	< 2.2	< 2.2
82081	C-13/C-12 ratio, water, unfiltered, per mil		-11		-14.2	-14.1
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-85		-46.6	-46
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-10.5		-6.63	-6.4
82303	Rn-222, water, unfiltered, picocuries per liter		210		420	310

### Water Quality Data for Selected RCWD Production Wells Well Nos. 110, 126, 130, and 133 2004

Code	Parameter	MCL	No. 110 6/15/2004	No. 126 5/27/2004	No. 130 6/14/2004	No. 133 5/20/2004
	Sampling date					
82346	Ethion, water, filtered, recoverable, micrograms per liter		< 0.004	< 0.004	< 0.004	< 0.004
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.51	< 0.51	< 0.51	< 0.51
82630	Metribuzin, water, filtered, recoverable, micrograms per liter		< 0.006	< 0.006	< 0.006	< 0.006
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.006	< 0.006	< 0.006	< 0.006
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.009	< 0.009	< 0.009	< 0.009
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.0061	< 0.0061	< 0.0061	< 0.0061
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.011	< 0.011	< 0.011	< 0.011
82670	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.015	< 0.015	< 0.015	< 0.015
82677	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.016	< 0.016	< 0.016	< 0.016
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.01	< 0.01	< 0.01	< 0.01
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.017	< 0.017	< 0.017	< 0.017
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.004	< 0.004	< 0.004	< 0.004
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.041	< 0.041	< 0.041	< 0.041
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.003	< 0.003	< 0.003	< 0.003
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.022	< 0.022	< 0.022	< 0.022
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.05	< 0.05	< 0.05	< 0.05
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.006	< 0.006	< 0.006	< 0.006
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius					
90851	Triholomehtanes, water, unfiltered, calcd, micrograms per liter					
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter					
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery					
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPASTORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPASTORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 157, 217, and 232  
2004**

Code	Parameter	MCL	No. 157		No. 217	No. 232
			5/27/2004	7/26/2004		
	Sampling date					
3	Sampling depth, feet					
10	Temperature, water, degrees Celsius		16.5	19	24.1	19.5
28	Agency analyzing sample, code		80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute		783	858	704	1020
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius			0.00003	0.00001	
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter			3.5	4.6	
300	Dissolved oxygen, water, unfiltered, milligrams per liter			7.5	8.1	
400	pH, water, unfiltered, field, standard units					
403	pH, water, unfiltered, laboratory, standard units					
405	Carbon dioxide, water, unfiltered, milligrams per liter					
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter					
602	Total nitrogen, water, filtered, milligrams per liter			< 0.06		
607	Organic nitrogen, water, filtered, milligrams per liter			< 0.04	< 0.04	
608	Ammonia, water, filtered, milligrams per liter as nitrogen			< 0.008	0.028	
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)		0.411	3.81	
618	Nitrate, water, filtered, milligrams per liter as nitrogen					
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen					
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen			0.41	3.84	
660	Orthophosphate, water, filtered, milligrams per liter			0.113	0.046	
666	Phosphorus, water, filtered, milligrams per liter					
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			0.037	0.015	
900	Hardness, water, milligrams per liter as calcium carbonate			261	76.6	
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate			120		
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate					
915	Calcium, water, filtered, milligrams per liter			65	25.6	
925	Magnesium, water, filtered, milligrams per liter			23.7	3	
930	Sodium, water, filtered, milligrams per liter			76.6	116	
931	Sodium adsorption ratio, water, number					
932	Sodium fraction of cations, water, percent in equivalents of major cations					
935	Potassium, water, filtered, milligrams per liter			4.29	1.77	
940	Chloride, water, filtered, milligrams per liter	600		79.9	86.8	
945	Sulfate, water, filtered, milligrams per liter	600		173	61.1	
950	Fluoride, water, filtered, milligrams per liter	2 (b)		0.27	0.82	
955	Silica, water, filtered, milligrams per liter			13.1	18.2	
1000	Arsenic, water, filtered, micrograms per liter	10 (c)		0.5	7.8	
1005	Barium, water, filtered, micrograms per liter	1000 (d)		34.9	62.8	
1010	Beryllium, micrograms per liter	4 (e)		< 0.06	< 0.06	
1020	Boron, water, filtered, micrograms per liter			159	299	
1025	Cadmium, micrograms per liter	5 (f)		E 0.022	< 0.04	
1030	Chromium, micrograms per liter	50 (g)		< 0.8	1.6	
1035	Cobalt, micrograms per liter			0.2	0.069	
1040	Copper, micrograms per liter	1000 (h)		4.9	V 0.9	
1046	Iron, water, filtered, micrograms per liter	300		< 6.4	E 6	
1049	Lead, micrograms per liter			0.936	0.111	
1056	Manganese, water, filtered, micrograms per liter	50		0.29	< 0.2	
1057	Thallium, micrograms per liter	2 (i)		< 0.04	< 0.04	
1060	Molybdenum, micrograms per liter			4.11	2.04	
1065	Nickel, micrograms per liter	100 (j)		1.33	0.55	
1075	Silver, micrograms per liter	100 (k)		< 0.2	< 0.2	
1080	Strontium, water, filtered, micrograms per liter			706	277	
1085	Vanadium, micrograms per liter			3	69	
1090	Zinc, micrograms per liter	5000 (l)		2.9	E 0.6	
1095	Antimony, micrograms per liter	6 (m)		E 0.112	< 0.2	

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 157, 217, and 232  
2004**

Code	Parameter	MCL	No. 157		No. 217	No. 232
			5/27/2004	7/26/2004		
	Sampling date					
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)		< 1.6	4.8	
1130	Lithium, water, filtered, micrograms per liter			17.4	4.15	
1145	Selenium, micrograms per liter	50 (o)		1.3	1.8	
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter		E 0.006		< 0.01	< 0.01
4025	Hexazinone, water, filtered, recoverable, micrograms per liter		E 0.01	< 0.03	< 0.013	< 0.013
4029	Bromacil, water, filtered, recoverable, micrograms per liter			< 0.03	< 0.03	
4035	Simazine, water, filtered, recoverable, micrograms per liter		0.017	0.006	0.006	< 0.005
4036	Prometryn, water, filtered, recoverable, micrograms per liter		0.008	< 0.005	< 0.005	< 0.005
4037	Prometon, water, filtered, recoverable, micrograms per liter		0.007	< 0.005	< 0.005	< 0.005
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter		E 0.005	< 0.03	< 0.006	< 0.006
4095	Fonofos, water, filtered, recoverable, micrograms per liter		< 0.003	< 0.003	< 0.003	< 0.003
7000	Tritium, water, unfiltered, picocuries per liter		20.5	1.6	10.6	
22703	Uranium, natural, micrograms per liter			2.67	2.55	
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate					
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.05		< 0.05	< 0.05
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter		0.112	< 0.028	< 0.028	< 0.028
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06	< 0.06	< 0.06	< 0.06
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.13	< 0.13	< 0.13	< 0.13
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter		0.49	< 0.02	< 0.02	< 0.02
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150	< 0.05	E 0.01	E 0.01	< 0.05
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1	< 0.021	< 0.021	< 0.021	< 0.021
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 1.2	< 1.2	< 1.2	< 1.2
34221	Anthracene, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34248	Benzo[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)		< 0.05	< 0.05	
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70	< 0.028	< 0.028	< 0.028	< 0.028
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300	< 0.03	< 0.03	< 0.03	< 0.03
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14
34409	Isophorone, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.3	< 0.3	< 0.3	< 0.3
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.2	< 0.2	< 0.2
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5	E 0.03	< 0.06	< 0.06	< 0.06
34443	Naphthalene, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34466	Phenol, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34470	Pyrene, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34475	Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.06	E 0.011	E 0.011	< 0.06
34478	Trichloroethane, water, filtered, recoverable, micrograms per liter			< 0.05	< 0.05	
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150	< 0.16	< 0.16	< 0.16	< 0.16
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.035	< 0.035	< 0.035	< 0.035
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6	< 0.024	< 0.024	< 0.024	< 0.024
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200	< 0.032	< 0.032	< 0.032	< 0.032
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.064	< 0.064	< 0.064	< 0.064
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1	< 0.16	< 0.16	< 0.16	< 0.16
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600	< 0.048	< 0.048	< 0.048	< 0.048
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5	< 0.029	< 0.029	< 0.029	< 0.029
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10	< 0.032	< 0.032	< 0.032	< 0.032
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.12	< 0.12	< 0.12	< 0.12
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.03	< 0.03	< 0.03	< 0.03

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 157, 217, and 232  
2004**

Code	Parameter	MCL	Sampling date		
			No. 157 5/27/2004	No. 157 7/26/2004	No. 217 5/19/2004
					No. 232 5/24/2004
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.034		< 0.034
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5	< 0.034		< 0.034
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter		< 0.18		< 0.18
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter		< 0.52		< 0.52
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.09		< 0.09
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.05		< 0.05
38454	Dicofthos, water, filtered, recoverable, micrograms per liter		< 0.08		< 0.08
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter		< 0.01		< 0.01
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate				
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06		< 0.06
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5	< 0.038		< 0.038
39381	Dieldrin, water, filtered, recoverable, micrograms per liter		< 0.009		< 0.009
39415	Melolachlor, water, filtered, recoverable, micrograms per liter		< 0.013		< 0.013
39532	Malathion, water, filtered, recoverable, micrograms per liter		< 0.027		< 0.027
39572	Diazinon, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
39632	Atrazine, water, filtered, recoverable, micrograms per liter		< 0.007		< 0.007
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter		< 0.14		< 0.14
46342	Alachlor, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
49260	Acetochlor, water, filtered, recoverable, micrograms per liter		< 0.006		< 0.006
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.0882		< 0.0882
49933	C-14, water, filtered, percent modern		91.45		74.09
49934	C-14, counting error, water, filtered, percent modern				
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter		< 2		< 2
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14		< 0.14
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14		< 0.14
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter		< 0.1		< 0.1
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.05		< 0.05
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.08		< 0.08
50305	Caffeine, water, filtered, recoverable, micrograms per liter		< 0.01		0.17
50359	Metolaxyl, water, filtered, recoverable, micrograms per liter		< 0.02		< 0.02
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter		0.74		1.4
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6	< 0.008		< 0.008
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter		< 0.009		< 0.009
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter		< 0.029		< 0.029
61593	Iprodione, water, filtered, recoverable, micrograms per liter		< 1.42		< 1.42
61594	Isofenphos, water, filtered, recoverable, micrograms per liter		< 0.003		< 0.003
61596	Metolaxyl, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
61598	Methidathion, water, filtered, recoverable, micrograms per liter		< 0.006		< 0.006
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter		< 0.008		< 0.008
61601	Phosmet, water, filtered, recoverable, micrograms per liter		< 0.008		< 0.008
61610	Tribuphos, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
61618	2-Chloro-2',6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
61620	2-Ethyl-6-methylacetanilide, water, filtered, recoverable, micrograms per liter		< 0.005		< 0.005
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter		0.0085		< 0.0045
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter		< 0.0056		< 0.0056
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.016		< 0.016
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.06		< 0.06
61644	Ethion monoxon, water, filtered, recoverable, micrograms per liter		< 0.034		< 0.034
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter		< 0.008		< 0.008
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter		< 0.03		< 0.03
61652	Malaoxon, water, filtered, recoverable, micrograms per liter		< 0.008		< 0.008
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter		< 0.03		< 0.03

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 157, 217, and 232  
2004**

Code	Parameter	MCL	No. 157		No. 217	No. 232
			5/27/2004	7/26/2004		
	Sampling date					
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter		< 0.097		< 0.097	< 0.097
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter		< 0.068		< 0.068	< 0.068
61705	Diethoxyoctylphenol, water, filtered, recoverable, micrograms per liter					
61706	Monoethoxyoctylphenol, water, filtered, recoverable, micrograms per liter					
62005	Cotinine, water, filtered, recoverable, micrograms per liter			< 0.019		
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter			< 0.5		
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter			< 0.5		
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter			< 0.5		
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter			< 2		
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter			< 1		
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter			< 5		
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter			< 1		
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter			< 1		
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter			< 1		
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter			< 2		
62064	Acetophenone, water, filtered, recoverable, micrograms per liter			< 0.5		
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter			< 0.5		
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter			< 0.5		
62067	Benzophenone, water, filtered, recoverable, micrograms per liter			< 0.5		
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter			< 2		
62070	Camphor, water, filtered, recoverable, micrograms per liter			< 0.5		
62071	Carbazole, water, filtered, recoverable, micrograms per liter			< 0.5		
62072	Cholesterol, water, filtered, recoverable, micrograms per liter			< 2		
62073	D-Limonene, water, filtered, recoverable, micrograms per liter			< 0.5		
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter			< 0.5		
62076	Indole, water, filtered, recoverable, micrograms per liter			< 0.5		
62077	Isoborneol, water, filtered, recoverable, micrograms per liter			< 0.5		
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter			< 0.5		
62079	Isouinolone, water, filtered, recoverable, micrograms per liter			< 0.5		
62080	Menthol, water, filtered, recoverable, micrograms per liter			< 0.5		
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter			< 0.5		
62082	DEET, water, filtered, recoverable, micrograms per liter			< 0.5		
62083	Diethoxymethylphenol, water, filtered, recoverable, micrograms per liter			< 5		
62084	p-Cresol, water, filtered, recoverable, micrograms per liter			< 1		
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter			< 5		
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter			< 2		
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter			< 0.5		
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter			< 0.5		
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter			< 0.5		
62090	Triclosan, water, filtered, recoverable, micrograms per liter			< 1		
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter			< 0.5		
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter			< 0.5		
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter			< 0.5		
62166	Fipronil, water, filtered, recoverable, micrograms per liter		< 0.016	< 0.016	< 0.016	< 0.016
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter		< 0.013	< 0.013	< 0.013	< 0.013
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter		< 0.024	< 0.024	< 0.024	< 0.024
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter		< 0.029	< 0.029	< 0.029	< 0.029
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter		< 0.012	< 0.012	< 0.012	< 0.012
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter			0.47	3.67	
63790	Perchlorate, water, filtered, recoverable, micrograms per liter					
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter			540	423	
70301	Residue, water, filtered, sum of constituents, milligrams per liter			E 524	V 401	

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 157, 217, and 232  
2004**

Code	Parameter	MCL	No. 157		No. 217	No. 232
			5/27/2004	7/26/2004		
	Sampling date					
70303	Residue, water, filtered, tons per acre-foot					
71846	Ammonia, water, filtered, milligrams per liter as NH4				< 0.052	
71851	Nitrate, water, filtered, milligrams per liter	45 (q)			16.9	
71856	Nitrite, water, filtered, milligrams per liter				< 0.026	
71865	Iodide, water, filtered, milligrams per liter					
71870	Bromide, water, filtered, milligrams per liter				0.320	
72019	Depth to water level, feet below land surface					
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter		< 0.7		< 0.7	< 0.18
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.7		< 0.18	< 0.18
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		1.3		1	1
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter			22	25	
77041	Carbon disulfide, water, unfiltered, micrograms per liter		< 0.038		< 0.038	< 0.038
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.024		< 0.024	< 0.024
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.7		< 0.7	< 0.7
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100	< 0.042		< 0.042	< 0.042
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter		< 0.038		< 0.038	< 0.038
77168	1,1-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.026		< 0.026	< 0.026
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.05		< 0.05	< 0.05
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06		< 0.06	< 0.06
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.06		< 0.06	< 0.06
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06		< 0.06	< 0.06
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.056		< 0.056	< 0.056
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.038		< 0.038	< 0.038
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.042		< 0.042	< 0.042
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.044		< 0.044	< 0.044
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04		< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.05		< 0.05	< 0.05
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.12		< 0.12	< 0.12
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.12		< 0.12	< 0.12
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06		< 0.06	< 0.06
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.06		< 0.06	< 0.06
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.08		< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter		< 0.35		< 0.35	< 0.35
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.18		< 0.18	< 0.18
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.03		< 0.03	< 0.03
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.27		< 0.27	< 0.27
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05	< 0.036		< 0.036	< 0.036
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter		< 0.038		< 0.038	< 0.038
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.17		< 0.17	< 0.17
78109	3-Chloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.5		< 0.5	< 0.5
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.37		< 0.37	< 0.37
81552	Acetone, water, unfiltered, recoverable, micrograms per liter		< 6		< 6	< 6
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.028		< 0.028	< 0.028
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1		< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1		< 0.1	< 0.1
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.76		< 0.76	< 0.76
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 4		< 4	< 4
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.35		< 0.35	< 0.35
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter		< 2.2		< 2.2	< 2.2
82081	C-13/C-12 ratio, water, unfiltered, per mil		-10.5		-16.5	-16.5
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-80.7		-48.1	-46
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-10.02		-7.02	-5.9
82303	Rn-222, water, unfiltered, picocuries per liter		270		410	

### Water Quality Data for Selected RCWD Production Wells Well Nos. 157, 217, and 232 2004

Code	Parameter	MCL	No. 157		No. 217	No. 232
			5/27/2004	7/26/2004		
	Sampling date					
82346	Ethion, water, filtered, recoverable, micrograms per liter		< 0.004		< 0.004	< 0.004
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.51		< 0.51	< 0.51
82630	Metribuzin, water, filtered, recoverable, micrograms per liter		< 0.006		< 0.006	< 0.006
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.006		< 0.006	< 0.006
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.009		< 0.009	< 0.009
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.0061		< 0.0061	< 0.0061
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.011		< 0.011	< 0.011
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.015		< 0.015	< 0.015
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.016	< 0.026	< 0.016	< 0.016
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.01		< 0.01	< 0.01
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.017		< 0.017	< 0.017
82676	Propylamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.004		< 0.004	< 0.004
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.041		< 0.041	< 0.041
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.003		< 0.003	< 0.003
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.022		< 0.022	< 0.022
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.05		< 0.05	< 0.05
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter		< 0.006		< 0.006	< 0.006
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter		< 0.06		< 0.06	< 0.06
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius					
90851	Triholomehtanes, water, unfiltered, calcd, micrograms per liter					
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter					
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery					
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					

Notes:

- (a) U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (i) MCL shown for U.S. EPA STORET No. 620.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPASTORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.



**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 124, 125, 126, and 130  
2007**

Code	Parameter	MCL	No. 110 9/17/2007	No. 124 9/19/2007	No. 125 9/27/2007	No. 126 9/18/2007	No. 130 9/19/2007
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius		18.5	22	23.5	26	21
28	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		834	585	733	531	807
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00004	M	0.00001	M	M
300	Dissolved oxygen, water, unfiltered, milligrams per liter		2.9	1.4	0.9	< 0.2	1.9
400	pH, water, unfiltered, field, standard units		7.4	8.7	8.3	9.1	8.8
403	pH, water, unfiltered, laboratory, standard units						
405	Carbon dioxide, water, unfiltered, milligrams per liter						
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter						
602	Total nitrogen, water, filtered, milligrams per liter						
607	Organic nitrogen, water, filtered, milligrams per liter						
608	Ammonia, water, filtered, milligrams per liter as nitrogen					E 0.01	< 0.07
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)				E 0.012	< 0.02
618	Nitrate, water, filtered, milligrams per liter as nitrogen					0.049	E 0.002
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen					0.23	E 0.16
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen					0.28	1.16
660	Orthophosphate, water, filtered, milligrams per liter					0.083	0.041
666	Phosphorus, water, filtered, milligrams per liter						
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus					0.027	0.013
900	Hardness, water, milligrams per liter as calcium carbonate		239	57.9	47.1	4.21	72.7
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate		113				
915	Calcium, water, filtered, milligrams per liter		60.1	19.7	13.1	1.55	4.33
925	Magnesium, water, filtered, milligrams per liter		21.5	2.05	3.41	0.072	15
930	Sodium, water, filtered, milligrams per liter		77	96.9	140	108	167
931	Sodium adsorption ratio, water, number						
932	Sodium fraction of cations, water, percent in equivalents of major cations						
935	Potassium, water, filtered, milligrams per liter		4.88	1.48	1.87	0.42	0.74
940	Chloride, water, filtered, milligrams per liter	600	81	71.8	93.4	62.2	82.4
945	Sulfate, water, filtered, milligrams per liter	600	166	39.8	61.1	11.4	94
950	Fluoride, water, filtered, milligrams per liter	2 (b)	0.38	0.98	0.53	3.61	0.53
955	Silica, water, filtered, milligrams per liter		15	17.2	16.5	14.8	13.3
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	0.81	11.4	3.3	25.1	3.6
1005	Barium, water, filtered, micrograms per liter	1000 (d)	38.2	67.5	95	13.7	20.9
1010	Beryllium, micrograms per liter	4 (e)	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
1020	Boron, water, filtered, micrograms per liter		140	284	368	1150	343
1025	Cadmium, micrograms per liter	5 (f)	E 0.025	< 0.04	< 0.04	E 0.027	< 0.04
1030	Chromium, micrograms per liter	50 (g)	0.18	0.72	2.2	< 0.12	0.85
1035	Cobalt, micrograms per liter		E 0.03	< 0.04	< 0.04	< 0.04	< 0.04
1040	Copper, micrograms per liter	1000 (h)	0.86	< 0.4	0.7	E 0.23	E 4.6
1046	Iron, water, filtered, micrograms per liter	300	12.5	E 3.8	E 4.6	< 6	E 0.072
1049	Lead, micrograms per liter		E 0.087	< 0.12	0.143	E 0.072	E 0.072
1056	Manganese, water, filtered, micrograms per liter	50	E 0.15	0.23	0.38	0.83	E 0.12
1057	Thallium, micrograms per liter	2 (i)	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1060	Molybdenum, micrograms per liter		7.08	4.64	4.49	12.7	2.49
1065	Nickel, micrograms per liter	100 (j)	0.56	0.07	0.11	< 0.06	< 0.06
1075	Silver, micrograms per liter	100 (k)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1080	Strontium, water, filtered, micrograms per liter		374	262	250	26	70.1
1085	Vanadium, micrograms per liter		4.6	117	55.9	60.9	35.5
1090	Zinc, micrograms per liter	5000 (l)	1	E 0.59	1.3	E 0.37	1.2
1095	Antimony, micrograms per liter	6 (m)	E 0.049	E 0.035	< 0.06	E 0.04	< 0.06

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 124, 125, 126, and 130  
2007**

Code	Parameter	MCL	No. 110 9/17/2007	No. 124 9/19/2007	No. 125 9/27/2007	No. 126 9/18/2007	No. 130 9/19/2007
	Sampling date						
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	< 1.6	7	5	22	5.4
1130	Lithium, water, filtered, micrograms per liter		3.22	4.57	4.92	5.01	7.90
1145	Selenium, micrograms per liter	50 (o)	1.2	1	2	0.48	1.8
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter						
4025	Hexazinone, water, filtered, recoverable, micrograms per liter						
4029	Bromacil, water, filtered, recoverable, micrograms per liter						
4035	Simazine, water, filtered, recoverable, micrograms per liter						
4036	Prometryn, water, filtered, recoverable, micrograms per liter						
4037	Prometon, water, filtered, recoverable, micrograms per liter						
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter						
4095	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter		18.2	1	1	0	2.6
22703	Uranium, natural, micrograms per liter		1.49	1.98	3.42	2.05	3.74
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		126	125	154	146	165
30217	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	0.24	< 0.04	< 0.04
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.06	< 0.1	< 0.1
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	1.21	< 0.08	< 0.08
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	0.39	< 0.12	< 0.12
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter		0.57	E 0.035	0.37	< 0.04	E 0.04
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1	< 0.016	< 0.016	< 0.02	< 0.016	< 0.016
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300	< 0.02	< 0.02	< 0.04	< 0.02	< 0.02
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34443	Naphthalene, water, filtered, recoverable, micrograms per liter	5					
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34476	Trichloroethane, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.06	< 0.06	< 0.04	< 0.06	< 0.06
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200	< 0.04	< 0.04	< 0.02	< 0.04	< 0.04
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.04	< 0.06	< 0.04	< 0.04
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600	< 0.04	< 0.04	< 0.02	< 0.04	< 0.04
34541	trans-1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34546	trans-1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	10	< 0.018	< 0.018	< 0.02	< 0.018	< 0.018
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.12	< 0.12	< 0.08	< 0.12	< 0.12
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 124, 125, 126, and 130  
2007**

Code	Parameter	MCL	No. 110 9/17/2007	No. 124 9/19/2007	No. 125 9/27/2007	No. 126 9/18/2007	No. 130 9/19/2007
	Sampling date						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5					
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.2	< 0.4	< 0.4
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06	< 0.06	< 0.1	< 0.06	< 0.06
38454	Dicropthos, water, filtered, recoverable, micrograms per liter						
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter						
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter						
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate						
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
39381	Dieldrin, water, filtered, recoverable, micrograms per liter	5					
39415	Metolachlor, water, filtered, recoverable, micrograms per liter						
39532	Malathion, water, filtered, recoverable, micrograms per liter						
39572	Diazinon, water, filtered, recoverable, micrograms per liter						
39632	Atrazine, water, filtered, recoverable, micrograms per liter						
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.06	< 0.1	< 0.1
46342	Alechlor, water, filtered, recoverable, micrograms per liter						
49260	Acetochlor, water, filtered, recoverable, micrograms per liter						
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
49933	C-14, water, filtered, percent modern		89.82	42.46	44.86	7.7	77.59
49934	C-14, counting error, water, filtered, percent modern						
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.6	< 0.4	< 0.4
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.06	< 0.04	< 0.04
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter						
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6	0.63	< 0.5	< 0.5	< 0.5	< 0.5
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter						
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter						
61593	Iprodione, water, filtered, recoverable, micrograms per liter						
61594	Isofenphos, water, filtered, recoverable, micrograms per liter						
61596	Metaxyl, water, filtered, recoverable, micrograms per liter						
61598	Methidathion, water, filtered, recoverable, micrograms per liter						
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter						
61601	Phosmet, water, filtered, recoverable, micrograms per liter						
61610	Tribuphos, water, filtered, recoverable, micrograms per liter						
61618	2-Chloro-2,6-diethylacetanilide, water, filtered, recoverable, micrograms per liter						
61620	2-Ethyl-6-methylamine, water, filtered, recoverable, micrograms per liter						
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter						
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter						
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter						
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter						
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter						
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter						
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter						
61652	Malaoxon, water, filtered, recoverable, micrograms per liter						
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter						

**Water Quality Data for Selected RCWD Production Wells**  
**Well Nos. 110, 124, 125, 126, and 130**  
**2007**

Code	Parameter	MCL	No. 110 9/17/2007	No. 124 9/19/2007	No. 125 9/27/2007	No. 126 9/18/2007	No. 130 9/19/2007
	Sampling date						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter						
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter						
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter						
61705	Diethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monoethoxyethylphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	Isouquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						
62169	Desulfinylfipronil amide, water, filtered, recoverable, micrograms per liter						
62170	Desulfinylfipronil, water, filtered, recoverable, micrograms per liter						
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter				0.3		1.23
63790	Perchlorate, water, filtered, recoverable, micrograms per liter						
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	6	521	345	425	297	484
70301	Residue, water, filtered, sum of constituents, milligrams per liter	1500	E 502	E 326	E 424	E 293	E 483

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 110, 124, 125, 126, and 130  
2007**

Code	Parameter	MCL	No. 110 9/17/2007	No. 124 9/19/2007	No. 125 9/27/2007	No. 126 9/18/2007	No. 130 9/19/2007
	Sampling date						
70303	Residue, water, filtered, tons per acre-foot						
71846	Ammonia, water, filtered, milligrams per liter as NH4					E 0.015	< 0.026
71851	Nitrate, water, filtered, milligrams per liter	45 (q)				1.02	E 5.11
71856	Nitrite, water, filtered, milligrams per liter					0.159	E 0.006
71865	Iodide, water, filtered, milligrams per liter						
71870	Bromide, water, filtered, milligrams per liter		0.145	0.272	0.318	0.203	0.322
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter		< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		1.6	1	0.6	1	1
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		19	22	20	24	23
77041	Carbon disulfide, water, unfiltered, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.6	< 0.4	< 0.4
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	E 0.1	< 0.04	E 0.024
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.06	< 0.08	< 0.08
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.08	< 0.12	< 0.12
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.2	< 0.4	< 0.2	< 0.2
81552	Acetone, water, unfiltered, recoverable, micrograms per liter		< 6	< 6	< 4	< 6	< 6
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.2	< 0.4	< 0.4
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter		< 1	< 1	< 1.4	< 1	< 1
82081	C-13/C-12 ratio, water, unfiltered, per mil		-8.73	-13.39	-12.64	-11.36	-12.42
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-80.8	-51.9	-50.6	-54.3	-46.3
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-10.12	-7.54	-7.29	-8.09	-6.47
82303	Rn-222, water, unfiltered, picocuries per liter		180	330	300	360	370

### Water Quality Data for Selected RCWD Production Wells Well Nos. 110, 124, 125, 126, and 130 2007

Code	Parameter	MCL	No. 110 9/17/2007	No. 124 9/19/2007	No. 125 9/27/2007	No. 126 9/18/2007	No. 130 9/19/2007
	Sampling date						
82346	Ethion, water, filtered, recoverable, micrograms per liter						
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter						
82630	Metribuzin, water, filtered, recoverable, micrograms per liter		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter						
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius						
90851	Triholomehtanes, water, unfiltered, calcd, micrograms per liter						
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 133, 157, 210, 217, and 232  
2007**

Code	Parameter	MCL	No. 133 9/17/2007	No. 157 9/17/2007	No. 210 9/18/2007	No. 217 9/19/2007	No. 232 9/18/2007
	Sampling date						
3	Sampling depth, feet						
10	Temperature, water, degrees Celsius		21	22.5	19	23.5	19
28	Agency analyzing sample, code		80020	80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute						
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		810	903	945	716	947
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00001	0.00004	0.00004	0.00001	0.00004
300	Dissolved oxygen, water, unfiltered, milligrams per liter		7	4.2	6	3	5.8
400	pH, water, unfiltered, field, standard units		8.1	7.4	7.4	8.2	7.4
403	pH, water, unfiltered, laboratory, standard units						
405	Carbon dioxide, water, unfiltered, milligrams per liter						
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter						
602	Total nitrogen, water, filtered, milligrams per liter						
607	Organic nitrogen, water, filtered, milligrams per liter						
608	Ammonia, water, filtered, milligrams per liter as nitrogen			< 0.05			
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)		< 0.02			
618	Nitrate, water, filtered, milligrams per liter as nitrogen			0.105			
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen						
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen			0.11			
660	Orthophosphate, water, filtered, milligrams per liter			0.14			
666	Phosphorus, water, filtered, milligrams per liter						
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus			0.046			
900	Hardness, water, milligrams per liter as calcium carbonate		96.4	262	272	82.3	234
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate						
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate						
915	Calcium, water, filtered, milligrams per liter		24.1	66.3	74.7	26.7	66.3
925	Magnesium, water, filtered, milligrams per liter		8.7	23.2	20.7	3.7	16.6
930	Sodium, water, filtered, milligrams per liter		132	81.8	85.1	117	101
931	Sodium adsorption ratio, water, number						
932	Sodium fraction of cations, water, percent in equivalents of major cations						
935	Potassium, water, filtered, milligrams per liter		2.41	4.78	5.35	1.77	4.18
940	Chloride, water, filtered, milligrams per liter	600	95	84.3	87.6	84.4	89.1
945	Sulfate, water, filtered, milligrams per liter	600	102	176	171	67.1	162
950	Fluoride, water, filtered, milligrams per liter	2 (b)	0.93	0.28	0.52	0.68	0.50
955	Silica, water, filtered, milligrams per liter		19	13.3	21.8	16.8	26.2
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	2.8	0.51	0.87	6.1	1.6
1005	Barium, water, filtered, micrograms per liter	1000 (d)	53.8	45.5	53.2	62.5	56.3
1010	Beryllium, micrograms per liter	4 (e)	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
1020	Boron, water, filtered, micrograms per liter		649	152	153	289	166
1025	Cadmium, micrograms per liter	5 (f)	< 0.04	E 0.021	E 0.025	< 0.04	E 0.034
1030	Chromium, micrograms per liter	50 (g)	0.71	E 0.08	0.54	1.9	0.97
1035	Cobalt, micrograms per liter		< 0.04	E 0.035	E 0.034	E 0.021	E 0.03
1040	Copper, micrograms per liter	1000 (h)	1.1	1.5	0.42	0.66	1.6
1046	Iron, water, filtered, micrograms per liter	300	E 4	E 3.1	< 6	15.5	E 4.1
1049	Lead, micrograms per liter		0.482	E 0.087	< 0.12	< 0.12	0.151
1056	Manganese, water, filtered, micrograms per liter	50	E 0.12	E 0.15	E 0.14	0.3	< 0.2
1057	Thallium, micrograms per liter	2 (i)	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1060	Molybdenum, micrograms per liter		4.94	4.39	9.94	1.82	11
1065	Nickel, micrograms per liter	100 (j)	0.47	0.63	0.49	0.18	0.48
1075	Silver, micrograms per liter	100 (k)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1080	Strontium, water, filtered, micrograms per liter		408	813	366	279	361
1085	Vanadium, micrograms per liter		45.4	3.1	6.8	69.4	14.6
1090	Zinc, micrograms per liter	5000 (l)	3.4	0.81	< 0.06	0.94	4
1095	Antimony, micrograms per liter	6 (m)	< 0.06	0.129	E 0.035	< 0.06	E 0.03

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 133, 157, 210, 217, and 232  
2007**

Code	Parameter	MCL	No. 133 9/17/2007	No. 157 9/17/2007	No. 210 9/18/2007	No. 217 9/19/2007	No. 232 9/18/2007
	Sampling date						
1106	Aluminum, water, filtered, micrograms per liter	1000 (n)	5.7	E 0.8	< 1.6	4.3	E 1
1130	Lithium, water, filtered, micrograms per liter		4.72	21.2	2.24	5.28	2.97
1145	Selenium, micrograms per liter	50 (o)	1.1	0.45	1.3	1.9	1.9
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter					< 0.008	
4025	Hexazinone, water, filtered, recoverable, micrograms per liter					< 0.026	
4029	Bromacil, water, filtered, recoverable, micrograms per liter					E 0.005	
4035	Simazine, water, filtered, recoverable, micrograms per liter					< 0.006	
4036	Prometryn, water, filtered, recoverable, micrograms per liter					< 0.01	
4037	Prometon, water, filtered, recoverable, micrograms per liter					< 0.014	
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter					< 0.006	
4095	Fonofos, water, filtered, recoverable, micrograms per liter						
7000	Tritium, water, unfiltered, picocuries per liter		3.2	18.9	16.6	1	12.4
22703	Uranium, natural, micrograms per liter		3.58	2.57	2.55	2.84	2.35
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		148	151	163	135	167
30217	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter		E 0.062	< 0.04	E 0.061	E 0.027	< 0.04
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter		0.12	0.43	0.24	E 0.04	E 0.07
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34221	Anthracene, water, filtered, recoverable, micrograms per liter						
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)					
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter						
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter						
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
34409	Isophorone, water, filtered, recoverable, micrograms per liter						
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34443	Naphthalene, water, filtered, recoverable, micrograms per liter						
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter						
34466	Phenol, water, filtered, recoverable, micrograms per liter						
34470	Pyrene, water, filtered, recoverable, micrograms per liter						
34475	Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34476	Trichloroethane, water, filtered, recoverable, micrograms per liter						
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
34501	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	6	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10	< 0.018	< 0.018	< 0.018	< 0.018	< 0.018
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04



**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 133, 157, 210, 217, and 232  
2007**

Code	Parameter	MCL	No. 133 9/17/2007	No. 157 9/17/2007	No. 210 9/18/2007	No. 217 9/19/2007	No. 232 9/18/2007
	Sampling date						
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5					
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
38454	Dictriphos, water, filtered, recoverable, micrograms per liter					< 0.08	
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter					< 0.01	
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					< 0.005	
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate						
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
39381	Dieldrin, water, filtered, recoverable, micrograms per liter	5				< 0.009	
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					< 0.01	
39532	Malathion, water, filtered, recoverable, micrograms per liter					< 0.016	
39572	Diazinon, water, filtered, recoverable, micrograms per liter					< 0.005	
39632	Atrazine, water, filtered, recoverable, micrograms per liter					< 0.007	
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
46342	Alechlor, water, filtered, recoverable, micrograms per liter					< 0.005	
49260	Acetochlor, water, filtered, recoverable, micrograms per liter					< 0.006	
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.0882	
49933	C-14, water, filtered, percent modern		69.82	87.36	94.08	76.99	99.84
49934	C-14, counting error, water, filtered, percent modern						
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
50305	Caffeine, water, filtered, recoverable, micrograms per liter						
50359	Metaxyl, water, filtered, recoverable, micrograms per liter						
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter					1.1	1.6
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6	0.57	< 0.5	0.73	< 0.053	
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter					< 0.046	
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter					< 0.029	
61593	Iprodione, water, filtered, recoverable, micrograms per liter					< 0.026	
61594	Isofenphos, water, filtered, recoverable, micrograms per liter					< 0.011	
61596	Metaxyl, water, filtered, recoverable, micrograms per liter					< 0.007	
61598	Methidathion, water, filtered, recoverable, micrograms per liter					< 0.009	
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter					< 0.033	
61601	Phosmet, water, filtered, recoverable, micrograms per liter					< 0.008	
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					< 0.035	
61618	2-Chloro-2,6-diethylacetamide, water, filtered, recoverable, micrograms per liter					< 0.007	
61620	2-Ethyl-6-methylamine, water, filtered, recoverable, micrograms per liter					< 0.01	
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter					< 0.0045	
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter					< 0.005	
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.042	
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.06	
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter					< 0.021	
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter					< 0.053	
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter					< 0.06	
61652	Malaoxon, water, filtered, recoverable, micrograms per liter					< 0.039	
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter					< 0.019	

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 133, 157, 210, 217, and 232  
2007**

Code	Parameter	MCL	No. 133 9/17/2007	No. 157 9/17/2007	No. 210 9/18/2007	No. 217 9/19/2007	No. 232 9/18/2007
	Sampling date						
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.027	
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					< 0.0511	
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter					< 0.045	
61705	Diethoxyoctylphenol, water, filtered, recoverable, micrograms per liter						
61706	Monoethoxyoctylphenol, water, filtered, recoverable, micrograms per liter						
62005	Cotinine, water, filtered, recoverable, micrograms per liter						
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter						
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter						
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter						
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter						
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter						
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter						
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter						
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter						
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter						
62064	Acetophenone, water, filtered, recoverable, micrograms per liter						
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter						
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter						
62067	Benzophenone, water, filtered, recoverable, micrograms per liter						
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter						
62070	Camphor, water, filtered, recoverable, micrograms per liter						
62071	Carbazole, water, filtered, recoverable, micrograms per liter						
62072	Cholesterol, water, filtered, recoverable, micrograms per liter						
62073	D-Limonene, water, filtered, recoverable, micrograms per liter						
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter						
62076	Indole, water, filtered, recoverable, micrograms per liter						
62077	Isoborneol, water, filtered, recoverable, micrograms per liter						
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter						
62079	isoquinoline, water, filtered, recoverable, micrograms per liter						
62080	Menthol, water, filtered, recoverable, micrograms per liter						
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter						
62082	DEET, water, filtered, recoverable, micrograms per liter						
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter						
62084	p-Cresol, water, filtered, recoverable, micrograms per liter						
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter						
62086	beta-Stigmastanol, water, filtered, recoverable, micrograms per liter						
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter						
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter						
62090	Triclosan, water, filtered, recoverable, micrograms per liter						
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter						
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter						
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter						
62166	Fipronil, water, filtered, recoverable, micrograms per liter						< 0.016
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter						< 0.013
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter						< 0.024
62169	Desulfenylipronil amide, water, filtered, recoverable, micrograms per liter						< 0.029
62170	Desulfenylipronil, water, filtered, recoverable, micrograms per liter						< 0.012
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter			0.15			
63790	Perchlorate, water, filtered, recoverable, micrograms per liter						
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	481	565	603	428	597
70301	Residue, water, filtered, sum of constituents, milligrams per liter		E 474	E 543	E 565	E 400	E 567

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 133, 157, 210, 217, and 232  
2007**

Code	Parameter	MCL	No. 133 9/17/2007	No. 157 9/17/2007	No. 210 9/18/2007	No. 217 9/19/2007	No. 232 9/18/2007
	Sampling date						
70303	Residue, water, filtered, tons per acre-foot		< 0.026				
71846	Ammonia, water, filtered, milligrams per liter as NH4		0.465				
71851	Nitrate, water, filtered, milligrams per liter	45 (q)	< 0.007				
71856	Nitrite, water, filtered, milligrams per liter						
71865	Iodide, water, filtered, milligrams per liter						
71870	Bromide, water, filtered, milligrams per liter		0.336	0.132	0.172	0.308	0.292
72019	Depth to water level, feet below land surface						
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter		< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		1	1.3	1.3	1	1.3
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter		20	21	22	23	21
77041	Carbon disulfide, water, unfiltered, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	E 0.024	< 0.04
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.14	< 0.14	< 0.14	< 0.14	< 0.14
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter		< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
81552	Acetone, water, unfiltered, recoverable, micrograms per liter		< 6	< 6	< 6	< 6	< 6
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter		< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter		< 1	< 1	< 1	< 1	< 1
82081	C-13/C-12 ratio, water, unfiltered, per mil		-12.5	-10.73	-10.92	-14.69	-10.92
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-48	-82.4	-75.5	-47.4	-66.6
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-6.71	-10.13	-9.49	-7.05	-8.43
82303	Rn-222, water, unfiltered, picocuries per liter		250	240	250	340	200

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 133, 157, 210, 217, and 232  
2007**

Code	Parameter	MCL	No. 133 9/17/2007	No. 157 9/17/2007	No. 210 9/18/2007	No. 217 9/19/2007	No. 232 9/18/2007
	Sampling date						
82346	Ethion, water, filtered, recoverable, micrograms per liter					< 0.016	
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter				< 0.5	< 0.5	< 0.5
82630	Metribuzin, water, filtered, recoverable, micrograms per liter		< 0.5				
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.012	
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.006	
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.009	
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.061	
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.02	
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.008	
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.016	
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.01	
82676	Propyzamide, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.012	
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.004	
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.06	
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.003	
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.02	
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					< 0.08	
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter					< 0.01	
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
90651	Triholomehtanes, water, unfiltered, calcd, micrograms per liter						
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter						
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery						
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery						
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery						
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery						
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery						

Notes: U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:

- (a) MCL shown for U.S. EPA STORET No. 620.
- (b) MCL shown for U.S. EPA STORET No. 951.
- (c) MCL shown for U.S. EPA STORET No. 1002.
- (d) MCL shown for U.S. EPA STORET No. 1007.
- (e) MCL shown for U.S. EPA STORET No. 1012.
- (f) MCL shown for U.S. EPA STORET No. 1027.
- (g) MCL shown for U.S. EPA STORET No. 1034.
- (h) MCL shown for U.S. EPA STORET No. 1042.
- (i) MCL shown for U.S. EPA STORET No. 1059.
- (j) MCL shown for U.S. EPA STORET No. 1067.
- (k) MCL shown for U.S. EPA STORET No. 1077.
- (l) MCL shown for U.S. EPA STORET No. 1092.
- (m) MCL shown for U.S. EPA STORET No. 1097.
- (n) MCL shown for U.S. EPA STORET No. 1105.
- (o) MCL shown for U.S. EPA STORET No. 1147.
- (p) MCL shown for U.S. EPA STORET No. 34247.
- (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

M--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 109, 110, 133, and 157  
2012**

Code	Parameter	MCL	No. 109 8/21/2012	No. 110 8/21/2012	No. 133 8/21/2012	No. 157 8/21/2012
	Sampling date					
3	Sampling depth, feet					
10	Temperature, water, degrees Celsius		20.9	19.3	20.2	23.4
28	Agency analyzing sample, code		80020	80020	80020	80020
59	Flow rate, instantaneous, gallons per minute					
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		1250	614	835	720
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		0.00006	0.00002	0.00001	M
300	Dissolved oxygen, water, unfiltered, milligrams per liter		3.7	1.4	1.8	0.6
400	pH, water, unfiltered, field, standard units		7.2	7.7	8	7.5
403	pH, water, unfiltered, laboratory, standard units		7.5	7.8	8	7.8
405	Carbon dioxide, water, unfiltered, milligrams per liter		29	4.5	1.8	7.6
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter		286	140	113	149
602	Total nitrogen, water, filtered, milligrams per liter		< 3.7	< 0.41	< 0.80	< 0.26
607	Organic nitrogen, water, filtered, milligrams per liter		< 0.07	< 0.07	< 0.07	< 0.07
608	Ammonia, water, filtered, milligrams per liter as nitrogen		< 0.010	< 0.010	< 0.010	< 0.010
613	Nitrite, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.001	< 0.001	0.003	< 0.001
618	Nitrate, water, filtered, milligrams per liter as nitrogen		3.64	0.342	0.724	0.195
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		< 0.07	< 0.07	< 0.07	< 0.07
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		3.64	0.342	0.727	0.195
660	Orthophosphate, water, filtered, milligrams per liter		0.135	0.24	0.04	0.108
666	Phosphorus, water, filtered, milligrams per liter		0.03	0.07	< 0.02	0.03
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.044	0.078	0.013	0.035
900	Hardness, water, milligrams per liter as calcium carbonate		402	159	137	211
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate		167	43	43	88
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate		177	41		87
915	Calcium, water, filtered, milligrams per liter		118.0	39.6	32.6	53
925	Magnesium, water, filtered, milligrams per liter		25.9	14.4	13.3	19
930	Sodium, water, filtered, milligrams per liter		126	67.5	127	69
931	Sodium adsorption ratio, water, number		2.73	2.33	4.75	2.07
932	Sodium fraction of cations, water, percent in equivalents of major cations		40	47	66	41
935	Potassium, water, filtered, milligrams per liter		3.84	3.72	2.95	4.47
940	Chloride, water, filtered, milligrams per liter	600	127	63.4	101	72
945	Sulfate, water, filtered, milligrams per liter	600	235	88.8	110	128
950	Fluoride, water, filtered, milligrams per liter	2 (b)	0.18	0.35	0.51	0.21
955	Silica, water, filtered, milligrams per liter		33.9	15.4	27.8	12.4
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	0.97	0.9	1.5	0.45
1005	Barium, water, filtered, micrograms per liter	1000 (d)	31.1	21.9	55	37.3
1010	Beryllium, micrograms per liter	4 (e)				
1020	Boron, water, filtered, micrograms per liter		175	156	438	142
1025	Cadmium, micrograms per liter	5 (f)				
1030	Chromium, micrograms per liter	50 (g)				
1035	Cobalt, micrograms per liter					
1040	Copper, micrograms per liter	1000 (h)	8	< 3.7	16.7	3.6
1046	Iron, water, filtered, micrograms per liter	300				
1049	Lead, micrograms per liter					
1056	Manganese, water, filtered, micrograms per liter	50	< 0.16	< 0.16	0.93	20.4
1057	Thallium, micrograms per liter	2 (i)				
1060	Molybdenum, micrograms per liter					
1065	Nickel, micrograms per liter	100 (j)				
1075	Silver, micrograms per liter	100 (k)				
1080	Strontium, water, filtered, micrograms per liter		819	294	480	613
1085	Vanadium, micrograms per liter					
1090	Zinc, micrograms per liter	5000 (l)				
1095	Antimony, micrograms per liter	6 (m)				

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells**  
**Well Nos. 109, 110, 133, and 157**  
**2012**

Code	Parameter	MCL	No. 109 8/21/2012	No. 110 8/21/2012	No. 133 8/21/2012	No. 157 8/21/2012
	Sampling date					
1106	Aluminum, water, filtered, micrograms per liter		<2.2	<6.6	<6.6	<2.2
1130	Lithium, water, filtered, micrograms per liter	1000 (n)				
1145	Selenium, micrograms per liter	50 (o)	10.7	5.26	8.95	27.5
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter					
4025	Hexazinone, water, filtered, recoverable, micrograms per liter					
4029	Bromacil, water, filtered, recoverable, micrograms per liter					
4035	Simazine, water, filtered, recoverable, micrograms per liter					
4036	Prometryn, water, filtered, recoverable, micrograms per liter					
4037	Prometon, water, filtered, recoverable, micrograms per liter					
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter					
4095	Fonofos, water, filtered, recoverable, micrograms per liter					
7000	Tritium, water, unfiltered, picocuries per liter		3.3			
22703	Uranium, natural, micrograms per liter					
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		225	118	156	124
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter					
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter					
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5				
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter					
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter					
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter					
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter					
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150				
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1				
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter					
34221	Anthracene, water, filtered, recoverable, micrograms per liter					
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)				
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter					
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70				
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter					
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300				
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter					
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter					
34409	Isophorone, water, filtered, recoverable, micrograms per liter					
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter					
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter					
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5				
34443	Naphthalene, water, filtered, recoverable, micrograms per liter					
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter					
34466	Phenol, water, filtered, recoverable, micrograms per liter					
34470	Pyrene, water, filtered, recoverable, micrograms per liter					
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5				
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter					
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150				
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5				
34501	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	6				
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200				
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5				
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1				
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600				
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5				
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10				
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5				
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter					

**Water Quality Data for Selected RCWD Production Wells**  
**Well Nos. 109, 110, 133, and 157**  
**2012**

Code	Parameter	MCL	No. 109 8/21/2012	No. 110 8/21/2012	No. 133 8/21/2012	No. 157 8/21/2012
	Sampling date					
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter					
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5				
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter					
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter					
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5				
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5				
38454	Dictriphos, water, filtered, recoverable, micrograms per liter					
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter					
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter					
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate		235	115	93.6	123
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5				
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5				
39381	Dieldrin, water, filtered, recoverable, micrograms per liter					
39415	Metolachlor, water, filtered, recoverable, micrograms per liter					
39532	Malathion, water, filtered, recoverable, micrograms per liter					
39572	Diazinon, water, filtered, recoverable, micrograms per liter					
39632	Atrazine, water, filtered, recoverable, micrograms per liter					
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter					
46342	Alechlor, water, filtered, recoverable, micrograms per liter					
49260	Acetochlor, water, filtered, recoverable, micrograms per liter					
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
49933	C-14, water, filtered, percent modern		94.97			
49934	C-14, counting error, water, filtered, percent modern		0.28			
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter					
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter					
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter					
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter					
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter					
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter					
50305	Caffeine, water, filtered, recoverable, micrograms per liter					
50359	Metaxyl, water, filtered, recoverable, micrograms per liter					
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter					
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6				
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter					
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter					
61593	Iprodione, water, filtered, recoverable, micrograms per liter					
61594	Isofenphos, water, filtered, recoverable, micrograms per liter					
61596	Metaxyl, water, filtered, recoverable, micrograms per liter					
61598	Methidathion, water, filtered, recoverable, micrograms per liter					
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter					
61601	Phosmet, water, filtered, recoverable, micrograms per liter					
61610	Tribuphos, water, filtered, recoverable, micrograms per liter					
61618	2-Chloro-2',6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter					
61620	2-Ethyl-6-methylamine, water, filtered, recoverable, micrograms per liter					
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter					
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter					
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter					
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter					
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter					
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter					
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter					
61652	Malaoxon, water, filtered, recoverable, micrograms per liter					
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter					

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 109, 110, 133, and 157  
2012**

Code	Parameter	MCL	No. 109 8/21/2012	No. 110 8/21/2012	No. 133 8/21/2012	No. 157 8/21/2012
	Sampling date					
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter					
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter					
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter					
61705	Diethoxyoctylphenol, water, filtered, recoverable, micrograms per liter					
61706	Monoethoxyoctylphenol, water, filtered, recoverable, micrograms per liter					
62005	Cotinine, water, filtered, recoverable, micrograms per liter					
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter					
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter					
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter					
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter					
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter					
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter					
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter					
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter					
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter					
62064	Acetophenone, water, filtered, recoverable, micrograms per liter					
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter					
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter					
62067	Benzophenone, water, filtered, recoverable, micrograms per liter					
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter					
62070	Camphor, water, filtered, recoverable, micrograms per liter					
62071	Carbazole, water, filtered, recoverable, micrograms per liter					
62072	Cholesterol, water, filtered, recoverable, micrograms per liter					
62073	D-Limonene, water, filtered, recoverable, micrograms per liter					
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter					
62076	Indole, water, filtered, recoverable, micrograms per liter					
62077	Isoborneol, water, filtered, recoverable, micrograms per liter					
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter					
62079	Isoquinoline, water, filtered, recoverable, micrograms per liter					
62080	Menthol, water, filtered, recoverable, micrograms per liter					
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter					
62082	DEET, water, filtered, recoverable, micrograms per liter					
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter					
62084	p-Cresol, water, filtered, recoverable, micrograms per liter					
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter					
62086	beta-Stigmastanol, water, filtered, recoverable, micrograms per liter					
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter					
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter					
62090	Triclosan, water, filtered, recoverable, micrograms per liter					
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter					
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter					
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter					
62166	Fipronil, water, filtered, recoverable, micrograms per liter					
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter					
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter					
62169	Desulfinyfipronil amide, water, filtered, recoverable, micrograms per liter					
62170	Desulfinyfipronil, water, filtered, recoverable, micrograms per liter					
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter	6				
63790	Perchlorate, water, filtered, recoverable, micrograms per liter		826	363	511	432
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	828	365	476	434
70301	Residue, water, filtered, sum of constituents, milligrams per liter					



**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 109, 110, 133, and 157  
2012**

Code	Parameter	MCL	No. 109 8/21/2012	No. 110 8/21/2012	No. 133 8/21/2012	No. 157 8/21/2012
	Sampling date					
70303	Residue, water, filtered, tons per acre-foot					
71846	Ammonia, water, filtered, milligrams per liter as NH4		< 0.013	< 0.013	< 0.013	< 0.013
71851	Nitrate, water, filtered, milligrams per liter	45 (q)	16.1	1.52	3.21	0.861
71856	Nitrite, water, filtered, milligrams per liter		< 0.003	< 0.003	0.009	< 0.003
71865	Iodide, water, filtered, milligrams per liter		0.008	0.002	0.003	0.015
71870	Bromide, water, filtered, milligrams per liter		0.502	0.13	0.313	0.125
72019	Depth to water level, feet below land surface					
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter					
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter					
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter					
77041	Carbon disulfide, water, unfiltered, micrograms per liter	6				
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter					
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100				
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter					
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter					
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter					
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter					
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter					
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter					
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter					
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter					
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter					
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter					
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter					
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter					
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter					
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter					
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter					
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter					
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter	0.05				
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter					
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter					
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					
81552	Acetone, water, unfiltered, recoverable, micrograms per liter					
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter					
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter					
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter					
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter					
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter					
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter					
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter					
82081	C-13/C-12 ratio, water, unfiltered, per mil		-15.19			
82082	Deuterium/Protium ratio, water, unfiltered, per mil		-47.6	-72.7	-54	-81.5
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-6.63	-9.08	-7.14	-9.84
82303	Rn-222, water, unfiltered, picocuries per liter					

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells**  
**Well Nos. 109, 110, 133, and 157**  
**2012**

Code	Parameter	MCL	No. 109 8/21/2012	No. 110 8/21/2012	No. 133 8/21/2012	No. 157 8/21/2012
	Sampling date					
82346	Ethion, water, filtered, recoverable, micrograms per liter					
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter					
82630	Metribuzin, water, filtered, recoverable, micrograms per liter					
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter					
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter					
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		1260	611	840	715
90851	Triholomehtanes, water, unfiltered, calcd, micrograms per liter					
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter					
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery					
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery					
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery					
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery					
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery					

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPA STORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPA STORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

MI--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 203, 210, and 234  
2012**

Code	Parameter	MCL	No. 203 8/22/2012	No. 210 8/22/2012	No. 234 8/21/2012
	Sampling date				
3	Sampling depth, feet				
10	Temperature, water, degrees Celsius		22.7	22.7	20.5
28	Agency analyzing sample, code		80020	80020	80020
59	Flow rate, instantaneous, gallons per minute				
95	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius		743	848	992
191	Hydrogen ion, water, unfiltered, calculated, milligrams per liter		M	0.00003	0.00003
300	Dissolved oxygen, water, unfiltered, milligrams per liter		2.3	3.8	4.8
400	pH, water, unfiltered, field, standard units		8.6	7.5	7.5
403	pH, water, unfiltered, laboratory, standard units		8.5	7.7	7.6
405	Carbon dioxide, water, unfiltered, milligrams per liter		0.8	0.8	12
453	Bicarbonate, water, filtered, incremental titration, field, milligrams per liter		185	188	238
602	Total nitrogen, water, filtered, milligrams per liter		< 0.88	< 3.0	< 5.0
607	Organic nitrogen, water, filtered, milligrams per liter		< 0.07	< 0.07	< 0.07
608	Ammonia, water, filtered, milligrams per liter as nitrogen	1 (a)	< 0.010	< 0.010	< 0.010
613	Nitrite, water, filtered, milligrams per liter as nitrogen		< 0.001	< 0.001	< 0.001
618	Nitrate, water, filtered, milligrams per liter as nitrogen		0.814	2.97	4.97
623	Ammonia plus organic nitrogen, water, filtered, milligrams per liter as nitrogen		< 0.07	< 0.07	< 0.07
631	Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen		0.814	2.97	4.97
660	Orthophosphate, water, filtered, milligrams per liter		0.049	0.269	0.318
666	Phosphorus, water, filtered, milligrams per liter		< 0.02	0.08	0.09
671	Orthophosphate, water, filtered, milligrams per liter as phosphorus		0.016	0.088	0.104
900	Hardness, water, milligrams per liter as calcium carbonate		116	240	277
904	Noncarb hardness, water filtered field, milligrams per liter as calcium carbonate			85	82
905	Noncarb hardness, water filtered lab, milligrams per liter as calcium carbonate			84	80
915	Calcium, water, filtered, milligrams per liter		21	62.9	76.2
925	Magnesium, water, filtered, milligrams per liter		15.2	20	21.1
930	Sodium, water, filtered, milligrams per liter		119	88.5	108
931	Sodium adsorption ratio, water, number		4.84	2.49	2.82
932	Sodium fraction of cations, water, percent in equivalents of major cations		69	44	45
935	Potassium, water, filtered, milligrams per liter		1.81	5.36	4.36
940	Chloride, water, filtered, milligrams per liter	600	77.4	83.2	90.5
945	Sulfate, water, filtered, milligrams per liter	600	93.9	143	158
950	Fluoride, water, filtered, milligrams per liter	2 (b)	1.33	0.48	0.49
955	Silica, water, filtered, milligrams per liter		20.4	22.7	29.2
1000	Arsenic, water, filtered, micrograms per liter	10 (c)	8	0.99	1.3
1005	Barium, water, filtered, micrograms per liter	1000 (d)	27.5	41.5	46.2
1010	Beryllium, micrograms per liter	4 (e)			
1020	Boron, water, filtered, micrograms per liter		834	141	172
1025	Cadmium, micrograms per liter				
1030	Chromium, micrograms per liter	5 (f)			
1035	Cobalt, micrograms per liter	50 (g)			
1040	Copper, micrograms per liter				
1046	Iron, water, filtered, micrograms per liter	1000 (h)	3.5	< 3.2	9.2
1049	Lead, micrograms per liter	300			
1056	Manganese, water, filtered, micrograms per liter	50	< 0.16	< 0.16	0.17
1057	Thallium, micrograms per liter	2 (i)			
1060	Molybdenum, micrograms per liter				
1065	Nickel, micrograms per liter	100 (j)			
1075	Silver, micrograms per liter	100 (k)			
1080	Strontium, water, filtered, micrograms per liter		300	315	378
1085	Vanadium, micrograms per liter				
1090	Zinc, micrograms per liter	5000 (l)			
1095	Antimony, micrograms per liter	6 (m)			

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 203, 210, and 234  
2012**

Code	Parameter	MCL	No. 203 8/22/2012	No. 210 8/22/2012	No. 234 8/21/2012
	Sampling date				
1106	Aluminum, water, filtered, micrograms per liter		< 6.6	< 6.6	< 2.2
1130	Lithium, water, filtered, micrograms per liter	1000 (n)	4.04	3.75	5.68
1145	Selenium, micrograms per liter	50 (o)			
4022	Terbutylazine, water, filtered, recoverable, micrograms per liter				
4025	Hexazinone, water, filtered, recoverable, micrograms per liter				
4029	Bromacil, water, filtered, recoverable, micrograms per liter				
4035	Simazine, water, filtered, recoverable, micrograms per liter				
4036	Prometryn, water, filtered, recoverable, micrograms per liter				
4037	Prometon, water, filtered, recoverable, micrograms per liter				
4040	2-Chloro-4-isopropylamino-6-amino-s-triazine, water, filtered, recoverable, micrograms per liter				
4095	Fonofos, water, filtered, recoverable, micrograms per liter				8.5
7000	Tritium, water, unfiltered, picocuries per liter				
22703	Uranium, natural, micrograms per liter				
29801	Alkalinity, water, filtered, fixed endpoint (pH 4.5) titration, laboratory, milligrams per liter as calcium carbonate		158	156	197
30217	Dibromomethane, water, unfiltered, recoverable, micrograms per liter				
32101	Bromodichloromethane, water, unfiltered, recoverable, micrograms per liter				
32102	Tetrachloromethane, water, unfiltered, recoverable, micrograms per liter	0.5			
32103	1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter				
32104	Tribromomethane, water, unfiltered, recoverable, micrograms per liter				
32105	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter				
32106	Trichloromethane, water, unfiltered, recoverable, micrograms per liter				
34010	Toluene, water, unfiltered, recoverable, micrograms per liter	150			
34030	Benzene, water, unfiltered, recoverable, micrograms per liter	1			
34215	Acrylonitrile, water, unfiltered, recoverable, micrograms per liter				
34221	Anthracene, water, filtered, recoverable, micrograms per liter				
34248	Benz[a]pyrene, water, filtered, recoverable, micrograms per liter	0.2 (p)			
34288	Tribromomethane, water, filtered, recoverable, micrograms per liter				
34301	Chlorobenzene, water, unfiltered, recoverable, micrograms per liter	70			
34311	Chloroethane, water, unfiltered, recoverable, micrograms per liter				
34371	Ethylbenzene, water, unfiltered, recoverable, micrograms per liter	300			
34377	Fluoranthene, water, filtered, recoverable, micrograms per liter				
34396	Hexachloroethane, water, unfiltered, recoverable, micrograms per liter				
34409	Isophorone, water, filtered, recoverable, micrograms per liter				
34413	Bromomethane, water, unfiltered, recoverable, micrograms per liter				
34418	Chloromethane, water, unfiltered, recoverable, micrograms per liter				
34423	Dichloromethane, water, unfiltered, recoverable, micrograms per liter	5			
34443	Naphthalene, water, filtered, recoverable, micrograms per liter				
34462	Phenanthrene, water, filtered, recoverable, micrograms per liter				
34466	Phenol, water, filtered, recoverable, micrograms per liter				
34470	Pyrene, water, filtered, recoverable, micrograms per liter				
34475	Tetrachloroethene, water, unfiltered, recoverable, micrograms per liter	5			
34476	Tetrachloroethane, water, filtered, recoverable, micrograms per liter				
34488	Trichlorofluoromethane, water, unfiltered, recoverable, micrograms per liter	150			
34496	1,1-Dichloroethane, water, unfiltered, recoverable, micrograms per liter	5			
34501	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	6			
34506	1,1,1-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	200			
34511	1,1,2-Trichloroethane, water, unfiltered, recoverable, micrograms per liter	5			
34516	1,1,2,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter	1			
34536	1,2-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter	600			
34541	1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter	5			
34546	trans-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	10			
34551	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter	5			
34566	1,3-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter				

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 203, 210, and 234  
2012**

Code	Parameter	MCL	No. 203 8/22/2012	No. 210 8/22/2012	No. 234 8/21/2012
	Sampling date				
34571	1,4-Dichlorobenzene, water, unfiltered, recoverable, micrograms per liter				
34572	1,4-Dichlorobenzene, water, filtered, recoverable, micrograms per liter	5			
34668	Dichlorodifluoromethane, water, unfiltered, recoverable, micrograms per liter				
34696	Naphthalene, water, unfiltered, recoverable, micrograms per liter				
34699	trans-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			
34704	cis-1,3-Dichloropropene, water, unfiltered, recoverable, micrograms per liter	0.5			
38454	Dicofolophos, water, filtered, recoverable, micrograms per liter				
38775	Dichlorvos, water, filtered, recoverable, micrograms per liter				
38933	Chlorpyrifos, water, filtered, recoverable, micrograms per liter				
39086	Alkalinity, water, filtered, incremental titration, field, milligrams per liter as calcium carbonate		158	155	196
39175	Vinyl chloride, water, unfiltered, recoverable, micrograms per liter	0.5			
39180	Trichloroethene, water, unfiltered, recoverable, micrograms per liter	5			
39381	Dieldrin, water, filtered, recoverable, micrograms per liter				
39415	Metolachlor, water, filtered, recoverable, micrograms per liter				
39532	Malathion, water, filtered, recoverable, micrograms per liter				
39572	Diazinon, water, filtered, recoverable, micrograms per liter				
39632	Atrazine, water, filtered, recoverable, micrograms per liter				
39702	Hexachlorobutadiene, water, unfiltered, recoverable, micrograms per liter				
46342	Alechlor, water, filtered, recoverable, micrograms per liter				
49260	Acetochlor, water, filtered, recoverable, micrograms per liter				
49295	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				96.49
49933	C-14, water, filtered, percent modern				0.35
49934	C-14, counting error, water, filtered, percent modern				
49991	Methyl acrylate, water, unfiltered, recoverable, micrograms per liter				
49999	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				
50000	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, micrograms per liter				
50002	Bromoethene, water, unfiltered, recoverable, micrograms per liter				
50004	tert-Butyl ethyl ether, water, unfiltered, recoverable, micrograms per liter				
50005	Methyl tert-pentyl ether, water, unfiltered, recoverable, micrograms per liter				
50305	Caffeine, water, filtered, recoverable, micrograms per liter				
50359	Metaxyl, water, filtered, recoverable, micrograms per liter				
61209	Perchlorate, water, unfiltered, recoverable, micrograms per liter				
61585	Cyfluthrin, water, filtered, recoverable, micrograms per liter	6			
61586	Cypermethrin, water, filtered, recoverable, micrograms per liter				
61591	Fenamiphos, water, filtered, recoverable, micrograms per liter				
61593	Iprodione, water, filtered, recoverable, micrograms per liter				
61594	Isofenphos, water, filtered, recoverable, micrograms per liter				
61596	Metaxyl, water, filtered, recoverable, micrograms per liter				
61598	Methidathion, water, filtered, recoverable, micrograms per liter				
61599	Myclobutanil, water, filtered, recoverable, micrograms per liter				
61601	Phosmet, water, filtered, recoverable, micrograms per liter				
61610	Tribuphos, water, filtered, recoverable, micrograms per liter				
61618	2-Chloro-2',6'-diethylacetanilide, water, filtered, recoverable, micrograms per liter				
61620	2-Ethyl-6-methylamine, water, filtered, recoverable, micrograms per liter				
61625	3,4-Dichloroaniline, water, filtered, recoverable, micrograms per liter				
61633	4-Chloro-2-methylphenol, water, filtered, recoverable, micrograms per liter				
61635	Azinphos-methyl oxygen analog, water, filtered, recoverable, micrograms per liter				
61636	Chlorpyrifos oxygen analog, water, filtered, recoverable, micrograms per liter				
61644	Ethion monooxon, water, filtered, recoverable, micrograms per liter				
61645	Fenamiphos sulfone, water, filtered, recoverable, micrograms per liter				
61646	Fenamiphos sulfoxide, water, filtered, recoverable, micrograms per liter				
61652	Malaoxon, water, filtered, recoverable, micrograms per liter				
61664	Methyl paraoxon, water, filtered, recoverable, micrograms per liter				

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 203, 210, and 234  
2012**

Code	Parameter	MCL	No. 203 8/22/2012	No. 210 8/22/2012	No. 234 8/21/2012
	Sampling date				
61666	Phorate oxygen analog, water, filtered, recoverable, micrograms per liter				
61668	Phosmet oxygen analog, water, filtered, recoverable, micrograms per liter				
61674	Terbufos oxygen analog sulfone, water, filtered, recoverable, micrograms per liter				
61705	Diethoxyoctylphenol, water, filtered, recoverable, micrograms per liter				
61706	Monoethoxyoctylphenol, water, filtered, recoverable, micrograms per liter				
62005	Cotinine, water, filtered, recoverable, micrograms per liter				
62054	1-Methylnaphthalene, water, filtered, recoverable, micrograms per liter				
62055	2,6-Dimethylnaphthalene, water, filtered, recoverable, micrograms per liter				
62056	2-Methylnaphthalene, water, filtered, recoverable, micrograms per liter				
62057	3-beta-Coprostanol, water, filtered, recoverable, micrograms per liter				
62058	3-Methyl-1H-indole, water, filtered, recoverable, micrograms per liter				
62059	3-tert-Butyl-4-hydroxyanisole, water, filtered, recoverable, micrograms per liter				
62060	4-Cumylphenol, water, filtered, recoverable, micrograms per liter				
62061	4-Octylphenol, water, filtered, recoverable, micrograms per liter				
62062	4-tert-Octylphenol, water, filtered, recoverable, micrograms per liter				
62063	5-Methyl-1H-benzotriazole, water, filtered, recoverable, micrograms per liter				
62064	Acetophenone, water, filtered, recoverable, micrograms per liter				
62065	Acetyl hexamethyl tetrahydro naphthalene, water, filtered, recoverable, micrograms per liter				
62066	9,10-Anthraquinone, water, filtered, recoverable, micrograms per liter				
62067	Benzophenone, water, filtered, recoverable, micrograms per liter				
62068	beta-Sitosterol, water, filtered, recoverable, micrograms per liter				
62070	Camphor, water, filtered, recoverable, micrograms per liter				
62071	Carbazole, water, filtered, recoverable, micrograms per liter				
62072	Cholesterol, water, filtered, recoverable, micrograms per liter				
62073	D-Limonene, water, filtered, recoverable, micrograms per liter				
62075	Hexahydrohexamethyl cyclopentabenzopyran, water, filtered, recoverable, micrograms per liter				
62076	Indole, water, filtered, recoverable, micrograms per liter				
62077	Isoborneol, water, filtered, recoverable, micrograms per liter				
62078	Isopropylbenzene, water, filtered, recoverable, micrograms per liter				
62079	isoquinoline, water, filtered, recoverable, micrograms per liter				
62080	Menthol, water, filtered, recoverable, micrograms per liter				
62081	Methyl salicylate, water, filtered, recoverable, micrograms per liter				
62082	DEET, water, filtered, recoverable, micrograms per liter				
62083	Diethoxynonylphenol, water, filtered, recoverable, micrograms per liter				
62084	p-Cresol, water, filtered, recoverable, micrograms per liter				
62085	4-Nonylphenol, water, filtered, recoverable, micrograms per liter				
62086	beta-Stigmasterol, water, filtered, recoverable, micrograms per liter				
62087	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, micrograms per liter				
62088	Tris(dichloroisopropyl) phosphate, water, filtered, recoverable, micrograms per liter				
62089	Tributyl phosphate, water, filtered, recoverable, micrograms per liter				
62090	Triclosan, water, filtered, recoverable, micrograms per liter				
62091	Triethyl citrate, water, filtered, recoverable, micrograms per liter				
62092	Triphenyl phosphate, water, filtered, recoverable, micrograms per liter				
62093	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, micrograms per liter				
62166	Fipronil, water, filtered, recoverable, micrograms per liter				
62167	Fipronil sulfide, water, filtered, recoverable, micrograms per liter				
62168	Fipronil sulfone, water, filtered, recoverable, micrograms per liter				
62169	Desulfnylfipronil amide, water, filtered, recoverable, micrograms per liter				
62170	Desulfnylfipronil, water, filtered, recoverable, micrograms per liter				
62854	Total nitrogen, (NH3+NO2+NO3+Organic), filtered, milligrams per liter	6			
63790	Perchlorate, water, filtered, recoverable, micrograms per liter				
70300	Residue on evaporation, dried at 180 degrees Celsius, water, filtered, milligrams per liter	1500	459	536	610
70301	Residue, water, filtered, sum of constituents, milligrams per liter		450	533	628

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells  
Well Nos. 203, 210, and 234  
2012**

Code	Parameter	MCL	No. 203 8/22/2012	No. 210 8/22/2012	No. 234 8/21/2012
	Sampling date				
70303	Residue, water, filtered, tons per acre-foot				
71846	Ammonia, water, filtered, milligrams per liter as NH4		< 0.013	< 0.013	< 0.013
71851	Nitrate, water, filtered, milligrams per liter	45 (q)	3.6	13.2	22
71856	Nitrite, water, filtered, milligrams per liter		< 0.003	< 0.003	< 0.003
71865	Iodide, water, filtered, milligrams per liter		0.01	0.002	0.002
71870	Bromide, water, filtered, milligrams per liter		0.226	0.15	0.273
72019	Depth to water level, feet below land surface				
73547	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, micrograms per liter				
73570	Ethyl methacrylate, water, unfiltered, recoverable, micrograms per liter				
75985	Tritium 2-sigma combined uncertainty, water, unfiltered, picocuries per liter				
76002	Rn-222, 2-sigma combined uncertainty, water, unfiltered, picocuries per liter				
77041	Carbon disulfide, water, unfiltered, micrograms per liter				
77093	cis-1,2-Dichloroethene, water, unfiltered, recoverable, micrograms per liter	6			
77103	n-Butyl methyl ketone, water, unfiltered, recoverable, micrograms per liter				
77128	Styrene, water, unfiltered, recoverable, micrograms per liter	100			
77135	o-Xylene, water, unfiltered, recoverable, micrograms per liter				
77168	1,1-Dichloropropene, water, unfiltered, recoverable, micrograms per liter				
77170	2,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter				
77173	1,3-Dichloropropane, water, unfiltered, recoverable, micrograms per liter				
77220	2-Ethyltoluene, water, unfiltered, recoverable, micrograms per liter				
77221	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter				
77222	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter				
77223	Isopropylbenzene, water, unfiltered, recoverable, micrograms per liter				
77224	n-Propylbenzene, water, unfiltered, recoverable, micrograms per liter				
77226	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, micrograms per liter				
77275	2-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter				
77277	4-Chlorotoluene, water, unfiltered, recoverable, micrograms per liter				
77297	Bromochloromethane, water, unfiltered, recoverable, micrograms per liter				
77342	n-Butylbenzene, water, unfiltered, recoverable, micrograms per liter				
77350	sec-Butylbenzene, water, unfiltered, recoverable, micrograms per liter				
77353	tert-Butylbenzene, water, unfiltered, recoverable, micrograms per liter				
77356	4-Isopropyltoluene, water, unfiltered, recoverable, micrograms per liter				
77424	Iodomethane, water, unfiltered, recoverable, micrograms per liter				
77443	1,2,3-Trichloropropane, water, unfiltered, recoverable, micrograms per liter				
77562	1,1,1,2-Tetrachloroethane, water, unfiltered, recoverable, micrograms per liter				
77613	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, micrograms per liter				
77651	1,2-Dibromoethane, water, unfiltered, recoverable, micrograms per liter				
77652	1,1,2-Trichloro-1,2,2-trifluoroethane, water, unfiltered, recoverable, micrograms per liter	0.05			
78032	Methyl tert-butyl ether, water, unfiltered, recoverable, micrograms per liter				
78109	3-Chloropropene, water, unfiltered, recoverable, micrograms per liter				
78133	Isobutyl methyl ketone, water, unfiltered, recoverable, micrograms per liter				
81555	Acetone, water, unfiltered, recoverable, micrograms per liter				
81555	Bromobenzene, water, unfiltered, recoverable, micrograms per liter				
81576	Diethyl ether, water, unfiltered, recoverable, micrograms per liter				
81577	Diisopropyl ether, water, unfiltered, recoverable, micrograms per liter				
81593	Methyl acrylonitrile, water, unfiltered, recoverable, micrograms per liter				
81595	Ethyl methyl ketone, water, unfiltered, recoverable, micrograms per liter				
81597	Methyl methacrylate, water, unfiltered, recoverable, micrograms per liter				
81607	Tetrahydrofuran, water, unfiltered, recoverable, micrograms per liter				
82081	C-13/C-12 ratio, water, unfiltered, per mil				-12.38
82082	Deuterium/Protium ratio, water, unfiltered, per mil				-62.6
82085	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil		-54.5	-73.2	
82303	Rn-222, water, unfiltered, picocuries per liter		-7.28	-9.03	-7.94

Source: USGS California Water Science Center.

**Water Quality Data for Selected RCWD Production Wells**  
**Well Nos. 203, 210, and 234**  
**2012**

Code	Parameter	MCL	No. 203 8/22/2012	No. 210 8/22/2012	No. 234 8/21/2012
	Sampling date				
82346	Ethion, water, filtered, recoverable, micrograms per liter				
82625	1,2-Dibromo-3-chloropropane, water, unfiltered, recoverable, micrograms per liter				
82630	Metribuzin, water, filtered, recoverable, micrograms per liter				
82660	2,6-Diethylaniline, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82661	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82662	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82664	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82667	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82670	Tebuthiuron, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82673	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82675	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82680	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82682	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82683	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82686	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
82687	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, micrograms per liter				
85795	m-Xylene plus p-xylene, water, unfiltered, recoverable, micrograms per liter				
90095	Specific conductance, water, unfiltered, laboratory, microsiemens per centimeter at 25 degrees Celsius		739	852	967
90851	Triholomehtanes, water, unfiltered, calcd, micrograms per liter				
90867	Triholomehtanes, water, unfiltered, calcd, micrograms per liter				
99583	Bisphenol A-d3, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery				
99584	Caffeine-13C, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery				
99585	Decafluorobiphenyl, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery				
99586	Fluoranthene-d10, surrogate, Schedule/lab code 2033/8033, water, filtered, percent recovery				
99832	1,2-Dichloroethane-d4, surrogate, Schedule 2090, water, unfiltered, percent recovery				
99833	Toluene-d8, surrogate, Schedule 2090, water, unfiltered, percent recovery				
99834	1-Bromo-4-fluorobenzene, surrogate, VOC schedules, water, unfiltered, percent recovery				
99994	Diazinon-d10, surrogate, Schedule 2003, water, filtered, percent recovery				
99995	alpha-HCH-d6, surrogate, Schedule 2003, water, filtered, percent recovery				

Notes:

- U.S. EPA STORET numbers for MCLs correspond to the same as the USGS NWIS data parameter number except as follows:
- (a) MCL shown for U.S. EPA STORET No. 620.
  - (b) MCL shown for U.S. EPASTORET No. 951.
  - (c) MCL shown for U.S. EPA STORET No. 1002.
  - (d) MCL shown for U.S. EPA STORET No. 1007.
  - (e) MCL shown for U.S. EPA STORET No. 1012.
  - (f) MCL shown for U.S. EPA STORET No. 1027.
  - (g) MCL shown for U.S. EPA STORET No. 1034.
  - (h) MCL shown for U.S. EPA STORET No. 1042.
  - (i) MCL shown for U.S. EPA STORET No. 1059.
  - (j) MCL shown for U.S. EPA STORET No. 1067.
  - (k) MCL shown for U.S. EPASTORET No. 1077.
  - (l) MCL shown for U.S. EPA STORET No. 1092.
  - (m) MCL shown for U.S. EPA STORET No. 1097.
  - (n) MCL shown for U.S. EPA STORET No. 1105.
  - (o) MCL shown for U.S. EPA STORET No. 1147.
  - (p) MCL shown for U.S. EPA STORET No. 34247.
  - (q) MCL shown for U.S. EPA STORET No. 71850.

Code--Data parameter number used in USGS National Water Information System (NWIS).

E--Estimated.

MI--Presence verified but not quantified.

MCL--Maximum Contaminant Level reported by California DHS (May 25, 2007 Database) for U.S. EPA STORET number.

V--Biased results from contamination.



**ANNUAL REPORT**

**COOPERATIVE WATER RESOURCE  
MANAGEMENT AGREEMENT**

**CALENDAR YEAR 2017**

**APPENDIX F**

**WATER QUALITY DATA FOR  
MWD AQUEDUCT NO. 5 DISCHARGE AT OUTLET WR-34**





**Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34  
RCWD Water Quality Sampling Station No. WR-34  
Data Collected by RCWD**

Parameter	WR-34 5/30/2012	WR-34 7/12/2012	WR-34 8/28/2012	WR-34 9/18/2012	WR-34 11/1/2012	WR-34 12/21/2012	WR-34 1/24/2013
Sampling Date							
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	470	390	350	390	310	320	330
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Ammonia, milligrams per liter as nitrogen							
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO3, milligrams per liter	130		100		100	96	100
Carbonate as CO3, milligrams per liter	< 3.0		< 3.0		< 3.0	< 3.0	< 3.0
Chloride, milligrams per liter							
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0		< 3.0		< 3.0	< 3.0	< 3.0
Inorganic Nitrogen, milligrams per liter		< 0.2	< 0.2	< 0.2	< 0.2	< 0.20	< 1.0
Kjeldahl Nitrogen, milligrams per liter	0.48	0.41	0.23	0.58	0.35	0.32	0.28
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	< 0.20	< 0.20	< 0.20	< 0.20	0.27	< 0.20	< 1.0
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen (Total), milligrams per liter		0.41		0.58			
Organic Nitrogen, milligrams per liter		0.4		0.6			
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.050	< 0.050
Perchlorate, micrograms per liter							
Phosphorus (Total), milligrams per liter		< 0.05					
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter							
Thalium, micrograms per liter							
Total Alkalinity as CaCO3, milligrams per liter	100		84		82	79	85
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter							

**Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34  
RCWD Water Quality Sampling Station No. WR-34  
Data Collected by RCWD**

Parameter	WR-34 2/11/2013	WR-34 3/5/2013	WR-34 4/12/2013	WR-34 5/15/2013	WR-34 6/12/2013	WR-34 7/11/2013	WR-34 8/6/2013
Sampling Date							
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	390	350	480	500	620	580	710
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10
Ammonia, milligrams per liter as nitrogen							
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	110	110	130	130	140	140	59
Carbonate as CO <sub>3</sub> , milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloride, milligrams per liter							
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Inorganic Nitrogen, milligrams per liter	< 0.20	0.27	< 0.20	0.20	0.20	< 0.20	< 0.20
Kjeldahl Nitrogen, milligrams per liter	0.20	0.79	< 0.10	0.31	0.33	0.35	0.38
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	< 0.20	0.27	< 0.20	0.20	0.20	< 0.20	< 0.20
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen (Total), milligrams per liter							
Organic Nitrogen, milligrams per liter							
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Perchlorate, micrograms per liter							
Phosphorus (Total), milligrams per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter							
Thalium, micrograms per liter							
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	90	87	110	110	110	110	48
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter							

**Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34  
RCWD Water Quality Sampling Station No. WR-34  
Data Collected by RCWD**

Parameter	WR-34 9/11/2013	WR-34 10/3/2013	WR-34 11/14/2013	WR-34 12/12/2013	WR-34 2/7/2014	WR-34 3/14/2014	WR-34 4/16/2014
Sampling Date							
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	630	550	540	580	540	480	540
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	< 0.10	< 0.059	< 0.10	< 0.10	< 0.10	0.11	0.15
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	140	89	140	150	160	140	160
Carbonate as CO <sub>3</sub> , milligrams per liter	< 3.0	< 1.7	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloride, milligrams per liter							
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0	< 1.7	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Inorganic Nitrogen, milligrams per liter	< 0.20	< 0.11	< 0.20	< 0.20	0.23	0.35	0.57
Kjeldahl Nitrogen, milligrams per liter	0.26	0.28	0.36	0.28	0.52	0.16	0.36
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	< 0.20	< 0.11	< 0.20	< 0.20	0.23	0.24	0.42
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.017	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen (Total), milligrams per liter							
Organic Nitrogen, milligrams per liter							
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	< 0.0028	< 0.050	< 0.050	< 0.050	0.12	< 0.050
Perchlorate, micrograms per liter							
Phosphorus (Total), milligrams per liter		< 0.01					
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter							
Thalium, micrograms per liter							
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	110	73	120	120	130	120	130
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter							

**Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34  
RCWD Water Quality Sampling Station No. WR-34  
Data Collected by RCWD**

Parameter	WR-34 5/29/2014	WR-34 6/10/2014	WR-34 8/13/2014	WR-34 9/16/2014	WR-34 10/14/2014	WR-34 11/14/2014	WR-34 12/11/2014
Sampling Date							
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	480	570	440	550	680	620	610
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter							
Ammonia, milligrams per liter as nitrogen	< 0.10	0.47	< 0.10	< 0.10	< 0.10	0.14	< 0.059
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	140	150	120	140	140	150	150
Carbonate as CO <sub>3</sub> , milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.7
Chloride, milligrams per liter							
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 1.7
Inorganic Nitrogen, milligrams per liter	0.24	0.47	< 0.20	< 0.20	< 0.20	< 0.20	< 0.11
Kjeldahl Nitrogen, milligrams per liter	0.37	0.41	0.38	0.26	0.29	0.39	0.20
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	0.24	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.11
Nitrite Nitrogen, milligrams per liter	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.046
Nitrogen (Total), milligrams per liter							
Organic Nitrogen, milligrams per liter							
Ortho Phosphate Phosphorus, milligrams per liter	< 0.050	0.055	0.068	< 0.050	< 0.050	< 0.050	< 0.0028
Perchlorate, micrograms per liter							
Phosphorus (Total), milligrams per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter							
Thallium, micrograms per liter							
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	110	120	98	120	120	120	130
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter							

**Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34  
RCWD Water Quality Sampling Station No. WR-34  
Data Collected by RCWD**

Parameter	WR-34 1/13/2015	WR-34 3/12/2015	WR-34 4/15/2015	WR-34 5/19/2015	WR-34 6/10/2015	WR-34 7/16/2015	WR-34 8/13/2015
Sampling Date							
Dissolved Oxygen, milligrams per liter							
pH, standard units							
Total Dissolved Solids, milligrams per liter	600	680	660	510	500	600	640
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius							
Temperature, water, degrees Celsius							
Aluminum, micrograms per liter	< 0.059	< 0.059	< 0.059	< 0.059	< 0.059	< 0.059	< 0.059
Ammonia, milligrams per liter as nitrogen							
Antimony, micrograms per liter							
Arsenic, micrograms per liter							
Barium, micrograms per liter							
Beryllium, micrograms per liter							
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	160	150	150	150	140	140	150
Carbonate as CO <sub>3</sub> , milligrams per liter	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
Chloride, milligrams per liter							
Cyanide, milligrams per liter							
Fluoride, milligrams per liter							
Hydroxide as OH, milligrams per liter	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
Inorganic Nitrogen, milligrams per liter	0.22	< 0.11	0.32	0.26	< 0.11	< 0.11	< 0.2
Kjeldahl Nitrogen, milligrams per liter	0.32	0.31	0.37	0.53	0.39	0.35	0.24
Lead, micrograms per liter							
Mercury, micrograms per liter							
Nickel, micrograms per liter							
Nitrate Nitrogen, milligrams per liter	0.22	< 0.11	0.32	0.26	< 0.11	< 0.11	< 0.11
Nitrite Nitrogen, milligrams per liter	< 0.046	< 0.046	< 0.046	< 0.046	< 0.046	< 0.046	< 0.046
Nitrogen (Total), milligrams per liter							
Organic Nitrogen, milligrams per liter							
Ortho Phosphate Phosphorus, milligrams per liter	< 0.0028	< 0.0028	< 0.0028	< 0.0028	< 0.0028	< 0.0028	< 0.0028
Perchlorate, micrograms per liter							
Phosphorus (Total), milligrams per liter							
Selenium, micrograms per liter							
Silver, micrograms per liter							
Sulfate, milligrams per liter							
Thalium, micrograms per liter							
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	130	120	120	120	110	120	120
Total Chromium, micrograms per liter							
Total Suspended Solids, milligrams per liter							



**Water Quality Data for MWD Aqueduct No. 5 Discharge at Outlet WR-34  
RCWD Water Quality Sampling Station No. WR-34  
Data Collected by RCWD**

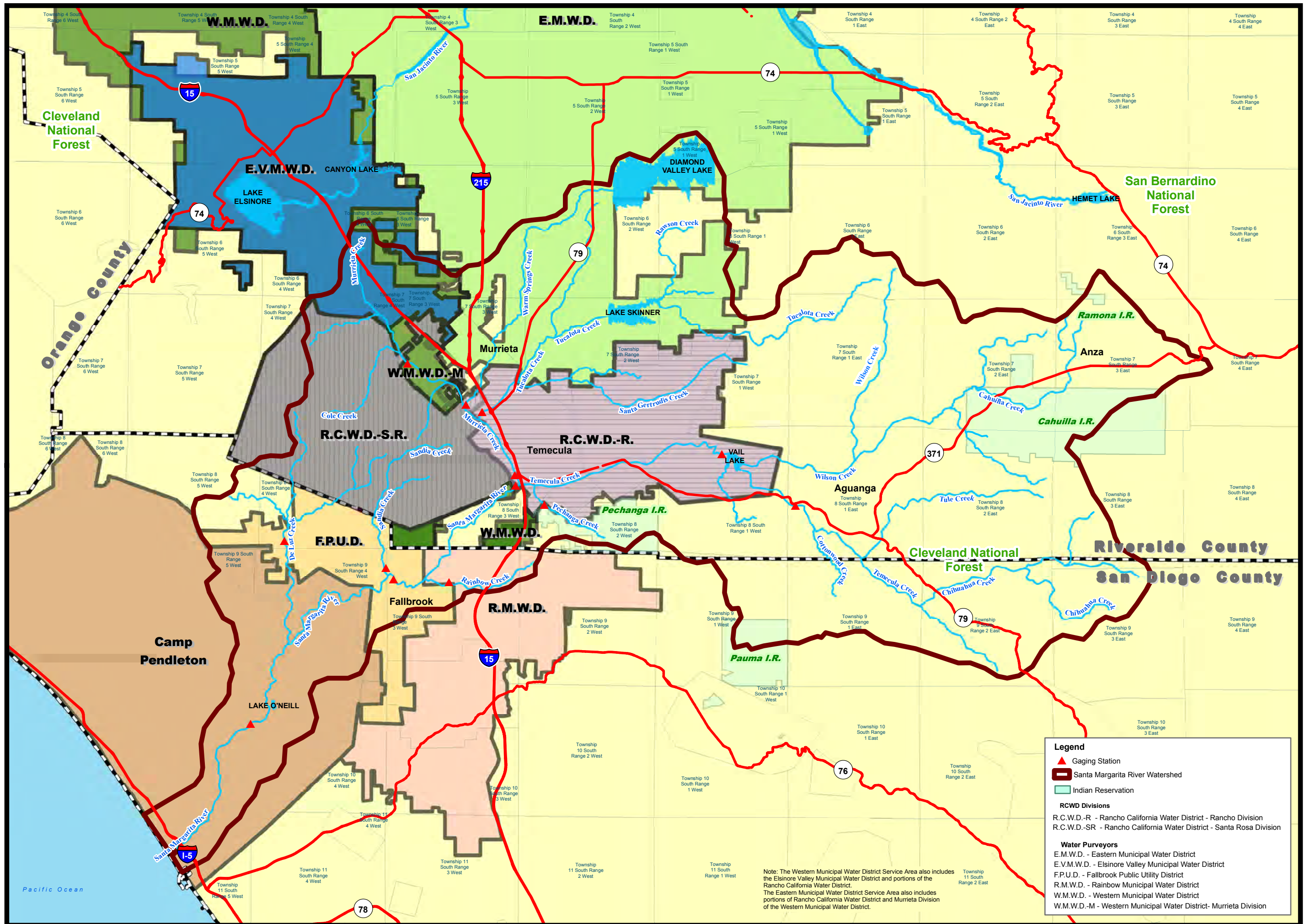
Parameter	WR-34 9/16/2015	WR-34 10/9/2015	WR-34 11/19/2015	WR-34 12/10/2015	WR-35 1/17/2017
Sampling Date					
Dissolved Oxygen, milligrams per liter					
pH, standard units					
Total Dissolved Solids, milligrams per liter	640	620	690	610	640
Specific Conductance, microsiemens per centimeter at 25 degrees Celsius					
Temperature, water, degrees Celsius					
Aluminum, micrograms per liter	< 0.059	< 0.059	< 0.059	< 0.072	< 0.048
Ammonia, milligrams per liter as nitrogen					
Antimony, micrograms per liter					
Arsenic, micrograms per liter					
Barium, micrograms per liter					
Beryllium, micrograms per liter					
Bicarbonate as HCO <sub>3</sub> , milligrams per liter	160	140	150	150	150
Carbonate as CO <sub>3</sub> , milligrams per liter	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
Chloride, milligrams per liter					
Cyanide, milligrams per liter					
Fluoride, milligrams per liter					
Hydroxide as OH, milligrams per liter	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7
Inorganic Nitrogen, milligrams per liter	< 0.2	< 0.2	0.2	0.2	0.2
Kjeldahl Nitrogen, milligrams per liter	0.23	0.43	0.39	0.33	0.34
Lead, micrograms per liter					
Mercury, micrograms per liter					
Nickel, micrograms per liter					
Nitrate Nitrogen, milligrams per liter	< 0.11	< 0.11	< 0.11	0.20	0.24
Nitrite Nitrogen, milligrams per liter	< 0.046	< 0.046	< 0.046	< 0.017	< 0.042
Nitrogen (Total), milligrams per liter					
Organic Nitrogen, milligrams per liter					
Ortho Phosphate Phosphorus, milligrams per liter	< 0.0028	< 0.0028	< 0.0028	< 0.0028	< 0.0024
Perchlorate, micrograms per liter					
Phosphorus (Total), milligrams per liter					
Selenium, micrograms per liter					
Silver, micrograms per liter					
Sulfate, milligrams per liter					
Thalium, micrograms per liter					
Total Alkalinity as CaCO <sub>3</sub> , milligrams per liter	130	120	120	120	120
Total Chromium, micrograms per liter					
Total Suspended Solids, milligrams per liter					



Map Produced by:  
 Rancho California Water District  
 Geographic Information Systems  
 March 2009



1 inch = 4 miles  
 0 0.5 1 2 3 Miles



**Legend**

- Gaging Station
- Santa Margarita River Watershed
- Indian Reservation

**RCWD Divisions**

- R.C.W.D.-R - Rancho California Water District - Rancho Division
- R.C.W.D.-SR - Rancho California Water District - Santa Rosa Division

**Water Purveyors**

- E.M.W.D. - Eastern Municipal Water District
- E.V.M.W.D. - Elsinore Valley Municipal Water District
- F.P.U.D. - Fallbrook Public Utility District
- R.M.W.D. - Rainbow Municipal Water District
- W.M.W.D. - Western Municipal Water District
- W.M.W.D.-M - Western Municipal Water District- Murrieta Division

Note: The Western Municipal Water District Service Area also includes the Elsinore Valley Municipal Water District and portions of the Rancho California Water District.  
 The Eastern Municipal Water District Service Area also includes portions of Rancho California Water District and Murrieta Division of the Western Municipal Water District.

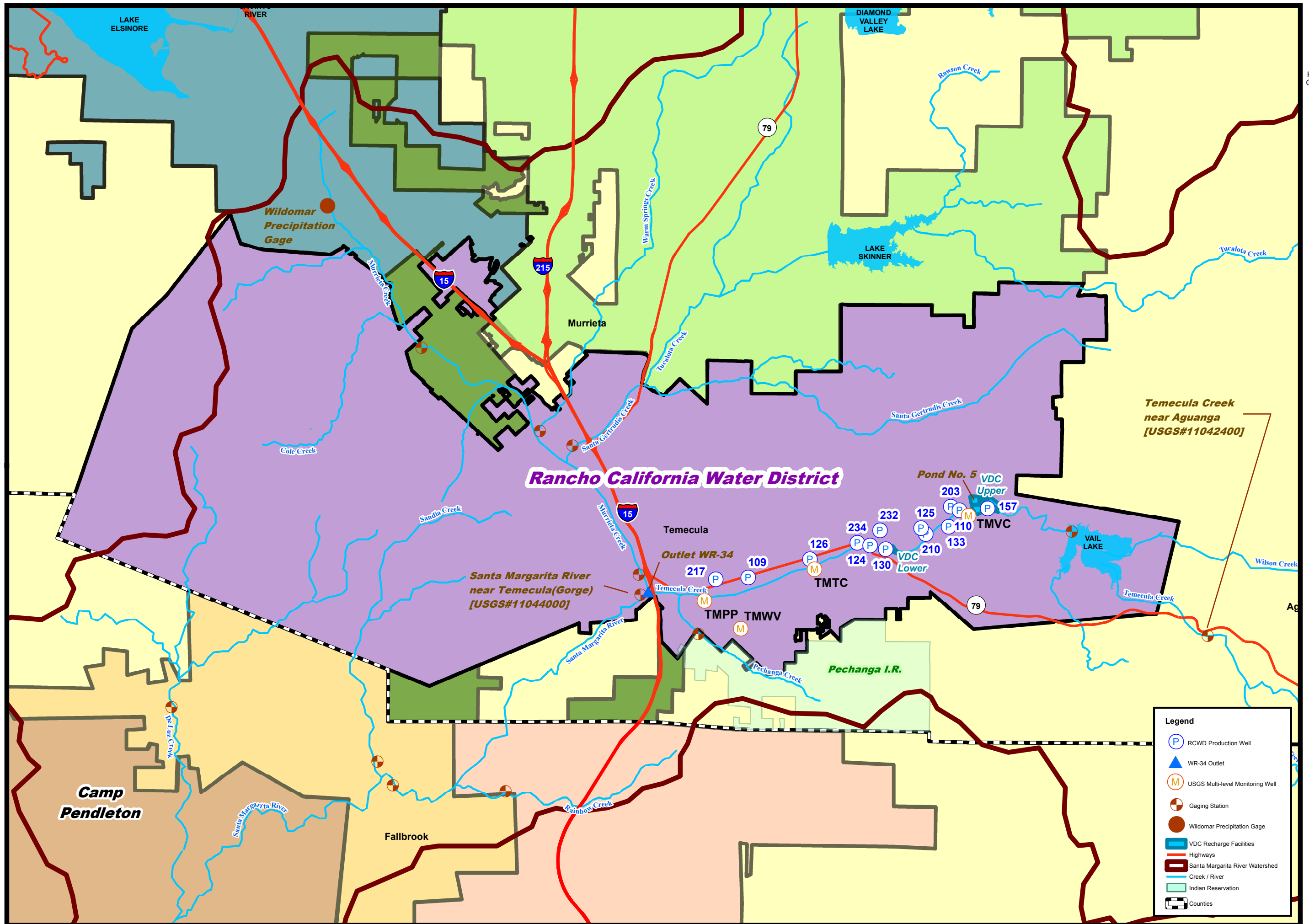
# Major Water Purveyors

## Santa Margarita River Watershed Watermaster





Map Produced by:  
 Rancho California Water District  
 Geographic Information Systems  
 February 2014



**Legend**

- RCWD Production Well
- WR-34 Outlet
- USGS Multi-Level Monitoring Well
- Gaging Station
- Wildomar Precipitation Gage
- VDC Recharge Facilities
- Highways
- Santa Margarita River Watershed
- Creek / River
- Indian Reservation
- Counties

# CWRMA Location Map