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Geologic, Hydrologic, and Water-Quality Data From Multiple-Well Monitoring Sites in the Bunker Hill and Yucaipa Groundwater Subbasins, San Bernardino County, California, 1974–2016

Data Series 1096
Version 1.1, November 2018

U.S. Department of the Interior
U.S. Geological Survey

Cover photographs:

Top: Cone Camp multiple-well monitoring site 1-6 in the Bunker Hill Subbasin. View looking east toward the San Bernardino Mountains. Seven Oaks Dam lies just beyond second well in background. Photograph taken by K.R. McPherson, U.S. Geological Survey, December 13, 2006.

Bottom: Equestrian Park multiple-well monitoring site 1-4 in the Yucaipa Subbasin. View looking northeast toward the Equestrian Park. Photograph taken by Greg Mendez, U.S. Geological Survey, March 8, 2010.

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By Gregory O. Mendez, Robert Anders, Kelly R. McPherson, and Wesley R. Danskin

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U.S. Geological Survey

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Conversion Factors, Datums, and Water-Quality Units

U.S. customary units to International System of Units

Multiply	By	To obtain
	Length	
inch (in.)	2.54	centimeter (cm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
	Area	
square mile (mi^2)	2.590	square kilometer (km^2)
	Flow	
inch per year (in/yr)	25.4	millimeter per year (mm/yr)
	Particle energy	
electron volt (eV)	1.602e–19	joule (J)

Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) as follows:

$$°F=(1.8×°C)+32$$

Temperature in degrees Fahrenheit (°F) can be converted to degrees Celsius (°C) as follows:

$$°C=(°F-32)/1.8$$

Vertical coordinate information is referenced to the North American Vertical Datum of 1988 (NAVD 88).

Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83).

Altitude of land surface, as used in this report, refers to distance above the vertical datum.

Specific conductance is given in microsiemens per centimeter at 25 degrees Celsius (µS/cm at 25 °C).

Concentrations of chemical constituents in water are given either in milligrams per liter (mg/L) or micrograms per liter (µg/L).

Results for stable isotopes in water are reported in delta notation, $\delta^{i}E$, where the ratio of the rarer isotope of an element (^{i}E) is expressed relative to the more common lighter isotope of that element, relative to a standard reference material, and expressed in per mil, except for carbon-14, which is reported in percent modern carbon (pmc).

Activities for radiogenic constituents in water are given in picocuries per liter (pCi/L).

Abbreviations

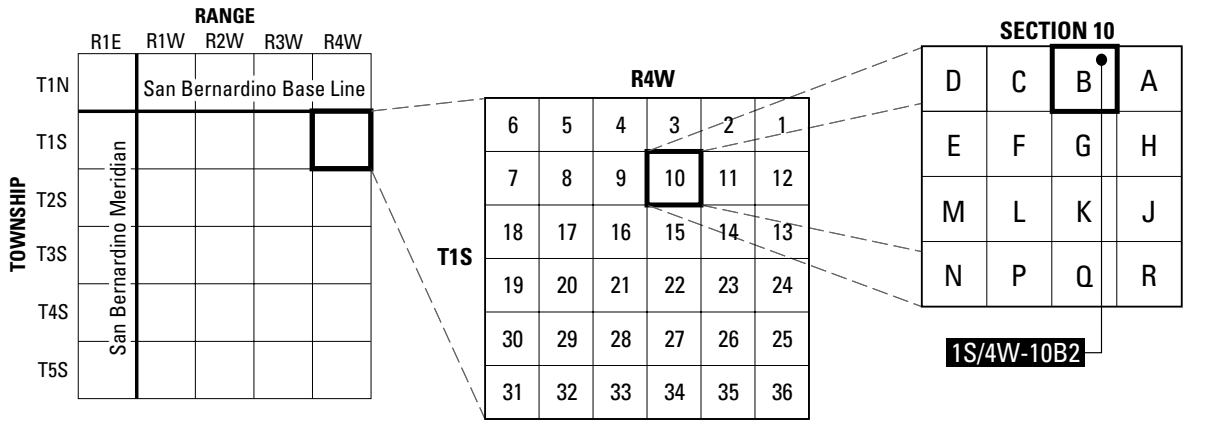
EM	electromagnetic induction
GAMA	Groundwater Ambient Monitoring and Assessment
GOES	Geostationary Operational Environmental Satellite
GPS	global positioning system
LRL	laboratory reporting level
LT-MDL	long-term method detection level

Abbreviations—Continued

MDL	method detection level
NWIS	National Water Information System
NWQL	U.S. Geological Survey National Water Quality Laboratory
OWCs	organic wastewater compounds
QA/QC	quality assurance/quality control
SD	standard deviation
SRL	study reporting level
RSD	relative standard deviation
RTK	Real Time Kinematic
USGS	U.S. Geological Survey
VOCs	volatile organic compounds
VPDB	Vienna Pee Dee Belemnite
VSMOW	Vienna Standard Mean Ocean Water

Well-Numbering System

Wells are identified and numbered according to their location in the rectangular system for the subdivision of public lands. The identification consists of the township number, north or south; the range number, east or west; and the section number. Each section is further divided into sixteen 40-acre tracts lettered consecutively (except I and O), beginning with "A" in the northeast corner of the section and progressing in a sinusoidal manner to "R" in the southeast corner. Within the 40-acre tract, wells are sequentially numbered in the order they are inventoried. The final letter refers to the base line and meridian. In California, there are three base lines and meridians: Humboldt (H), Mount Diablo (M), and San Bernardino (S). All wells in the study area are referenced to the San Bernardino base line and meridian (S). Well numbers consist of 15 characters and follow the format 001S004W10B002S. In this report well numbers are abbreviated and written 1S/4W-10B2. Wells in the same township and range are referred to only by their section designation, 10B2. The following diagram shows how the number for well 1S/4W-10B2 is derived.



Well-numbering diagram (Note: Maps in this report use abbreviated well numbers such as 10B2)

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By Gregory O. Mendez, Robert Anders, Kelly R. McPherson, and Wesley R. Danskin

Abstract

In 1974, the U.S. Geological Survey (USGS), in cooperation with the San Bernardino Valley Municipal Water District, initiated a study to assess the regional groundwater resources in the Bunker Hill Subbasin of the Upper Santa Ana Valley Groundwater Basin in San Bernardino County, California. The study area expanded east into the Yucaipa Subbasin in 1996. This report compiles the geologic (borehole lithology and geophysical logs) and hydrologic (water-quality and water-level) data collected from 1974–2016 for 11 multiple-well monitoring sites (48 individual wells) constructed by the USGS in the Bunker Hill (7 sites) and Yucaipa (4 sites) Groundwater Subbasins.

Approximately 240 water-quality samples from the 11 sites were analyzed for constituents including major and minor ions, nutrients, selected trace elements, organic wastewater compounds (OWCs), volatile organic compounds (VOCs), pesticides and pesticide degradates, the stable isotopes of hydrogen, oxygen, and nitrogen, and the radiogenic isotopes of tritium and carbon-14. All environmental data associated with these sites are available on the project web page for the San Bernardino Optimal Basin Management study (https://ca.water.usgs.gov/sanbern/) and the Yucaipa Valley Hydrogeology study (https://ca.water.usgs.gov/yucaipa/).

Quality-assurance blank samples were processed periodically throughout the study and show that approximately 2.4 percent of the analytical results for major and minor ions, trace elements, and nutrients, and 1.5 percent of the results for VOCs fall below the acceptable study reporting limits and therefore are censored.

Introduction

Background

The combination of increasing population, changing land and water use, and local geologic structures in the Upper Santa Ana River drainage basin has resulted in a large number of complex water-management issues including supply, recharge, water quality, and flooding. Local water purveyors are concerned about the availability and the quality of groundwater, as groundwater is the predominant water resource in the area. The U.S. Geological Survey (USGS) has been conducting a regional assessment of groundwater resources in the Upper Santa Ana River drainage basin (fig. 1) in cooperation with the San Bernardino Valley Municipal Water District. The data in this report cover groundwater monitoring in the Bunker Hill Groundwater Subbasin since 1974 and in the Yucaipa Groundwater Subbasin since 1996 (fig. 2). The USGS studies in the Bunker Hill Subbasin determined the chemical and isotopic composition of groundwater (Izbicki and others, 1998) and evaluated selected water-management alternatives using a groundwater-flow model (Danskin and others, 2005). The USGS studies in the Yucaipa Subbasin included an assessment of surface-water and groundwater quality (Mendez and others, 2001) and subsurface characterization of basement rock beneath the Yucaipa Subbasin using gravity data (Mendez and others, 2016).

Eleven multiple-well monitoring sites were constructed by the USGS from 1974 to 2004 (fig. 2). Multiple-well monitoring sites include several wells in a single borehole to collect water-quality data and groundwater-level information at different depths. The 11 multiple-well monitoring sites comprise 48 individual wells. Data associated with these sites are available on the project web page for the San Bernardino Optimal Basin Management study (https://ca.water.usgs.gov/sanbern/) and the Yucaipa Valley Hydrogeology study (https://ca.water.usgs.gov/yucaipa/).

Figure 1. Location of the study area in the Santa Ana River drainage basin, San Bernardino and Riverside Counties, California.

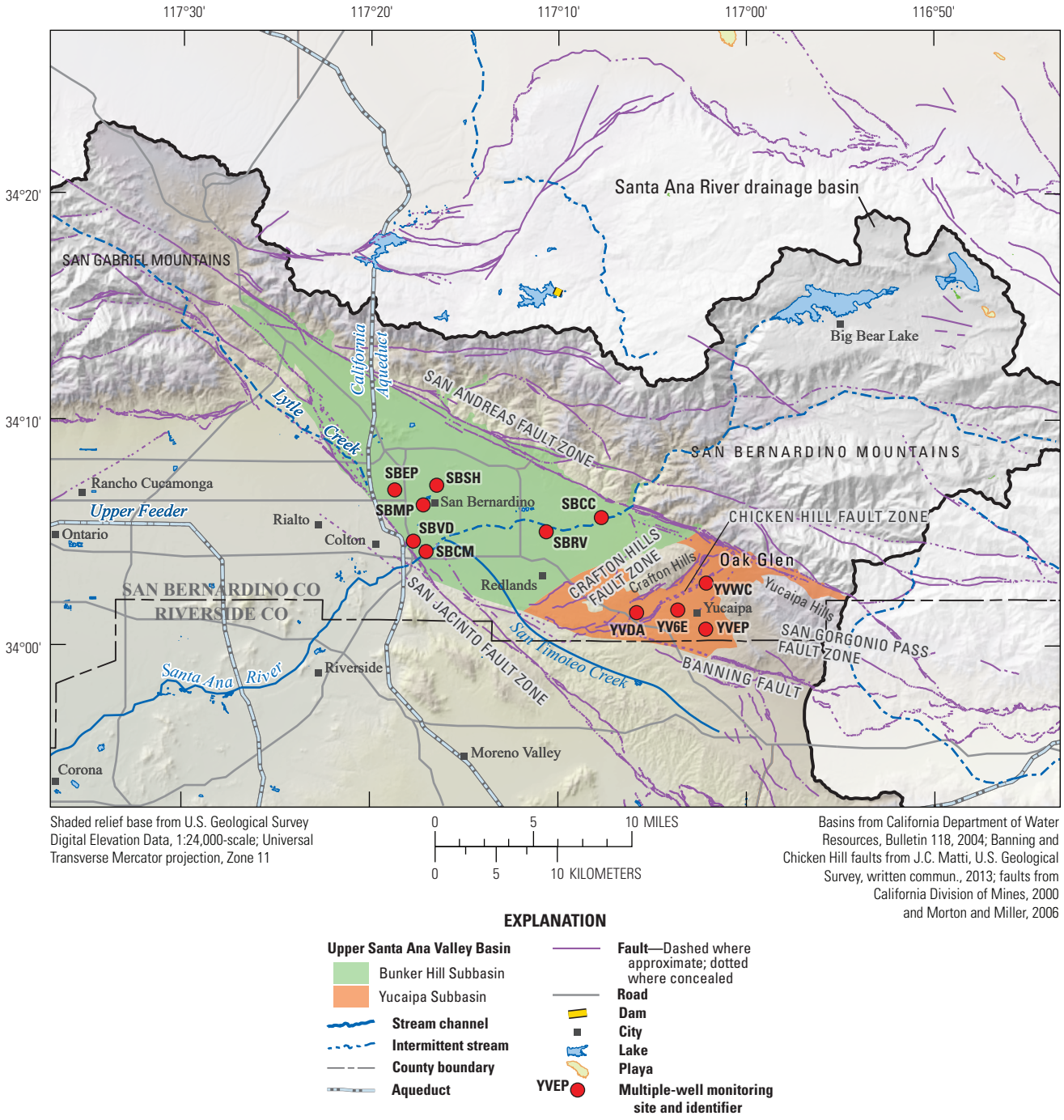


Figure 2. Locations of the 11 U.S. Geological Survey multiple-well monitoring sites and major fault zones in the Bunker Hill and Yucaipa Subbasins, San Bernardino and Riverside Counties, California.

Purpose and Scope

The purpose of this report is to present geologic (borehole lithology and geophysical logs) and hydrologic (water-quality and water-level) data collected from 1974–2016 for 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Groundwater Subbasins.

The scope of this report includes detailed descriptions of the methods and analyses used for site selection, well construction/development (coring, geophysical logging), water-quality sampling and analysis, and collection of continuous water-level data from the 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Groundwater Subbasins.

Description of Study Area

The study area is located in the upper part of the Santa Ana River drainage basin in San Bernardino and Riverside Counties, California, and includes the cities of San Bernardino, Redlands, and Yucaipa (fig. 1). The city of San Bernardino is in a semiarid inland valley of about 120 square miles (mi^2) in southwestern San Bernardino County, about 60 miles (mi) east of Los Angeles. The mountains surrounding San Bernardino ranges in altitude from about 1,000 feet (ft) near the city of San Bernardino to more than 10,000 ft in the San Bernardino Mountains. The city of Yucaipa is a smaller subbasin (33 mi^2), located 12 mi southeast of San Bernardino and has a similar climate. The hills surrounding Yucaipa range in altitude from about 3,000 ft in the Crafton Hills, to 5,000 ft along the ridge of the Yucaipa Hills. In this report, the study area refers to the Bunker Hill and the Yucaipa Subbasins (fig. 2) as defined by the California Department of Water Resources (2004).

Local climate is moderate with long, dry summers and short, wet winters. Temperatures range from daytime highs of about 90 degrees Fahrenheit (°F) during the summer to night-time lows of about 40 °F in the winter. Precipitation is nearly always in the form of rain at the lower altitudes and snow above an altitude of about 6,000 ft in the surrounding San Bernardino Mountains. Mean annual precipitation in this semiarid region averages about 11 inches per year (in/yr) in the valley and as much as 40 in/yr in the San Bernardino Mountains (PRISM Climate Group, Oregon State University, website accessed August 13, 2018, at http://prism.oregonstate.edu).

Runoff from the San Bernardino Mountains flows southward into several streams in the San Bernardino area. Seepage from the streams replenishes the valley-fill alluvial aquifer, which provides most of the water supply within the San Bernardino area. Runoff from the hills surrounding Yucaipa flows into two main stream channels that merge before entering San Timoteo Creek. San Timoteo Creek then merges with the Santa Ana River, which flows southwest through Riverside and Orange Counties, and eventually discharges to the Pacific Ocean (figs. 1 and 2).

Population and land use in the San Bernardino and Yucaipa areas have changed substantially since their development as an important citrus-growing area of southern California in the early 1900s. Beginning in about 1940, the urban population began to steadily increase as a result of increased growth in the defense industry and an increased awareness of the southern Californian climate.

Geology

Geologic maps of the entire study area include detailed descriptions and locations of faults and geologic hazards (Moreland, 1970; Matti and others, 1992, 2003; Matti and Morton, 1993; California Department of Conservation, 2000; Dibblee and Minch, 2003, 2008). Unconsolidated materials in the study area include river-channel deposits, young alluvium of Holocene age, and older alluvium of Pleistocene age. The sedimentary badlands to the south of San Bernardino and Yucaipa consist of poorly to moderately consolidated terrestrial deposits of Pleistocene and Pliocene age that have been uplifted and dissected. These sedimentary rocks that crop out in the badlands are a primary part of the San Timoteo Formation. Igneous and metamorphic rocks of Precambrian to Tertiary age underlie the basin fill in San Bernardino County and crop out in the surrounding mountain ranges (Dutcher and Garrett, 1963).

The study area contains numerous fault systems, many of which are tectonically active (fig. 2). Faults are important not only because of their influence on the general topography, but also because of their influence on the flow of groundwater. Fault zones in consolidated rocks commonly consist of fissures that may serve as conduits for groundwater flow. Conversely, faults that transect permeable unconsolidated materials may produce barriers to groundwater flow. The presence of offset beds, gouge material, sharp folds, and chemical cementation are thought to contribute to reduced permeability. For example, the San Andreas Fault along the base of the San Bernardino Mountains is known to be a barrier to groundwater flow because its trace (surface expression) in the alluvium at the mouth of nearly every canyon is marked by springs and dense vegetation. The tectonic forces in the Yucaipa area have created highly fractured, cataclastic rock, which in some places is moderately permeable. Some wells, including large municipal wells, have been completed in these fractured rocks to increase well yield.

Hydrologic Basins

On a basin-wide scale, the general movement of both surface water and groundwater is southwestward from the surrounding hills and mountains toward the coast. On a local scale, the movement of groundwater is constrained by faults and subsurface flow barriers.

The Bunker Hill Groundwater Subbasin sits between the parallel, northwest-southeast trending San Andreas and San Jacinto Fault Zones (Burnham and Dutcher, 1960; fig. 2). The area is bordered on the northwest by the San Gabriel Mountains, on the northeast by the San Bernardino Mountains, on the south by sedimentary badlands, and on the southwest by a low, east-facing escarpment of the San Jacinto Fault. Alluvial fans extend from the base of the mountains and hills that surround the Bunker Hill Subbasin and coalesce to form a broad, sloping alluvial plain in the central part of San Bernardino.

The Yucaipa Groundwater Subbasin is also located between the San Andreas and San Jacinto Faults (fig. 2) and is bordered on the west by the Crafton Hills, on the east by the Yucaipa Hills, on the north by the San Bernardino Mountains, and on the south by sedimentary badlands. Between the hills and mountains is a gently south-sloping area of unconsolidated alluvial deposits, commonly referred to as the Yucaipa plain. In the Yucaipa area, faults have dissected the groundwater basin into many subbasins that are characterized as being relatively isolated from one another (Moreland, 1970). Flow in and between subbasins is complex but can be inferred from contour maps of groundwater levels (Moreland, 1970; Todd, 1988).

Methods

Well Construction and Development

Eleven multiple-well monitoring sites were constructed by the USGS between 1974 and 2004 as part of the San Bernardino Valley Municipal Water District regional groundwater assessment (table 1). Each multiple-well monitoring site has several wells completed at different depths to monitor pressure (water-level) differences and water quality. Four multiple-well monitoring sites were constructed by the USGS Geologic Division Drilling Unit between 1974 and 1977 using mud-rotary techniques. Seven multiple-well monitoring sites were constructed by the USGS Western Region Research Drilling Unit between 1997 and 2004 also using a mud-rotary rig. One well used the ODEX method in the upper 250 ft then moved 30 ft and drilled a deeper well using the mud-rotary method.

Well construction information (date completed, borehole depth, and well screen interval) for the 11 multiple-well monitoring sites is listed in table 1. Borehole diameters vary with depth, generally ranging from 12.25 inches (in.) at land surface to 6 in. at the bottom of the hole. Several small-diameter wells (generally 2 in.) were installed at each monitoring site (figs. 3*A–K*). Prior to 1997, each well was constructed using metal; thereafter, polyvinyl chloride (PVC) pipe was used.

Table 1. Well identifiers and construction information for 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[Altitude of land surface based on North American Vertical Datum of 1988. **Abbreviations**: ft, feet; ft bls, feet below land surface; mm/dd/yyyy, month/day/year; USGS, U.S. Geological Survey]

Common well name	Station name	USGS site identification number	Date completed (mm/dd/yyyy)	Altitude of land surface (ft)	Depth of borehole (ft bls)	Depth to top of well screen (ft bls)	Depth to bottom of well screen (ft bls)
SBSH1	001S004W02D006S	340707117162706	12/14/1975	1,078.6	530	520	530
SBSH2	001S004W02D007S	340707117162707	12/14/1975	1,078.6	530	340	400
SBSH3	001S004W02D008S	340707117162708	12/14/1975	1,078.6	530	170	190
SBEP1	001S004W04E003S	340655117184003	10/23/1974	1,121.3	605	310	350
SBEP2	001S004W04E004S	340655117184004	10/23/1974	1,121.3	605	160	174
SBEP3	001S004W04E005S	340655117184005	10/23/1974	1,121.3	605	241	256
SBEP4	001S004W04E006S	340655117184006	10/23/1974	1,121.3	605	536	550
SBMP1	001S004W10B002S	340615117170902	03/01/1977	1,019.0	875	680	700
SBMP2	001S004W10B003S	340615117170903	03/01/1977	1,019.0	875	300	320
SBMP3	001S004W10B004S	340615117170904	03/01/1977	1,019.0	875	100	120
SBCC1	001S002W07Q001S	340541117074401	08/20/1997	1,638.6	799	770	790
SBCC2	001S002W07Q002S	340541117074402	08/20/1997	1,638.6	799	500	520
SBCC3	001S002W07Q003S	340541117074403	08/20/1997	1,638.6	799	280	300
SBCC4	S001S002W07Q004	340541117074404	08/20/1997	1,639.3	167	124	144
SBCC5	001S002W07Q005S	340541117074405	08/20/1997	1,639.3	167	91	101

Table 1. Well identifiers and construction information for 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[Altitude of land surface based on North American Vertical Datum of 1988. **Abbreviations**: ft, feet; ft bls, feet below land surface; mm/dd/yyyy, month/day/year; USGS, U.S. Geological Survey]

Common well name	Station name	USGS site identification number	Date completed (mm/dd/yyyy)	Altitude of land surface (ft)	Depth of borehole (ft bls)	Depth to top of well screen (ft bls)	Depth to bottom of well screen (ft bls)
SBCC6	001S002W07Q006S	340541117074406	08/20/1997	1,639.3	167	65	75
SBRV1	001S003W15K001S	340503117104101	03/03/1997	1,368.9	1,105	1,075	1,095
SBRV2	001S003W15K002S	340503117104102	03/03/1997	1,368.9	1,105	930	950
SBRV3	001S003W15K003S	340503117104103	03/03/1997	1,368.9	1,105	750	770
SBRV4	001S003W15K004S	340503117104104	03/03/1997	1,368.9	1,105	490	510
SBRV5	001S003W15K005S	340503117104105	03/03/1997	1,368.9	1,105	220	240
SBVD1	001S004W22D002S	340439117173902	10/02/1974	976.4	700	160	200
SBVD2	001S004W22D004S	340439117173904	10/02/1974	976.4	700	650	655
SBVD3	001S004W22D005S	340439117173905	10/02/1974	976.4	700	555	574
SBVD4	001S004W22D006S	340439117173906	10/02/1974	976.4	700	388	398
SBVD5	001S004W22D007S	340439117173907	07/12/1990	976.4	55	16.6	46.6
SBCM1	001S004W22J001S	340408117165301	03/22/1997	998.9	902	840	860
SBCM2	001S004W22J002S	340408117165302	03/22/1997	998.9	902	520	540
SBCM3	001S004W22J003S	340408117165303	03/22/1997	998.9	902	240	260
SBCM4	001S004W22J004S	340408117165304	03/22/1997	998.9	902	25	45
YVWC1	001S002W36A002S	340248117020901	03/02/2001	2,753.1	862.5	820	840
YVWC2	001S002W36A003S	340248117020902	03/02/2001	2,753.1	862.5	640	660
YVWC3	001S002W36A004S	340248117020903	03/02/2001	2,753.1	862.5	500	520
YVWC4	001S002W36A005S	340248117020904	03/02/2001	2,753.1	862.5	350	370
YV6E1	002S002W02F002S	340136117033901	06/04/2003	2,426.4	930.5	870	930
YV6E2	002S002W02F003S	340136117033902	06/04/2003	2,426.4	930.5	730	750
YV6E3	002S002W02F004S	340136117033903	06/04/2003	2,426.4	930.5	500	540
YV6E4	002S002W02F005S	340136117033904	06/04/2003	2,426.4	930.5	380	400
YV6E5	002S002W02F006S	340136117033905	06/04/2003	2,426.4	930.5	290	310
YVDA1	002S002W04L002S	340130117054901	05/31/2004	2,070.0	1,107	1,010	1,050
YVDA2	002S002W04L003S	340130117054902	05/31/2004	2,070.0	1,107	830	850
YVDA3	002S002W04L004S	340130117054903	05/31/2004	2,070.0	1,107	590	610
YVDA4	002S002W04L005S	340130117054904	05/31/2004	2,070.0	1,107	440	460
YVDA5	002S002W04L006S	340130117054905	05/31/2004	2,070.0	1,107	230	250
YVEP1	002S002W12H001S	340046117020801	06/10/1998	2,559.5	853	830	850
YVEP2	002S002W12H002S	340046117020802	06/10/1998	2,559.5	853	625	655
YVEP3	002S002W12H003S	340046117020803	06/10/1998	2,559.5	853	510	530
YVEP4	002S002W12H004S	340046117020804	06/10/1998	2,559.5	853	380	400

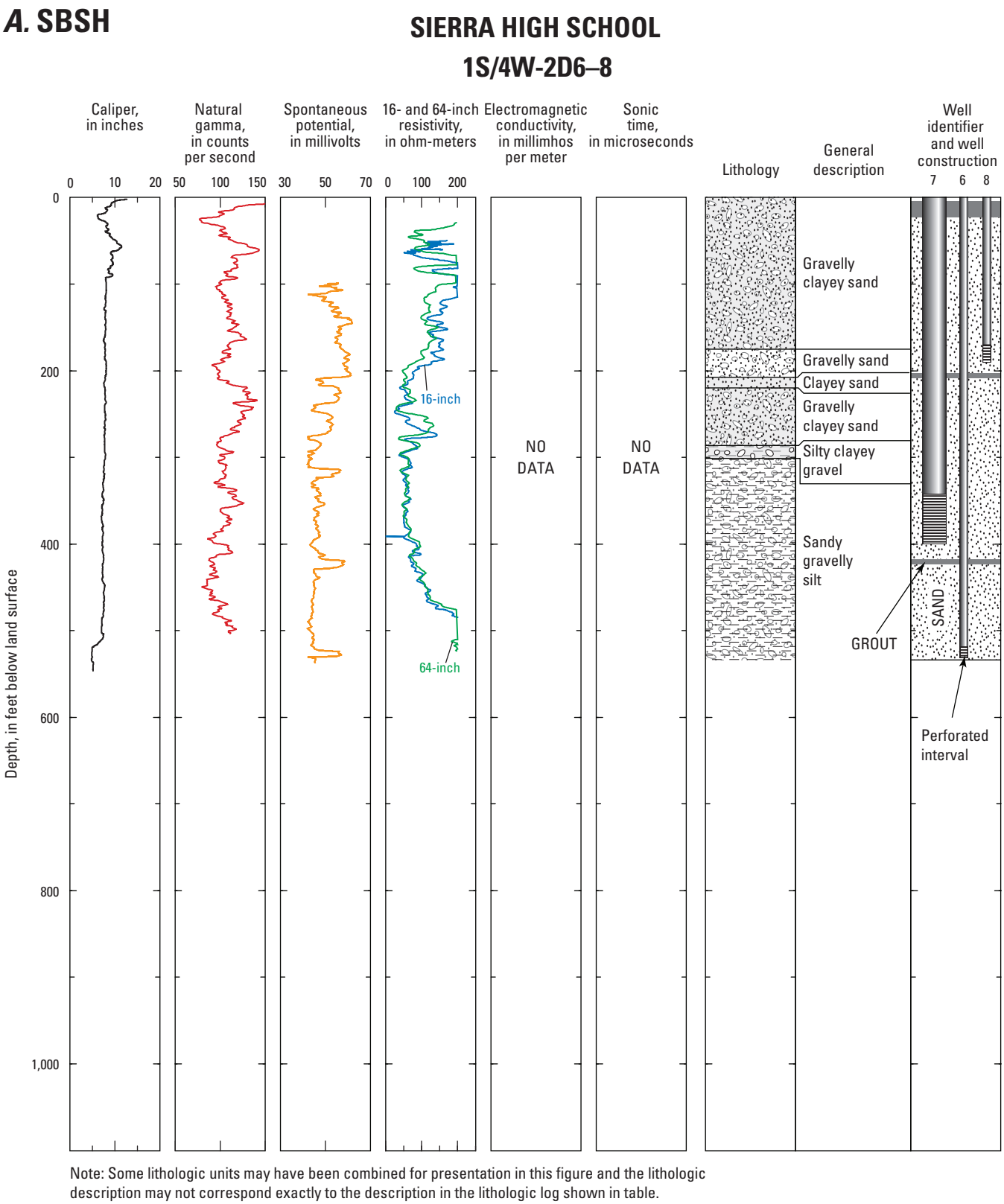
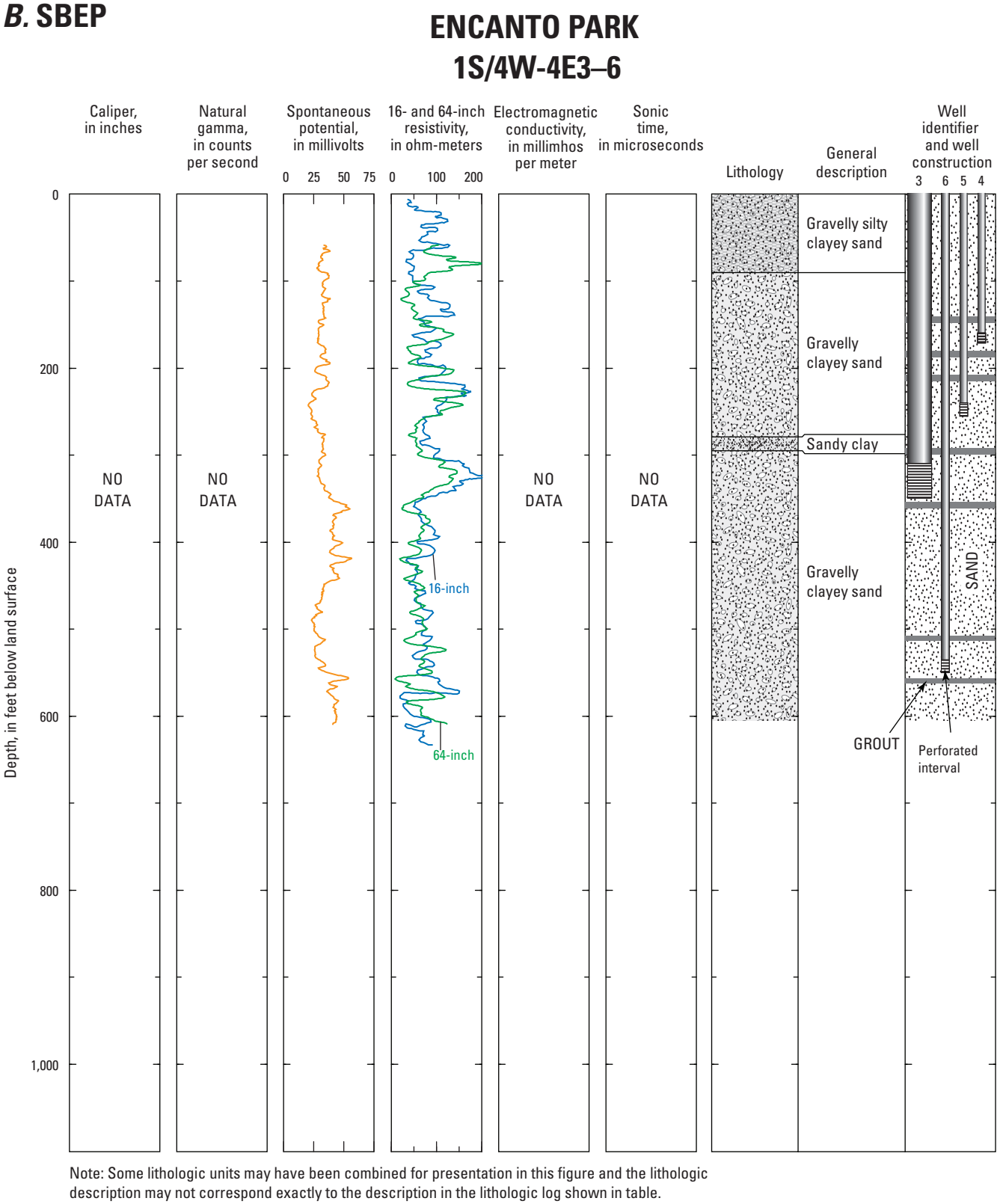


Figure 3. Well construction, lithology, and geophysical data from caliper, natural gamma, spontaneous potential, resistivity, electromagnetic conductivity, and sonic logs for 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California: *A*, SBSH; *B*, SBEP; *C*, SBMP; *D*, SBCC; *E*, SBRV; *F*, SBVD; *G*, SBCM; *H*, YVWC; *I*, YV6E; *J*, YVDA; and *K*, YVEP.

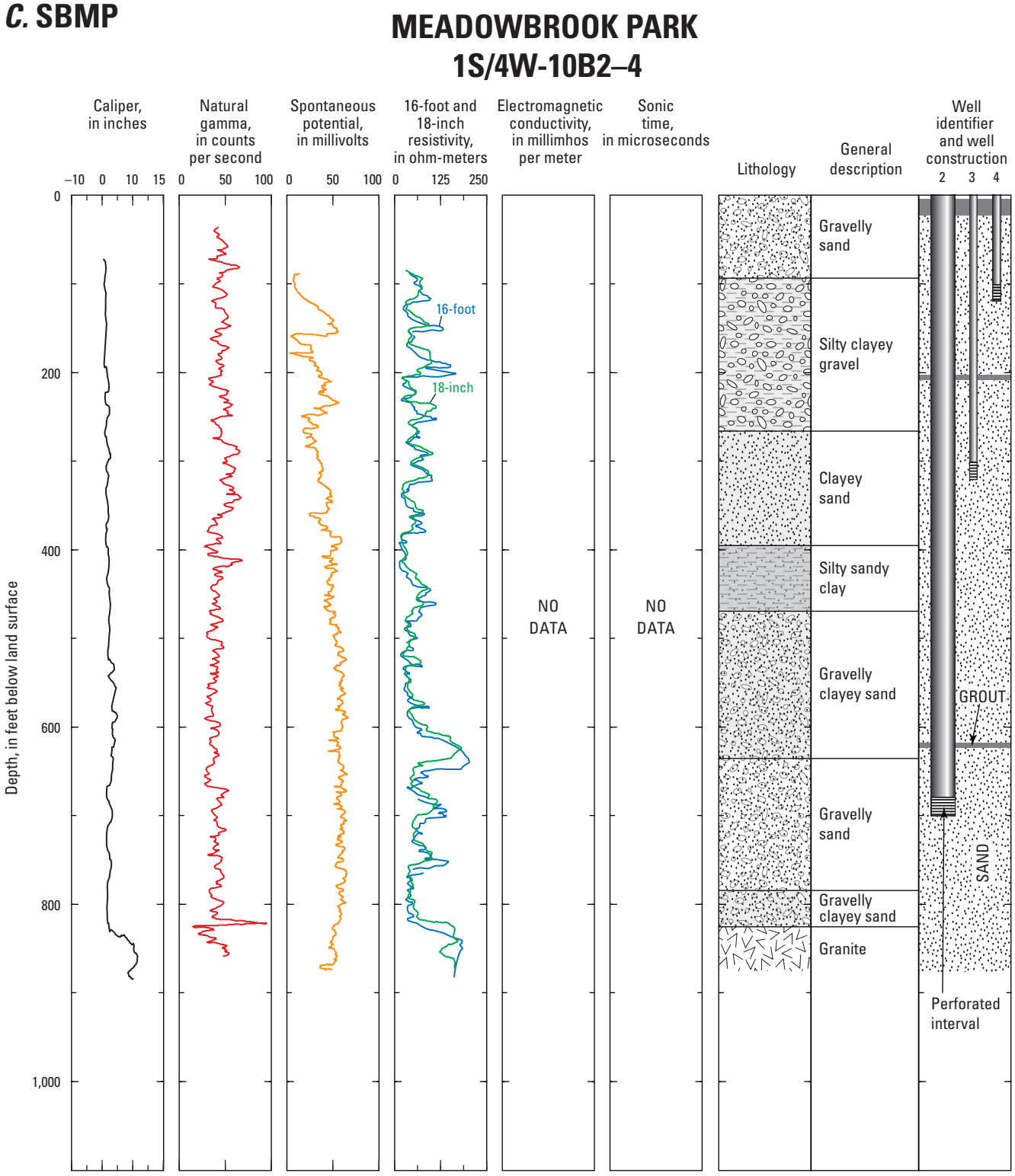
B. SBEP



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

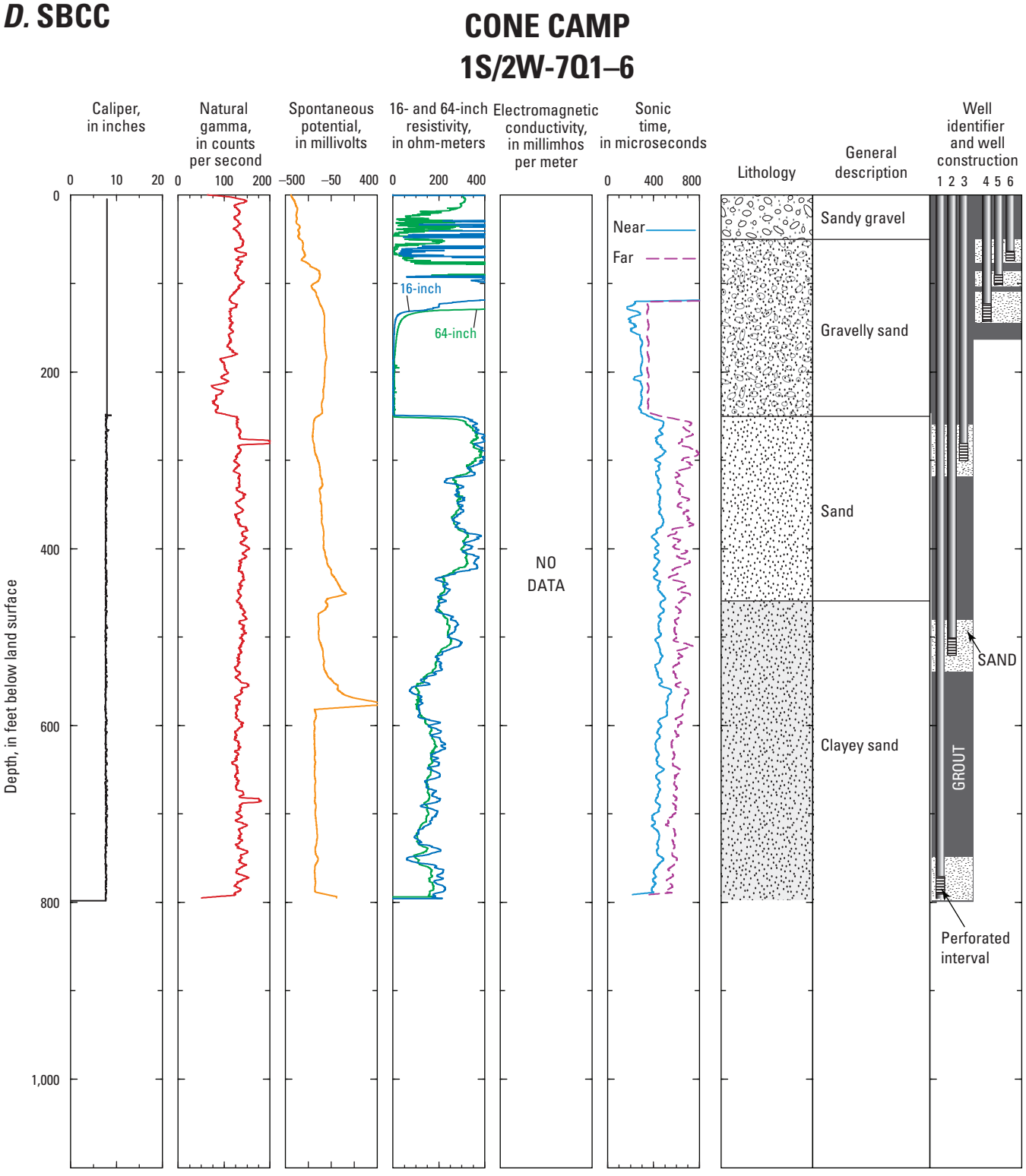
C. SBMP



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

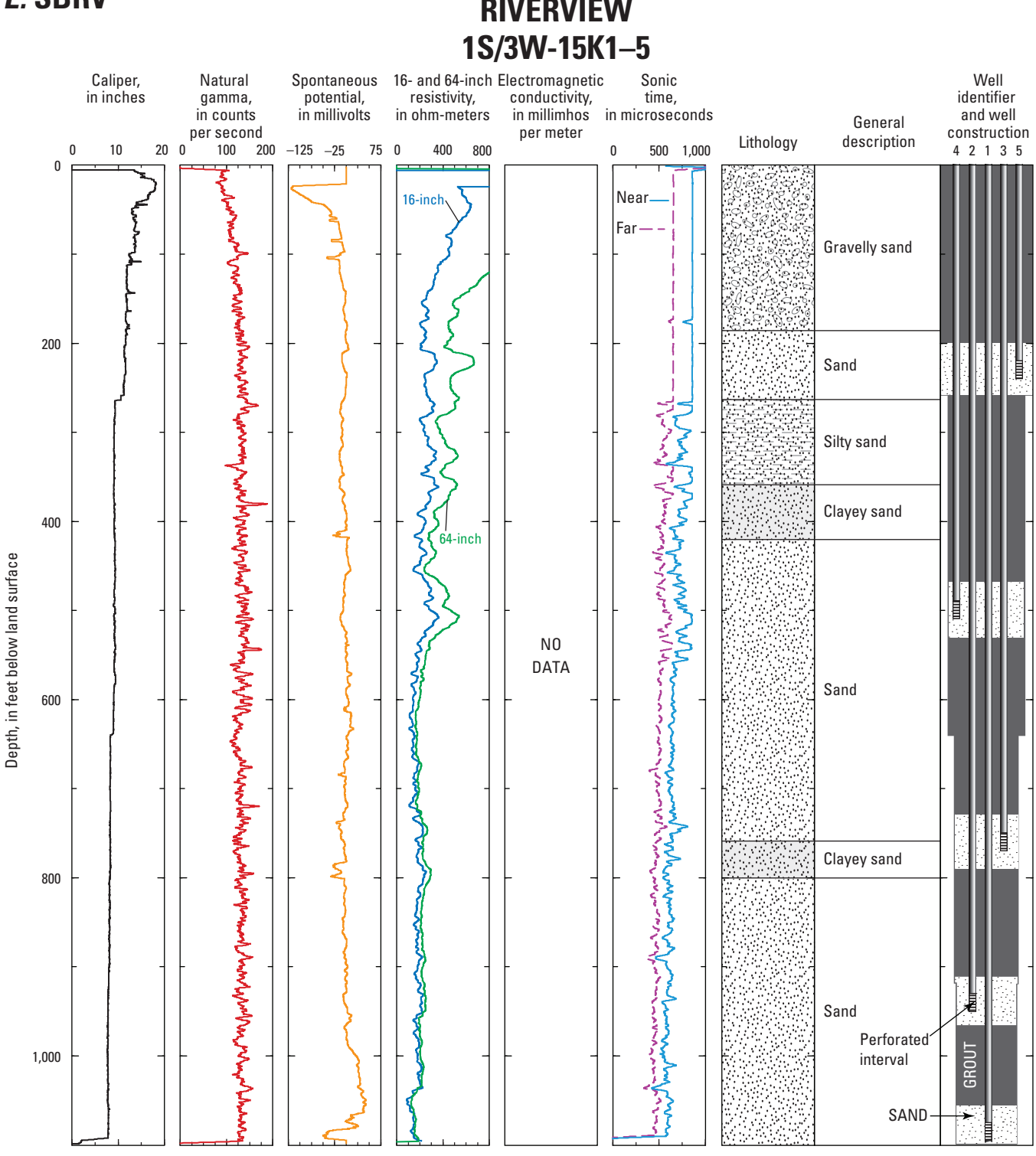
D. SBCC



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

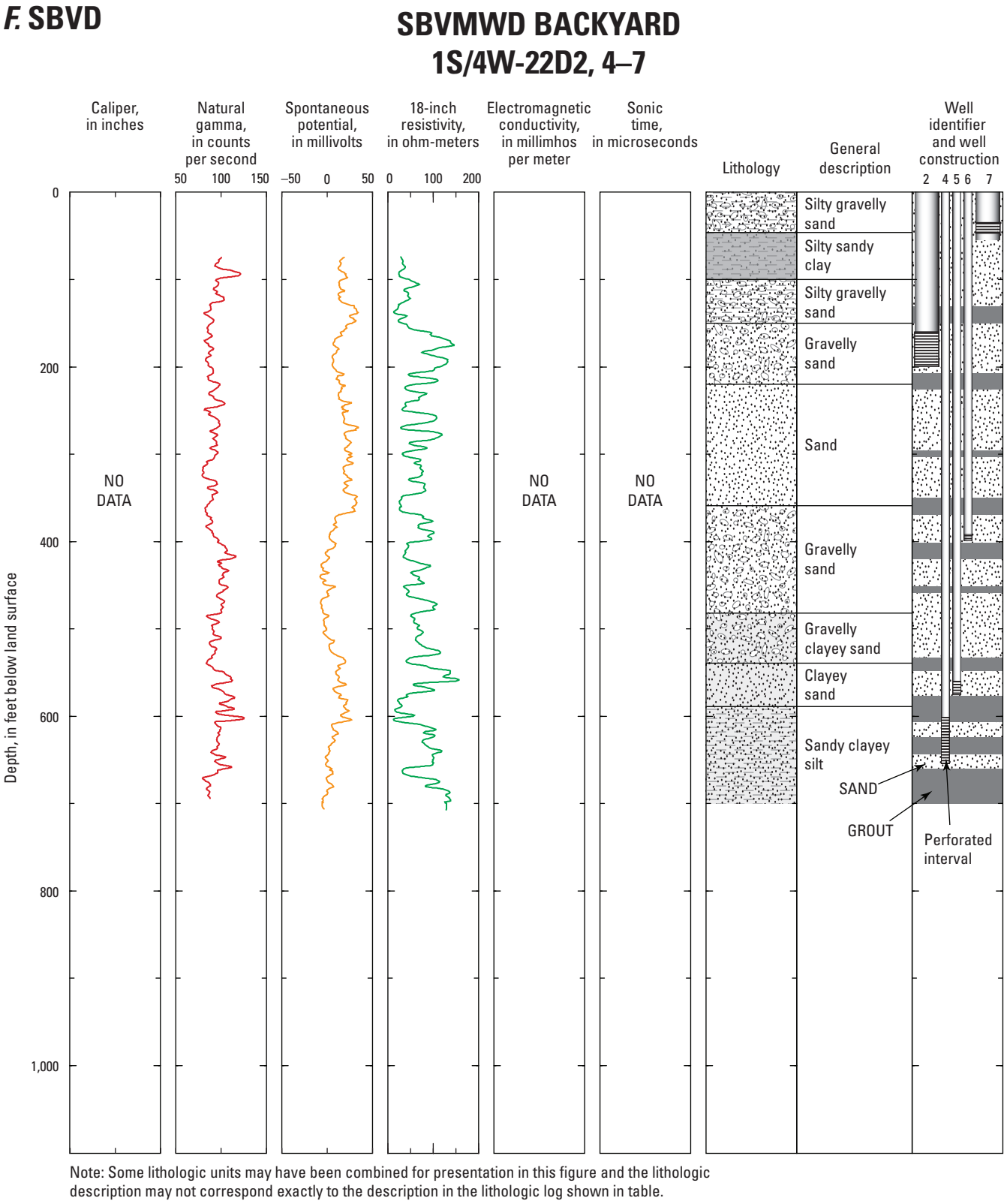
E. SBRV



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

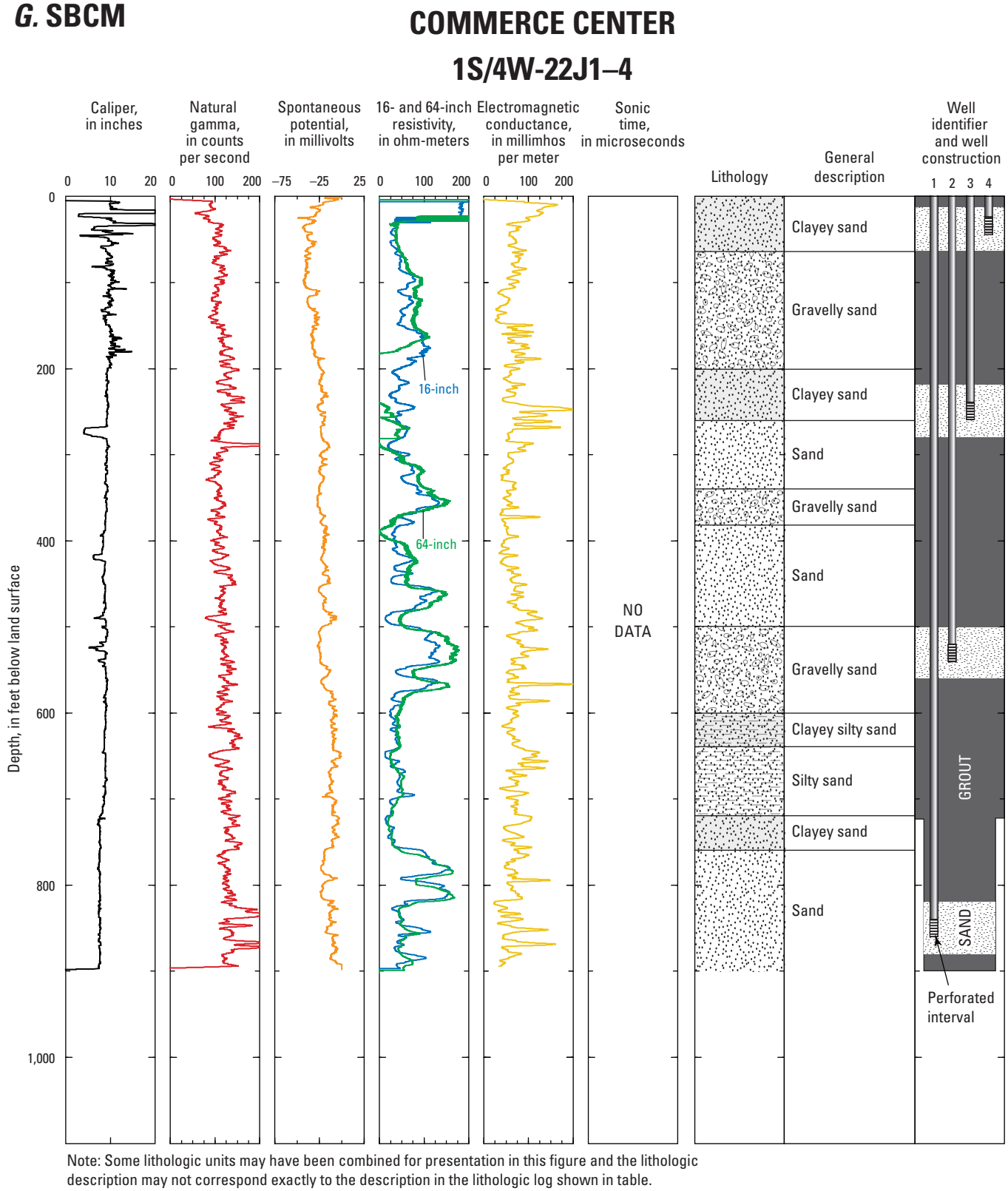
F. SBVD



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

G. SBCM

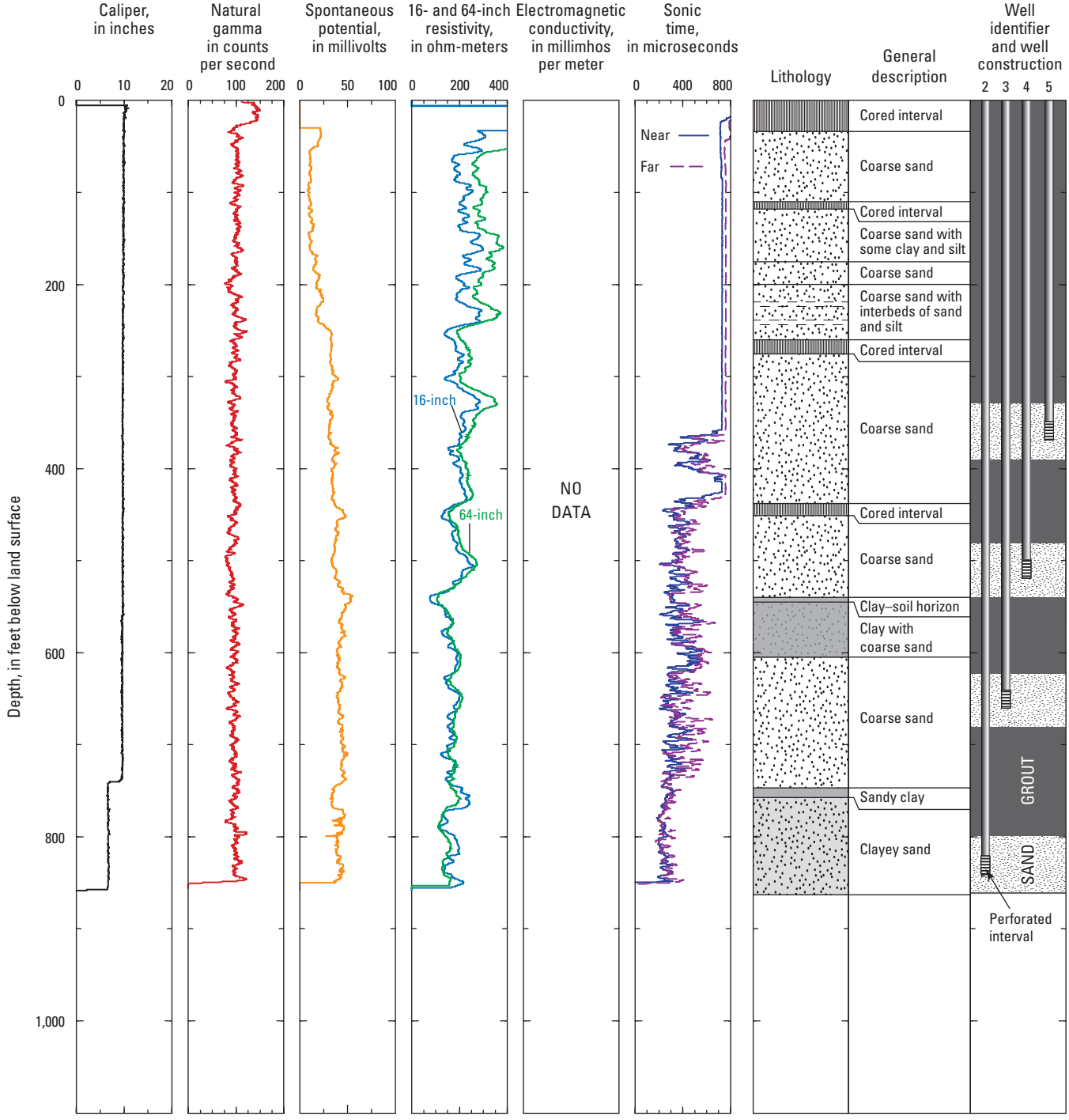


Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

H. YVWC

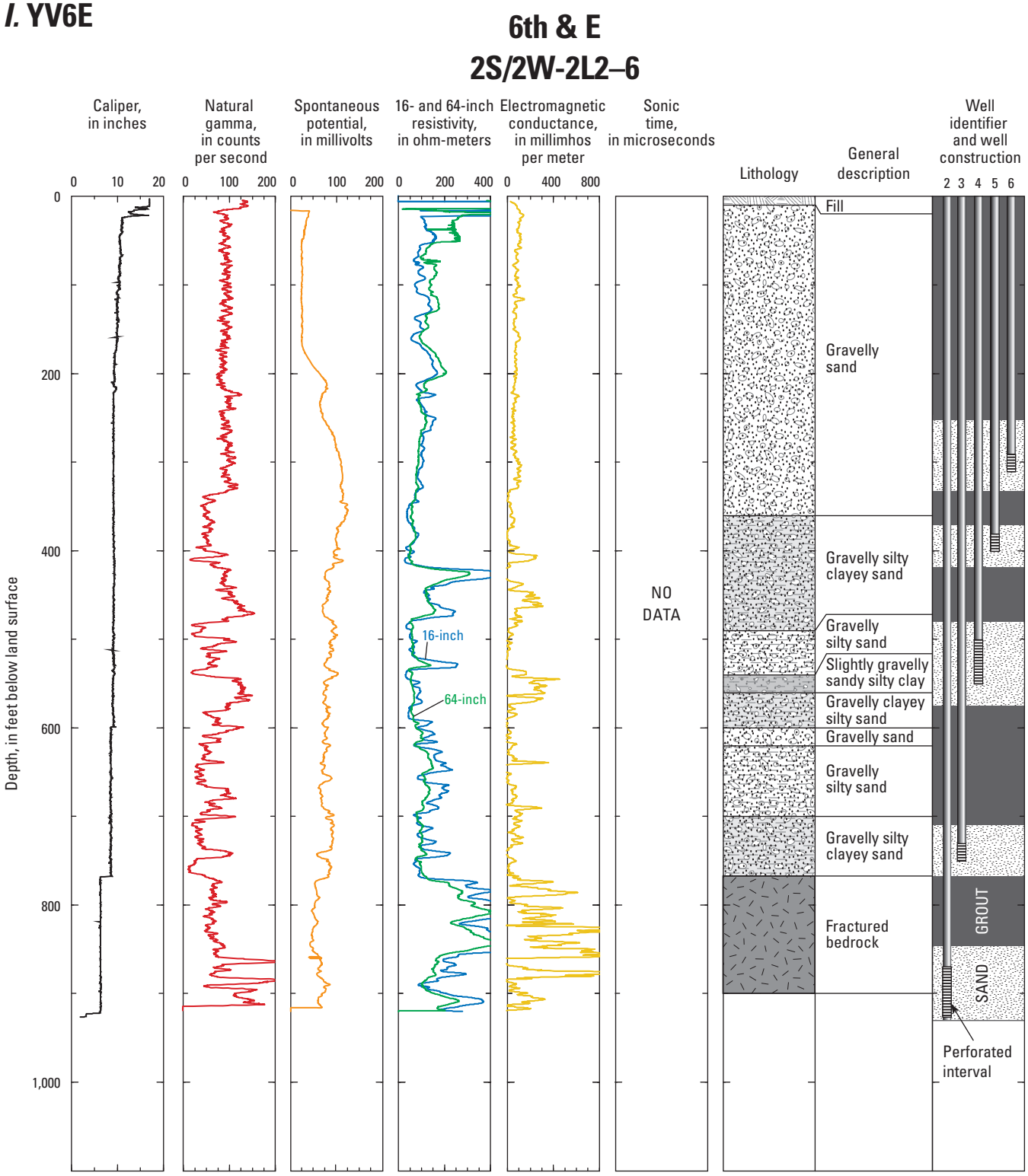
WILSON CREEK
1S/2W-36A2–5



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

I. YV6E

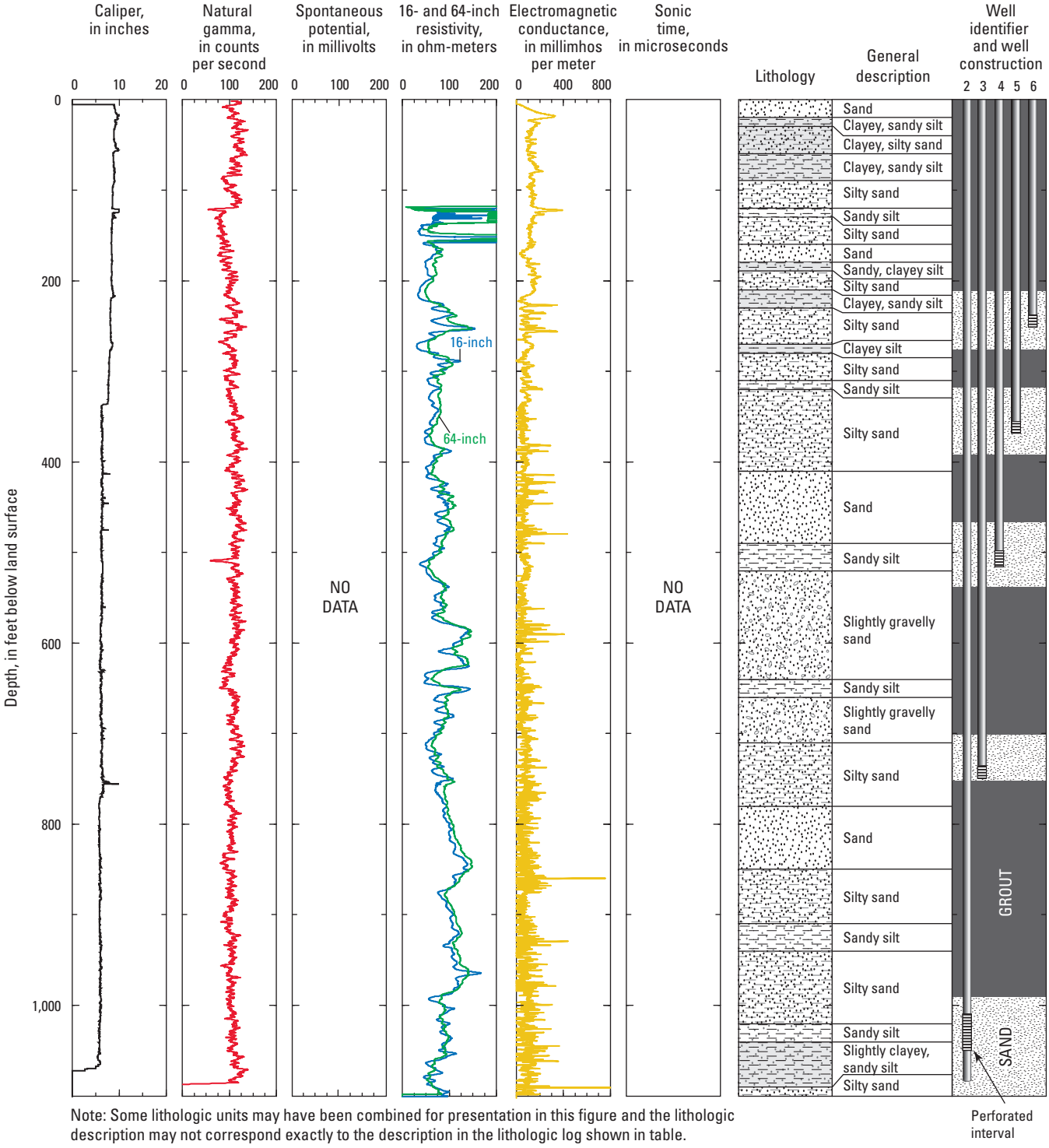


Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

J. YVDA

Dunlap Acres
2S/2W-4L2–6

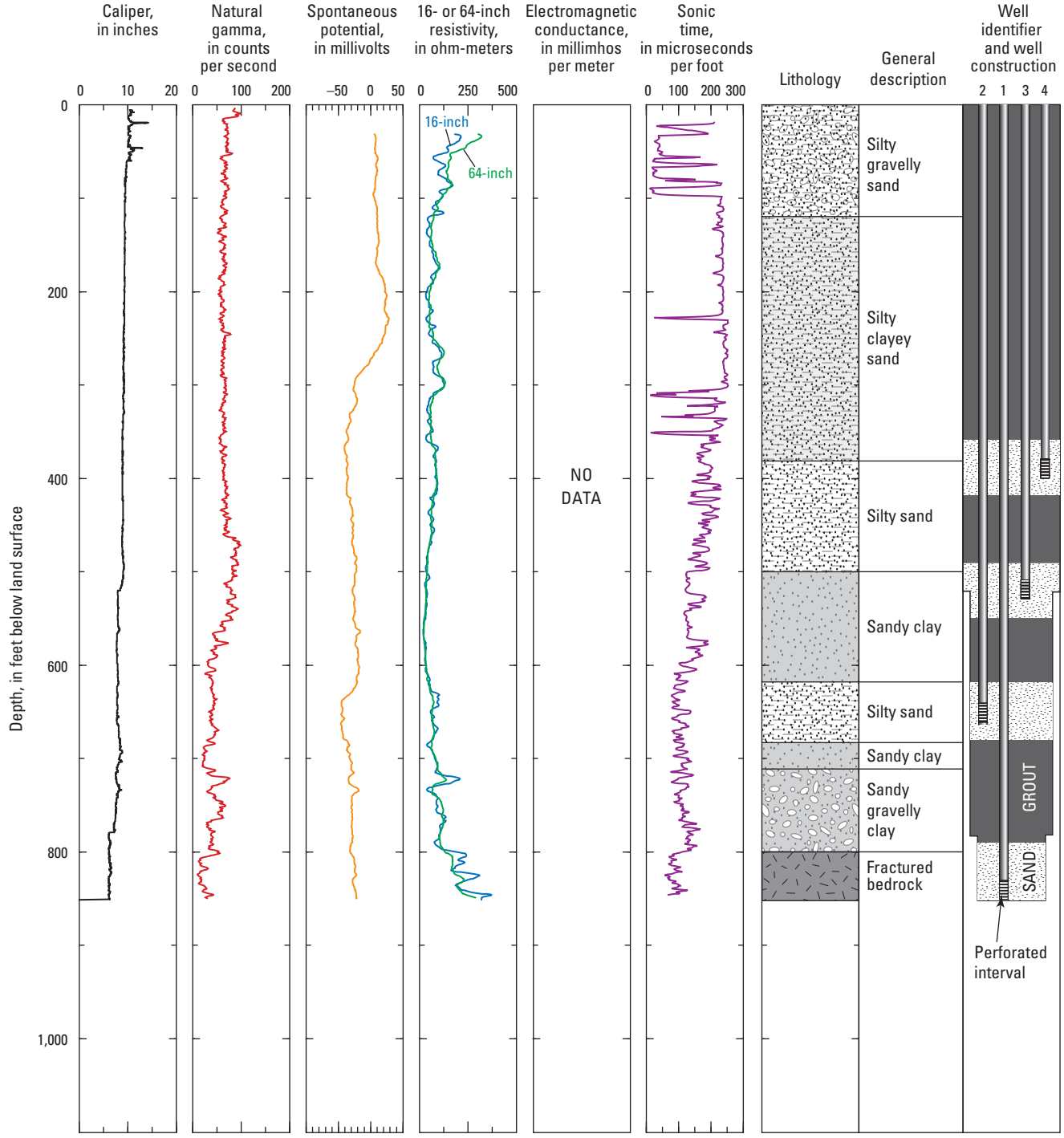


Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

K. YVEP

EQUESTRIAN PARK
2S/2W-12H1–4



Note: Some lithologic units may have been combined for presentation in this figure and the lithologic description may not correspond exactly to the description in the lithologic log shown in table.

Figure 3. —Continued

After the construction of a multiple-well monitoring site, it was necessary to develop each well at that site by evacuating any remaining drilling fluid using compressed air (Kjos and others, 2014). Extensive airlifting and a surging technique using compressed air were employed to further develop the filter pack surrounding the well. Specific conductance, pH, temperature, apparent color and turbidity, along with the discharge rate and total volume of water removed, were recorded during this process. Development of each well was continued until no discernable drilling mud was present and field parameters stabilized.

Site Identification and Location

Each site in this report is represented by a common well name, station name (state-assigned well number), and unique 15-digit USGS site identification number. The common well name is assigned by the USGS; the first two letters designate those sites drilled in San Bernardino (SB) and those sites drilled in Yucaipa (YV), while the second two letters identify the well location; the number refers to a specific well installation sequence. The state well number (station name) is assigned by the California Department of Water Resources. The 15-digit identification numbers are used for groundwater stations in California according to the grid system of latitude and longitude.

Geographic coordinates and altitude for the 11 multiple-well monitoring sites were determined by using a Trimble 4400 Real Time Kinematic (RTK) global positioning system (GPS) with a TSC-1 data controller. This process uses radio communication to broadcast real-time corrections from the base station to a mobile receiver to adjust variances to X, Y, and Z locations at the receiver position. The system is capable of obtaining vertical and horizontal coordinates with a precision of plus or minus 0.083 ft between receiver and base station using standard RTK methods described by Morton and others (1993). RTK survey measurements were referenced to the North American Vertical Datum of 1988 (NAVD88) using local benchmarks. GPS data were exported and processed using Trimble Survey Office version 1.52 by Trimble Navigation Systems, Ltd (https://geospatial.trimble.com/products-and-solutions/office-software).

Geologic, Hydrologic, and Water-Quality Data Collection

The processes used to drill and construct the multiple-well monitoring sites enable the collection of many types of data that can be used to get a more complete picture of the groundwater system. Geologic data help with understanding how groundwater moves through the system by identifying materials of varying permeability. Hydrologic data show vertical direction of flow and allow monitoring of the groundwater system over time. Water-quality data can help with the interpretation of the system by identifying differences in water type and approximate time since recharge or age.

Geologic Data Collection

Sediment Cores

Sediment coring was attempted at seven multiple-well monitoring sites, at various intervals, to characterize the lithology or bottom hole material (table 2 and fig. 3, where applicable). The first core was attempted using sidewall coring techniques while all other cores were attempted using a wire-line coring technique. Many core attempts had no recovery after retrieving the core barrel. Photographs of core material for monitoring-well sites YVWC and YV6E are shown on the Yucaipa project web page (https://ca.water.usgs.gov/yucaipa/wells/summary.html).

Table 2. Sediment core samples collected from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[ft, feet; ft bls, feet below land surface; ND, not determined; USGS, U.S. Geological Survey]

USGS site identification number	Common well name	Number of cores attempted	Core number	Core interval		Core length (ft)	Percent recovery
				from (ft bls)	to (ft bls)		
340615117170902	SBMP	6	1c	200	200	0.00	0.00
340615117170902	SBMP	6	2c	305	305	0.00	0.00
340615117170902	SBMP	6	3c	365	365	0.00	0.00
340615117170902	SBMP	6	4c	455	455	0.00	0.00
340615117170902	SBMP	6	5c	720	720	0.00	0.00
340615117170902	SBMP	6	6c	850	850	0.00	0.00
340541117074401	SBCC	2	1d	517	520	0.00	0.00
340541117074401	SBCC	2	2d	797	799	0.00	0.00
340503117104101	SBRV	3	1e	460	ND	0.00	0.00

Table 2. Sediment core samples collected from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[ft, feet; ft bls, feet below land surface; ND, not determined; USGS, U.S. Geological Survey]

USGS site identification number	Common well name	Number of cores attempted	Core number	Core interval		Core length (ft)	Percent recovery
				from (ft bls)	to (ft bls)		
340503117104101	SBRV	3	2e	639.5	642.5	3.00	100
340503117104101	SBRV	3	3e	1,103	1,105	0.00	0.00
340408117165301	SBCM	2	1g	620	622	0.00	0.00
340408117165301	SBCM	2	2g	900	902	0.00	0.00
340248117020901	YVWC	23	1h	0.0	5.0	3.67	73.5
340248117020901	YVWC	23	2h	10.0	10.0	2.90	58.1
340248117020901	YVWC	23	3h	15.0	15.0	0.92	18.4
340248117020901	YVWC	23	4h	15.0	18.3	2.87	88.3
340248117020901	YVWC	23	5h	18.3	23.3	0.97	19.4
340248117020901	YVWC	23	6h	23.3	27.0	2.46	65.6
340248117020901	YVWC	23	7h	27.0	30.0	3.10	103
340248117020901	YVWC	23	8h	110	115	4.33	86.6
340248117020901	YVWC	23	9h	115	118.5	3.38	96.6
340248117020901	YVWC	23	10h	170	174	3.61	90.6
340248117020901	YVWC	23	11h	260	265	4.40	87.9
340248117020901	YVWC	23	12h	265	270	3.12	62.7
340248117020901	YVWC	23	13h	270	274	3.59	89.8
340248117020901	YVWC	23	14h	438	441	2.81	93.5
340248117020901	YVWC	23	15h	441	443.5	2.35	93.8
340248117020901	YVWC	23	16h	450	451.3	0.98	78.7
340248117020901	YVWC	23	17h	605	606	0.79	78.7
340248117020901	YVWC	23	18h	606	606.3	0.00	0.00
340248117020901	YVWC	23	19h	628	ND	0.00	0.00
340248117020901	YVWC	23	20h	665	667	0.72	36.1
340248117020901	YVWC	23	21h	667	670	2.85	N/A
340248117020901	YVWC	23	22h	670	672.3	2.03	N/A
340248117020901	YVWC	23	23h	857.5	862.5	4.00	79.7
340136117033902	YV6E	12	1i	220	225	5.25	105
340136117033902	YV6E	12	2i	225	228	1.66	55.0
340136117033902	YV6E	12	3i	400	405	0.23	5.0
340136117033902	YV6E	12	4i	405	407	2.36	118
340136117033902	YV6E	12	5i	565	568.5	2.97	85.0
340136117033902	YV6E	12	6i	568.5	569.5	1.16	116
340136117033902	YV6E	12	7i	574	579	4.63	93.0
340136117033902	YV6E	12	8i	579	584	4.89	97.0
340136117033902	YV6E	12	9i	584	585.5	1.48	98.0
340136117033902	YV6E	12	10i	921	923.5	2.05	59.0
340136117033902	YV6E	12	11i	923.5	928.5	2.81	56.0
340136117033902	YV6E	12	12i	928.5	930.5	1.59	80.0
340046117020801	YVEP	3	1k	140.5	143.5	0.00	0.00
340046117020801	YVEP	3	2k	420	426	0.00	0.00
340046117020801	YVEP	3	3k	852	853	1.00	100

Geophysical Logs

A suite of borehole geophysical logs were recorded in the uncased (open) borehole prior to the installation of the monitoring wells (figs. 3*A–K*). Wire-line geophysical logging provides information about the characteristics of the sediment and groundwater near the borehole. This information leads to a better understanding of the geometry and lithology of aquifers, fine-grained interbeds, and confining units between aquifers. Geophysical logs also can provide clues on the relation between water quality and depth, the relative permeability of materials adjacent to the borehole, and the characteristics of groundwater flow. Geophysical surveys in each borehole included a combination of the following measurements: caliper, natural gamma, spontaneous potential (SP), 16- and 64-in. normal resistivity (18-in. for one well), electromagnetic induction (EM), and acoustic velocity (sonic). Geophysical log data, along with lithologic observations, were used to select the screened intervals of monitoring wells during the construction phase. All geophysical tools were calibrated by the manufacturer, except for the caliper tool, which was calibrated on-site by a field technician.

A caliper logging tool is designed to measure the inside diameter of the open borehole. This allows for viewing any "wash-out zones" where unconsolidated sand has been eroded away by the drilling process. The caliper tool also can aid in identifying zones in which a clay unit has expanded. In addition, the caliper tool is used to determine the quantity of sand and grout needed to fill the annular space during construction of the observation wells.

A natural gamma tool is designed to measure the total intensity of gamma-ray emissions from the formation. The most significant, naturally occurring gamma-emitting radioisotopes are potassium-40 and daughter products of the uranium- and thorium-decay series (Keys, 1990). Generally, materials that emit higher gamma-ray values are clay, feldspar-rich gravel, and granite; limestones and quartz-rich sandstones will yield lower gamma-ray values (Schlumberger, 1972). Natural gamma logs are used to help locate low-permeability layers such as silts and clays, which may represent a potential confining unit within or between aquifers (Newhouse and others, 2004).

Resistivity tools measure the apparent resistivity of a volume of sample material under the direct application of an electrical current (Keys and MacCary, 1985). Spontaneous potential (SP) and normal resistivity logs (16- and 64-in.) are used to distinguish fine-grained silt and clay from coarser sand and gravel. A 64-in. log measures resistance farther into the formation than a 16-in. log. The 16-in. normal resistivity log records the apparent resistivity of material adjacent to the borehole that was probably invaded with drilling fluid, and the 64-in. normal resistivity log records the apparent resistivity beyond the invaded zone that is saturated with formation water (Newhouse and others, 2004); on one occasion an 18-in. resistivity tool was used (fig. 3*F*). These logs are useful indicators of potential locations for poor water quality due to higher salt content or left-over drilling mud. In alluvial settings, such as the San Bernardino and Yucaipa areas, high resistivity generally indicates coarser material such as sand or gravel, whereas low resistivity indicates fine-grained deposits such as silt, clay, and shale. In freshwater systems, sand and gravel beds are indicated by a negative deflection (toward the left) on the SP log and by a high resistivity response (toward the right) on resistivity logs (Newhouse and others, 2004).

The neutron porosity tool creates a log of porosity based on the response of the formation to fast neutrons emitted by a source. Hydrogen has by far the biggest effect in slowing down and capturing neutrons. Because hydrogen is found mainly in the pore fluids, the neutron porosity log responds to porosity; however, the matrix and the type of fluid also have an effect. Newer neutron log values are reported in units of porosity (volume of void space/total volume), whereas older log values were reported in counts per second or American Petroleum Institute units. The neutron porosity log is strongly affected by clay and gas because hydrogen occurs in clays and hydrated minerals as well as pore fluids. Gas has a low hydrogen density, so gas zones have a very low apparent porosity. The measurement is based on either thermal or epithermal neutron detection. Thermal neutrons have about the same energy as the surrounding matter, typically less than 0.4 electronvolt (eV), while epithermal neutrons have higher energy, between about 0.4 and 10 eV (http://www.glossary.oilfield.slb.com/en/Terms/n/neutron_porosity.aspx).

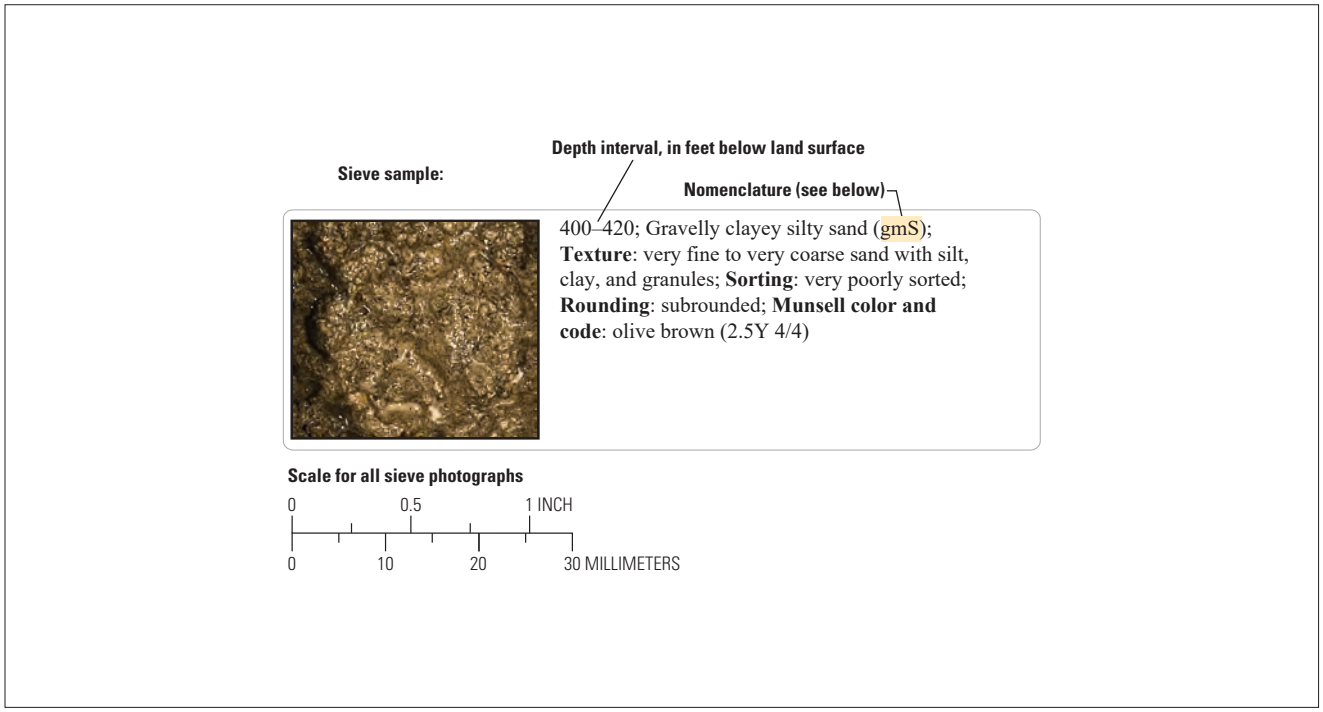
The EM tool also provides a continuous log of aquifer material electrical conductivity. Electromagnetic conductivity logs yield detailed information on the vertical electrical conductivity of a formation and of pore water (McNeill, 1986). Because the EM tool responds to changes in dissolved-solids concentration (total dissolved solids) in groundwater, it is possible to repeatedly track and map electrical anomalies associated with changes in dissolved-solids concentration in groundwater over time (Williams and others, 1993).

The sonic tool is designed to measure the time it takes for a pulsed compressional sound wave to travel from a downhole source to downhole receivers. The acoustic energy travels through the borehole and formation at a velocity that is related to the mineralogy and porosity of the aquifer material (Keys, 1990). Variations in porosity of the formation, and therefore transit time, can help to identify contacts between lithologic units penetrated by the borehole. The sonic log also gives an indication of the degree of consolidation of the formation, as well as an approximate location of the water table.

Lithologic Descriptions

Lithologic information was compiled by describing the drill cuttings collected at each site and from observations recorded during drilling. An explanation of the nomenclature used to describe these cuttings is shown on figure 4.

Drill-cutting samples were examined in the office under a binocular microscope and described according to grain size, texture, sorting, rounding, and color. Texture descriptions follow the Folk (1974) grain-size classification. This classification allows for correlation of grain-size terms (such as "sand") to size limits (millimeters or inches). For samples not containing gravel, the term "clay" is used in lieu of "mud", and "silt" replaces "sand." Color, determined on moist samples, follows the alpha-numerical color designations in Munsell Soil Color Charts (1994).



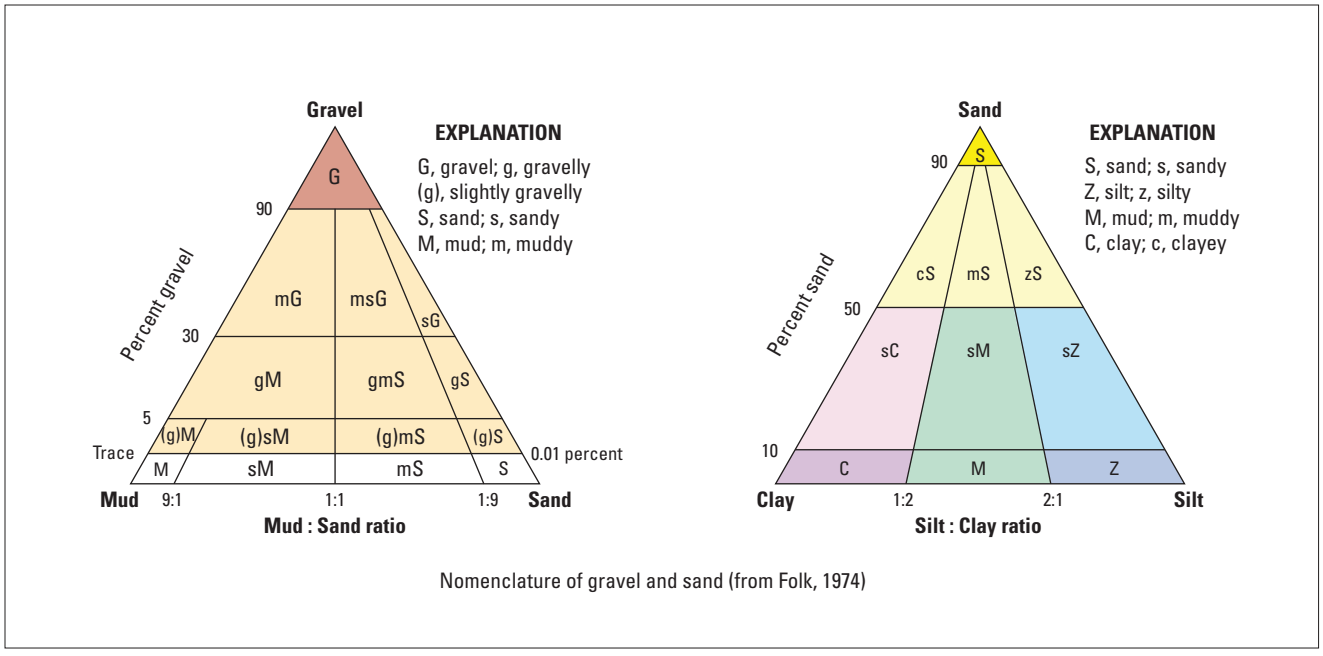


Figure 4. Description and nomenclature for lithologic textures shown on figures 5, 6, and 7.

Drill cuttings generated by mud-rotary drilling were obtained using the following methods: (1) "sieved" samples (figs. 5*A–K*, excluding 5*D*) were collected throughout a 20-foot interval from the return drilling fluid using a 120-mesh (125-micron) U.S.A. Standard Testing Sieve, and (2) "shaker" samples (figs. 6*H–J*, shaker not collected for sites A–G, and K) were collected as grab samples once every 10 ft (or at distinguishable changes in lithology) from a 60-mesh (841-micron) screen mounted on the drill rig's shaker tank, which is the initial phase of the drilling fluid recycling process. Drill cuttings generated by the ODEX (down-hole air hammer system) method (fig. 7) were obtained using a sieve. The sieved drill-cutting samples represent a composite of fine-grained material from the entire drilling interval, whereas shaker samples represent the coarser-grained material at discrete points.

Hydrologic Data Collection

Discrete Water-Level Measurements

Discrete water-level measurements were made periodically at the 11 multiple-well monitoring sites in accordance with USGS procedures (Cunningham and Schalk, 2011). In general, these data were collected monthly (after well installation) and prior to sampling events and can be viewed on the USGS National Water Information System (NWIS) website at https://waterdata.usgs.gov/ca/nwis.

Continuous Real-Time Water-Level Measurements

Water levels were continuously monitored at each multiple-well monitoring site using a data collection platform that transmits groundwater levels. The sites include a non-vented pressure transducer for each well, a barometer to adjust the non-vented water-level data, a data logger, an antenna, and a high data rate transmitter. Raw data are transmitted hourly via satellite to the NWIS database.

Continuous water-level data were corrected for offsets and drift using the discrete measurements described above. Real-time water-level data from these 48 wells are accessible through the USGS National Water Information System (NWIS) (https://waterdata.usgs.gov/ca/nwis) Statistical values for daily water-level data (maximum, minimum, and median) were calculated from the computed record and can be viewed on the NWIS and San Bernardino or Yucaipa project web pages. Hydrographs of the median daily value for the period of record for each site are included in this report (figs. 8*A–K*).

Water-Quality Data Collection

The water-quality data in this report were compiled for the Bunker Hill and Yucaipa Subbasins from different sample periods, each with a slightly different study purpose, and using different quality-assurance procedures. In general, water-quality samples were collected in 1977, from 1995–97 (Izbicki and others, 1998), and from 1998–2016.

Sample Collection and Processing

All groundwater samples were collected following USGS field-sampling procedures for their respective timeframe. Monitoring wells were purged prior to the collection of water samples by removing three casing volumes using a variable-speed submersible Bennett sampling pump.

Field measurements and sample collection were done in accordance with the National Field Manual for the Collection of Water-Quality Data (U.S. Geological Survey, variously dated). The field instruments were calibrated daily prior to use for water temperature, pH, specific conductance, and dissolved oxygen measurements. Whole or unfiltered samples were dispensed directly into their appropriate bottles; filtered water samples were processed through the appropriate micron-size capsule filter.

***A.* SBSH**

Depth interval (feet) and description		Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–6; Sand	No image available	215–216; Sand and clayey silt	No image available	288–290; Sand, silt, and boulders
No image available	6–12; Clay and sand	No image available	216–217; Sand and clayey gravel	No image available	290–292; Gravel and minor boulders
No image available	12–175; Boulders, gravel, and sand	No image available	217–220; Sand, fine and clayey silt	No image available	292–299; Sand, silt, and boulders
No image available	175–190; Sand and gravel with minor boulders	No image available	220–235; Sand, clay, and gravel	No image available	299–300; Gravel and minor cobbles
No image available	190–206; Sand and gravel	No image available	235–267; Sand, silt, minor gravel, and boulders	No image available	300–400; Sand, silt, and cobbles
No image available	206–210; Sand and clayey silt	No image available	267–275; Gravel and boulders	No image available	400–411; Sand, cobbles, and gravel
No image available	210–212; Sand, gravel, and clayey silt	No image available	275–279; Sand and silt	No image available	411–417; Sand, silt, and trace cobbles
No image available	212–214; Sand and clayey silt	No image available	279–286; Sand, silt, and boulders	No image available	417–465; Sand, gravel, and cobbles
No image available	214–215; Clay, sand, and gravel	No image available	286–288; Gravel and boulders	No image available	465–530; Bedrock

Figure 5. Sieve drill-cutting samples collected from boreholes at 10 multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California: *A*, SBSH; *B*, SBEP; *C*, SBMP; *D*, SBCC (no data collected); *E*, SBRV; *F*, SBVD; *G*, SBCM; *H*, YVWC; *I*, YV6E; *J*, YVDA; and *K*, YVEP.

B1. **SBEP**

Depth interval (feet) and description		Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–14; Silty clay and very fine sand; gray-brown	No image available	64–78; Sandy clay; gray-brown	No image available	176–182; Clay with medium to coarse sand, and fine gravel; gray
No image available	14–25; Clay and very fine sand; light brown	No image available	78–90; Fine to medium sand and silty clay; minor fine to very coarse gravel; gray	No image available	182–192; Medium to coarse sand and fine gravel
No image available	25–34; Silt and very fine sand; light brown	No image available	90–98; Medium to coarse sand and blue-gray sandy clay with minor brown clay and fine gravel; *wood fragments*	No image available	192–194; Medium to coarse sand and fine gravel with minor gray sandy clay
No image available	34–39; Silty clay; reddish-brown	No image available	98–110; Coarse sand and gravel with blue-gray sandy clay and cobbles	No image available	194–220; Medium to coarse sand and fine gravel with minor gray sandy clay and cobbles
No image available	39–44; Clay and silt; light brown	No image available	110–123; Clay, sand, and minor coarse sand; blue-gray and brown	No image available	220–226; Medium to coarse sand and gravel with blue-gray and brown clay
No image available	44–49; Gravel; subrounded; light brown	No image available	123–145; Coarse sand and gravel with blue-gray clay	No image available	226–269; Medium to coarse sand and fine gravel with cobbles
No image available	49–54; Silt, very fine to coarse gravel and minor fine to coarse sand; subrounded to rounded; light brown	No image available	145–149; Medium to coarse sand with fine gravel and cobbles	No image available	269–279; Medium to coarse sand and minor fine gravel with white and brown clay; *minor wood fragments*
No image available	54–59; Silt, fine to medium sand, and minor very fine to medium gravel; subrounded to rounded; light brown	No image available	149–152; Medium to coarse sand and fine gravel with minor brown clay	No image available	279–295; Sandy clay; gray; *abundant wood fragments*
No image available	59–64; Silty clay and very fine sand; light brown	No image available	152–176; Medium to coarse sand and fine gravel with minor brown clay and cobbles	No image available	295–304; Medium to coarse sand and minor fine gravel with brown and gray clay

Figure 5. —Continued

B2. **SBEP**

Depth interval (feet) and description		Depth interval (feet) and description		Depth interval (feet) and description	
No image available	304–314; Coarse sand and gravel with cobbles and minor gray clay	No image available	432–436; Clay, with minor medium sand, gravel, and cobbles; gray	No image available	585–605; Clay with medium sand and minor gray sandy clay; brown
No image available	314–358; Medium to coarse sand with gravel and cobbles	No image available	436–441; Sand, medium to coarse, gravel and gray sandy clay		
No image available	358–370; Medium to coarse sand with cobbles and blue-gray sandy clay	No image available	441–472; Clay with minor medium to coarse sand and minor brown sand; gray		
No image available	370–374; Medium to coarse sand with gravel and cobbles and gray-brown sandy clay	No image available	472–500; Sand, medium to coarse, with gravel and gray sandy clay		
No image available	374–396; Medium to coarse sand with gravel and cobbles and minor brown sandy clay	No image available	500–512; Clay, with minor fine sand; gray; *wood fragments*		
No image available	396–404; Medium to coarse sand with gravel and cobbles and brown sandy clay	No image available	512–542; Sand, medium to coarse, and minor gray and white sandy clay		
No image available	404–420; Sand, medium to coarse, gray and brown sandy clay and cobbles	No image available	542–552; Sand, medium to coarse with fine gravel and minor light brown clay		
No image available	420–426; Sand, medium to coarse, with gray sandy clay; *minor wood fragments*	No image available	552–570; Clay with fine to medium sand and gravel; gray		
No image available	426–432; Clay with medium to coarse sand; gray and brown; *minor wood fragments*	No image available	570–585; Clay with coarse sand; red, yellow, light brown, and white		

Figure 5. —Continued

C1. **SBMP**

Depth interval (feet) and description		Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–10; Sand, coarse to very coarse; brown	No image available	81–85; Gravel and sand with minor silty clay	No image available	141–143; Sand with minor silty clay
No image available	10–16; Gravel and cobbles	No image available	85–94; Sand with minor silty clay; *wood fragments (from 87 to 90 feet)*	No image available	143–150; Sand with minor silty clay and cobbles
No image available	16–29; Sand and gravel with minor cobbles; *wood fragments (at 28 feet)*	No image available	94–97; Gravel and cobbles	No image available	150–180; Sand and cobbles
No image available	29–31; Sand	No image available	97–100; Sand and gravel with minor cobbles	No image available	180–205; Gravel
No image available	31–37; Sand and cobbles	No image available	100–105; Gravel and sand with minor cobbles	No image available	205–212; Sand and gravel
No image available	37–55; Sand	No image available	105–112; Gravel and cobbles	No image available	212–221; Sand and silty clay
No image available	55–56; Sand with minor clay	No image available	112–117; Sand and gravel	No image available	221–265; Sand and gravel with minor silty clay
No image available	56–70; Sand	No image available	117–119; Sand with minor cobbles	No image available	265–283; Sand with trace of clay
No image available	70–81; Gravel; *wood fragments (from 79 to 81 feet)*	No image available	119–141; Sand	No image available	283–295; Sand, fine, with trace of clay

Figure 5. —Continued

C2. **SBMP**

Depth interval (feet) and description		Depth interval (feet) and description		Depth interval (feet) and description	
No image available	295–301; Sand, fine, and cobbles	No image available	395–410; Sandy clay	No image available	491–541; Silty clay with minor cobbles and trace sand
No image available	301–315; Sand with minor cobbles; brown	No image available	410–440; Silty clay with minor cobbles	No image available	541–561; Silty clay with minor small gravel and sand
No image available	315–330; Sand and cobbles	No image available	440–455; Silty clay with minor sand and cobbles	No image available	561–577; Silt and very fine sand with minor clay
No image available	330–335; Sand with minor cobbles	No image available	455–460; Sand with minor clay and cobbles	No image available	577–590; Silt and very fine sand with minor clay and cobbles
No image available	335–344; Sand with minor small gravel	No image available	460–465; Silty sand	No image available	590–595; Sand and clay
No image available	344–350; Clay and sand	No image available	465–470; Clay, sand, and minor cobbles	No image available	595–612; Clay with trace sand
No image available	350–370; Sand with minor clay and cobbles	No image available	470–477; Sand with minor cobbles and trace of clay	No image available	612–616; Sand and clay
No image available	370–385; Sand, clay, and cobbles	No image available	477–488; Silty clay with trace sand	No image available	616–635; Gravel, sand, and cobbles
No image available	385–395; Sand with minor clay	No image available	488–491; Sand with trace silty clay	No image available	635–650; Sand, gravel, and cobbles

Figure 5. —Continued

C3. **SBMP**

	Depth interval (feet) and description		Depth interval (feet) and description
No image available	650–653; Fine sand	No image available	750–760; Sand, fine, and cobbles
No image available	653–660; Fine sand with minor cobbles	No image available	760–775; Sand with minor cobbles and trace brown clay
No image available	660–677; Sand, coarse, and fine gravel	No image available	775–785; Sand with minor cobbles and trace brown clay
No image available	677–690; Sand, fine to medium	No image available	785–790; Sand and brown clay with minor cobbles
No image available	690–699; Sand, fine to medium, with minor cobbles and trace gravel	No image available	790–798; Clay and sand with minor cobbles; brown
No image available	699–733; Sand, very fine, silt and minor cobbles	No image available	798–805; Sand and clay with minor cobbles
No image available	733–737; Sand, very coarse, and small gravel	No image available	805–810; Clay and sand with minor cobbles
No image available	737–742; Sand, medium	No image available	810–825; Clay and sand with minor cobbles; brown
No image available	742–750; Sand, fine to medium, with minor cobbles and trace coarse sand	No image available	825–875; Bedrock; granitic

Figure 5. —Continued

E1. **SBRV**

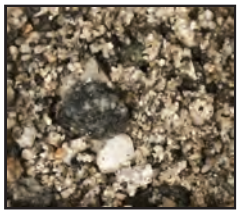
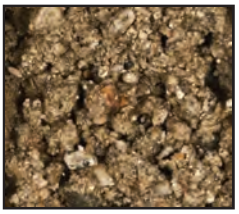
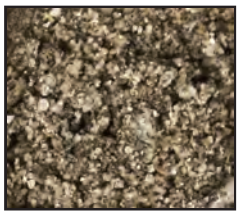
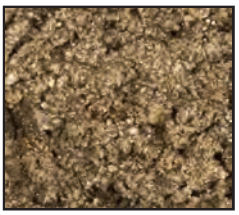
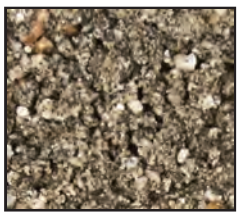
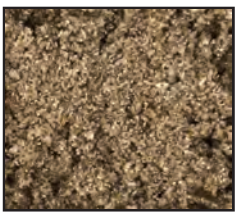
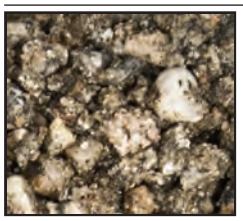
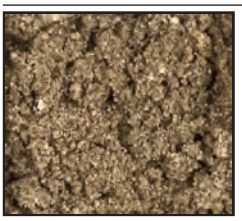
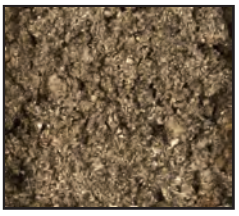
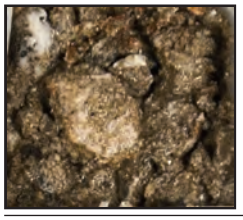
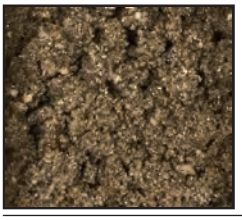
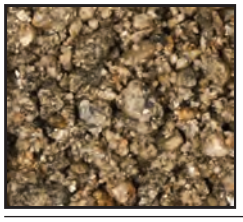
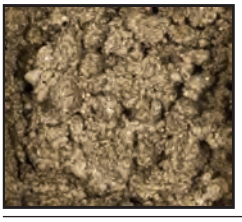
	Depth interval (feet) and description		Depth interval (feet) and description
	0–24; Gravelly sand (gS); very coarse sand with granules to large pebbles and minor medium to coarse sand; poorly sorted; subangular to rounded; light olive gray (5Y 6/2)		144–164; Gravelly sand (gS); fine to very coarse sand and granules to small pebbles; poorly sorted; subangular to subrounded; moderate yellowish brown (10YR 5/4)
	24–44; Slightly gravelly sand (gS); coarse to very coarse sand with granules to large pebbles and minor fine to medium sand; poorly sorted; subangular to subrounded; light olive gray (5Y 6/2)		164–184; Clayey sand (cS); fine to very coarse sand and clay with trace granules to large pebbles; very poorly sorted; subangular to subrounded; moderate yellowish brown (10YR 5/4)
	44–64; Gravelly sand (gS); medium to very coarse sand and granules to small pebbles with minor fine sand; poorly sorted; subangular to subrounded; light olive gray (5Y 6/2)		184–204; Sand (S); fine to coarse sand and trace granules to medium pebbles; moderately sorted; angular to subrounded; light olive gray (5Y 6/2); *biotite-rich*
	64–84; Sandy gravel (sG); granules to medium pebbles and medium to very coarse sand with minor very fine to fine sand; poorly sorted; subangular to subrounded; olive gray (5Y 5/2)		204–224; Sand (S); very fine to medium sand; well sorted; subangular to subrounded; olive gray (5Y 5/2); *biotite-rich*
	84–104; Sandy gravel (sG); granules to large pebbles with fine to very coarse sand; very poorly sorted; subangular to rounded; olive gray (5Y 5/2)		224–244; Sand (S); very fine to medium sand and trace clay; well sorted; subangular to subrounded; olive gray (5Y 5/2); *biotite-rich*
	104–124; Gravelly sand (gS); fine to very coarse sand with granules to large pebbles; poorly sorted; subangular to rounded; olive gray (5Y 4/2)		244–264; Sand (S); very fine to medium sand and trace clay; well sorted; subangular to subrounded; olive gray (5Y 4/2)
	124–144; Sand (S); coarse to very coarse sand with trace granules to medium pebbles; well sorted; subangular to subrounded; moderate yellowish brown (10YR 5/4)		264–280; Silty sand (zS); very fine to very coarse sand and silt with minor clay; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)

Figure 5. —Continued

E2. **SBRV**

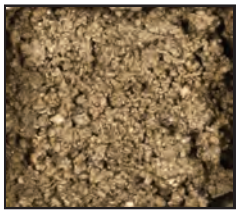
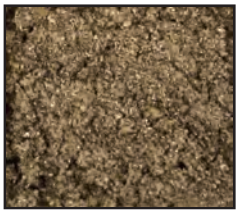
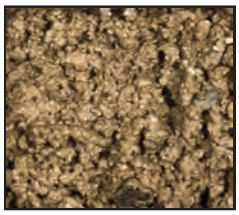
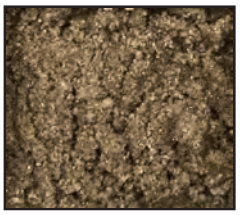
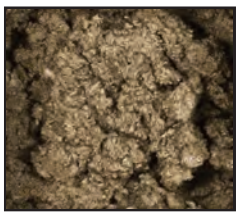
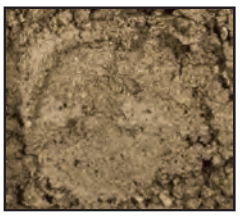
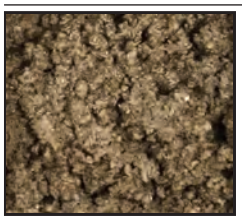
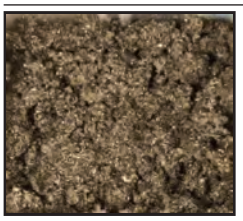
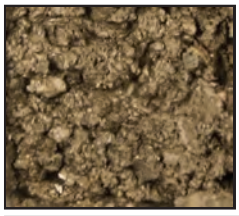
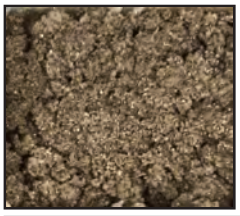
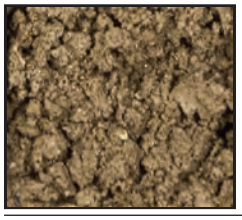
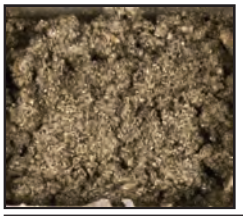
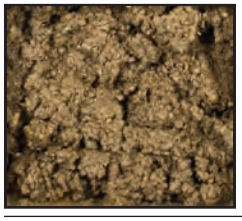
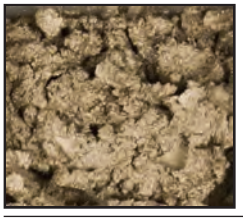
	Depth interval (feet) and description		Depth interval (feet) and description
	280–300; Silty sand (zS); coarse to very coarse sand and silt with minor very fine to medium sand and clay; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		420–440; Sand (S); fine to medium sand with minor clay and very coarse sand; moderately sorted; subangular to subrounded; olive (5Y 5/3)
	300–320; Silty sand (zS); coarse to very coarse sand and silt with minor very fine to medium sand and clay; poorly sorted; angular to subrounded; olive brown (2.5Y 4/3)		440–460; Sand (S); fine to medium sand with minor clay and very coarse sand; moderately sorted; subangular to subrounded; dark greenish gray (10Y 3/1)
	320–340; Silty sand (zS); fine to medium sand and silt with minor very fine to coarse sand and clay; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/8)		460–470; Sandy clay (sC); clay with very fine to coarse sand; poorly sorted; pale olive (5Y 6/4)
	340–360; Silty sand (zS); fine to coarse sand and silt with minor very fine to very coarse sand; poorly sorted; angular to subrounded; yellowish brown (10YR 5/8)		470–480; Sand (S); fine to medium sand with minor clay and very fine sand; moderately sorted; subangular to subrounded; pale olive (5Y 6/4); *biotite-rich*
	360–380; Clayey sand (cS); medium to very coarse sand and clay with minor silt and very fine to fine sand; very poorly sorted; angular to subrounded; gray (10YR 5/1)		480–500; Sand (S); fine to medium sand with minor clay and very fine sand; moderately sorted; subangular to subrounded; olive gray (5Y 4/2); *biotite-rich*
	380–400; Clayey sand (cS); medium to coarse sand and clay with minor silt and very fine to fine sand; poorly sorted; subangular to subrounded; grayish brown (2.5Y 5/2)		500–520; Sand (S); fine to medium sand with minor clay and very fine sand; moderately sorted; subangular to subrounded; dark olive gray (5Y 3/2); *biotite-rich*
	400–420; Clayey sand (cS); coarse sand and clay with minor silt and very fine to very coarse sand; poorly sorted; subangular to subrounded; grayish brown (2.5Y 5/2)		520–540; Sandy clay (sC); clay with fine to medium sand; moderately sorted; olive brown (2.5Y 4/3)

Figure 5. —Continued

E3. **SBRV**

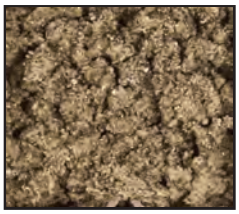
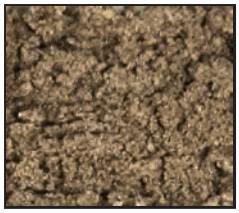
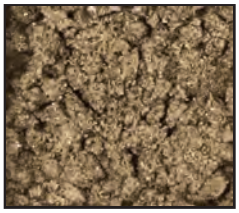
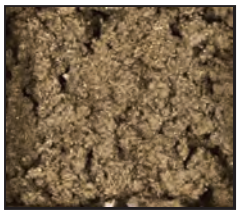
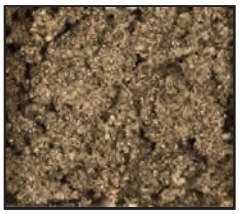
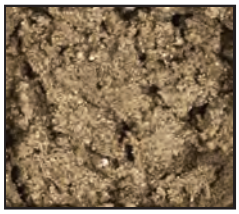
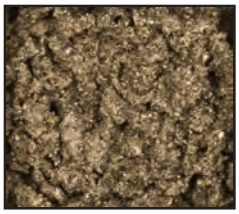
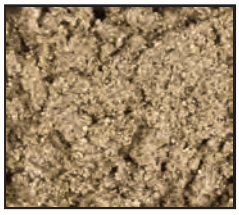
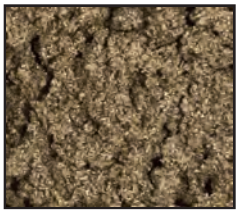
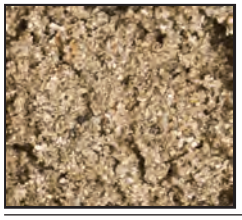
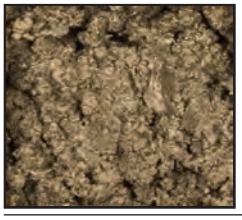
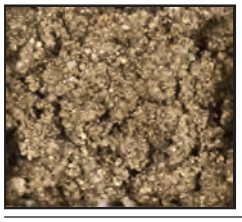
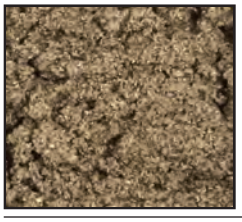
	Depth interval (feet) and description		Depth interval (feet) and description
	540–560; Sand (S); fine to medium sand with minor clay and very fine sand with coarse sand; moderately sorted; subangular to subrounded; yellowish brown (10YR 5/4); *biotite-rich*		680–700; Sand (S); very fine to very coarse sand with minor clay; moderately to poorly sorted; angular to subrounded; pale brown (10YR 6/3)
	560–580; Sand (S); fine to medium sand with minor very fine and coarse sand; well sorted; subangular to subrounded; yellowish brown (10YR 5/4)		700–720; Sand (S); fine to medium sand with minor clay and trace granules to small pebbles; moderately sorted; subangular to subrounded; grayish brown (10YR 5/2)
	580–600; Sand (S); fine to medium sand with minor clay and very fine sand; well sorted; subangular to subrounded; yellowish brown (10YR 5/4)		720–740; Sand (S); fine to medium sand with minor clay and very fine sand; moderately sorted; subangular to subrounded; dark olive gray (5Y 3/2); *biotite-rich*
	600–620; Sand (S); very fine to very coarse sand; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/3)		740–760; Sand (S); fine to medium sand with minor coarse sand and clay; moderately sorted; subangular to subrounded; dark olive gray (5Y 3/2); *biotite-rich*
	620–640; Sand (S); fine to coarse sand and minor very fine sand; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/3)		760–780; Clayey sand (cS); very fine to medium sand with clay; moderately sorted; subangular to subrounded; dark olive gray (5Y 3/2); *biotite-rich*
	640–660; Sand (S); fine to very coarse sand with trace granules; moderately sorted; subangular to subrounded; light yellowish brown (10YR 6/4)		780–800; Clayey sand (cS); fine to medium sand and clay with minor very fine sand; moderately sorted; subangular to subrounded; olive (5Y 5/3)
	660–680; Sand (S); medium to coarse sand with minor clay and very fine to very coarse sand; poorly sorted; subangular to subrounded; pale brown (10YR 6/3)		800–820; Sand (S); fine to coarse sand with trace clay and granules to small pebbles; moderately sorted; angular to subrounded; light olive gray (5Y 6/2)

Figure 5. —Continued

E4. **SBRV**

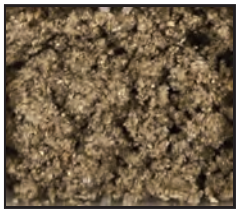
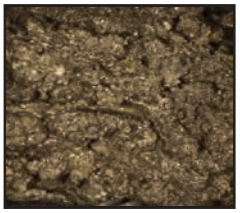
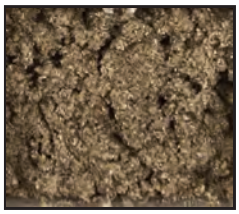
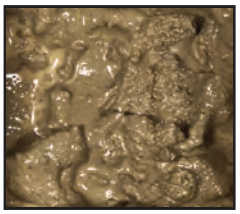
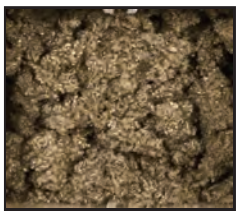
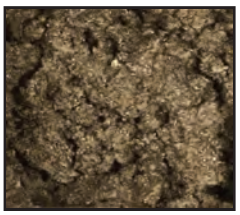
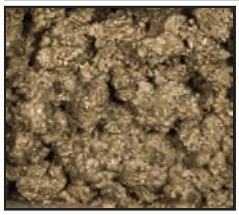
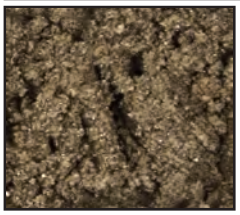
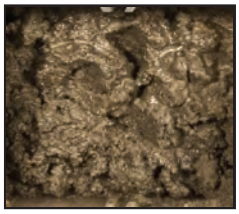
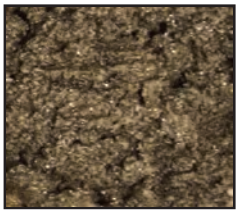
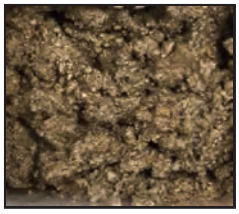
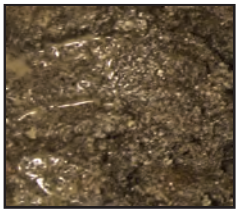
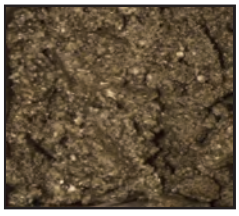
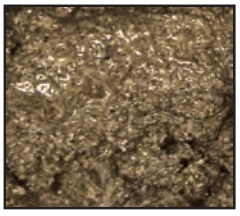
	Depth interval (feet) and description		Depth interval (feet) and description
	820–840; Gravelly sand (gS); fine to coarse sand with granules to medium pebbles; moderately sorted; subangular to subrounded; olive gray (5Y 4/2)		960–980; Sand (S); very fine to coarse sand with minor clay; moderately sorted; subangular to subrounded; olive (5Y 5/3)
	840–860; Sand (S); very fine to coarse sand with minor clay; moderately sorted; subangular to subrounded; olive gray (5Y 4/2); *biotite-rich*		980–1,000; Clayey sand (cS); fine to medium sand and clay with minor very fine sand; moderately sorted; subangular to subrounded; olive (5Y 5/3)
	860–880; Sand (S); very fine to coarse sand; moderately sorted; subangular to subrounded; olive gray (5Y 4/2)		1,000–1,020; Sand (S); very fine to coarse sand with minor clay; moderately sorted; subangular to subrounded; olive (5Y 5/3)
	880–900; Sand (S); very fine to medium sand; moderately sorted; subangular to subrounded; dark olive gray (5Y 3/2)		1,020–1,040; Sand (S); fine to medium sand with minor clay; well sorted; subangular to subrounded; dark olive gray (5Y 3/2); *biotite-rich*
	900–920; Sand (S); very fine to medium sand with minor clay; moderately sorted; angular to subrounded; dark olive gray (5Y 3/2)		1,040–1,060; Sand (S); fine to medium sand with minor clay; well sorted; subangular to subrounded; dark olive gray (5Y 3/2); *biotite-rich*
	920–940; Sand (S); very fine to very coarse sand with minor clay and trace granules to small pebbles; moderately to poorly sorted; angular to subrounded; dark olive gray (5Y 3/2)		1,060–1,080; Sand (S); very fine to coarse sand with minor clay; moderately sorted; subangular to subrounded; dark olive gray (5Y 3/2)
	940–960; Sand (S); fine to very coarse sand with trace granules to small pebbles; moderately sorted; subangular to subrounded; olive (5Y 5/3)		1,080–1,100; Sand (S); fine to coarse sand with minor clay; moderately sorted; subangular to subrounded; pale olive (5Y 6/3)

Figure 5. —Continued

F1. **SBVD**

Depth interval (feet) and description		Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–15; Silt and very fine to medium sand; dark brown	No image available	140–152; Sand, fine to coarse, with silt and minor gray clay	No image available	238–250; Sand, fine to coarse with fine gravel
No image available	15–29; Fine to medium sand and very fine to very coarse gravel; subrounded to rounded; light brown	No image available	152–162; Silty fine sand to fine gravel	No image available	250–263; Sand, fine to coarse with minor fine gravel and trace cobbles
No image available	29–34; Medium to very coarse gravel and fine to medium sand; subrounded to rounded; light brown	No image available	162–170; Silty fine sand to fine gravel with trace cobbles	No image available	263–273; Fine sand to fine gravel
No image available	34–39; Fine to coarse sand and fine to very coarse gravel with minor silt; subrounded to rounded; light brown	No image available	170–182; Silty fine sand with trace cobbles	No image available	273–286; Fine sand to fine gravel with minor cobbles
No image available	39–44; Fine sand and clay; gray-brown	No image available	182–190; Sand, fine to coarse, with minor coarse gravel	No image available	286–292; Silty sand, fine to coarse
No image available	44–54; Silt and sandy clay; gray-brown; *wood fragments*	No image available	190–210; Sand, fine to coarse, and fine gravel with trace cobbles; subrounded	No image available	292–298; Fine sand to fine gravel with minor cobbles
No image available	54–102; Sandy clay and trace fine sand; gray; *wood fragments*	No image available	210–223; Sand, fine to coarse with minor cobbles; subrounded	No image available	298–304; Fine sand to very fine gravel with trace cobbles; *wood fragments*
No image available	102–130; Sand, fine to coarse, with minor fine gravel	No image available	223–228; Fine sand to fine gravel; *wood fragments*	No image available	304–348; Sand, fine to coarse, with minor fine to medium gravel and trace cobbles
No image available	130–140; Sand, fine to coarse, with minor fine gravel; *wood fragments*	No image available	228–238; Fine sand to medium gravel with trace cobbles	No image available	348–366; Sand, fine to medium, with minor sandy clay

Figure 5. —Continued

F2. **SBVD**

Depth interval (feet) and description		Depth interval (feet) and description	
No image available	366–404; Fine gravel to fine sand, trace cobbles, and medium to coarse gravel	No image available	574–590; Sand, medium to coarse, with sandy white clay and trace cobbles
No image available	404–420; Fine sand to fine gravel; *abundant wood fragments*	No image available	590–596; Sand, medium to coarse, with gray, brown, and green clay; *abundant wood fragments*
No image available	420–450; Fine sand to medium gravel with minor cobbles	No image available	596–604; Sand, medium to coarse, with minor gray clay and trace cobbles
No image available	450–462; Clay with fine gravel to fine sand; gray; *wood fragments*	No image available	604–660; Sand, medium to coarse, with minor gray clay and trace cobbles
No image available	462–482; Fine sand to fine gravel and cobbles	No image available	660–680; Sand, fine to medium, with sandy brown and gray clay and trace cobbles
No image available	482–514; Fine sand and silt with minor brown clay and trace cobbles	No image available	680–700; Silt and fine to medium sand with trace cobbles
No image available	514–540; Sand, medium to coarse, with minor silty clay and trace cobbles		
No image available	540–557; Sand, medium to coarse, with sandy white clay and trace cobbles		
No image available	557–574; Sand, medium to coarse, with trace cobbles		

Figure 5. —Continued

G1. **SBCM**

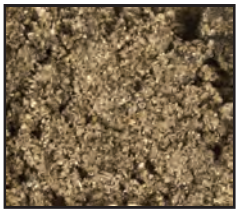
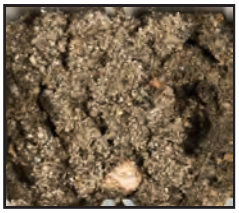
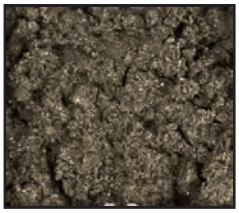
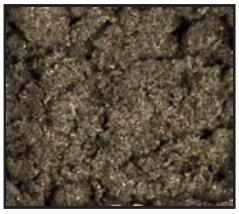
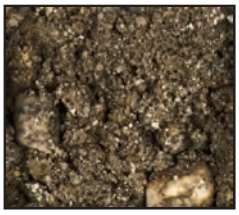
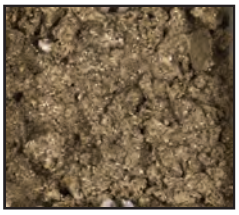
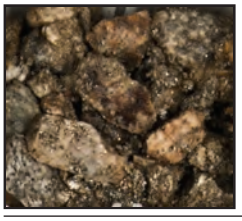
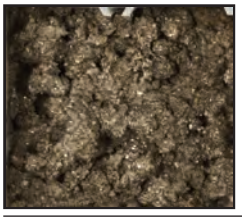
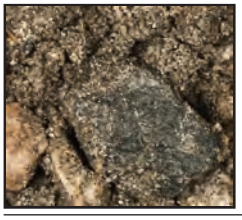
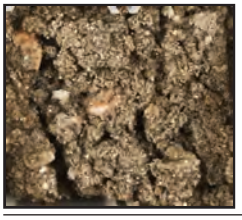
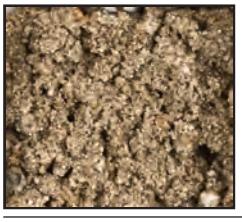
Depth interval (feet) and description		Depth interval (feet) and description	
	0–20; clayey sand (cS); fine to medium sand and clay with trace granules; moderately sorted; angular to subrounded; olive brown (2.5Y 4/3); *Artificial fill*		140–160; Slightly gravelly silty sand (g, mS); fine to very coarse sand with silt and granules to medium pebbles; very poorly sorted; subangular to rounded; dark grayish brown (2.5Y 4/2)
	20–40; Clayey sand (cS); very fine to fine sand and clay; well sorted; subangular to subrounded; dark greenish gray (5GY 4/1); *biotite-rich*		160–180; Gravel (G); granules to large pebbles with minor fine to very coarse sand; very poorly sorted; angular to rounded; olive brown (2.5Y 4/3)
	40–60; Clayey sand (cS); very fine sand and clay; well sorted; subangular to subrounded; dark greenish gray (5GY 4/1); *biotite-rich*		180–200; Gravel (G); granules to large pebbles with minor fine to coarse sand; very poorly sorted; angular to subrounded; olive gray (5Y 5/2)
	60–80; Gravelly sand (gS); very fine to very coarse sand with granules to medium pebbles and minor silt with clay; very poorly sorted; subangular to subrounded; olive gray (5Y 5/2); *biotite-rich*		200–220; Clayey sand (cS); fine sand and clay; well sorted; subangular to subrounded; olive (5Y 5/3); *micaceous*
	80–100; Sandy gravel (sG); granules to large pebbles with fine to very coarse sand; very poorly sorted; subangular to subrounded; olive gray (5Y 5/2); *biotite-rich*		220–240; Clayey sand (cS); fine sand and clay; well sorted; subangular to subrounded; dark olive gray (5Y 3/2); *micaceous*
	100–120; Sandy gravel (sG); granules to very large pebbles with fine to very coarse sand; very poorly sorted; subangular to rounded; grayish brown (2.5Y 5/2); *biotite-rich*		240–260; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules to medium pebbles; very poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3); *micaceous*
	120–140; Gravel (G); granules to large pebbles with minor medium to very coarse sand; poorly sorted; angular to subrounded; olive gray (5Y 5/2)		260–280; Sand (S); very fine to very coarse sand with minor silt; moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3); *biotite-rich*

Figure 5. —Continued

***G2.* SBCM**

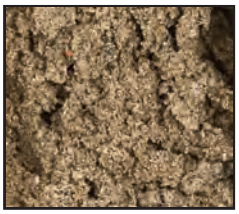
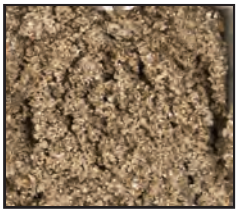
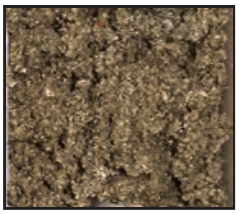
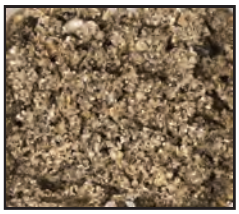
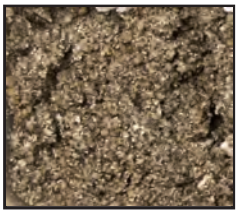
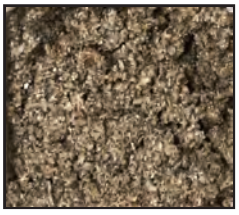
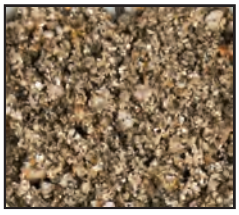
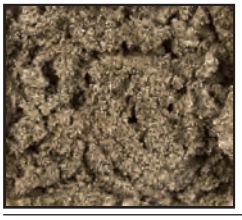
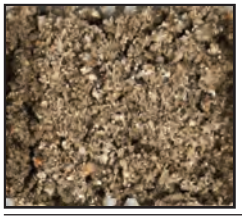
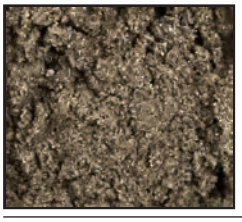
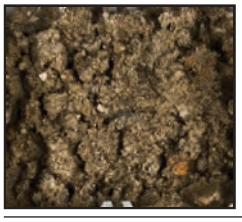
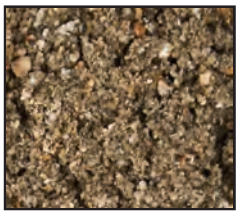
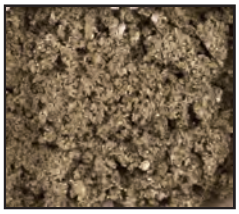
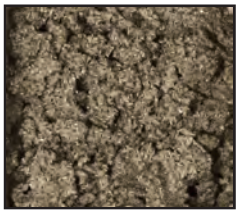
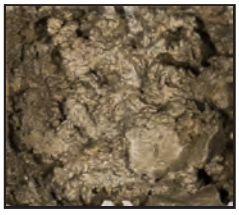
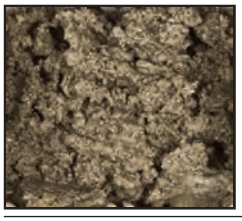
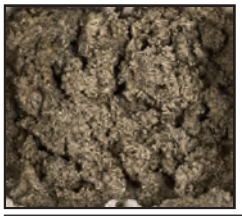
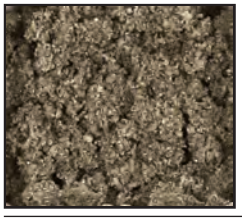
Depth interval (feet) and description		Depth interval (feet) and description	
	280–300; Sand (S); fine to medium sand; well sorted; subangular to subrounded; olive brown (2.5Y 4/3); *biotite-rich*		420–440; Sand (S); fine to very coarse sand with trace granules to small pebbles; poorly sorted; subangular to subrounded; pale olive (5Y 6/3)
	300–320; Sand (S); fine to medium sand with minor coarse to very coarse sand and trace granules; moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3); *biotite-rich*		440–460; Gravelly sand (gS); fine to very coarse sand with granules to medium pebbles; poorly sorted; subangular to subrounded; pale olive (5Y 6/3)
	320–340; Sand (S); fine to medium sand with minor coarse to very coarse sand; moderately sorted; subangular to subrounded; olive gray (5Y 5/2); *biotite-rich*		460–480; Sand (S); fine to very coarse sand with trace granules to small pebbles; poorly sorted; subangular to subrounded; pale olive (5Y 6/3)
	340–360; Gravelly sand (gS); very fine to very coarse sand with granules to small pebbles; poorly sorted; subangular to subrounded; olive gray (5Y 5/2)		480–500; Clayey sand (cS); fine to medium sand and clay with minor coarse sand; poorly sorted; subangular to subrounded; dark greenish gray (10GY 4/1); *abundant wood fragments 10–60 mm; biotite-rich*
	360–380; Gravelly sand (gS); fine to very coarse sand with granules to medium pebbles; poorly sorted; angular to subrounded; olive gray (5Y 5/2)		500–520; Sandy gravel (sG); granules to small pebbles with fine to very coarse sand; poorly sorted; angular to subrounded; pale olive (5Y 6/3)
	380–400; Clayey sand (cS); fine to medium sand and clay; moderately sorted; subangular to subrounded; olive gray (5Y 5/2); *biotite-rich*		520–540; Sand (S); very fine to very coarse sand with trace granules to small pebbles; poorly sorted; subangular to subrounded; pale olive (5Y 6/3); *biotite-rich*
	400–420; Sand (S); very fine to medium sand with minor coarse sand; well sorted; subangular to subrounded; greenish gray (10Y 5/1); *biotite-rich*		540–560; Gravelly silty sand (gS); very fine to medium sand with silt and granules to small pebbles; poorly sorted; angular to subrounded; pale olive (5Y 6/3); *biotite-rich*

Figure 5. —Continued

***G3.* SBCM**

	Depth interval (feet) and description
	560–580; Gravelly sand (gS); fine to coarse sand with granules to small pebbles; moderately sorted; subangular to rounded; olive gray (5Y 5/2); *biotite-rich*
	580–600; Sand (S); very fine to very coarse sand with trace granules; moderately sorted; subangular to subrounded; olive gray (5Y 5/2); *micaceous*
	600–620; Clayey sand (cS); very fine to medium sand with clay and minor silt; moderately sorted; subangular to subrounded; dark gray (5Y 4/1)
	620–622 *Nose cone*; Sandy silt (sZ); silt with very fine to fine sand; well sorted; olive gray (5Y 4/2); *micaceous*
	622–640; Clayey silty sand (mS); very fine to medium sand with silt and clay; moderately sorted; subangular to subrounded; greenish gray (5GY 5/1)
	640–660; Silty sand (zS); very fine to medium sand with silt; moderately sorted; subangular to subrounded; greenish gray (5GY 5/1)
	660–680; Sand (S); very fine to medium sand with minor silt; moderately sorted; subangular to subrounded; greenish gray (5GY 7/1)

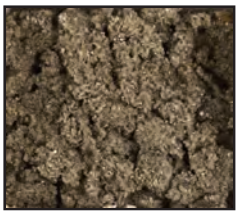
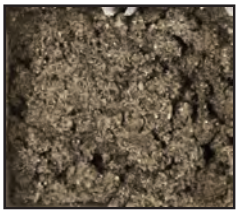
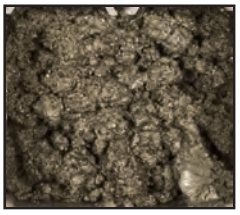
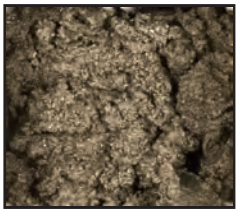
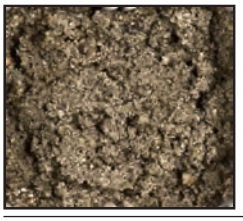
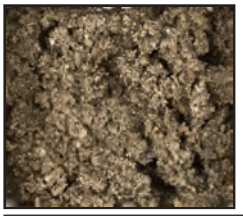
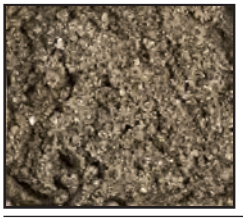
	Depth interval (feet) and description
	680–700; Silty sand (zS); very fine to medium sand with silt; moderately sorted; subangular to subrounded; light greenish gray (5GY 7/1)
	700–720; Silty sand (zS); very fine to medium sand with silt; moderately sorted; subangular to subrounded; light greenish gray (5GY 7/1)
	720–740; Clayey sand (cS); very fine to medium sand with clay; moderately sorted; subangular to subrounded; dark greenish gray (5GY 4/1)
	740–760; Clayey silty sand (mS); very fine to medium sand with silt and minor clay; moderately sorted; subangular to subrounded; dark greenish gray (5GY 4/1)
	760–780; Sand (S); very fine to very coarse sand with minor clay and silt; poorly sorted; angular to subrounded; greenish gray (5GY 5/1); *biotite-rich*
	780–800; Sand (S); very fine to very coarse sand with minor clay; poorly sorted; subangular to subrounded; light greenish gray (10GY 7/1)
	800–820; Sand (S); fine to very coarse sand; moderately sorted; subangular to subrounded; light greenish gray (10GY 7/1); *biotite-rich*

Figure 5. —Continued

***G4.* SBCM**

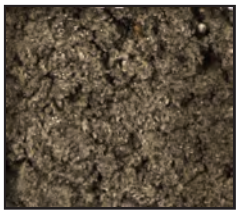
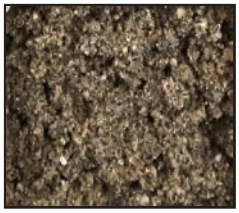
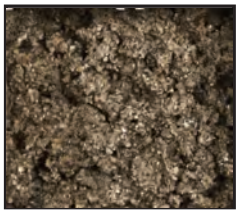
	Depth interval (feet) and description
	820–840; Sand (S); very fine to coarse sand; moderately sorted; angular to subrounded; dark greenish gray (5GY 3/1)
	840–860; Sand (S); very fine to very coarse sand; moderately sorted; angular to subrounded; light greenish gray (10GY 2/1)
	860–880; Sand (S); very fine to very coarse sand; moderately sorted; angular to subrounded; dark greenish gray (5GY 3/1)
	880–900; Sand (S); fine to coarse sand; moderately sorted; angular to subrounded; greenish gray (5GY 5/1)
	900–902 *Nose cone*; Sandy silt (sZ); silt with very fine to fine sand; well sorted; light greenish gray (10GY 7/1); *micaceous*

Figure 5. —Continued

H1. **YVWC**

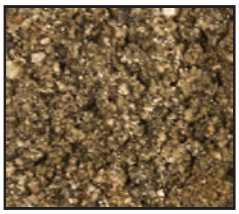
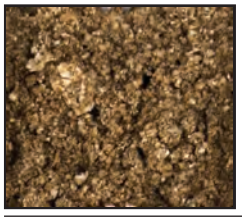
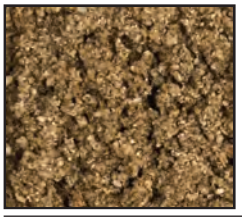
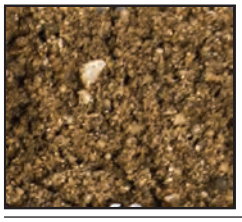
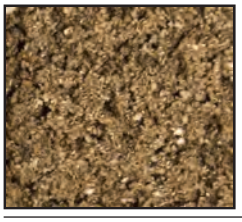
Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–30; *No sample collected*		130–150; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)
	30–50; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; angular; brown (10YR 4/3)		150–170; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; angular to subangular; olive brown (2.5Y 4/3)
	50–70; Gravelly sand (gS); fine to very coarse sand with granules to large pebbles; poorly sorted; angular to subangular; brown (10YR 4/3)	No image available	170–174; *Cored interval; core 10C*
	70–90; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; angular to subangular; brown (10YR 4/3)		174–190; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; angular to subangular; olive brown (2.5Y 4/3)
	90–110; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; subangular; light olive brown (2.5Y 5/3)		190–210; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; angular to subangular; olive brown (2.5Y 4/3)
No image available	110–118.5; *No sample collected*		210–230; Silty sand (zS); very fine to very coarse sand with silt; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	118.5–130; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		230–250; Sand (S); very fine to very coarse sand; poorly sorted; subangular; olive brown (2.5Y 4/3)

Figure 5. —Continued

***H2.* YVWC**

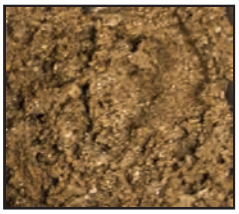
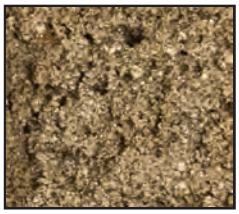
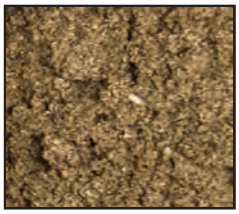
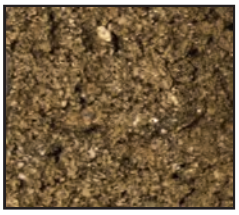
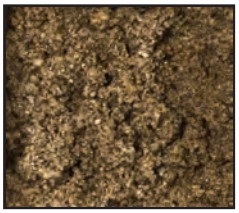
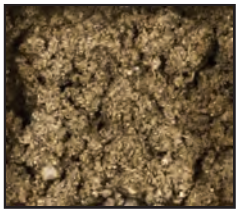
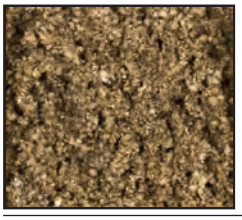
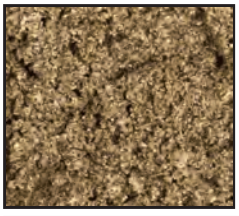
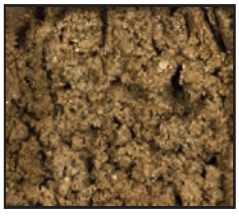
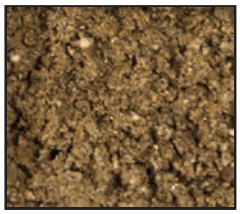
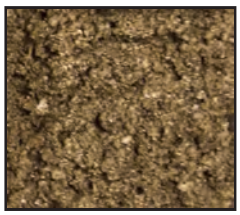
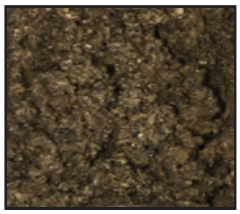
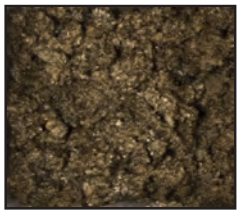
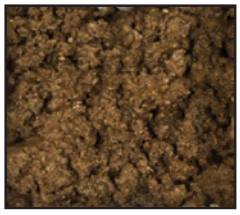
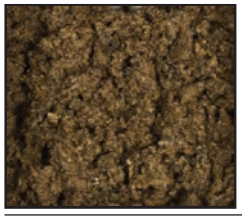
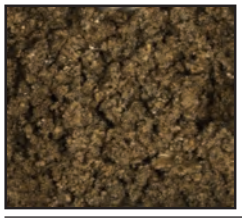
Depth interval (feet) and description		Depth interval (feet) and description	
	250–260; Silty sand (zS); very fine to very coarse sand with silt; poorly sorted; subangular; light olive brown (2.5Y 5/3)		350–370; Gravelly sand (gS); very fine to very coarse sand with minor granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)
No image available	260–280; *Cored interval; cores 11C–13C*		370–390; Sand (S); fine to very coarse sand; moderately sorted; subangular; light olive brown (2.5Y 5/4)
	280–290; Sand (S); very fine to coarse sand; moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3)		390–410; Gravelly sand (gS); fine to very coarse sand with minor granules; moderately to poorly sorted; subangular; light olive brown (2.5Y 5/3)
	290–308; Sand (S); very fine to coarse sand; moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3)		410–430; Sand (S); fine to very coarse sand; moderately sorted; subangular; light olive brown (2.5Y 5/3)
No image available	308–310; *No sample collected*		430–438; Sand (S); fine to coarse sand; moderately sorted; subangular; light olive brown (2.5Y 5/3)
	310–330; Gravelly sand (gS); very fine to very coarse sand with granules to small pebbles; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)	No image available	438–443; *Cored interval; cores 14C–15C*
	330–350; Sand (S); very fine to very coarse sand; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/3)		443–450; Sand (S); fine to coarse sand; moderately sorted; subangular; light olive brown (2.5Y 5/4)

Figure 5. —Continued

***H3.* YVWC**

	Depth interval (feet) and description
	450–470; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subangular; light olive brown (2.5Y 5/4)
	470–490; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subangular; light olive brown (2.5Y 5/4)
	490–510; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subangular; olive brown (2.5Y 4/3)
	510–530; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subangular; olive brown (2.5Y 4/3)
	530–550; Silty sand (zS); very fine to coarse sand with silt; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	550–570; Sand (S); very fine to medium sand with minor coarse to very coarse sand; moderately to well sorted; subangular to subrounded; olive brown (2.5Y 4/3)
	570–590; Silty sand (zS); very fine to very coarse sand with silt and trace granules; poorly sorted; subangular; olive brown (2.5Y 4/3)

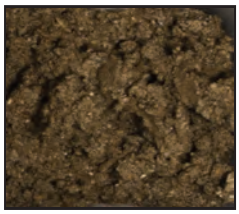
	Depth interval (feet) and description
	590–605; Silty sand (zS); very fine to very coarse sand with silt; moderately to poorly sorted; subangular; olive brown (2.5Y 4/3)

Figure 5. —Continued

I1. **YV6E**

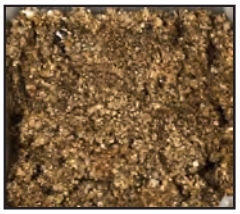
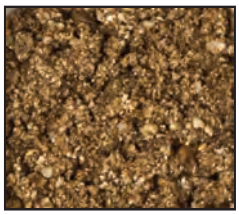
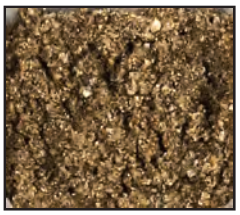
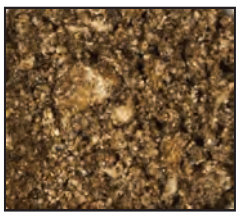
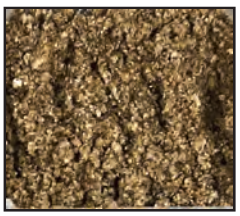
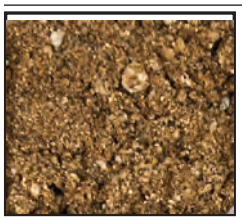
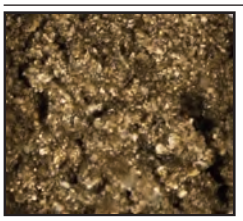
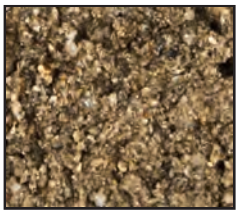
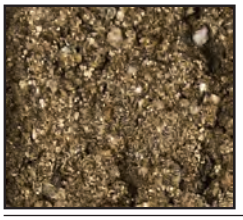
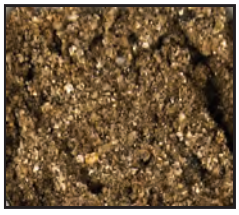
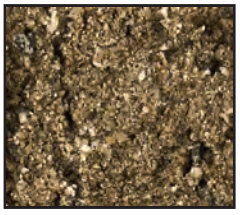
Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–20; *No sample collected*		140–160; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular; dark yellowish brown (10YR 4/4)
	20–40; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular; yellowish brown (10YR 5/6)		160–180; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	40–60; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular; dark yellowish brown (10YR 4/4)		180–200; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	60–80; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		200–220; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular; yellowish brown (10YR 5/4)
No image available	80–100; *No sample recovery*		220–240; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
No image available	100–120; *No sample recovery*		240–260; Gravelly sand (gS); medium sand to granules; moderately sorted; subrounded; olive brown (2.5Y 4/3)
	120–140; Gravelly sand (gS); medium sand to granules; moderately sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		260–280; Gravelly sand (gS); medium sand to granules; moderately sorted; subrounded; light olive brown (2.5Y 5/3)

Figure 5. —Continued

I2. **YV6E**

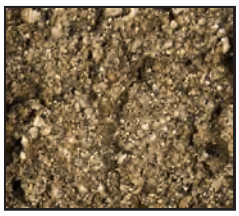
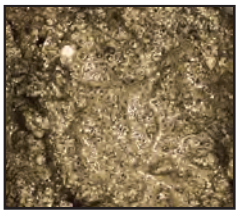
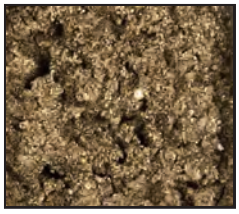
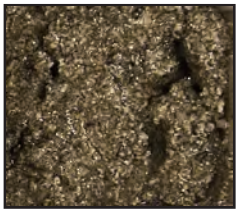
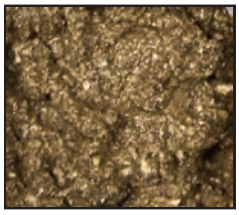
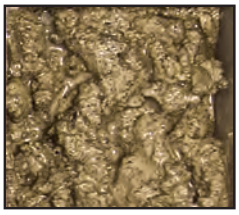
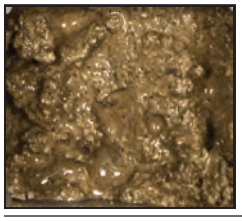
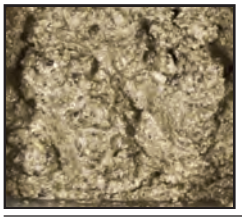
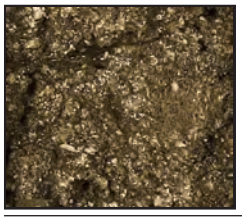
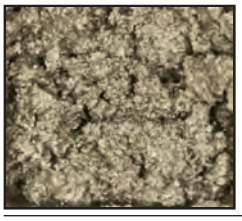
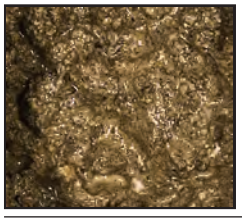
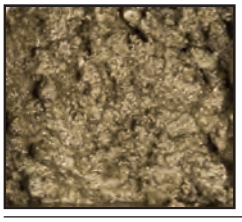
Depth interval (feet) and description		Depth interval (feet) and description	
	280–300; Gravelly sand (gS); medium sand to granules; moderately sorted; subrounded; light olive brown (2.5Y 5/4)	No image available	420–430; *No sample recovery*
	300–320; Gravelly sand (gS); medium sand to granules; moderately sorted; subrounded; olive brown (2.5Y 4/3)		430–450; Gravelly sand (gS); medium sand to granules; moderately sorted; subrounded; light olive brown (2.5Y 5/4)
	320–340; Sand (S); fine to coarse sand; moderately sorted; subrounded; olive brown (2.5Y 4/3)		450–470; Sand (S); fine to coarse sand; moderately sorted; subrounded; olive gray (5Y 4/2)
	340–360; Sand (S); very fine to coarse sand; moderately to poorly sorted; subrounded; light olive brown (2.5Y 5/3)		470–490; Sand (S); very fine to coarse sand; moderately to poorly sorted; subangular to subrounded; olive (5Y 5/3)
	360–380; Sandy silt (sZ); silt with very fine to very coarse sand; poorly sorted; light olive brown (2.5Y 5/4)		490–510; Sand (S); fine to coarse sand; moderately sorted; subrounded; pale olive (5Y 6/3)
	380–400; Silty sand (zS); very fine to very coarse sand with silt; poorly sorted; subrounded; olive brown (2.5Y 4/3)		510–530; Sand (S); fine to coarse sand; moderately sorted; subrounded; greenish gray (10Y 5/1)
	400–420; Gravelly clayey silty sand (gmS); very fine to very coarse sand with silt, clay, and granules; very poorly sorted; subrounded; olive brown (2.5Y 4/4)		530–550; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subrounded to rounded; olive (5Y 5/3)

Figure 5. —Continued

I3. **YV6E**

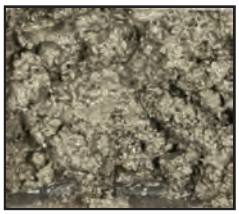
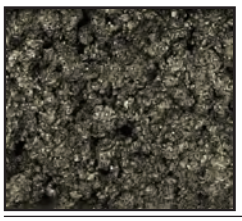
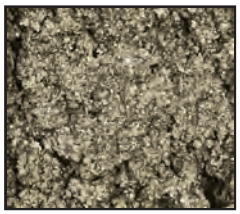
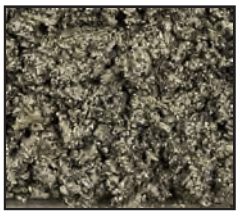
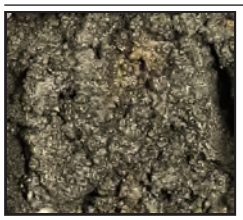
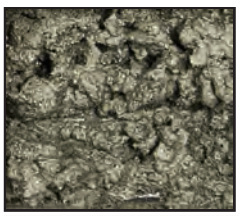
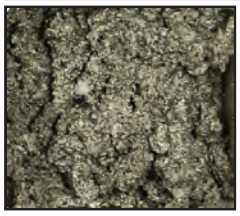
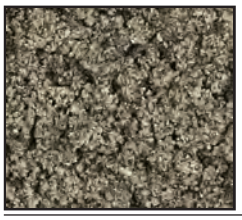
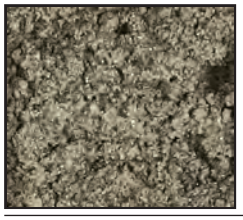
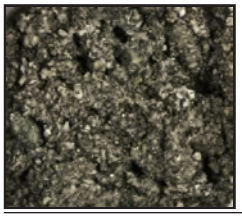
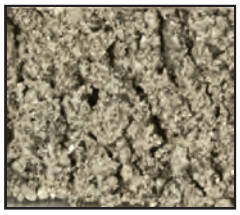
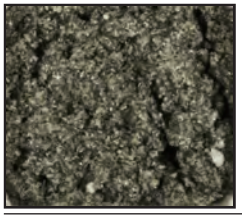
Depth interval (feet) and description		Depth interval (feet) and description	
No image available	550–565; *No sample recovery*		690–710; Silty clayey sand (mS); medium to very coarse sand with clay and silt; very poorly sorted; subrounded; greenish gray (10Y 5/1)
No image available	565–585.5; *Cored interval; cores 5C–9C*		710–730; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; angular to subangular; dark greenish gray (10Y 3/1)
	590–610; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subrounded; greenish gray (10Y 5/1)		730–750; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; angular to subangular; dark greenish gray (10Y 4/1)
	610–630; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; subrounded; dark greenish gray (10Y 4/1)		750–770; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; subangular to subrounded; dark greenish gray (10Y 4/1)
	630–650; Gravelly silty clayey sand (gmS); fine to very coarse sand with clay, silt, and granules; very poorly sorted; subrounded; greenish gray (5GY 5/1)		770–790; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subrounded; greenish gray (10Y 5/1)
	650–670; Sand (S); fine to very coarse sand; moderately sorted; subrounded; greenish gray (10Y 5/1)		790–810; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; angular to subangular; greenish gray (10Y 6/1)
	670–690; Sand (S); medium to very coarse sand; moderately sorted; subangular to subrounded; greenish gray (10Y 5/1)		810–830; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; angular to subangular; greenish gray (10Y 6/1)

Figure 5. —Continued

***I4.* YV6E**

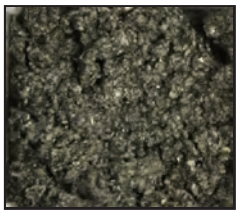
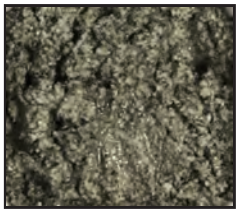
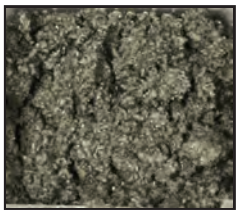
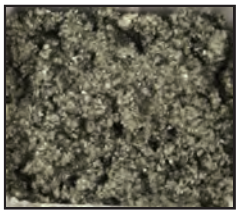
	Depth interval (feet) and description
	830–850; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; angular to subangular; greenish gray (10Y 5/1)
	850–870; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; angular to subangular; greenish gray (10Y 5/1)
	870–890; Sand (S); very fine to very coarse sand; moderately sorted; angular to subangular; greenish gray (10Y 5/1)
	890–910; Gravelly sand (gS); very fine to very coarse sand with granules; poorly sorted; angular to subangular; greenish gray (10Y 5/1)

Figure 5. —Continued

J1. **YVDA**

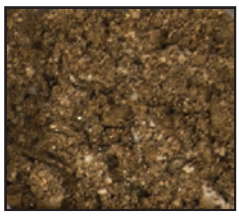
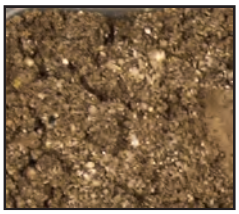
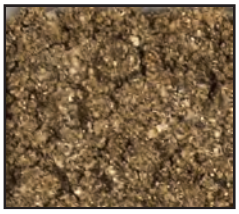
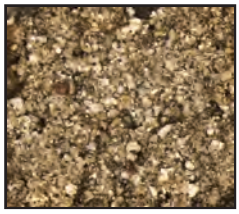
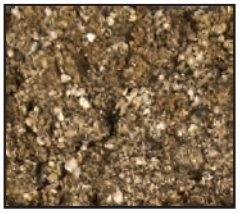
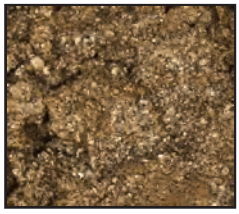
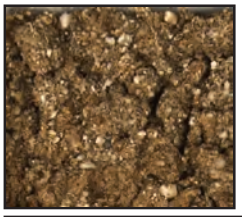
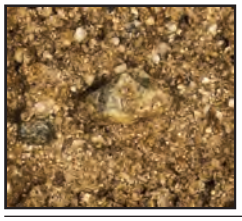
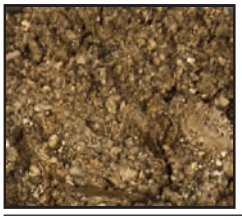
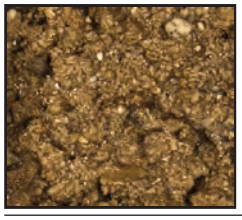
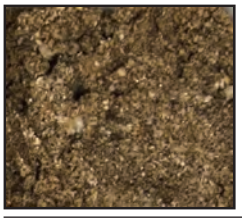
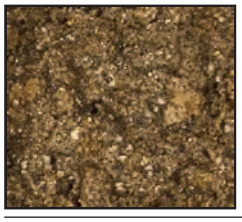
Depth interval (feet) and description		Depth interval (feet) and description	
No image available	0–20; *No sample recovery*		137–157; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subangular; light olive brown (2.5Y 5/4)
	20–37; Silty sand (zS); fine to medium sand with silt; moderately sorted; subangular; brown (10YR 4/3)		157–177; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; subangular; light olive brown (2.5Y 5/4)
	37–57; Sand (S); fine to coarse sand; moderately sorted; subangular to subrounded; brown (10YR 4/3)		177–197; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; angular to subangular; light olive brown (2.5Y 5/4)
	57–77; Clayey silty sand (mS); fine to very coarse sand with silt and clay; poorly sorted; angular to subangular; olive brown (2.5Y 4/4)		197–217; Silty clayey sand (mS); fine to coarse sand with silt and clay; poorly sorted; subangular; dark yellowish brown (10YR 4/4)
	77–97; Clayey silty sand (mS); fine to very coarse sand with silt and clay; poorly sorted; subangular; dark yellowish brown (10YR 4/4)		217–237; Gravelly sand (gS); fine to very coarse sand with granules to medium pebbles; very poorly sorted; subangular to subrounded; yellowish brown (10YR 5/4)
	97–117; Clayey silty sand (mS); medium to very coarse sand with silt and clay; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)		237–257; Sandy silty clay (sM); clay and silt with medium to very coarse sand; poorly sorted; dark yellowish brown (10YR 4/4)
	117–137; Gravelly sand (gS); fine to very coarse sand with granules to small pebbles; poorly sorted; subangular; light olive brown (2.5Y 5/4)		257–277; Sand (S); fine to very coarse sand; moderately sorted; angular to subangular; yellowish brown (10YR 5/4)

Figure 5. —Continued

***J2.* YVDA**

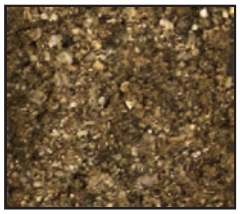
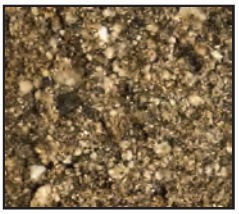
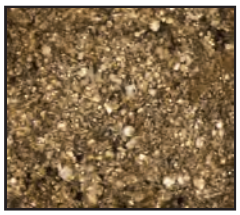
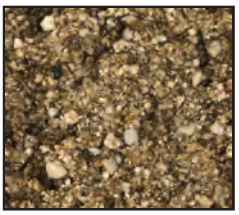
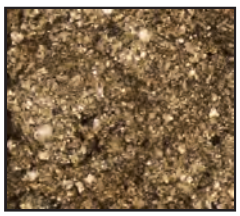
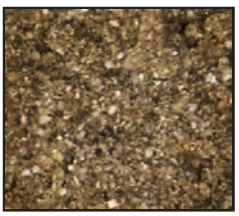
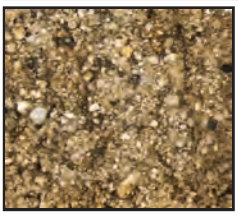
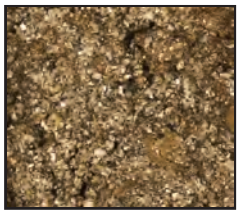
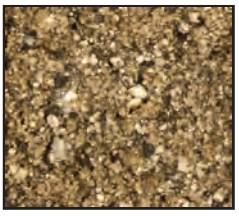
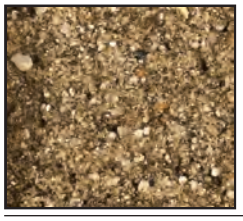
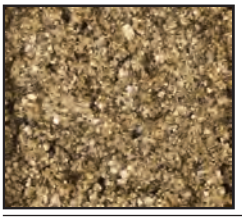
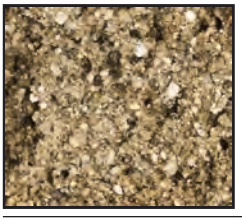
Depth interval (feet) and description		Depth interval (feet) and description	
	277–297; Slightly gravelly clayey silty sand (gmS); medium to very coarse sand with silt, clay, and granules; very poorly sorted; angular to subangular; dark yellowish brown (10YR 4/4)		416–436; Gravelly sand (gS); fine to very coarse sand with granules; poorly sorted; angular to subangular; light olive brown (2.5Y 5/4)
	297–317; Slightly gravelly clayey silty sand (gmS); medium to very coarse sand with silt, clay, and granules; poorly sorted; angular to subangular; dark yellowish brown (10YR 4/4)		436–456; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; angular to subangular; light olive brown (2.5Y 5/4)
	317–337; Sand (S); fine to very coarse sand; moderately sorted; angular to subangular; dark yellowish brown (10YR 4/4)		456–476; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; angular to subangular; light olive brown (2.5Y 5/4)
No image available	337–356; *No sample recovery*		476–496; Sand (S); medium to very coarse sand; moderately to well sorted; angular to subangular; light olive brown (2.5Y 5/4)
	356–376; Sand (S); fine to very coarse sand; moderately sorted; angular to subangular; dark yellowish brown (10YR 4/4)		496–516; Sand (S); medium to very coarse sand; moderately to well sorted; angular to subangular; light olive brown (2.5Y 5/4)
	376–396; Sand (S); fine to very coarse sand; moderately sorted; angular to subangular; light olive brown (2.5Y 5/4)		516–536; Sand (S); medium to very coarse sand; moderately to well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
No image available	396–416; *No sample recovery*		536–556; Sand (S); medium to very coarse sand; moderately to well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)

Figure 5. —Continued

J3. **YVDA**

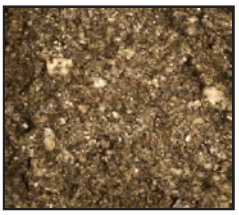
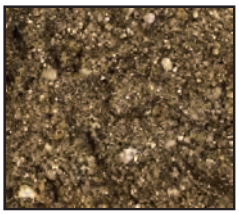
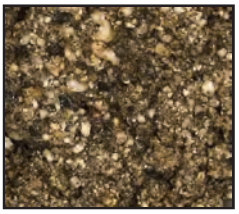
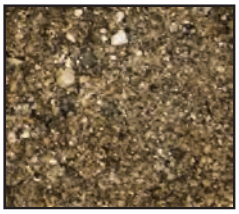
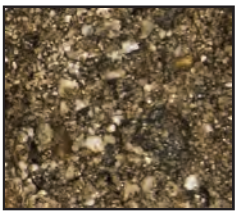
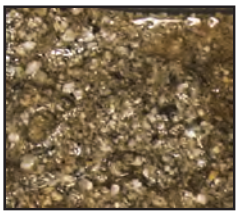
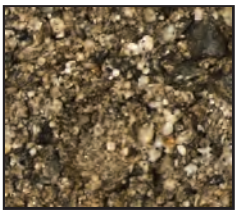
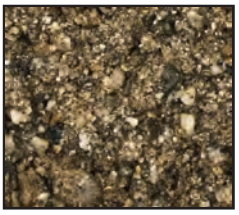
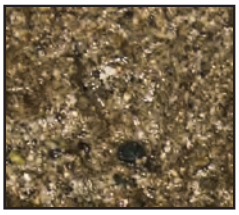
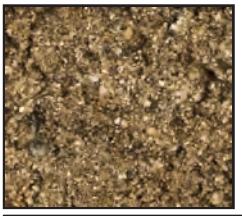
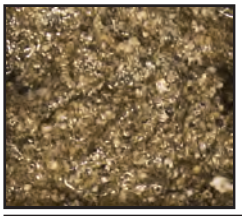
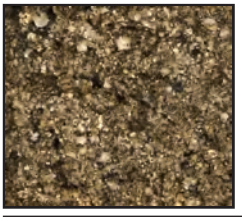
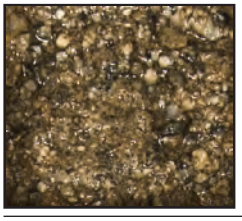
Depth interval (feet) and description		Depth interval (feet) and description	
	556–576; Clayey silty sand (mS); fine to very coarse sand with silt and clay; poorly sorted; subangular; light olive brown (2.5Y 5/4)		696–716; Sand (S); medium to very coarse sand; moderately sorted; angular to subangular; light olive brown (2.5Y 5/4)
	576–596; Gravelly sand (gS); medium to very coarse sand with granules to medium pebbles; poorly sorted; subangular; light olive brown (2.5Y 5/4)		716–736; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subangular; light olive brown (2.5Y 5/3)
	596–616; Gravelly sand (gS); medium to very coarse sand with granules to small pebbles; moderately to poorly sorted; subangular; light olive brown (2.5Y 5/3)		736–756; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	616–636; Sandy gravel (sG); granules to medium pebbles with medium to very coarse sand; moderately to poorly sorted; subangular; light olive brown (2.5Y 5/3)	No image available	756–776; *No sample recovery*
	636–656; Gravelly sand (gS); medium to very coarse sand with granules to medium pebbles; moderately to poorly sorted; subangular; light olive brown (2.5Y 5/4)		776–796; Sand (S); fine to very coarse sand; poorly sorted; angular to subangular; light olive brown (2.5Y 5/3)
	656–676; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subangular; light olive brown (2.5Y 5/4)		796–816; Sand (S); medium to very coarse sand; moderately sorted; angular to subangular; light olive brown (2.5Y 5/3)
	676–696; Sand (S); medium to very coarse sand; moderately sorted; subangular; light olive brown (2.5Y 5/4)		816–836; Gravelly sand (gS); medium to very coarse sand with granules to medium pebbles; moderately to poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)

Figure 5. —Continued

***J4.* YVDA**

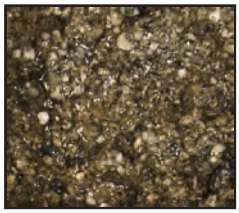
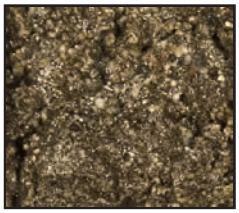
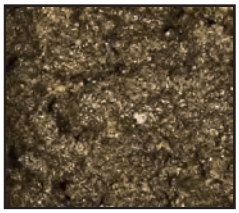
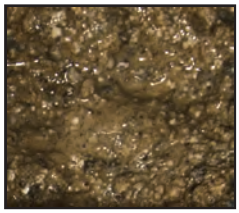
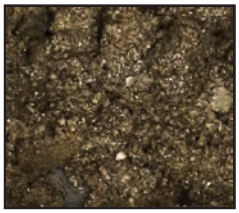
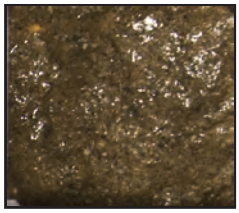
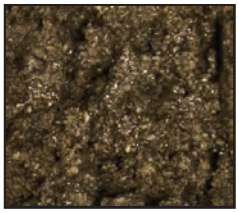
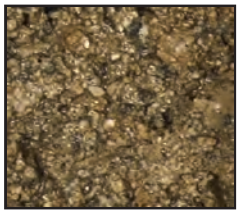
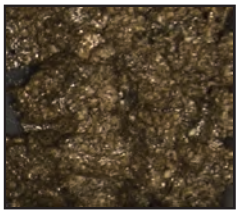
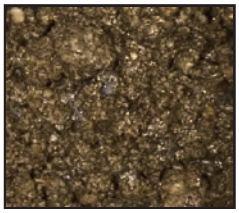
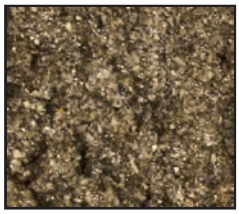
Depth interval (feet) and description		Depth interval (feet) and description	
	836–856; Gravelly silty clayey sand (gmS); medium to very coarse sand with clay, silt, and granules to medium pebbles; very poorly sorted; subangular; olive brown (2.5Y 4/3)		967–987; Gravelly sand (gS); fine to very coarse sand with granules; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
No image available	856–876; *No sample recovery*		987–1,007; Sand (S); fine to coarse sand; moderately sorted; subangular; olive brown (2.5Y 4/3); *micaceous*
	876–896; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3)		1,007–1,027; Silty sand (zS); fine to coarse sand with silt; moderately sorted; subangular; olive brown (2.5Y 4/3); *micaceous*
	896–916; Clayey silty sand (mS); fine to coarse sand with silt and clay; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		1,027–1,047; Silty sand (zS); fine to very coarse sand with silt; moderately to poorly sorted; subangular; olive brown (2.5Y 4/3)
	916–936; Gravelly clayey silty sand (gmS); fine to very coarse sand, silt, clay, and granules; very poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		1,047–1,067; Sand (S); fine to medium sand; well sorted; subangular; olive brown (2.5Y 4/3)
No image available	936–947; *No sample recovery*		1,067–1,087; Silty clayey sand (mS); fine to very coarse sand with silt and clay; poorly sorted; subangular; olive brown (2.5Y 4/3)
	947–967; Sand (S); fine to coarse sand; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		

Figure 5. —Continued

K1. **YVEP**

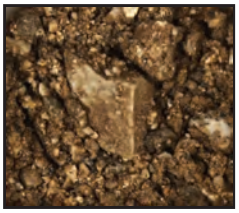
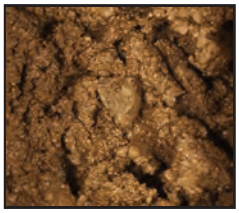
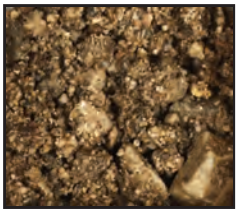
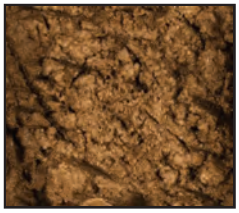
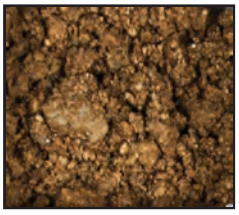
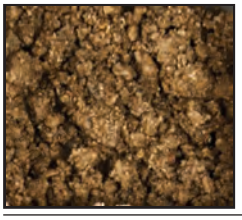
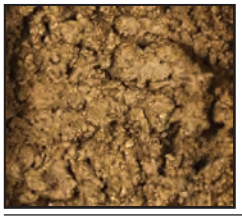
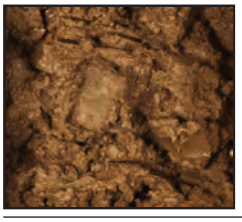
Depth interval (feet) and description		Depth interval (feet) and description	
	0–20; Silty gravelly sand (gmS); very fine to very coarse sand with granules to large pebbles and silt; very poorly sorted; subangular; light olive brown (2.5Y 5/4)		140–160; Clayey sand (cS); very fine to very coarse sand with clay and minor silt; poorly sorted; subrounded to subangular; brown (7.5YR 4/4)
	20–40; Gravelly sand (gS); fine and coarse to very coarse sand with granules to large pebbles; moderately to poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		160–180; Slightly gravelly silty clayey sand (g, mS); fine to coarse sand with clay, silt, and granules to medium pebbles; very poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)
	40–60; Silty sand (zS); very fine to medium sand and silt with minor coarse to very coarse sand; moderately sorted; subangular; brown (7.5Y 4/4)		180–200; Silty clayey sand (mS); fine to coarse sand with clay and silt; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)
	60–80; Silty gravelly sand (gmS); fine to coarse sand with granules to large pebbles and silt; very poorly sorted; subrounded to subangular; dark yellowish brown (10YR 4/6)		200–220; Silty clayey sand (mS); very fine to coarse sand with clay and silt; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)
	80–100; Slightly gravelly silty sand (g, mS); fine to very coarse sand with silt and granules to large pebbles; very poorly sorted; subangular; yellowish brown (10YR 5/8)		220–240; Silty clayey sandy gravel (msG); granules to medium pebbles and very fine to very coarse sand with clay and silt; very poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)
	100–120; Slightly gravelly silty sand (g, mS); fine to very coarse sand with silt and granules to very large pebbles; very poorly sorted; subrounded to subangular; strong brown (7.5YR 4/6)		240–260; Slightly gravelly silty clayey sand (g, mS); very fine to coarse sand with clay and silt with granules to medium pebbles; very poorly sorted; subangular to subrounded; yellowish brown (10YR 5/8); *mafic-rich*
	120–140; Sandy clay (sC); clay and very fine to fine sand with minor silt; well sorted; strong brown (7.5YR 4/6)		260–280; Clayey silty sand (mS); very fine to coarse sand with silt and clay; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/6)

Figure 5. —Continued

***K2.* YVEP**

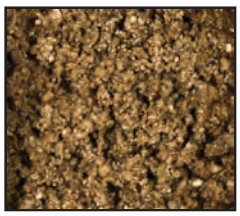
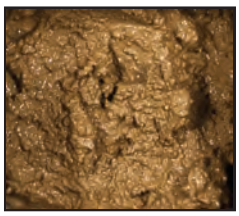
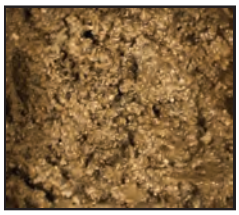
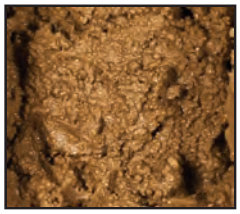
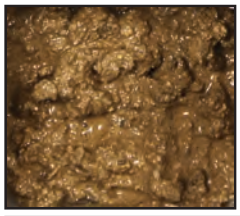
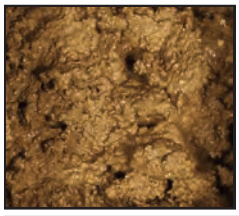
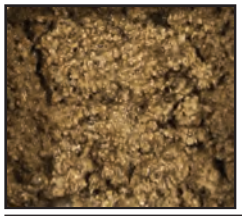
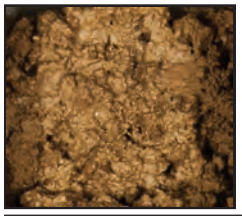
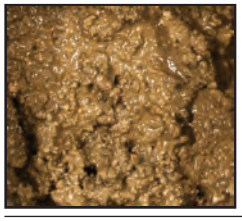
Depth interval (feet) and description		Depth interval (feet) and description	
	280–300; Silty sand (zS); coarse to very coarse sand with silt and fine sand; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/4)		420–440; Clayey silty sand (mS); fine to coarse sand with silt and clay with minor very coarse sand; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/6)
	300–320; Silty sand (zS); coarse to very coarse sand with silt and very fine sand; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/6)		440–460; Silty sand (zS); coarse to very coarse sand with silt and minor clay; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/6)
	320–340; Clayey silty sand (mS); very fine to coarse sand with silt and clay with minor very coarse sand; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)		460–480; Silty sand (zS); medium to very coarse sand and silt; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/4)
	340–360; Silty clayey sand (mS); very fine to medium sand with clay and silt with minor coarse sand; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/6)		480–500; Silty sand (zS); medium to coarse sand and silt; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)
	360–380; Clayey silty sand (mS); fine to coarse sand with silt and clay with minor very coarse sand; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/6)		500–520; Clayey sand (cS); medium to very coarse sand with clay; very poorly sorted; subangular to subrounded; dark yellowish brown (10YR 5/6)
	380–400; Sand (S); fine to coarse sand with minor silt and very coarse sand; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		520–540; Clayey sand (cS); medium to very coarse sand with clay; very poorly sorted; subangular to subrounded; yellowish brown (10YR 5/6)
	400–420; Silty sand (zS); fine to coarse sand with silt and minor very coarse sand; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/6)		540–560; Clayey sand (cS); fine to coarse sand with clay; poorly sorted; subangular to subrounded; yellowish brown (10YR 5/6)

Figure 5. —Continued

***K3.* YVEP**

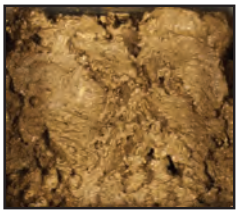
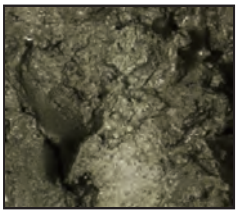
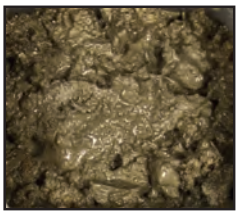
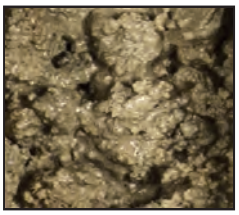
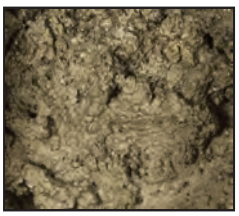
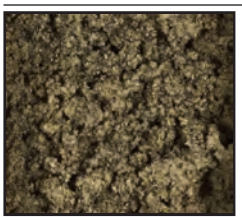
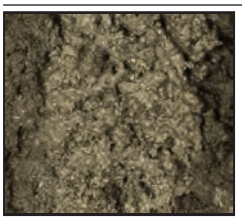
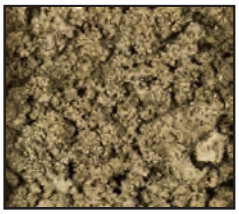
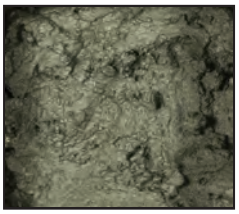
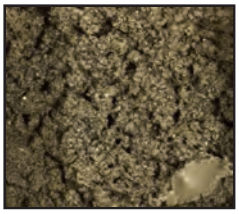
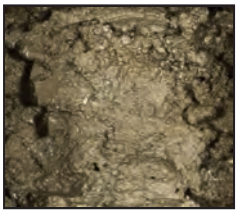
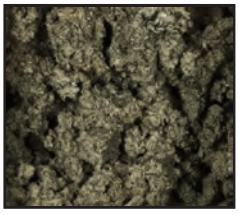
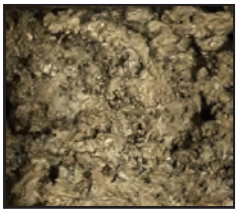
Depth interval (feet) and description		Depth interval (feet) and description	
	560–580; Sandy clay (sC); clay with medium to coarse sand; poorly sorted; yellowish brown (10YR 5/6)		700–710; Clay (C); clay with minor very fine sand; very well sorted; dark greenish gray (10GY 4/1)
	580–600; Sandy clay (sC); clay with fine and coarse to very coarse sand; very poorly sorted; olive (5Y 4/4)		710–720; Slightly gravelly sandy clay (g, sM); clay with very fine to coarse sand and granules; poorly sorted; light yellow (2.5Y 7/6); *caliche*
	600–620; Sandy clay (sC); clay with fine and coarse to very coarse sand; very poorly sorted; pale olive (5Y 6/3)		720–740; Slightly gravelly clayey sand (g, mS); coarse to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to angular; dark greenish gray (10GY 4/1)
	620–640; Silty sand (zS); medium to coarse sand with silt; poorly sorted; subangular; olive (5Y 4/4)		740–760; Clayey sand (cS); medium to coarse sand with clay and minor silt; well sorted; subangular to angular; olive (5Y 5/3); *mafic-rich*
	640–660; Clayey sand (cS); medium to coarse sand with clay and minor silt; poorly sorted; subangular; pale olive (5Y 6/3)		760–780; Clay (C); clay with minor very fine to coarse sand and silt; moderately sorted; greenish gray (5GY 5/1)
	660–680; Silty sand (zS); fine to medium sand with silt and minor coarse sand; moderately sorted; subangular; olive gray (5Y 5/2)		780–800; Sandy clay (sC), clay with fine to coarse sand; poorly sorted; dark greenish gray (10GY 4/1); *caliche*
	680–700; Silty clay (M); clay with silt and minor very fine to fine sand; well sorted; dark greenish gray (10GY 4/1); *mafic-rich*		800–820; Sandy clay (sC); clay with fine to coarse sand; poorly sorted; pale olive (5Y 6/4); *caliche*

Figure 5. —Continued

***K4.* YVEP**

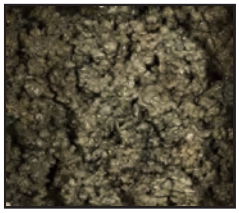
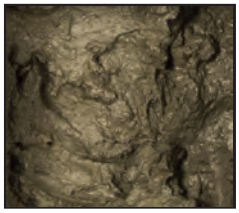
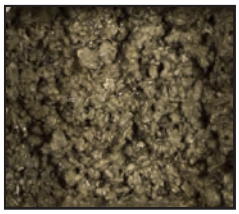
	Depth interval (feet) and description
	820–830 *Shaker*; silty sandy gravel (msG); granules with very coarse sand and silt; poorly sorted; subangular to angular; greenish gray (10GY 5/1); *mafic-rich*
	830–840; Slightly gravelly sandy clay (g, sM); clay with fine and coarse to very coarse sand with granules; poorly sorted; pale olive (5Y 6/3); *mafic-rich*
	840–850 *Shaker*; sandy gravel (sG); granules with very coarse sand and minor silt; moderately to well sorted; angular; pale olive (5Y 6/3); *mafic-rich; weathered mafic bedrock?*
No image available	850–852; *No sample collected*

Figure 5. —Continued

H1. **YVWC**

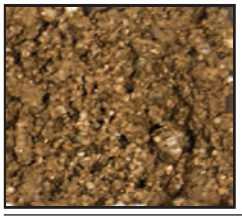
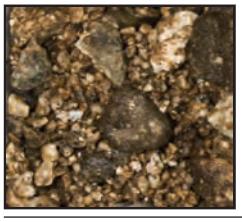
Depth interval (feet) and description		Depth interval (feet) and description	
No image available	5; *shoe 1C* 10; *shoe 2C*		80; Sandy gravel (sG); granules to medium pebbles with coarse to very coarse sand; moderately to well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	20; Sand (S); coarse to very coarse sand; well sorted; subangular; dark yellowish brown (10YR 4/4)*; cores 3C–5C; shaker sample from cored interval*		90; Sandy gravel (sG); granules to small pebbles with coarse to very coarse sand; moderately to well sorted; subangular; brown (10YR 4/3)
	30; Sand (S); coarse to very coarse sand; well sorted; subangular; dark yellowish brown (10YR 4/4)*; cores 6C–7C*; *shaker sample from cored interval*		100; Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; moderately to well sorted; subangular; brown (10YR 4/3)
	40; Gravel (G); granules to large pebbles; moderately to well sorted; angular to subrounded; various colors		110; Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; moderately to well sorted; subangular; brown (10YR 4/3)
	50; Sandy gravel (sG); granules to medium pebbles; well sorted; angular to rounded; dark yellowish brown (10YR 4/4)		120; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular; brown (10YR 4/3); *cores 8C–9C; shaker sample from cored interval*
	60; Slightly gravelly silty sand (g, mS); medium to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 3/4)		130; Slightly gravelly sandy clay (g, sM); clay with coarse to very coarse sand and granules; very poorly sorted; light olive brown (2.5Y 5/4)
	70; Gravelly sand (gS); coarse to very coarse sand with minor granules; well sorted; subangular to subrounded; brown (10YR 4/3)		135; Sandy gravel (sG); granules to large pebbles with very coarse sand; moderately to well sorted; subangular; olive brown (2.5Y 4/3)

Figure 6. Shaker drill-cutting samples collected from boreholes at three multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California: *A*–*G* and *K*, no data collected; *H*, YVWC; *I*, YV6E; and *J*, YVDA.

***H2.* YVWC**

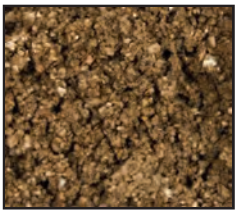
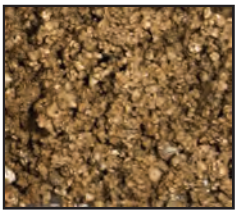
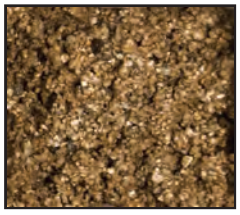
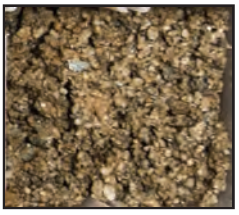
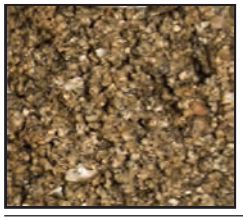
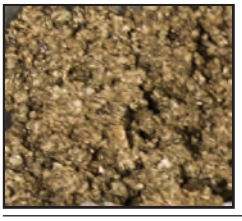
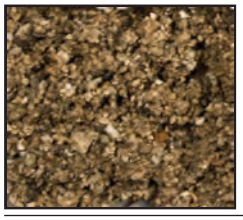
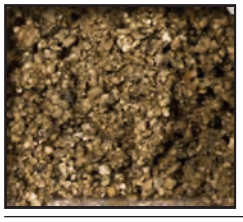
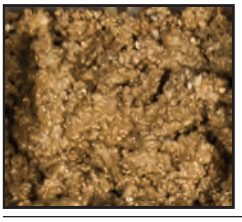
Depth interval (feet) and description		Depth interval (feet) and description	
	140; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular; brown (10YR 4/3)		210; Silty gravelly sand (gmS); very fine to very coarse sand with granules and silt; poorly sorted; subangular; brown (10YR 4/3)
	150; Sandy gravel (sG); granules to small pebbles with very coarse sand; moderately to well sorted; angular to subangular; olive brown (2.5Y 4/3)		215; Silty gravelly sand (gmS); very fine to very coarse sand with granules and silt; poorly sorted; angular to subangular; brown (10YR 4/3)
	160; Sandy gravel (sG); granules to small pebbles with very coarse sand; moderately to well sorted; angular to subangular; olive brown (2.5Y 4/3)		220; Silty gravelly sand (gmS); very fine to very coarse sand with granules and silt; poorly sorted; angular to subangular; brown (10YR 4/3)
	170; Silty sandy gravel (msG); granules with very coarse sand and silt; poorly sorted; subangular; brown (10YR 4/3)		230; Sandy gravel (sG); granules to small pebbles with very coarse sand; well to moderately sorted; subangular; olive brown (2.5Y 4/3)
	180; Silty sandy gravel (msG); granules to small pebbles with very coarse sand and silt; poorly sorted; subangular; olive brown (2.5Y 4/3); *core 10C; shaker sample from cored interval*		240; Sandy gravel (sG); granules with very coarse sand; well sorted; subangular; olive brown (2.5Y 4/3)
	190; Sandy gravel (sG); granules to small pebbles with very coarse sand; moderately to well sorted; angular to subangular; olive brown (2.5Y 4/3)		250; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/4)
	200; Sandy gravel (sG); granules with very coarse sand; well sorted; angular to subangular; olive brown (2.5Y 4/3)		255; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules to small pebbles; poorly sorted; subangular; yellowish brown (10YR 5/4)

Figure 6. —Continued

H3. **YVWC**

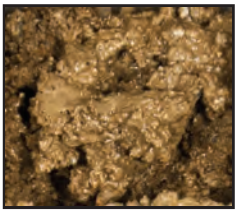
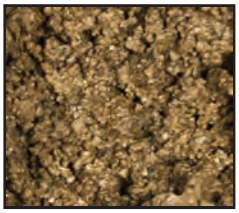
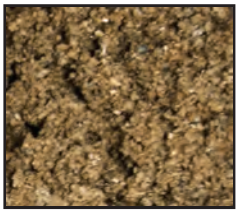
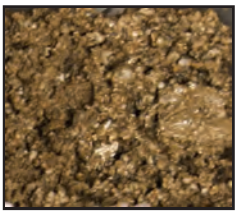
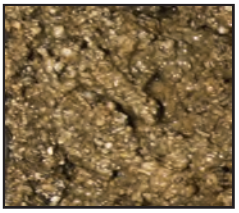
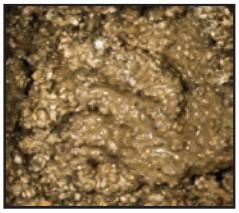
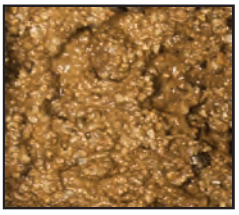
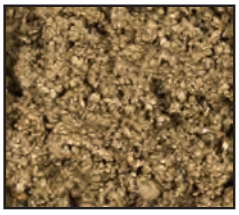
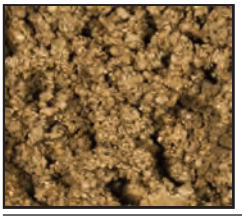
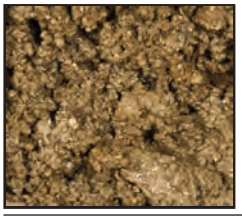
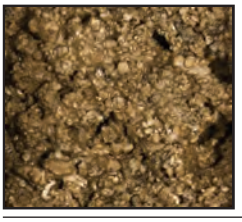
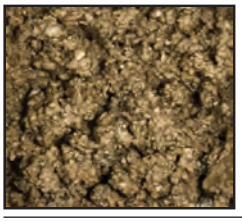
Depth interval (feet) and description		Depth interval (feet) and description	
	260; Sandy silty clay (sM); clay with silt and medium to very coarse sand; poorly sorted; light olive brown (2.5Y 5/4) 265; *shoe 11C*		330; Silty sandy gravel (msG); granules with coarse to very coarse sand and silt; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	270; Clay (C); clay; very well sorted; light olive brown (2.5Y 5/4) 270; *shoe 12C*, sluff 274; *shoe 13C*		340; Silty sandy gravel (msG); granules with coarse to very coarse sand and silt; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	280; Silty sandy gravel (msG); granules with very fine to very coarse sand and silt; poorly sorted; subangular; olive brown (2.5Y 4/3)		350; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	288; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; olive brown (2.5Y 4/4)		360; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	300; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular; dark yellowish brown (10YR 4/6)		370; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	310; Gravelly sandy silt (g, sM); silt with medium to very coarse sand and granules; poorly sorted; light olive brown (2.5Y 5/4)		383; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)
	320; Silty sandy gravel (msG); granules to small pebbles with coarse to very coarse sand and silt; poorly sorted; angular to subangular; light olive brown (2.5Y 5/3)		390; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)

Figure 6. —Continued

***H4.* YVWC**

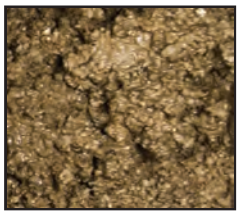
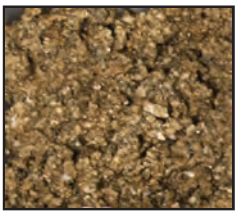
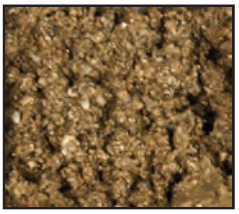
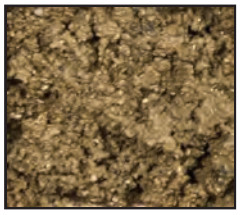
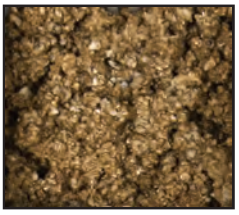
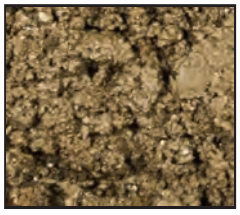
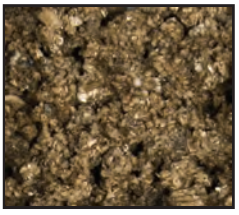
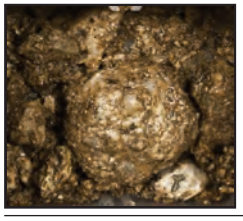
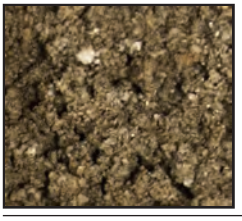
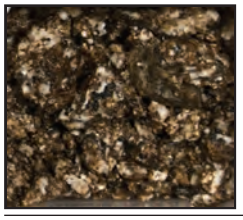
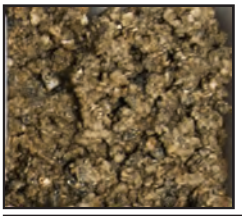
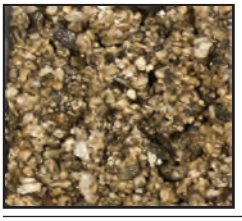
Depth interval (feet) and description		Depth interval (feet) and description	
	400; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)		460; Silty sandy gravel (msG); granules to small pebbles with very fine to very coarse sand and silt; poorly sorted; angular to subangular; light olive brown (2.5Y 5/4)
	410; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)		470; Gravelly sandy silt (g, sM); silt with very fine to very coarse sand and granules; poorly sorted; light olive brown (2.5Y 5/4)
	420; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)		480; Silty sandy gravel (msG); granules with very fine to very coarse sand and silt; poorly sorted; angular to subangular; light olive brown (2.5Y 5/4)
	430; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules; poorly sorted; subangular; light olive brown (2.5Y 5/3)		490; Gravelly sandy silt (g, sM); silt with very fine to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/3)
	441; Shoe 14C*;* gravel (G); granules to large pebbles; moderately to well sorted; angular to subrounded; various colors		500; Gravelly sandy silt (g, sM); silt with very fine to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/3)
	443.25; Shoe 15C; gravel (G); granules to large pebbles; moderately to well sorted; angular; various colors		510; Silty sandy gravel (msG); granules to small pebbles with very fine to very coarse sand and silt; poorly sorted; angular to subangular; olive brown (2.5Y 4/3)
	452; Silty sandy gravel (msG); granules to small pebbles with coarse to very coarse sand and silt; poorly sorted; angular; light olive brown (2.5Y 5/4); *shaker sample from cored interval 16C*		520; Gravel (G); granules to small pebbles; well sorted; angular to subangular; light olive brown (2.5Y 5/3)

Figure 6. —Continued

I1. **YV6E**

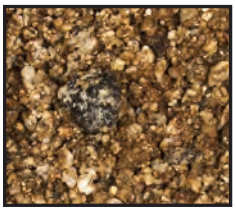
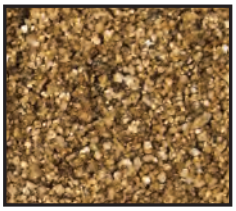
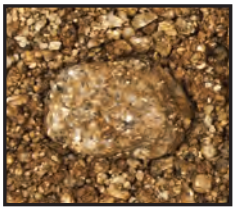
Depth interval (feet) and description		Depth interval (feet) and description	
	10; Sand (S); coarse to very coarse sand; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		80; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; yellowish brown (10YR 5/6)
	20; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		90; Gravelly sand (gS); coarse to very coarse sand with granules to medium pebbles; moderately to well sorted; subrounded; dark yellowish brown (10YR 4/6)
	30; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		100; Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; moderately to well sorted; subrounded; dark yellowish brown (10YR 4/6)
	40; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		110; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subrounded; yellowish brown (10YR 5/6)
	50; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		120; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subrounded; dark yellowish brown (10YR 4/6)
	60; Gravel (G); granules to large pebbles; moderately to well sorted; subangular; dark yellowish brown (10YR 4/4)		130; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/6)
	70; Gravelly sand (gS); coarse to very coarse sand with granules; moderately sorted; subangular to subrounded; yellowish brown (10YR 5/6)		140; Gravelly sand (gS); coarse sand with granules to medium pebbles; moderately sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)

Figure 6. —Continued

I2. **YV6E**

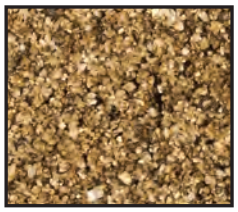
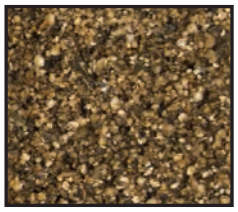
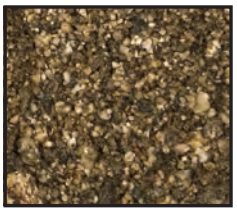
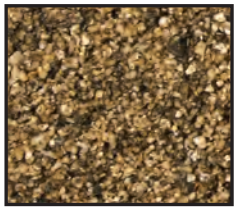
Depth interval (feet) and description		Depth interval (feet) and description	
	150; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/6)	No image available	220; *No sample recovery*
	160; Gravelly silty sand (gmS); coarse to very coarse sand and silt with granules; moderately to poorly sorted; subrounded; yellowish brown (10YR 5/6)	No image available	230–240; *Cored interval; cores 1C and 2C*
	170; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subrounded; light olive brown (2.5Y 5/6)		240; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	180; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		250; Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	190; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		260; Gravelly sand (gS); coarse sand with granules to small pebbles; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	200; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		270; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/3)
	210; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		280; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/3)

Figure 6. —Continued

***I3.* YV6E**

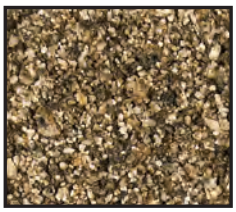
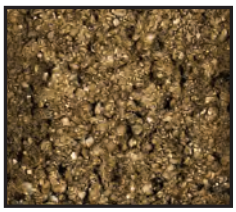
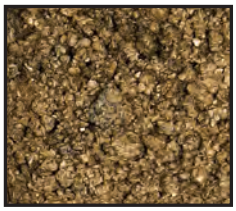
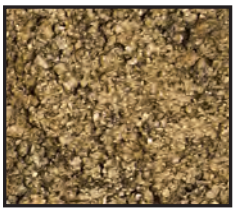
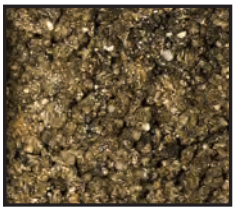
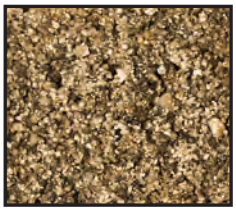
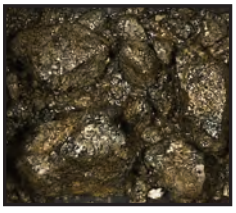
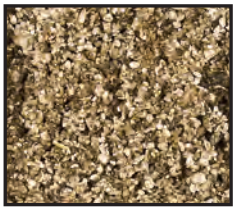
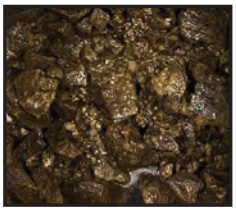
Depth interval (feet) and description		Depth interval (feet) and description	
	290; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/3)		360; Gravelly silty sand (gmS); coarse to very coarse sand and silt with granules; moderately to poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	300; Gravelly sand (gS); coarse to very coarse sand with granules; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		370; Gravelly silty clayey sand (gmS); coarse to very coarse sand with silt and clay and granules to small pebbles; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	310; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		380; Gravelly silty clayey sand (gmS); coarse to very coarse sand with silt and clay and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	320; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/4)		390; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; moderately to poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	330; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		400; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; moderately to poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	340; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		405; Shoe 3C; sand (S); very fine to medium sand; moderately to well sorted; subangular to angular; olive brown (2.5Y 4/4); *well indurated; calcareous*
	350; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		407; Shoe 4C; silty sand (zS); very fine to fine sand and silt; well sorted; subangular to angular; olive brown (2.5Y 4/4); *well indurated; weakly calcareous*

Figure 6. —Continued

***I4.* YV6E**

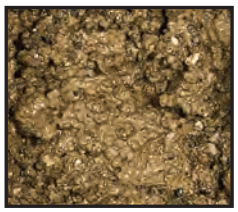
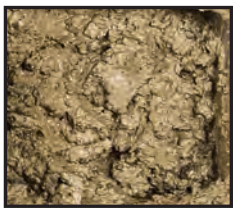
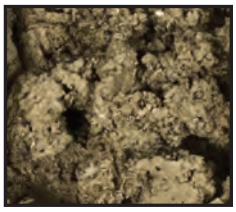
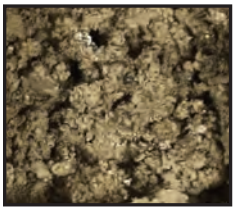
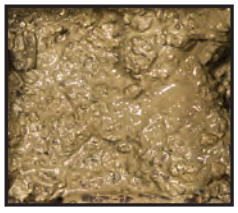
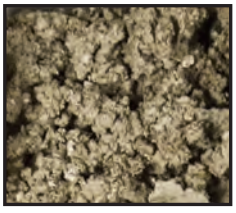
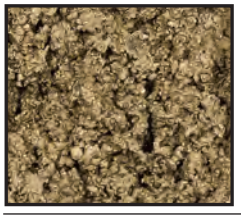
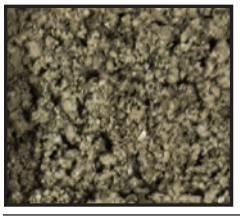
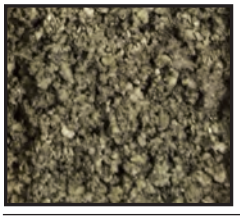
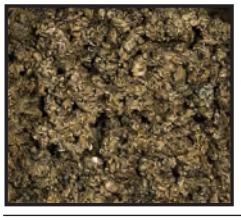
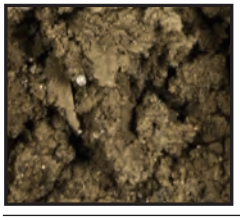
Depth interval (feet) and description		Depth interval (feet) and description	
	410; Slightly gravelly sandy silty clay (g, sM); clay and silt with coarse to very coarse sand and granules; poorly sorted; light olive brown (2.5Y 5/4)		480; Gravelly clayey silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; olive (5Y 4/3)
	420; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules to medium pebbles; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		490; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; angular to subangular; pale yellow (5Y 7/3)
	430; Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; moderately sorted; angular to subangular; olive (5Y 5/3)		500; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; moderately sorted; angular to subangular; pale olive (5Y 6/3)
	440; Gravelly clayey silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive (5Y 5/3)		510; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; angular to subangular; pale olive (5Y 6/3)
	450; Gravelly clayey silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive (5Y 5/3)		520; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; greenish gray (5GY 5/1)
	460; Gravelly clayey silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive (5Y 5/3)		530; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular; greenish gray (5GY 5/1)
	470; Gravelly clayey silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive (5Y 4/3)		540; Slightly gravelly sandy silty clay (g, sM); clay and silt with coarse to very coarse sand and granules; poorly sorted; olive (5Y 5/3)

Figure 6. —Continued

I5. **YV6E**

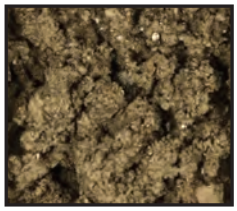
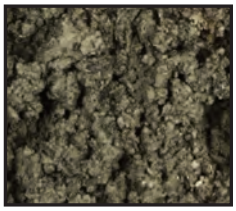
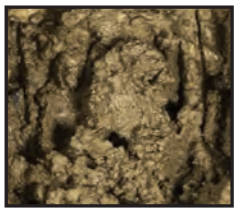
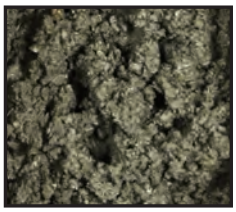
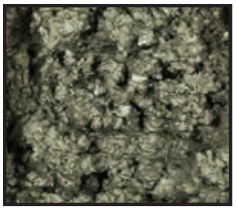
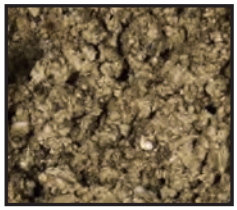
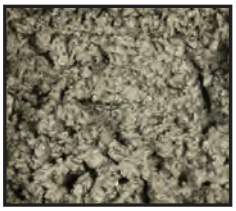
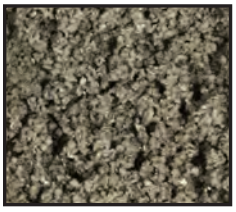
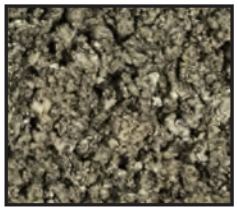
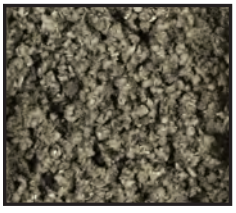
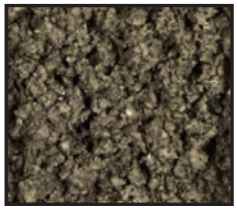
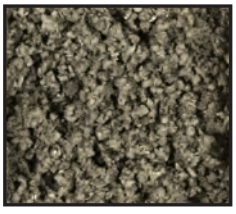
Depth interval (feet) and description		Depth interval (feet) and description	
	550; Slightly gravelly sandy silty clay (g, sM); clay and silt with medium to very coarse sand and granules; poorly sorted; olive (5Y 5/3)		630; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; dark greenish gray (5GY 4/1)
	560; Gravelly clayey silty sand (gmS); medium to very coarse sand with silt and clay and granules; poorly sorted; subangular to subrounded; olive (5Y 5/3)		640; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; greenish gray (5GY 5/1)
No image available	565–585.5; *Cored interval; cores 5C–9C*		650; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; greenish gray (10GY 5/1)
	590; Gravelly clayey silty sand (gmS); medium to very coarse sand with silt, clay, and granules; subangular to subrounded; olive (5Y 5/3)		660; Gravelly silty clayey sand (gmS); medium to very coarse sand with silt, clay, and granules; poorly sorted; subangular to subrounded; greenish gray (5GY 5/1)
	600; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive gray (5Y 5/2)		670; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; greenish gray (5GY 5/1)
	610; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular; olive gray (5Y 5/2)		680; Gravelly silty sand (gmS); coarse to very coarse sand and silt with granules; poorly sorted; subangular to subrounded; greenish gray (10Y 5/1)
	620; Gravelly silty sand (gmS); medium to very coarse sand with silt and granules; poorly sorted; subangular; olive gray (5Y 4/2)		690; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subangular to subrounded; greenish gray (10Y 6/1)

Figure 6. —Continued

***I6.* YV6E**

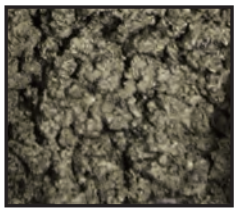
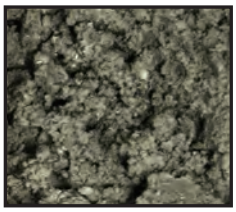
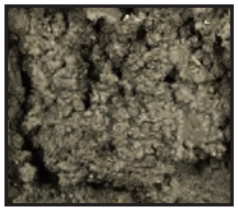
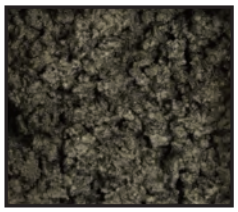
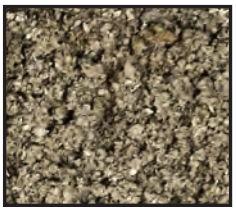
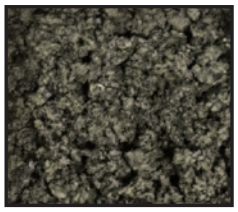
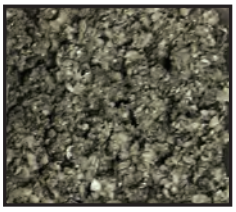
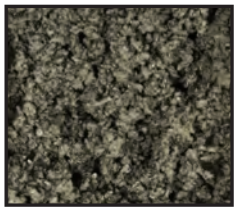
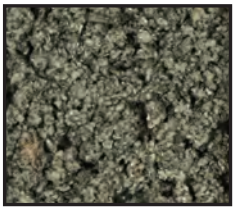
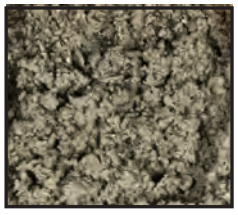
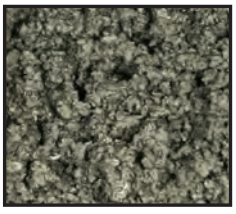
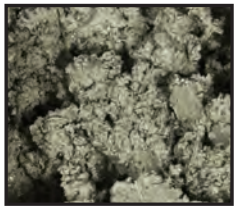
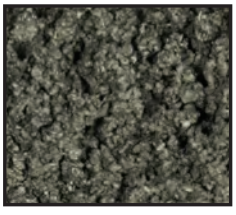
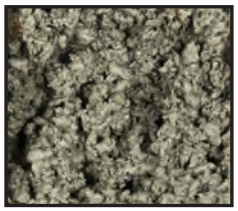
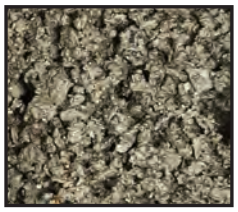
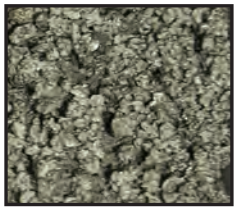
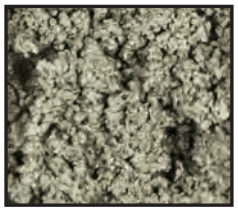
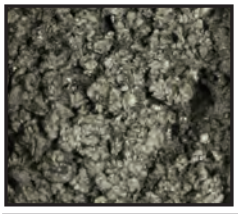
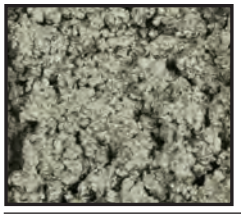
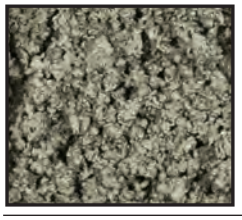
Depth interval (feet) and description		Depth interval (feet) and description	
	700; Gravelly silty clayey sand (gmS); medium to very coarse sand with clay, silt, and granules; poorly sorted; subangular; dark greenish gray (10Y 4/1)		770; Gravelly silty clayey sand (gmS); coarse to very coarse sand with clay, silt, and granules; poorly sorted; subangular; dark greenish gray (10Y 4/1)
	710; Gravelly silty clayey sand (gmS); medium to very coarse sand with clay, silt, and granules; poorly sorted; subangular; dark greenish gray (10Y 4/1)		780; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; olive (5Y 5/3)
	720; Gravelly silty clayey sand (gmS); coarse to very coarse sand with clay, silt, and granules; poorly sorted; subangular; dark greenish gray (10Y 4/1)		790; Sand (S); medium to very coarse sand; moderately to well sorted; subangular; olive (5Y 5/3)
	730; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; angular to subangular; dark greenish gray (10Y 4/1)		800; Gravelly sand (gS); medium to very coarse sand with granules; moderately sorted; subangular; dark greenish gray (10Y 4/1)
	740; Gravelly silty sand (gmS); coarse to very coarse sand and silt with granules; poorly sorted; subangular; dark greenish gray (10Y 4/1)		810; Gravelly silty clayey sand (gmS); medium to very coarse sand with clay, silt, and granules; poorly sorted; subangular; dark greenish gray (5GY 4/1)
	750; Gravelly silty clayey sand (gmS); coarse to very coarse sand with clay, silt, and granules; poorly sorted; subangular; dark greenish gray (10Y 4/1)		820; Gravelly silty clayey sand (gmS); coarse to very coarse sand with clay, silt, and granules; poorly sorted; subangular to subrounded; greenish gray (5GY 5/1)
	760; Slightly gravelly sandy silt (g, sM); silt with coarse to very coarse sand and granules; poorly sorted; greenish gray (5GY 5/1)		830; Gravelly silty clayey sand (gmS); coarse to very coarse sand with clay, silt, and granules; poorly sorted; subangular to subrounded; dark greenish gray (10Y 3/1)

Figure 6. —Continued

***I7.* YV6E**

Depth interval (feet) and description	
	840; Gravelly silty clayey sand (gmS); coarse to very coarse sand with clay, silt, and granules; poorly sorted; subangular; greenish gray (10Y 5/1)
	850; Gravelly sand (gS); coarse to very coarse sand with granules to medium pebbles; moderately to poorly sorted; subangular; greenish gray (10Y 5/1)
	860; Gravelly sand (gS); coarse to very coarse sand with granules to medium pebbles; moderately to poorly sorted; greenish gray (5GY 5/1)
	870; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; greenish gray (10Y 5/1)
	880; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; dark greenish gray (10Y 4/1)
	890; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; greenish gray (5GY 6/1)
	900; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; greenish gray (10Y 5/1)

Depth interval (feet) and description	
	910; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular; greenish gray (10Y 5/1)

Figure 6. —Continued

J1. **YVDA**

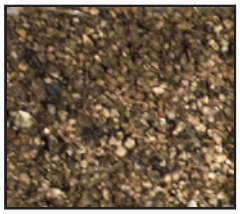
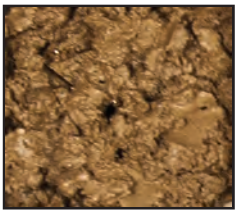
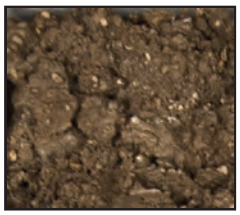
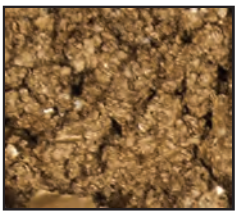
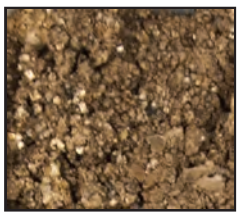
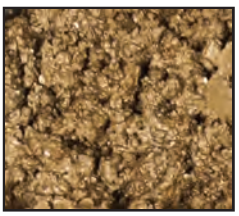
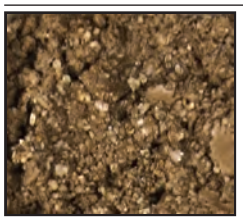
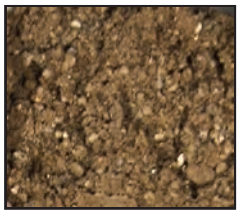
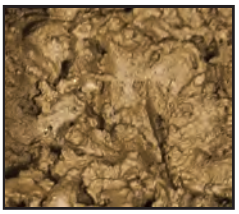
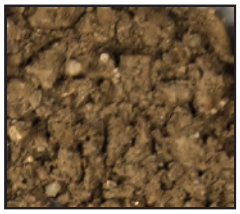
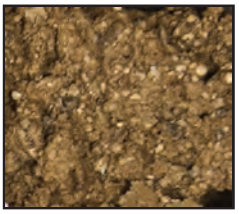
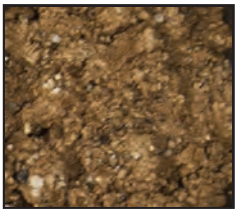
Depth interval (feet) and description		Depth interval (feet) and description	
	10; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; dark grayish brown (2.5Y 4/2)		80; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; yellowish brown (10YR 5/4)
	20; Sandy clayey silt (sM); silt and clay with coarse to very coarse sand; poorly sorted; dark grayish brown (2.5Y 4/2)		90; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; dark yellowish brown (10YR 4/4)
	30; Sandy silty clay (sM); clay and silt with coarse to very coarse sand; poorly sorted; brown (10YR 4/3)		100; Silty sand (zS); coarse to very coarse sand with silt; poorly sorted; angular to subangular; brown (10YR 4/3)
	40; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; brown (10YR 4/3)		110; Sandy silt (sZ); silt and very fine sand with coarse to very coarse sand; poorly sorted; brown (10YR 4/3)
	50; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; brown (10YR 4/3)		120; Sandy silt (sZ); silt and very fine sand with coarse to very coarse sand; poorly sorted; olive brown (2.5Y 4/3)
	60; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; light olive brown (2.5Y 5/6)		130; Slightly gravelly silty sand (g, mS); coarse to very coarse sand and silt with granules; subrounded; poorly sorted; dark yellowish brown (10YR 4/4)
	70; Sandy clayey silt (sM); silt and clay with coarse to very coarse sand; poorly sorted; dark yellowish brown (10YR 4/4)		140; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; dark yellowish brown (10YR 4/4)

Figure 6. —Continued

J2. **YVDA**

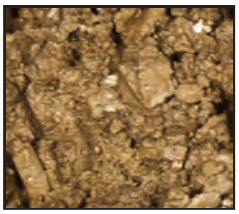
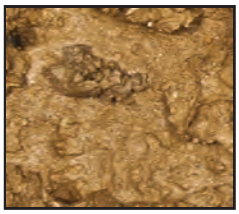
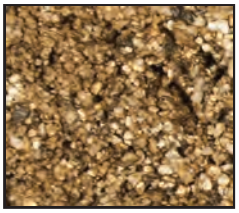
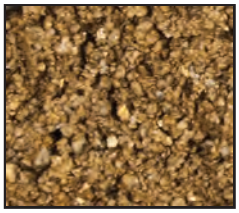
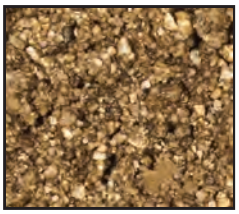
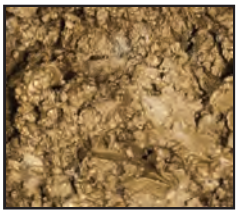
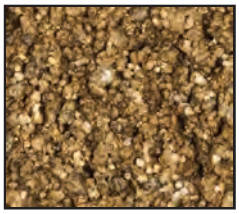
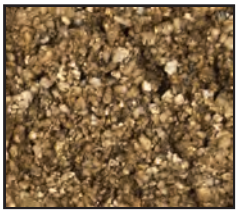
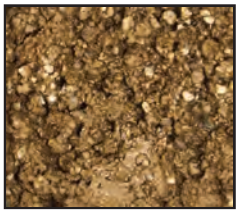
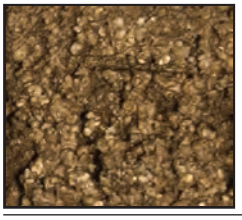
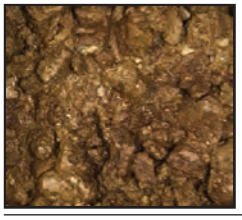
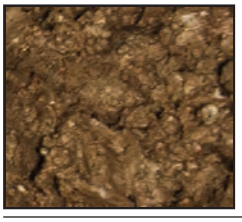
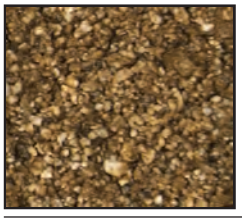
Depth interval (feet) and description		Depth interval (feet) and description	
	150; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		220; Silt (Z); silt with minor coarse to very coarse sand; moderately sorted; dark yellowish brown (10YR 4/6)
	160; Slightly gravelly silty sand (g, mS); coarse to very coarse sand and silt with granules; poorly sorted; subangular to subrounded; brown (10YR 4/3)		230; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	170; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular to subrounded; brown (10YR 4/3)		240; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	180; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; brown (10YR 4/3)		250; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	190; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		260; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; moderately to poorly sorted; subangular; dark yellowish brown (10YR 4/4)
	200; Silty sand (zS); coarse to very coarse sand with silt; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		270; Sandy silt (sZ); silt with coarse to very coarse sand; poorly sorted; dark yellowish brown (10YR 4/6)
	210; Silt (Z); silt with minor coarse to very coarse sand; moderately sorted; brown (10YR 4/3)		280; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; angular to subangular; dark yellowish brown (10YR 4/4)

Figure 6. —Continued

J3. **YVDA**

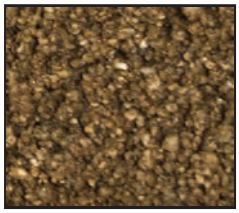
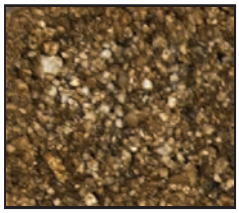
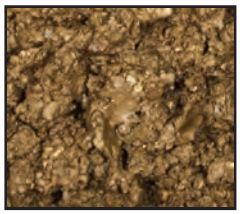
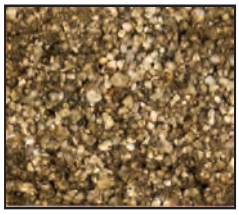
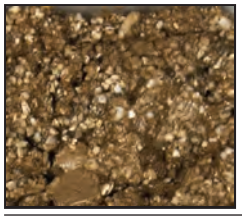
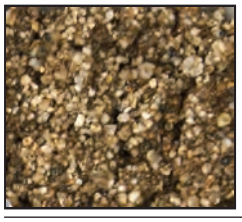
Depth interval (feet) and description		Depth interval (feet) and description	
	290; Sand (S); coarse to very coarse sand; very well sorted; angular to subangular; dark yellowish brown (10YR 4/4)		360; Sand (S); coarse to very coarse sand with minor silt; moderately to well sorted; subangular to subrounded; brown (10YR 4/3)
	300; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		370; Sand (S); coarse to very coarse sand with minor silt; moderately to well sorted; subangular; brown (10YR 4/3)
	310; Sandy clayey silt (sM); silt and clay with coarse to very coarse sand; poorly sorted; brown (10YR 4/3)		380; Sand (S); coarse to very coarse sand; very well sorted; angular to subangular; dark yellowish brown (10YR 4/4)
	320; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular; light olive brown (2.5Y 5/4)		390; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)
	330; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; moderately sorted; subangular; brown (10YR 4/3)		400; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
No image available	340; *No sample recovery*		410; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; dark yellowish brown (10YR 4/4)
No image available	350; *No sample recovery*		420; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; angular to subangular; light olive brown (2.5Y 5/3)

Figure 6. —Continued

J4. **YVDA**

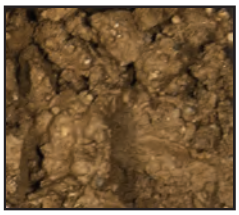
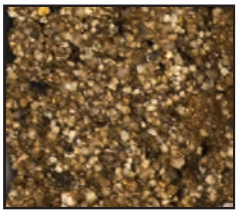
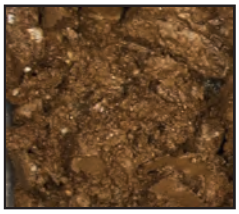
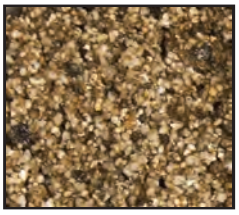
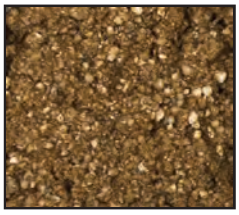
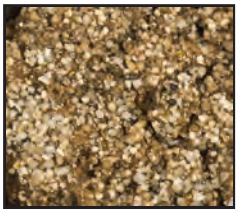
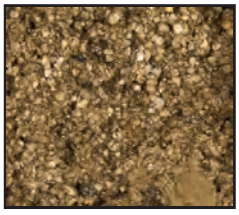
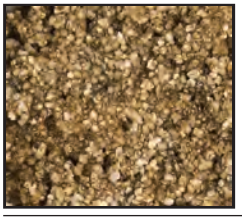
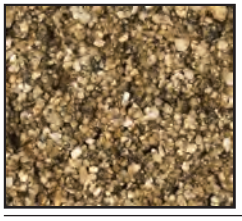
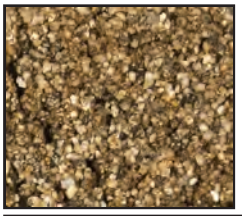
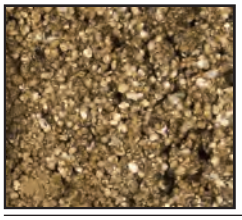
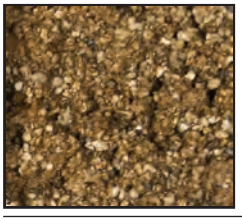
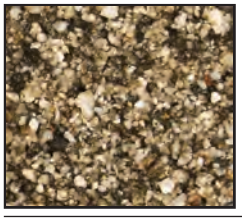
Depth interval (feet) and description		Depth interval (feet) and description	
	430; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; angular to subangular; dark yellowish brown (10YR 4/4)		500; Slightly gravelly sandy silt (gM); silt with coarse to very coarse sand and granules; poorly sorted; brown (10YR 4/3)
	440; Sand (S); coarse to very coarse sand; very well sorted; subangular; light olive brown (2.5Y 5/4)		510; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; dark yellowish brown (10YR 4/4)
	450; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)		520; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)
	460; Silty sand (zS); coarse to very coarse sand with silt; moderately to poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		530; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	470; Silty sand (zS); coarse to very coarse sand with silt; moderately to poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		540; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	480; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; angular to subangular; light olive brown (2.5Y 5/3)		550; Silty sand (zS); coarse to very coarse sand with silt; moderately to poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	490; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; angular to subangular; brown (10YR 4/3)		560; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; angular to subangular; light olive brown (2.5Y 5/4)

Figure 6. —Continued

J5. **YVDA**

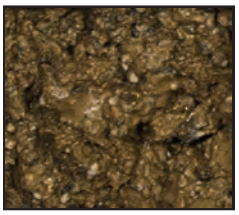
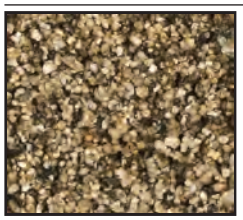
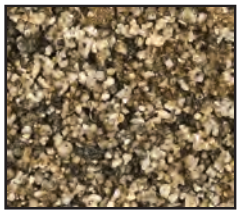
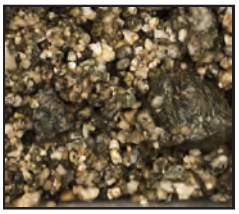
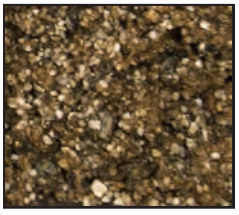
Depth interval (feet) and description		Depth interval (feet) and description	
	570; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; subangular; light olive brown (2.5Y 5/4)		640; Clayey silty sand (mS); coarse to very coarse sand with silt and clay; poorly sorted; subangular; olive brown (2.5Y 4/3); *trace wood fragments 20–24 mm*
	580; Sand (S); coarse to very coarse sand; very well sorted; angular to subangular; light olive brown (2.5Y 5/4)		650; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules to small pebbles; very poorly sorted; olive brown (2.5Y 4/3)
	590; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; angular to subangular; light olive brown (2.5Y 5/4)		660; Slightly gravelly silty sand (g, mS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; dark yellowish brown (10YR 4/4)
	600; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		670; Gravelly sand (gS); coarse to very coarse sand and granules to small pebbles; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	610; Slightly gravelly sand (g, S); coarse to very coarse sand with granules; well sorted; angular to subangular; light olive brown (2.5Y 5/4)		680; Gravelly sand (gS); coarse to very coarse sand and granules to medium pebbles; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/4)
	620; Gravelly sand (gS); coarse to very coarse sand with granules to small pebbles; well to moderately sorted; subangular; light olive brown (2.5Y 5/4)		690; Sand (S); coarse to very coarse sand; very well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)
	630; Slightly gravelly sand (g,S); coarse to very coarse sand with granules; well sorted; angular to subangular; light olive brown (2.5Y 5/4)		700; Gravelly sand (gS); coarse to very coarse sand and granules to medium pebbles; moderately sorted; subangular to subrounded; light olive brown (2.5Y 5/3)

Figure 6. —Continued

***J6.* YVDA**

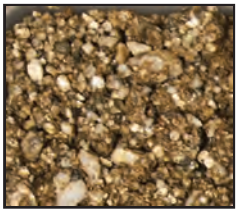
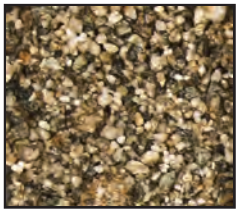
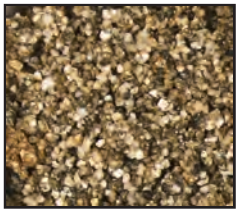
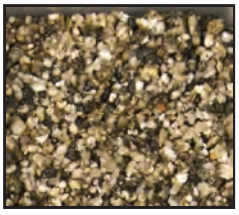
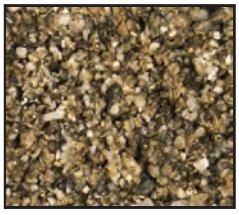
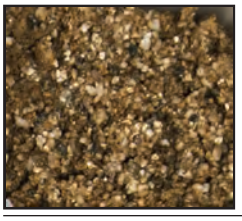
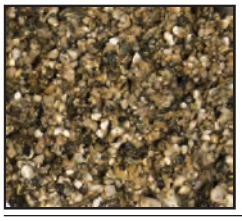
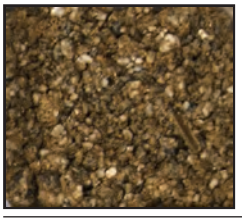
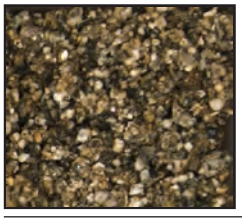
Depth interval (feet) and description		Depth interval (feet) and description	
	710; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules to small pebbles; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		780; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/3)
	720; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules to small pebbles; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		790; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subrounded; light olive brown (2.5Y 5/3)
	730; Gravelly sand (gS); coarse to very coarse sand with silt and granules to small pebbles; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)		800; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)
	740; Silty sand (zS); coarse to very coarse sand with silt; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		810; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)
	750; Sand (S); coarse to very coarse sand; very well sorted; subrounded; light olive brown (2.5Y 5/3)		820; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)
	760; Silty sand (zS); coarse to very coarse sand with silt; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		830; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)
	770; Clayey silty sand (mS); coarse to very coarse sand with silt and clay; poorly sorted; subangular to subrounded; dark yellowish brown (10YR 4/4)		840; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; light olive brown (2.5Y 5/3)

Figure 6. —Continued

***J7.* YVDA**

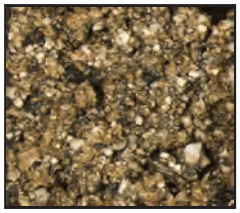
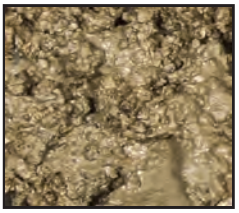
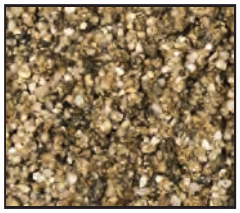
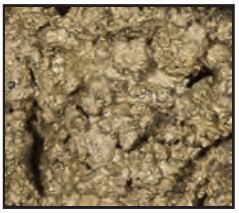
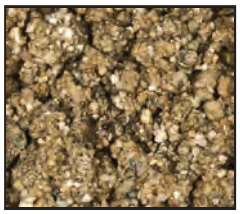
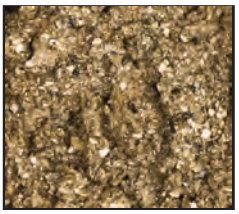
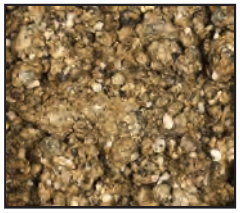
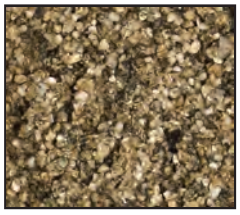
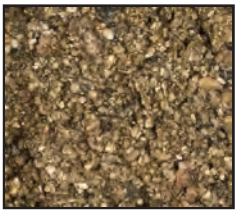
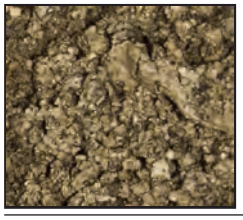
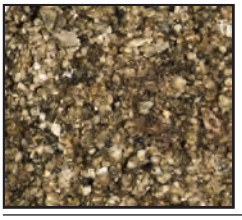
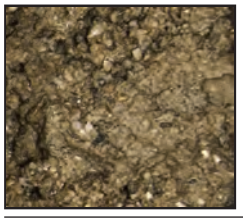
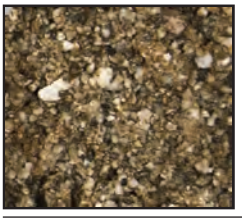
Depth interval (feet) and description		Depth interval (feet) and description	
	850; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/3)		920; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive (5Y 4/3)
	860; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; olive brown (2.5Y 4/3)		930; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; olive (5Y 4/3)
	870; Gravelly silty clayey sand (gmS); coarse to very coarse sand and clay with silt and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		940; Slightly gravelly clayey silty sand (gmS); coarse to very coarse sand with silt and clay with granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	880; Gravelly silty clayey sand (gmS); coarse to very coarse sand and clay with silt and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		950; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/4)
	890; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		960; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; olive (5Y 4/3)
	900; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)		970; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular; olive (5Y 4/3)
	910; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular to subrounded; olive brown (2.5Y 4/3)		980; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; olive (5Y 4/3)

Figure 6. —Continued

J8. **YVDA**

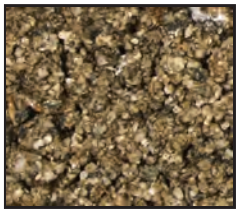
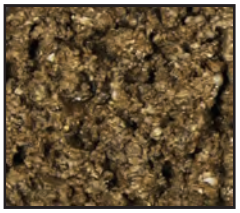
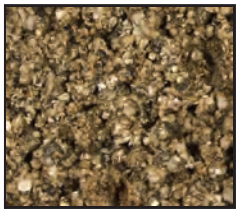
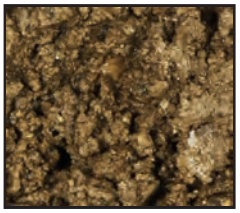
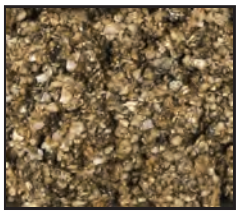
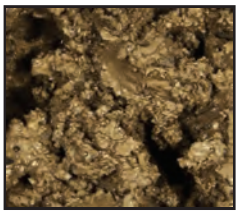
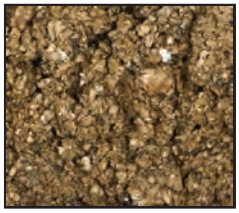
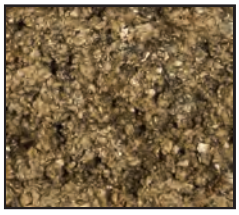
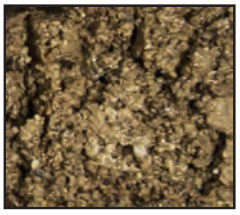
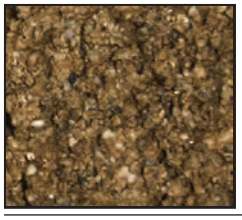
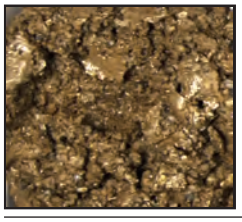
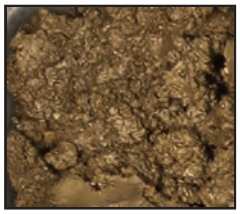
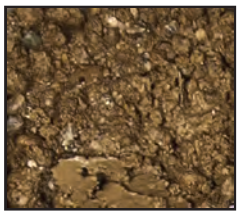
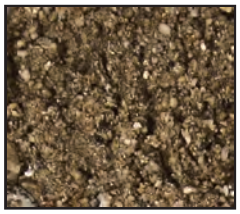
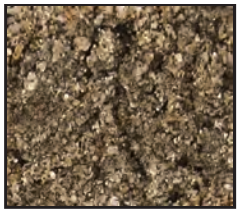
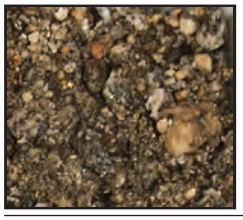
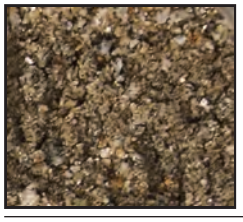
Depth interval (feet) and description		Depth interval (feet) and description	
	990; Gravelly sand (gS); coarse to very coarse sand with granules; well sorted; subangular; olive brown (2.5Y 4/4)		1,060; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/4)
	1,000; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; subangular; olive brown (2.5Y 4/4)		1,070; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/4)
	1,010; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; angular to subangular; olive brown (2.5Y 4/4)		1,080; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/4)
	1,020; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; angular to subangular; olive brown (2.5Y 4/4)	No image available	1,090; *No sample recovery*
	1,030; Gravelly silty sand (gmS); coarse to very coarse sand with silt and granules; poorly sorted; angular to subangular; olive brown (2.5Y 4/4)		1,100; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/4)
	1,040; Gravelly clayey silty sand (gmS); coarse to very coarse sand and silt with clay and granules; poorly sorted; subangular; olive brown (2.5Y 4/4)		
	1,050; Slightly gravelly sandy clayey silt (gM); silt and clay with coarse to very coarse sand and granules; poorly sorted; olive brown (2.5Y 4/4)		

Figure 6. —Continued

D1. **SBCC**

	Depth interval (feet) and description
	10; Slightly gravelly sandy clay (g, sM); clay with medium to very coarse sand and granules to small pebbles; very poorly sorted; olive brown (2.5Y 4/3)
	15; Slightly gravelly clayey sand (g, mS); very fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to rounded; olive brown (2.5Y 4/3); *trace grass 3–22 mm*
	20; Gravelly sand (gS); very fine to very coarse sand with granules to medium pebbles; very poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)
	25; Sandy gravel (sG); granules to medium pebbles with medium to very coarse sand; poorly sorted; subrounded; light olive brown (2.5Y 5/3); *abundant biotite*
	30; Gravelly sand (gS); very fine to very coarse sand with granules to small pebbles; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/3); *abundant biotite with minor chlorite*
	35; Gravelly sand (gS); very fine to very coarse sand with granules to medium pebbles; very poorly sorted; subangular; olive brown (2.5Y 4/3); *abundant biotite*
	40; Gravelly sand (gS); very fine to very coarse sand with granules to small pebbles; poorly sorted; subangular; light olive brown (2.5Y 5/3); *abundant biotite with minor chlorite*

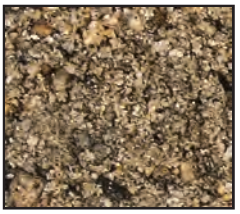
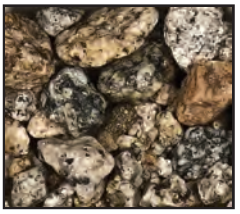
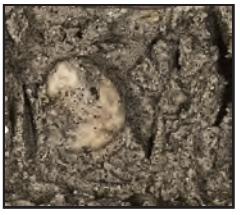
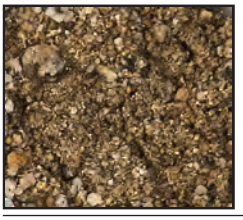
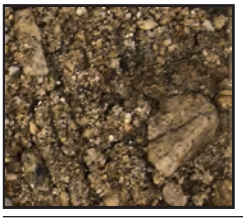
	Depth interval (feet) and description
	45; Gravelly silty sand (gmS); very fine to coarse sand with silt and granules to small pebbles; very poorly sorted; angular to subrounded; light olive brown (2.5Y 5/3); *abundant biotite*
	50; Gravel (G); granules to large pebbles with minor fine to very coarse sand; moderately sorted; subangular; salt and pepper
	55; Slightly gravelly sand (g, S); very fine to very coarse sand with granules to small pebbles; moderately sorted; subangular to subrounded; grayish brown (2.5Y 5/2); *abundant biotite*
	60; Gravel (G); granules to large pebbles with minor medium to very coarse sand; moderately sorted; subangular; various colors
	65; Slightly gravelly sand (g, S); very fine to coarse sand with granules to large pebbles; very poorly sorted; angular to subrounded; dark gray (5Y 4/1); *abundant biotite*
	70; Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules to medium pebbles; very poorly sorted; angular to subrounded; light olive brown (2.5Y 5/4)
	75; Gravelly sand (gS); fine to very coarse sand with granules to large pebbles; very poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)

Figure 7. ODEX drill-cutting samples collected from the borehole at multiple-well monitoring site *D*, SBCC, in the Bunker Hill Subbasin, San Bernardino County, California.

D2. **SBCC**

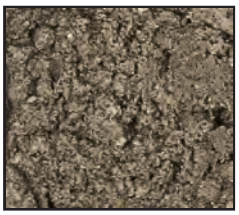
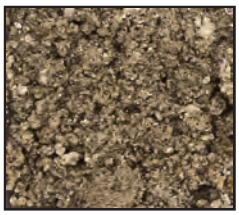
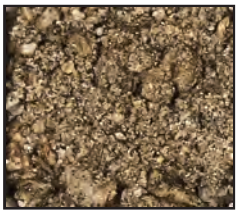
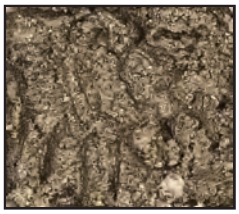
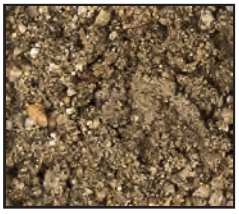
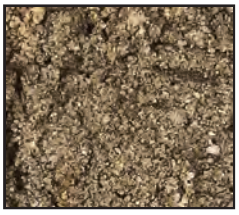
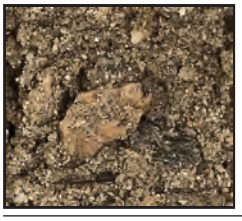
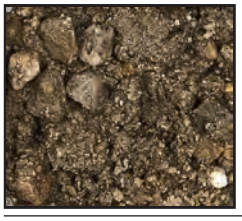
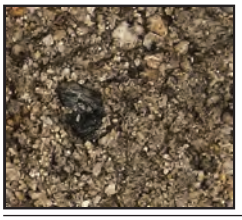
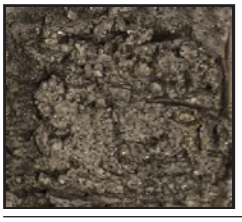
	Depth interval (feet) and description		Depth interval (feet) and description
	80; Slightly gravelly sand (g, S); fine to very coarse sand with granules to small pebbles; moderately sorted; subangular to subrounded; olive gray (5Y 5/2)		150; Sand (S); fine to very coarse sand with trace granules; well sorted; subangular; light olive brown (2.5Y 5/3)
	90; Gravelly sand (gS); fine to very coarse sand with granules to medium pebbles; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/3)		160; Slightly gravelly sand (g, S); very fine to coarse sand with granules to small pebbles; moderately sorted; subangular; grayish brown (2.5Y 5/2)
	100; Slightly gravelly sand (g, S); very fine to very coarse sand with granules to medium pebbles; poorly sorted; subangular to rounded; olive brown (2.5Y 4/3)		170; Gravelly silty sand (gmS); very fine to very coarse sand with silt and granules to medium pebbles; very poorly sorted; subangular; light olive brown (2.5Y 5/3); *abundant biotite*
	110; Slightly gravelly sand (g, S); fine to very coarse sand with granules to small pebbles; poorly sorted; subangular to rounded; light olive brown (2.5Y 5/3)		180; Slightly gravelly sand (g, S); very fine to very coarse sand with granules to medium pebbles and minor silt; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/3); *minor biotite*
	120; Slightly gravelly sand (g, S); fine to very coarse sand with granules to large pebbles; poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/3)		190; Silty sandy gravel (msG); granules to medium pebbles with very fine to very coarse sand and silt; very poorly sorted; subrounded; dark grayish brown (2.5Y 4/2); *minor biotite*
	130; Slightly gravelly sand (g, S); medium to very coarse sand with granules to medium pebbles; moderately to poorly sorted; subangular to subrounded; grayish brown (2.5Y 5/2)		200; Sand (S); fine to coarse sand with minor silt and trace granules to small pebbles; moderately sorted; subrounded; dark grayish brown (2.5Y 4/2); *minor biotite*
	140; Silty sand (zS); very fine to medium sand with silt and minor coarse sand and trace granules to small pebbles; moderately to well sorted; subangular to subrounded; dark gray (5Y 4/1)		210; Gravelly sand (gS); medium to very coarse sand with granules to medium pebbles; moderately sorted; subrounded; olive brown (2.5Y 4/3)

Figure 7. —Continued

***D3.* SBCC**

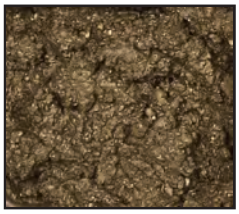
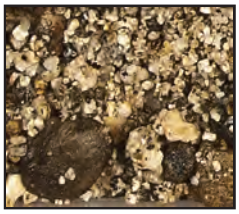
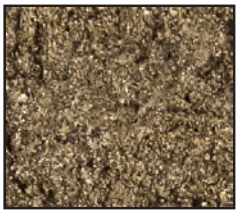
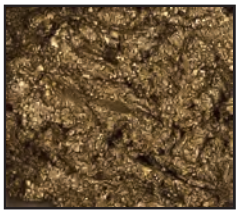
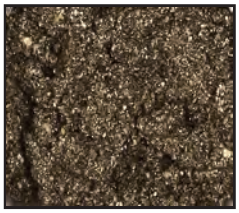
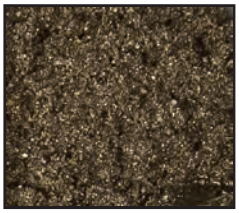
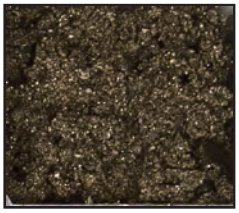
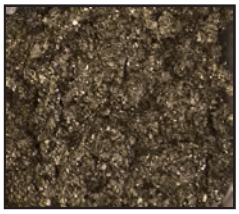
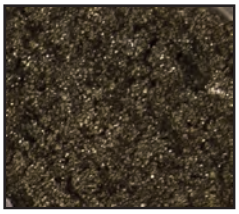
Depth interval (feet) and description		Depth interval (feet) and description	
	220; Sandy clayey silty gravel (msG); Granules to medium pebbles with silt and clay and medium to very coarse sand; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/3)		317–337; Sand (S); fine to coarse sand; well to moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3); *micaceous*
	240; Sandy gravel (sG); granules to large pebbles with coarse to very coarse sand and minor medium sand; moderately sorted; subangular to rounded; light yellowish brown (2.5Y 6/4)		337–357; Sand (S); fine to medium sand with minor coarse to very coarse sand; well sorted; subangular to rounded; olive brown (2.5Y 4/3); *minor biotite*
	245; Gravelly silty clayey sand (gmS); very fine to very coarse sand with clay, silt, and granules; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/4)		357–377; Sand (S); fine to coarse sand; well to moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3); *minor biotite*
	250–257; Sand (S); fine to coarse sand with trace granules; well sorted; subangular to subrounded; dark grayish brown (2.5Y 4/2); *abundant biotite*		377–397; Sand (S); fine to coarse sand; well sorted; subangular to subrounded; dark grayish brown (2.5Y 4/2); *abundant biotite*
	257–277; Sand (S); fine to very coarse sand; moderately sorted; subangular to subrounded; dark grayish brown (2.5Y 4/3); *abundant biotite*		397–417; Sand (S); fine to coarse sand; well sorted; subangular to rounded; dark grayish brown (2.5Y 4/2); *abundant biotite*
	277–297; Sand (S); fine to very coarse sand; moderately sorted; subangular to subrounded; grayish brown (2.5Y 5/2); *abundant biotite*		417–437; Sand (S); very fine to medium sand; well sorted; subangular to subrounded; dark grayish brown (2.5Y 4/2); *abundant biotite*
	297–317; Sand (S); fine to very coarse sand; moderately sorted; subangular to subrounded; dark grayish brown (2.5Y 4/2); *abundant biotite*		437–457; Sand (S); fine to very coarse sand with trace granules to medium pebbles; moderately sorted; subangular to subrounded; olive brown (2.5Y 4/3); *minor biotite*

Figure 7. —Continued

***D4.* SBCC**

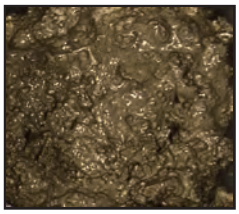
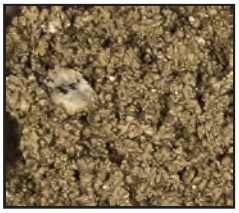
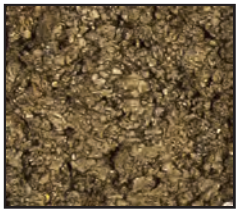
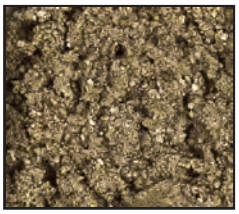
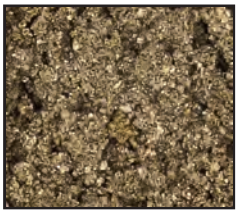
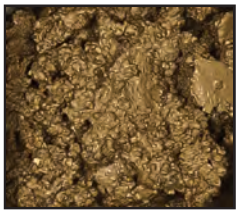
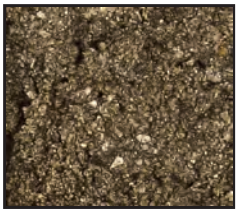
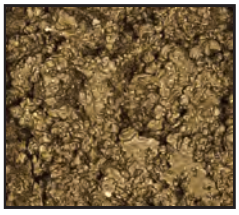
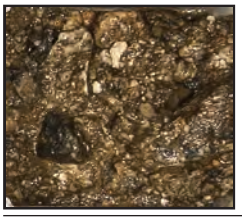
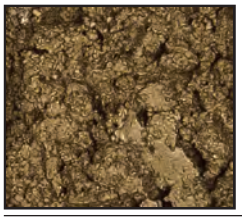
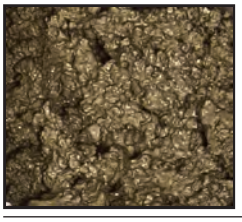
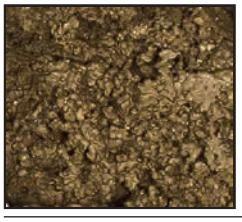
Depth interval (feet) and description		Depth interval (feet) and description	
No image available	457–460; *No sample collected*		535–540; Clayey sand (cS); coarse to very coarse sand with clay and minor medium sand with trace granules; very poorly sorted; subangular to subrounded; olive brown (2.5Y 4/3)
	460–470; Clayey gravel (mG); granules to small pebbles with clay and minor very coarse sand; very poorly sorted; angular to subrounded; light yellowish brown (2.5Y 6/3)		550; Slightly gravelly clayey sand (g, mS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded; olive brown (2.5Y 4/3)
	470–480; Silty sand (zS); very fine to very coarse sand with silt and trace granules; poorly sorted; subangular to rounded; olive (5Y 5/3)		561; Slightly gravelly clayey sand (g, mS); medium to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded; light olive brown (2.5Y 5/4)
	480–500; Silty sand (zS); very fine to very coarse sand with silt; poorly sorted; subrounded; light olive brown (2.5Y 5/3)		570; Slightly gravelly clayey sand (g, mS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted subrounded to rounded; olive brown (2.5Y 4/4)
	500–520; Sand (S); very fine to very coarse sand with minor silt and trace granules; moderately sorted; subangular to rounded; olive brown (2.5Y 4/3); *minor biotite*		575; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/4)
	517–520 Core; Silty sandy gravel (msG); granules to large pebbles with very fine to very coarse sand and silt; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/3)		580; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/4)
	525; Clayey sand (cS); medium to very coarse sand with clay and trace granules; very poorly sorted; subrounded to rounded; olive (5Y 5/3)		590; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules; very poorly sorted; subangular to subrounded; light olive brown (2.5Y 5/4)

Figure 7. —Continued

D5. **SBCC**

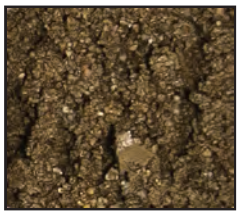
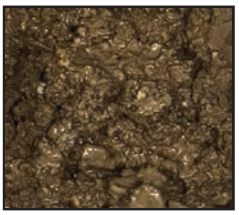
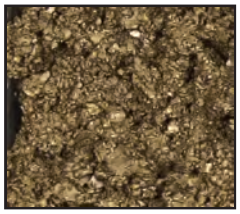
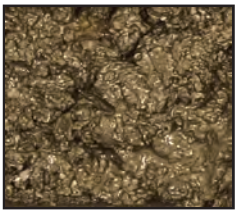
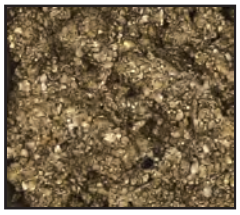
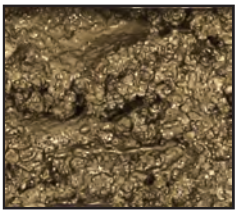
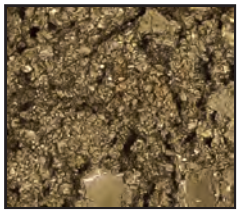
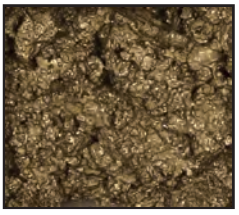
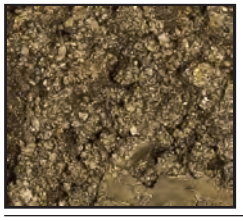
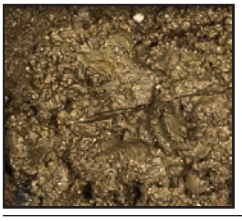
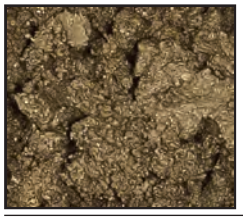
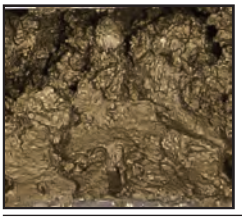
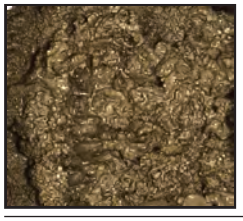
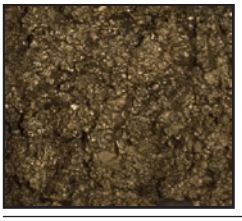
Depth interval (feet) and description		Depth interval (feet) and description	
	600; Slightly gravelly clayey sand (g, mS); medium to very coarse sand with clay and granules; very poorly sorted; subrounded to rounded; light olive brown (2.5Y 5/3)		645; Slightly gravelly clayey sand (g, mS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded to rounded; light olive brown (2.5Y 5/3)
	610; Slightly gravelly clayey sand (g, mS); fine to very coarse sand with clay and granules; very poorly sorted; subangular to rounded; olive (5Y 4/4)		650; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to rounded; olive (5Y 5/3); *trace wood fragments ~12 mm*
	620; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to rounded; olive (5Y 4/4)		655–660; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules; very poorly sorted; subangular to subrounded; olive (5Y 5/3)
	622; Gravelly clayey sand (gmS); medium to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to rounded; olive (5Y 4/3)		662; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules; very poorly sorted; subangular to subrounded; olive (5Y 4/3)
	627; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to subrounded; olive (5Y 4/4)		670–680; Slightly gravelly sandy clay (g, sM); clay with very fine to very coarse sand and granules; very poorly sorted; olive (5Y 4/4)
	635–640; Slightly gravelly clayey sand (g, mS); medium to very coarse sand with clay and granules; very poorly sorted; subangular to rounded; olive brown (2.5Y 4/3)		683; Gravelly clay (gM); clay with granules to small pebbles and minor fine to very coarse sand; very poorly sorted; olive (5Y 4/3)
	637; Slightly gravelly clayey sand (g, mS); fine to very coarse sand with clay and granules; very poorly sorted; subrounded to rounded; light olive brown (2.5Y 5/3)		687–697; Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to subrounded; olive (5Y 4/4)

Figure 7. —Continued

D6. **SBCC**

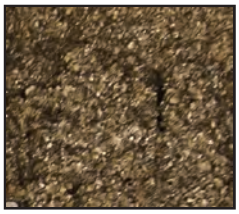
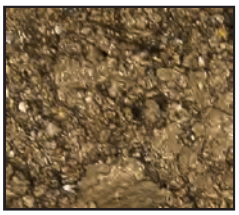
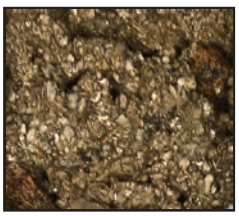
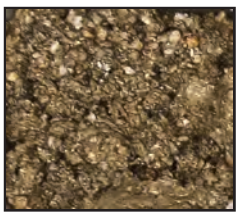
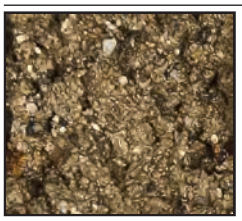
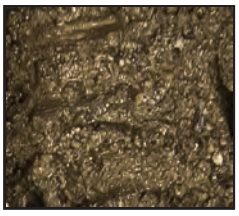
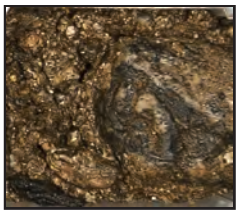
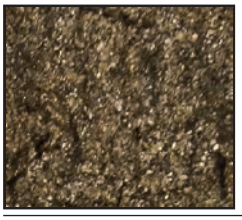
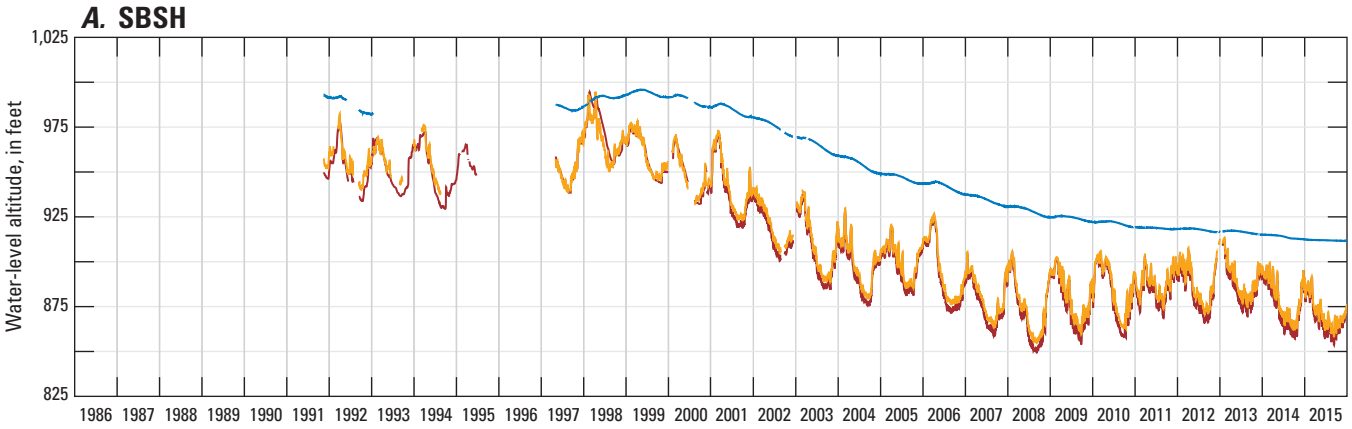
	Depth interval (feet) and description		Depth interval (feet) and description
	692; Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules; very poorly sorted; subangular to rounded; light olive brown (2.5Y 5/3)		740–760; Sand (S); fine to very coarse sand with minor clay; moderately sorted; rounded to well-rounded; light yellowish brown (2.5Y 6/3)
	705; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subrounded to rounded; olive brown (2.5Y 4/4)		757–777; Sand (S); fine to very coarse sand; moderately sorted; rounded to well-rounded; grayish brown (2.5Y 5/2)
	710; Gravelly clayey sand (gmS); very fine to very coarse sand with clay and granules; very poorly sorted; rounded; olive brown (2.5Y 4/3)		777; Gravelly clayey sand (gmS); fine to very coarse sand with clay and granules; very poorly sorted; rounded to well-rounded; olive (5Y 5/3); *trace roots ~23 mm*
	712; Sandy gravel (sG); granules to small pebbles with coarse to very coarse sand and minor medium sand; moderately sorted; subangular to rounded; grayish brown (2.5Y 5/2); *mafic-rich*		777–799; Sandy clayey gravel (msG); granules to small pebbles with clay and medium to very coarse sand; very poorly sorted; rounded to well-rounded; olive (5Y 4/3)
	710–720; Slightly gravelly clayey sand (g, mS); very fine to very coarse sand with clay and granules to small pebbles; very poorly sorted; subangular to rounded; olive (5Y 4/3)		Bottom of hole-core: gravel (G); granules to very large pebbles with minor fine to coarse sand; very poorly sorted; rounded; olive brown (2.5Y 4/3)
	717–737; Clayey sand (cS); fine to coarse sand with clay; poorly sorted; rounded to well-rounded; light olive brown (5Y 5/3)		
No image available	737–740; *No sample collected*		

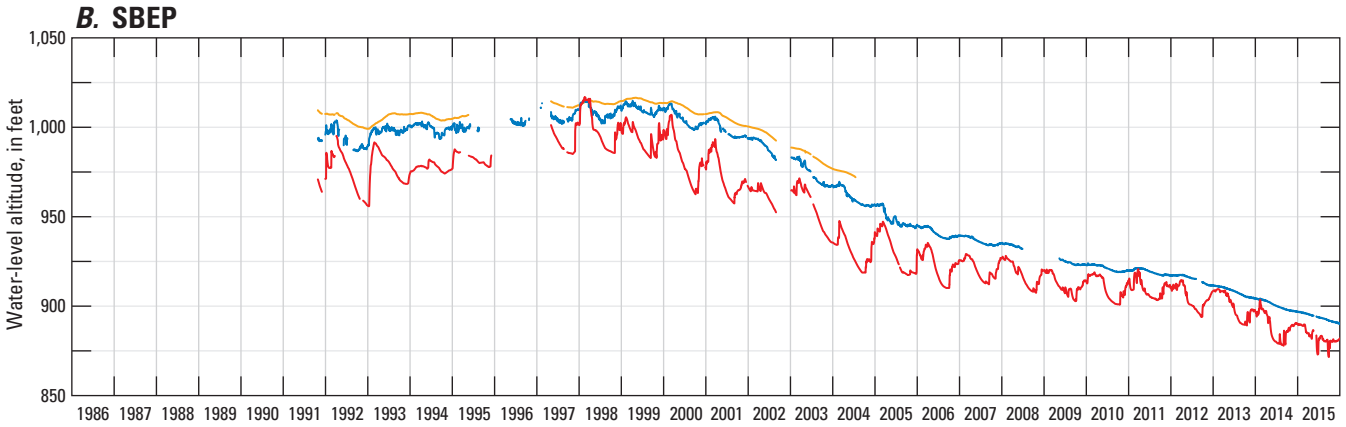
Figure 7. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340707117162708	001S004W02D008S	SBSH3	170	190	1991–present
—	340707117162707	001S004W02D007S	SBSH2	340	400	
—	340707117162706	001S004W02D006S	SBSH1	520	530	

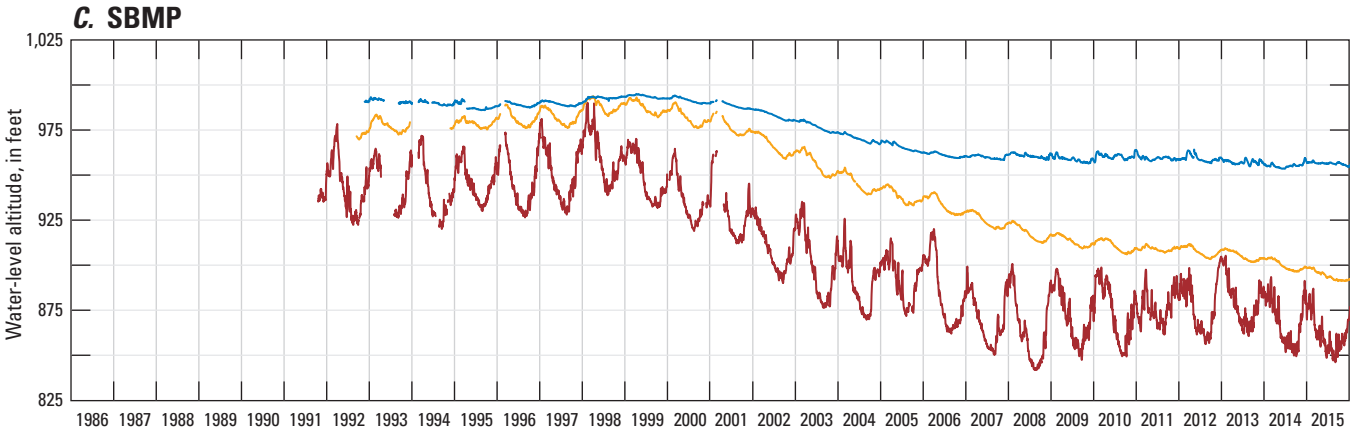
Figure 8. Water-level altitude for the period of record, screened intervals, and photographs for 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California, 1986–2015: *A*, SBSH; *B*, SBEP; *C*, SBMP; *D1*, SBCC; *D2*, SBCC; *E*, SBRV; *F*, SBVD; *G*, SBCM; *H*, YVWC; *I*, YV6E; *J*, YVDA; and *K*, YVEP. Each hydrograph shows the daily median value calculated from a 15-minute interval continuous record.



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340655117184006	001S004W04E006S	SBEP4	536	550	1991–present
—	340655117184005	001S004W04E005S	SBEP3	241	256	
—	340655117184004	001S004W04E004S	SBEP2	160	174	
None	340655117184003	001S004W04E003S	SBEP1	312	352	None

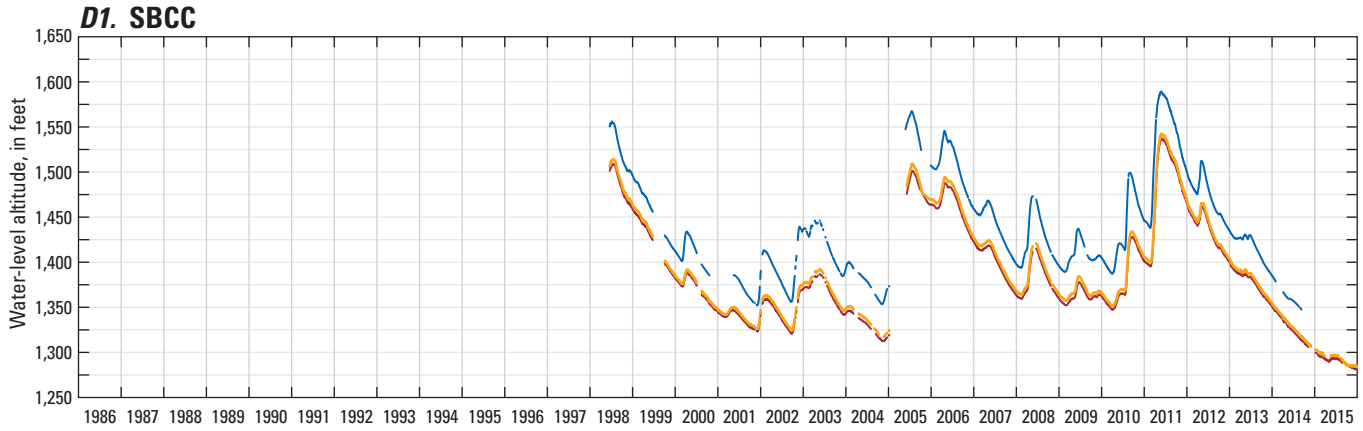
Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340615117170904	001S004W10B004S	SBMP3	100	120	1991–present
—	340615117170903	001S004W10B003S	SBMP2	300	320	
—	340615117170902	001S004W10B002S	SBMP1	680	700	

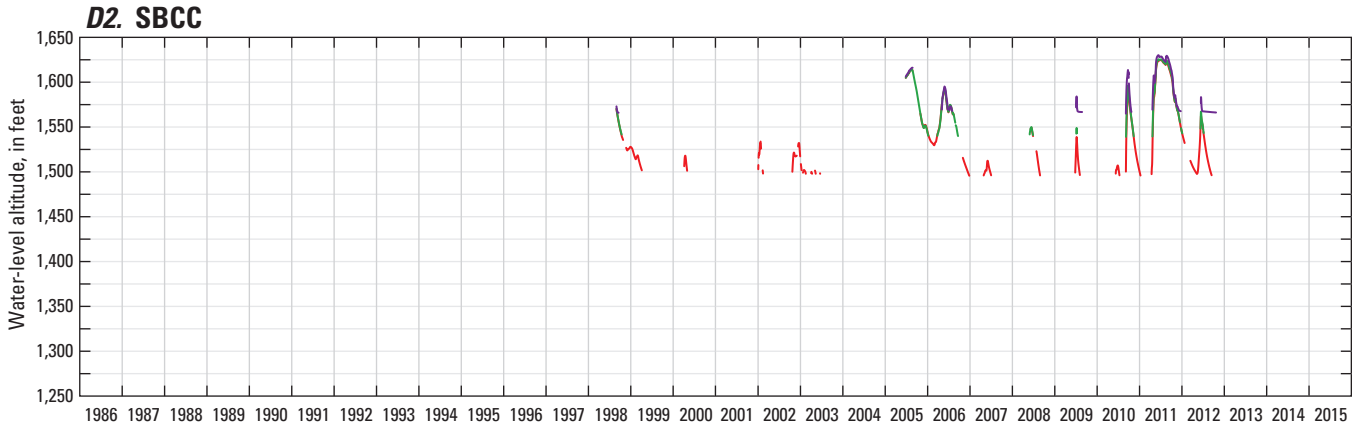
Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340541117074403	001S002W07Q003S	SBCC3	280	300	1998–present
—	340541117074402	001S002W07Q002S	SBCC2	500	520	
—	340541117074401	001S002W07Q001S	SBCC1	770	790	

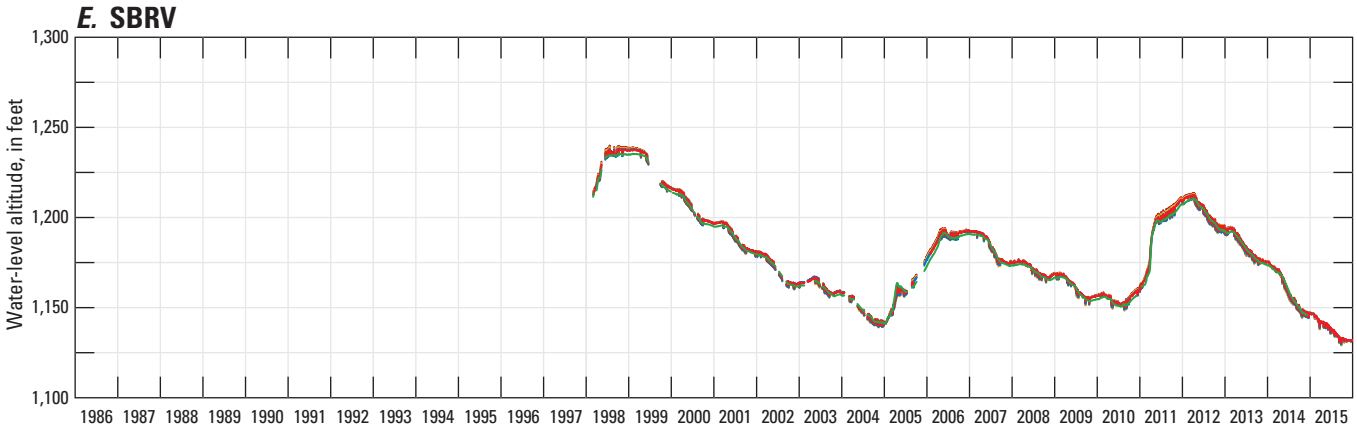
Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340541117074406	001S002W07Q006S	SBCC6	65	75	1998–present
—	340541117074405	001S002W07Q005S	SBCC5	91	101	
—	340541117074404	001S002W07Q004S	SBCC4	124	144	

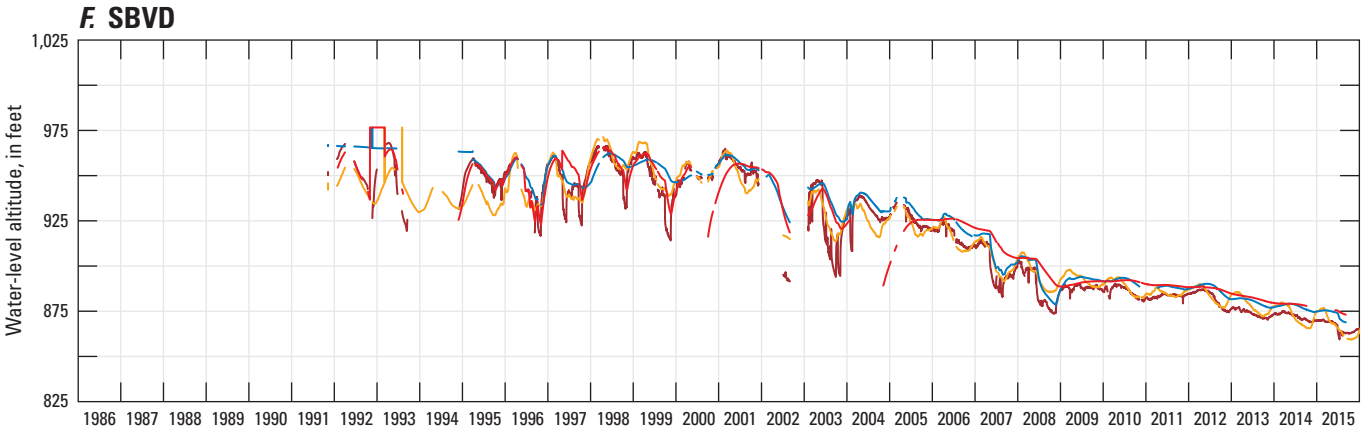
Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340503117104105	001S003W15K005S	SBRV5	220	240	1998–present
—	340503117104104	001S003W15K004S	SBRV4	490	510	
—	340503117104103	001S003W15K003S	SBRV3	750	770	
—	340503117104102	001S003W15K002S	SBRV2	930	950	
—	340503117104101	001S003W15K001S	SBRV1	1,075	1,095	

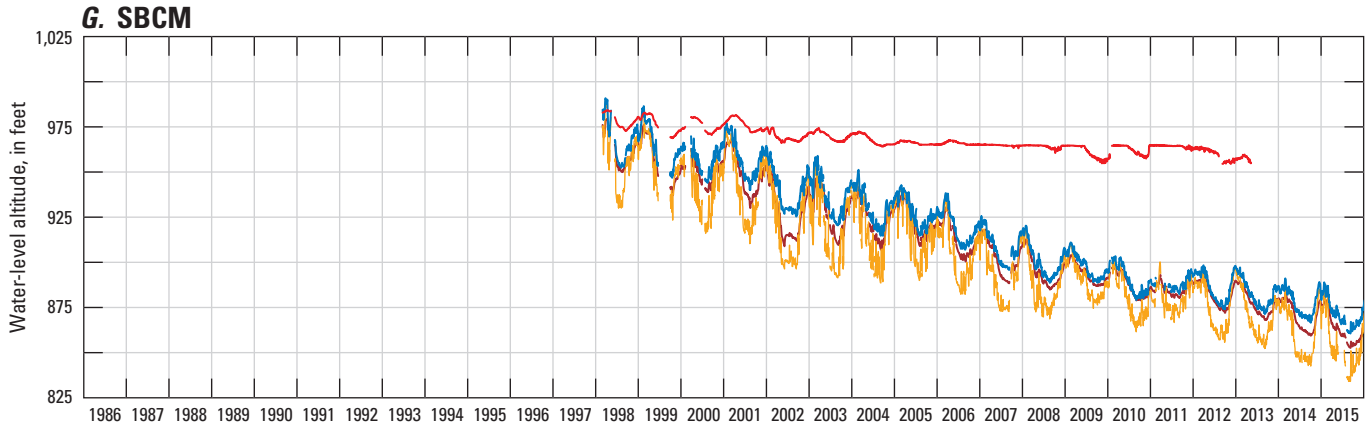
Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
None	340439117173907	001S004W22D007S	SBVD5	16.6	46.6	1991–present
—	340439117173906	001S004W22D006S	SBVD4	388	398	
—	340439117173905	001S004W22D005S	SBVD3	555	574	
—	340439117173904	001S004W22D004S	SBVD2	650	655	
—	340439117173902	001S004W22D002S	SBVD1	160	200	

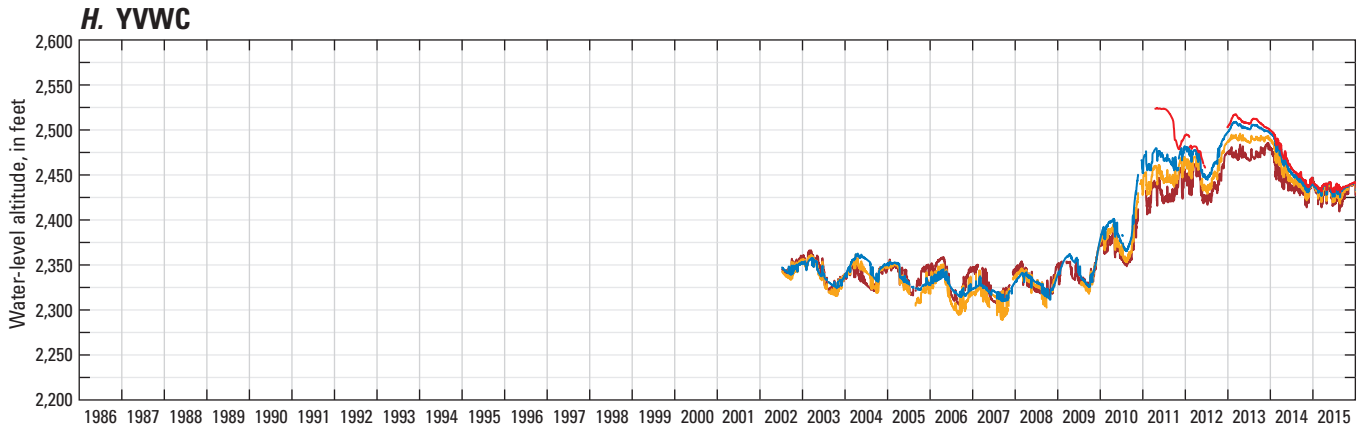
Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
	340408117165304	001S004W22J004S	SBCM4	25	45	1998–present
	340408117165303	001S004W22J003S	SBCM3	240	260	
	340408117165302	001S004W22J002S	SBCM2	520	540	
	340408117165301	001S004W22J001S	SBCM1	840	860	

Figure 8. —Continued

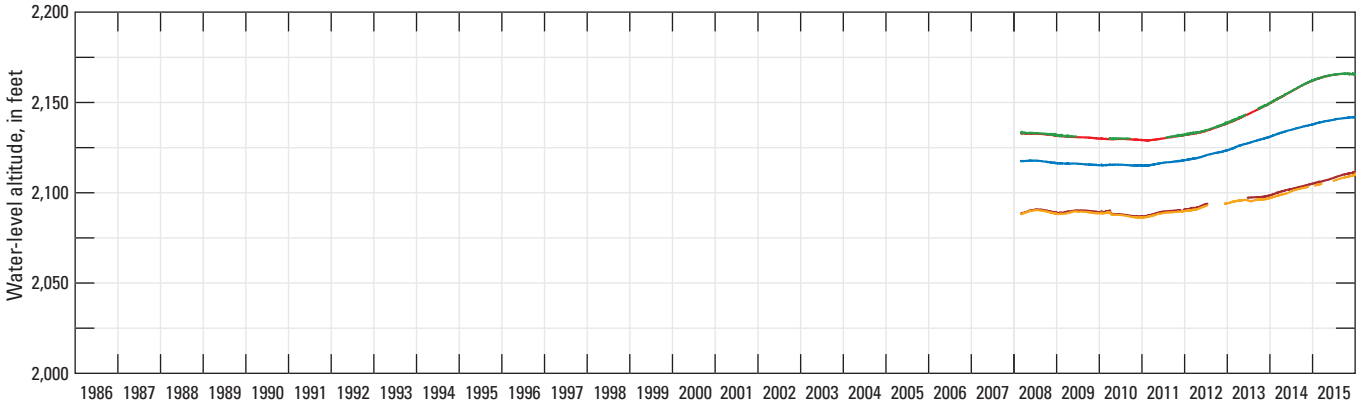


EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340248117020904	001S002W36A005S	YVWC4	350	370	2002–present
—	340248117020903	001S002W36A004S	YVWC3	500	520	
—	340248117020902	001S002W36A003S	YVWC2	640	660	
—	340248117020901	001S002W36A002S	YVWC1	820	840	

Figure 8. —Continued

I. YV6E

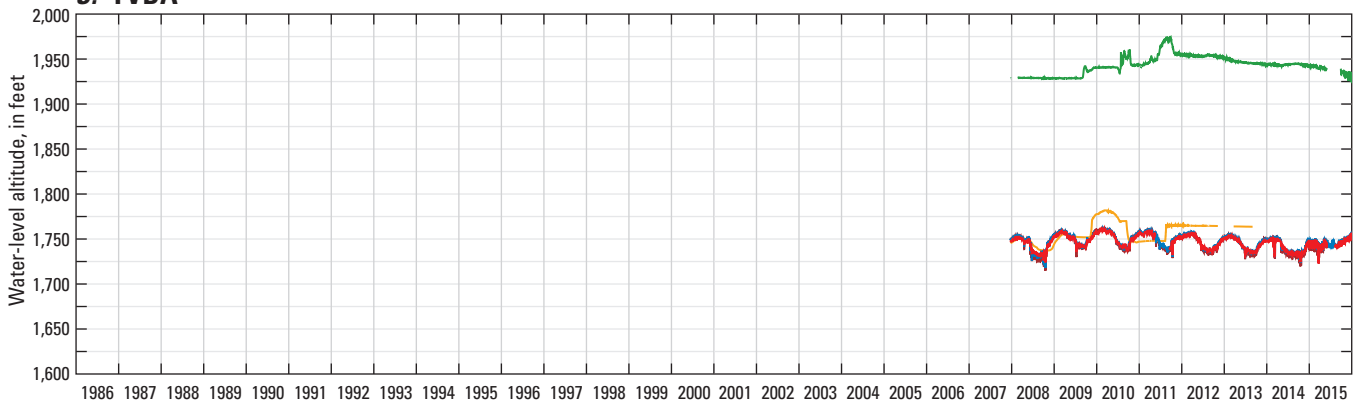


EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340136117033905	002S002W02F006S	YV6E5	290	310	2008–present
—	340136117033904	002S002W02F005S	YV6E4	380	400	
—	340136117033903	002S002W02F004S	YV6E3	500	540	
—	340136117033902	002S002W02F003S	YV6E2	730	750	
—	340136117033901	002S002W02F002S	YV6E1	870	930	

Figure 8. —Continued

J. YVDA



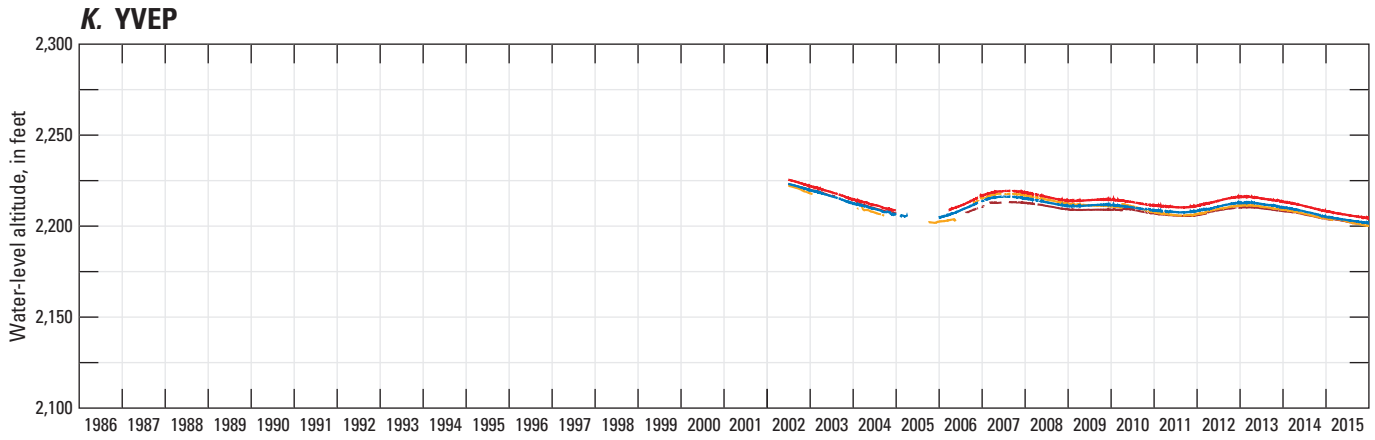
EXPLANATION

(For location see figure 2)

Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340130117054905	002S002W04L006S	YVDA5	230	250	2007–present
—	340130117054904	002S002W04L005S	YVDA4	440	460	
—	340130117054903	002S002W04L004S	YVDA3	590	610	
—	340130117054902	002S002W04L003S	YVDA2	830	850	
—	340130117054901	002S002W04L002S	YVDA1	1,010	1,050	

Figure 8. —Continued



EXPLANATION
(For location see figure 2)
Note: Continuous record may have brief periods of data loss due to instrumentation failure.

Line symbol	USGS site identification number	Station name	Local name	Screened interval, in feet below land surface		Period of record
				Top	Bottom	
—	340046117020804	002S002W12H004S	YVEP4	380	400	2002–present
—	340046117020803	002S002W12H003S	YVEP3	510	530	
—	340046117020802	002S002W12H002S	YVEP2	635	655	
—	340046117020801	002S002W12H001S	YVEP1	830	850	

Figure 8. —Continued

Water-Quality Data Analysis

Samples for major and minor ions, selected trace elements, dissolved organic carbon, nutrients, organic wastewater compounds (OWCs), volatile organic compounds (VOCs), and pesticides and pesticide degradates were analyzed by the USGS National Water-Quality Laboratory (NWQL) in Denver, Colorado. Samples requiring stable isotope analysis for hydrogen, oxygen, and nitrogen were done at the USGS Isotope Laboratory in Reston, Virginia. Tritium samples were analyzed at the University of Miami Isotope Tracers Laboratory. Carbon-13 and carbon-14 analyses were done at the University of Waterloo Environmental Isotope Laboratory in Ontario, Canada.

Laboratory Methods

The methodology and references used for analysis of major and minor ions, trace elements, nutrients, dissolved organic carbon, and stable and radiogenic isotopes in water samples are listed in table 3. The methodology and references used for analysis of OWCs, VOCs, and pesticides and pesticide degradates, are listed in the table body, header, or footnotes of tables 4, 5, and 6.

Reporting Conventions

The USGS NWQL uses the laboratory reporting level (LRL) as a threshold for reporting analytical results. The LRL is set to lower the chance of false negatives (not detecting a compound when it actually is present in a sample) to less than 1 percent (Childress and others, 1999). The LRL usually is set at two times the long-term method detection level (LT-MDL). The MDL is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the concentration is greater than zero (at the MDL there is less than 1-percent chance of a false positive) (Childress and others, 1999; U.S. Environmental Protection Agency, 2002). The USGS NWQL updates LRL values regularly, and the values listed in this report were in effect during the period when analyses were processed for individual water samples (tables 3–6).

Detections between the LRL and the LT-MDL are reported with an "E" before the table values indicating that these results are estimated or have a higher degree of uncertainty. E-coded values also may result from detections outside the range of calibration standards, for detections that did not meet all laboratory quality-control criteria, and for samples that were diluted prior to analysis (Childress and others, 1999). Similarly, detections reported with a "V" after a value in tables 7*A* and 7*D* indicate that these detections may be attributed to contamination and have been assigned a higher study reporting level. For information-rich methods, detections below the LT-MDL have a high degree of certainty of detection, but the precise concentration is uncertain. Information-rich methods are those that utilize gas chromatography or high-performance liquid chromatography (HPLC) with mass spectrometry detection (OWCs, VOCs, and pesticides and pesticide degradates). Compounds are identified by the presence of characteristic fragmentation patterns in their mass spectra in addition to being quantified by measurement of peak areas at their associated chromatographic retention times.

Reporting Stable Isotope Data and Groundwater Dating Parameters

Stable isotopic compositions of oxygen, hydrogen, carbon, and nitrogen are reported as relative isotope ratios in units of per mil using the standard delta (δ) notation (Coplen and others, 1991) as follows:

$$\delta^{i}E = \left[\frac{R_{\text{sample}}}{R_{\text{reference}}} - 1\right] \cdot 1{,}000 \text{ per mil} \quad (1)$$

where

i is the atomic mass of the heavier isotope of the element,

E is the element (O for oxygen, H for hydrogen, C for carbon, or N for nitrogen),

R_{sample} is the ratio of the abundance of the heavier isotope of the element (^{18}O, ^{2}H, ^{13}C, or ^{15}N) to the lighter isotope of the element (^{16}O, ^{1}H, ^{12}C, or ^{14}N) in the sample, and

$R_{\text{reference}}$ is the ratio of the abundance of the heavier isotope of the element to the lighter isotope of the element in the reference material.

Values are compared to the ratios observed in the standard reference materials, where positive values indicate enrichment of the heavier isotope and negative values indicate depletion of the heavier isotope. The reference material for oxygen and hydrogen is Vienna Standard Mean Ocean Water (VSMOW), which is assigned $\delta^{18}O$ and $\delta^{2}H$ values of zero per mil and the analytical uncertainty is 2 and 0.2 per mil, respectively (Révész and Coplen, 2008a, b). Atmospheric nitrogen is the primary reference material for nitrogen isotope analysis, and is assigned a value of zero per mil with an uncertainty of 0.5 per mil (Böhlke and Coplen, 1995). The reference material for carbon is the Vienna Pee Dee Belemnite (VPDB), which is assigned a $\delta^{13}C$ value of zero per mil (Coplen, 1994).

The concentration of tritium in water is reported as an activity (picocurie per liter, pCi/L) and is related to tritium units (TU) by the conversion factor 1 TU = 3.2 pCi/L; each tritium unit equals one ^{3}H atom in 10^{18} atoms of hydrogen. The concentration of tritium is reported with a two-sigma estimate of precision. The concentration of ^{14}C is expressed as percent modern carbon (pmc) and is reported with a one-sigma uncertainty relative to the 1950 National Bureau of Standards oxalic acid standard (Stuiver and Polach, 1977; Wigley and Muller, 1981).

Table 3. Major and minor ions, selected trace elements, nutrients, stable and radiogenic isotopes, and relative standard deviations for water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are reported in milligram per liter (mg/L), microgram per liter (µg/L), per mil, picocurie per liter (pCi/L), or percent modern carbon (pmc); values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: ASF, automated-segmented flow; CASRN, Chemical Abstract Services Registry Number; ICP-AES, inductively coupled plasma-atomic emission spectrometry; ICP-MS, inductively coupled plasma-mass spectrometry; IR, infrared; NA, not applicable; ND, no data; RSD, relative standard deviation; UV, ultraviolet; ºC, degrees Celsius; —, CASRN not assigned]

Constituent	Method	Reference	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Unit	Number of RSDs greater than zero/ replicate pairs[3]	Maximum RSD (percent)
Major and minor ions and selected trace elements								
Alkalinity	Titrimetry with sulfuric acid	Fishman and Friedman, 1989	29801	471-34-1	2, 5, 8, 9.2	mg/L	5/7	2.3
Aluminum	ICP-AES	Struzeski and others, 1996	01106	7429-90-5	1.0, 1.6, 3.4, 4, 4.4, 6.0	µg/L	5/6	53.0
Antimony	ICP-MS	Garbarino and others, 2005	01095	7440-36-0	0.04, 0.048, 0.054, 0.06, 0.14, 0.2, 0.3	µg/L	5/5	20.4
Arsenic	ICP-MS	Garbarino, 1999	01000	7440-38-2	0.044, 0.06, 0.08, 0.12, 0.2	µg/L	7/7	25.7
Barium	ICP-AES	Fishman, 1993	01005	7440-39-3	0.05, 0.08, 0.14, 0.2, 0.4, 0.5, 0.6, 1.0	µg/L	7/9	1.6
Beryllium	ICP-AES	Fishman, 1993	01010	7440-41-7	0.008, 0.02, 0.04, 0.06, 0.12	µg/L	ND	ND
Boron	ICP-MS	Garbarino, 1999	01020	7440-42-8	1.2, 1.8, 2, 2.0, 4.0, 7, 7.0, 13, 16	µg/L	6/9	6.2
Bromide	Colorimetry, ASF	Fishman and Friedman, 1989	71870	24959-67-9	0.02, 0.06	mg/L	10/14	25.9
Cadmium	ICP-AES	Fishman, 1993	01025	7440-43-9	0.02, 0.032, 0.037, 0.04, 0.06	µg/L	1/1	3.0
Calcium	ICP-AES	Fishman, 1993	00915	7440-70-2	0.01, 0.011, 0.02, 0.04, 0.044	mg/L	8/9	1.3
Chloride	Ion chromatography	Fishman and Friedman, 1989	00940	16887-00-6	0.04, 0.08, 0.12, 0.20, 0.29, 0.33	mg/L	11/14	1.8
Chromium	ICP-AES	Fishman, 1993	01030	7440-47-3	0.04, 0.12, 0.14, 0.6	µg/L	3/5	14.1
Copper	ICP-AES	Fishman, 1993	01040	7440-50-8	0.023, 0.4, 1, 1.6	µg/L	2/2	5.9
Fluoride	ASF, ion-selective electrode	Fishman and Friedman, 1989	00950	16984-48-8	0.01, 0.020, 0.02, 0.08	mg/L	6/9	4.4
Iodide	Colorimetry, ASF, ceric-arseneous	Fishman and Friedman, 1989	71865	7553-56-2	0.002	mg/L	1/2	47.1
Iron	ICP-AES	Fishman, 1993	01046	7439-89-6	4, 6, 6.4, 8	µg/L	3/3	32.8
Lead	ICP-MS	Garbarino and others, 2005	01049	7439-92-1	0.030, 0.03, 0.050, 0.06, 0.08, 0.12	µg/L	1/1	17.4
Lithium	ICP-MS	Garbarino, 1999	01130	7439-93-2	0.04, 0.06, 0.1, 2, 3	µg/L	5/5	13.4

Table 3. Major and minor ions, selected trace elements, nutrients, stable and radiogenic isotopes, and relative standard deviations for water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are reported in milligram per liter (mg/L), microgram per liter (µg/L), per mil, picocurie per liter (pCi/L), or percent modern carbon (pmc); values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: ASF, automated-segmented flow; CASRN, Chemical Abstract Services Registry Number; ICP-AES, inductively coupled plasma-atomic emission spectrometry; ICP-MS, inductively coupled plasma-mass spectrometry; IR, infrared; NA, not applicable; ND, no data; RSD, relative standard deviation; UV, ultraviolet; ºC, degrees Celsius; —, CASRN not assigned]

Constituent	Method	Reference	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Unit	Number of RSDs greater than zero/ replicate pairs[3]	Maximum RSD (percent)
Major and minor ions and selected trace elements—Continued								
Magnesium	ICP-AES	Fishman, 1993	00925	7439-95-4	0.008, 0.012, 0.014, 0.016, 0.02, 0.022	mg/L	6/9	3.6
Manganese	ICP-AES	Fishman, 1993	01056	7439-96-5	0.2, 0.32, 0.4, 0.6, 0.8	µg/L	8/8	24.2
Molybdenum	ICP-AES	Fishman, 1993	01060	7439-98-7	0.02, 0.028, 0.12, 0.10, 0.2, 0.33, 0.4	µg/L	6/8	2.3
Nickel	ICP-AES	Fishman, 1993	01065	7440-02-0	0.06, 0.12, 0.18, 0.2, 0.40	µg/L	6/7	14.9
Potassium	Atomic absorption, flame	Fishman and Friedman, 1989	00935	7440-09-7	0.02, 0.04, 0.044, 0.06, 0.064, 0.16	mg/L	8/9	2.4
Residue (total dissolved solids)	Gravimetry, residue on evaporation at 180 ºC	Fishman and Friedman, 1989	70300	—	10, 12, 20	mg/L	11/14	6.9
Selenium	ICP-MS	Garbarino, 1999	01145	7782-49-2	0.040, 0.04, 0.06, 0.08, 0.10, 0.33, 0.4, 0.5	µg/L	5/5	10.9
Silica, as SiO_2	Colorimetry, ASF	Fishman and Friedman, 1989	00955	7631-86-9	0.018, 0.02, 0.036, 0.04, 0.058, 0.09, 0.13	mg/L	9/9	3.8
Silver	ICP-AES	Fishman, 1993	01075	7440-22-4	1.8, 2.2, 2.8, 4, 4.6, 7, 9	µg/L	ND	ND
Sodium	ICP-AES	Fishman, 1993	00930	7440-23-5	0.1, 0.12, 0.2	mg/L	8/9	4.2
Strontium	ICP-MS	Garbarino, 1999	01080	7440-24-6	0.4, 0.6, 1, 1.4	µg/L	9/9	1.8
Sulfate	Ion chromatography	Fishman and Friedman, 1989	00945	14808-79-8	0.11, 0.18	mg/L	11/14	3.4
Thallium	ICP-MS	Garbarino, 1999	01057	7440-28-0	0.020, 0.04, 0.041, 0.06	µg/L	ND	ND
Tungsten	ICP-AES	Garbarino and others, 2005	01155	7440-33-7	0.020, 0.02, 0.06	µg/L	5/6	9.9
Uranium	ICP-MS	Garbarino and others, 2005	22703	7440-61-1	0.006, 0.008, 0.018, 0.02, 0.028, 0.04	µg/L	4/5	2.0
Vanadium	ICP-MS	Garbarino, 1999	01085	7440-62-2	0.04, 0.10, 0.13, 0.14, 0.16, 0.2, 0.21	µg/L	4/8	6.2
Zinc	ICP-AES	Fishman, 1993	01090	7440-24-6	0.08, 0.2, 0.40, 0.4, 0.8, 1.6	µg/L	2/2	10.0

Table 3. Major and minor ions, selected trace elements, nutrients, stable and radiogenic isotopes, and relative standard deviations for water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are reported in milligram per liter (mg/L), microgram per liter (µg/L), per mil, picocurie per liter (pCi/L), or percent modern carbon (pmc); values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: ASF, automated-segmented flow; CASRN, Chemical Abstract Services Registry Number; ICP-AES, inductively coupled plasma-atomic emission spectrometry; ICP-MS, inductively coupled plasma-mass spectrometry; IR, infrared; NA, not applicable; ND, no data; RSD, relative standard deviation; UV, ultraviolet; ºC, degrees Celsius; —, CASRN not assigned]

Constituent	Method	Reference	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Unit	Number of RSDs greater than zero/ replicate pairs[3]	Maximum RSD (percent)
			Nutrients					
Nitrogen, ammonia as N	Colorimetry, ASF, salicylate-hypochlorite	Fishman, 1993	00608	7664-41-7	0.01, 0.02	mg/L	0/1	0.0
Nitrogen, ammonia + organic nitrogen as N	Colorimetry, ASF, microkjeldahl digestion	Patton and Truitt, 1992	00623	17778-88-0	0.10, 0.14	mg/L	1/1	23.6
Nitrogen, nitrite as N	Colorimetry, ASF	Fishman, 1993	00613	14797-65-0	0.002, 0.008, 0.01	mg/L	ND	ND
Nitrogen, nitrite + nitrate as N	Colorimetry, ASF, cadmium reduction-diazotization	Fishman, 1993	00631	—	0.04, 0.05, 0.06	mg/L	1/1	2.3
Phosphorous, orthophosphate as P	Colorimetry, ASF, phosphomolybdate	Fishman, 1993	00671	14265-44-2	0.006, 0.008	mg/L	1/3	2.7
Phosphorous, as P	Colorimetry, ASF, microkjeldahl digestion	Patton and Truitt, 1992	00666	7723-14-0	0.035, 0.04	mg/L	3/4	37.2
Dissolved organic carbon (DOC)	UV catalyzed persulfate oxidation and IR spectrometry	Brenton and Arnett, 1993, and Wershaw and others, 1987	00681	—	0.33, 0.4, 0.66	mg/L	ND	ND
			Stable and radiogenic isotopes					
Carbon-13/12	Accelerator mass spectrometry	Coplen, 1994	82081	—	0.05	per mil	ND	ND
Carbon-14	Accelerator mass spectrometry	Stuiver and Polach, 1977	49933	14762-75-5	0.0015	pmc	ND	ND
Hydrogen-2/1	Mass spectrometry	Coplen and others, 1991	82082	—	2	per mil	1/1	0.5
Oxygen-18/16	Mass spectrometry	Coplen and others, 1991	82085	—	0.2	per mil	1/1	0.3
Nitrogen-15/14, in nitrate fraction	Continuous flow isotope ratio mass spectrometry	Coplen and others, 2012	82690	—	NA	per mil	ND	ND
Oxygen-18/16, in nitrate fraction	Continuous flow isotope ratio mass spectrometry	Coplen and others, 2012	63041	—	NA	per mil	ND	ND
Tritium	Electrolytic enrichment and gas counting	Thatcher and others, 1977	07000	10028-17-8	1	pCi/L	ND	ND

[1]This report uses the CASRN®, which is a registered trademark of the American Chemical Society. The CASRN online database provides the latest registry number information: http://www.cas.org/. Chemical Abstracts Services (CAS) recommends the verification of CASRNs through CAS Client Services℠.

[2]The LRLs in effect at different times during the study.

[3]Quality-control analysis of replicate data for major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes with relative standard deviations above zero. See text for more information.

Table 4. Laboratory reporting levels, primary use or source, and reporting information for organic wastewater compounds analyzed in water samples from multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram(s) per liter; values below the LRL may be reported as estimated concentrations if the compound is present. Constituents are analyzed by gas chromatography/mass spectrometry using methods described in Zaugg and others, 2002. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; —, CASRN not assigned]

Constituent	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Use
1,4-Dichlorobenzene	34572	106-46-7	0.04, 0.08, 0.5	Fumigant
1-Methylnaphthalene	62054	90-12-0	0.022, 0.04, 0.1, 0.5	Fuels
2,6-Dimethylnaphthalene	62055	581-42-0	0.06, 0.12, 0.2, 0.5	Fuels
2-Methylnaphthalene	62056	91-57-6	0.036, 0.04, 0.08, 0.5	Fuels
3-β-Coprostanol	62057	360-68-9	1, 1.6, 1.8, 2	Fecal sterol
3-Methyl-1H-indole (skatol)	62058	83-34-1	0.036, 0.04, 0.08, 1	Fragrance
3-*tert*-Butyl-4-hydroxyanisole	62059	25013-16-5	0.6, 5, 8	Antioxidant
4-Cumylphenol	62060	599-64-4	0.06, 0.1, 0.14, 1	Detergent metabolite
4-*n*-Octylphenol	62061	1806-26-4	0.06, 0.16, 1	Detergent metabolite
4-Nonylphenol	62085	84852-15-3	1, 1.8, 2, 5	Detergent metabolite
4-Nonylphenol diethoxylates	62083	—	5	Detergent metabolite
4-Octylphenol diethoxylates	61705	—	1	Detergent metabolite
4-Octylphenol monoethoxylates	61706	—	1	Detergent metabolite
4-*tert*-Octylphenol	62062	140-66-9	0.1, 0.14, 1, 1.4	Detergent metabolite
5-Methyl-1H-benzotriazole	62063	136-85-6	0.08, 1.2, 1.8, 2	Anticorrosive
Acetophenone	62064	98-86-2	0.1, 0.4, 0.5	Fragrance
Acetyl hexamethyl tetrahydronaphthalene (AHTN)	62065	21145-77-7	0.028, 0.5	Fragrance
Anthracene	34221	120-12-7	0.028, 0.04, 0.08, 0.5	Combustion product
Anthraquinone	62066	84-65-1	0.16, 0.5	Manufacturing
Benzo[*a*]pyrene	34248	50-32-8	0.05, 0.08, 0.12, 0.5	Combustion product
Benzophenone	62067	119-61-9	0.08, 0.12, 0.18, 0.5	Fixative
Bromacil	04029	314-40-9	0.36, 0.4, 0.5, 1	Herbicide
Bromoform (Tribromomethane)	34288	75-25-2	0.08, 0.1, 0.5	Chemical solvent, disinfection by-product
Caffeine	50305	58-08-2	0.06, 0.1, 0.2, 0.5	Stimulant
Camphor	62070	76-22-2	0.044, 0.06, 0.1, 0.5	Flavorant
Carbaryl	82680	63-25-2	0.38, 1	Insecticide
Carbazole	62071	86-74-8	0.03, 0.04, 0.5	Insecticide
Chlorpyrifos	38933	2921-88-2	0.12, 0.16, 0.2, 0.5	Insecticide
Cholesterol	62072	57-88-5	1.4, 2	Plant/animal sterol
Cotinine	62005	486-56-6	0.4, 0.6, 1	Nicotine metabolite
p-Cresol	62084	106-44-5	0.08, 0.18, 1	Wood preservative
Diazinon	39572	333-41-5	0.08, 0.16, 0.5	Insecticide
N-*N*-Diethyl-*meta*-toluamide (DEET)	62082	134-62-3	0.06, 0.1, 0.14, 0.2, 0.5	Insect repellant
Fluoranthene	34377	206-44-0	0.024, 0.04, 0.08, 0.5	Combustion product
Hexahydrohexamethyl cyclopentabenzopyran (HHCB)	62075	1222-05-5	0.052, 0.5	Fragrance
Indole	62076	120-72-9	0.08, 0.14, 0.5	Pesticide inert
Isoborneol	62077	124-76-5	0.06, 0.18, 0.5	Fragrance
Isophorone	34409	78-59-1	0.08, 0.14, 0.5	Solvent

Table 4. Laboratory reporting levels, primary use or source, and reporting information for organic wastewater compounds analyzed in water samples from multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram(s) per liter; values below the LRL may be reported as estimated concentrations if the compound is present. Constituents are analyzed by gas chromatography/mass spectrometry using methods described in Zaugg and others, 2002. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; —, CASRN not assigned]

Constituent	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Use
Isoquinoline	62079	119-65-3	0.046, 0.2, 0.4, 0.5	Flavorant
D-Limonene	62073	5989-27-5	0.08, 0.04, 0.14, 0.5	Fungicide
Menthol	62080	89-78-1	0.2, 0.32, 0.4, 0.5	Fragrance
Metalaxyl	50359	57837-19-1	0.08, 0.12, 0.2, 0.5	Fungicide
Methyl salicylate	62081	119-36-8	0.044, 0.1, 0.18, 0.5	Liniment
Metolachlor	39415	51218-45-2	0.08, 0.16, 0.5	Herbicide
Naphthalene	34443	91-20-3	0.04, 0.1, 0.5	Combustion product
Perchloroethene (PCE, Tetrachloroethene)	34476	127-18-4	0.08, 0.12, 0.18, 0.5	Solvent, degreaser
Phenanthrene	34462	85-01-8	0.032, 0.04, 0.08, 0.5	Combustion product
Prometon	04037	1610-18-0	0.12, 0.18, 0.2, 0.4, 0.5	Herbicide
Pyrene	34470	129-00-0	0.08, 0.04, 0.042, 0.5	Combustion product
β-Sitosterol	62068	83-46-5	1.6, 2, 4	Plant sterol
β-Stigmastanol	62086	19466-47-8	1.2, 2, 2.6	Plant sterol
Tributyl phosphate	62089	126-73-8	0.16, 0.2, 0.5	Flame retardant
Triclosan	62090	3380-34-5	0.2, 1	Antimicrobial disinfectant
Triethyl citrate	62091	77-93-0	0.2, 0.38, 0.4, 0.5	Cosmetics
Triphenyl phosphate	62092	115-86-6	0.1, 0.12, 0.16, 0.5	Plasticizer
Tris(2-butoxyethyl) phosphate	62093	78-51-3	0.4, 0.5, 0.8	Plasticizer
Tris(2-chloroethyl) phosphate	62087	115-96-8	0.1, 0.1, 0.18, 0.5	Flame retardant
Tris(dichloroisopropyl) phosphate	62088	13674-87-8	0.12, 0.16, 0.18, 0.5	Flame retardant
Caffeine-13C	99584	—	Percent recovery	Surrogate
Decafluorobiphenyl	99585	—	Percent recovery	Surrogate
Fluoranthene-d10	99586	—	Percent recovery	Surrogate

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[2]The LRLs in effect at different times during the study.

Table 5. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for volatile organic compounds and gasoline oxygenates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram(s) per liter; values below the LRL may be reported as estimated concentrations if the compound is present. Constituents are analyzed by gas chromatography/mass spectrometry using methods described in Connor and others, 1998. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Recovery[3] (percent)	Use
Acetone	81552	67-64-1	3.4, 4, 6, 7	65.7	Solvent
Acrylonitrile	34215	107-13-1	0.4, 0.8, 1.2	81.6	Organic synthesis
tert-Amyl methyl ether (TAME)	50005	994-05-8	0.04, 0.06, 0.08	52.2	Gasoline oxygenate
Benzene	34030	71-43-2	0.016, 0.021, 0.026	75.4	Gasoline hydrocarbon
Bromobenzene	81555	108-86-1	0.02, 0.022, 0.028, 0.036	52.1	Solvent
Bromochloromethane	77297	74-97-5	0.06, 0.12	61.1	Fire retardant
Bromodichloromethane	32101	75-27-4	0.028, 0.034, 0.04, 0.048	78.6	Disinfection by-product
Bromoform (Tribromomethane)	32104	75-25-2	0.08, 0.1	61.1	Disinfection by-product
Bromomethane (Methyl bromide)	34413	74-83-9	0.2, 0.26, 0.33, 0.4	30.1	Fumigant
n-Butylbenzene	77342	104-51-8	0.08, 0.12, 0.14, 0.19	74.6	Gasoline hydrocarbon
sec-Butylbenzene	77350	135-98-8	0.034, 0.02, 0.04, 0.06	75.0	Gasoline hydrocarbon
tert-Butylbenzene	77353	98-06-6	0.06, 0.08, 0.1	63.2	Gasoline hydrocarbon
Carbon disulfide	77041	75-15-0	0.038, 0.04, 0.06, 0.07	58.0	Organic synthesis
Carbon tetrachloride (Tetrachloromethane)	32102	56-23-5	0.052, 0.06, 0.08	58.6	Solvent
Chlorobenzene	34301	108-90-7	0.016, 0.02, 0.028	63.5	Solvent
Chloroethane	34311	75-00-3	0.06, 0.1, 0.12	61.1	Solvent
Chloroform (Trichloromethane)	32106	67-66-3	0.02, 0.024, 0.03, 0.04	76.6	Disinfection by-product
Chloromethane	34418	74-87-3	0.1, 0.14, 0.17	27.8	Solvent
3-Chloropropene	78109	107-05-1	0.08, 0.12, 0.5	80.2	Organic synthesis
2-Chlorotoluene	77275	95-49-8	0.02, 0.028, 0.04	44.1	Solvent
4-Chlorotoluene	77277	106-43-4	0.02, 0.04, 0.042, 0.05	43.7	Solvent
Dibromochloromethane	32105	124-48-1	0.1, 0.12, 0.18	62.0	Disinfection by-product
1,2-Dibromo-3-chloropropane (DBCP)	82625	96-12-8	0.34, 0.5, 0.51, 1	56.4	Fumigant
1,2-Dibromoethane (EDB)	77651	106-93-4	0.036, 0.04, 0.05	66.7	Fumigant
Dibromomethane	30217	74-95-3	0.04, 0.05	52.3	Solvent
1,2-Dichlorobenzene	34536	95-50-1	0.02, 0.028, 0.04, 0.048	55.1	Solvent
1,3-Dichlorobenzene	34566	541-73-1	0.02, 0.024, 0.03, 0.04	42.3	Solvent
1,4-Dichlorobenzene	34571	106-46-7	0.02, 0.026, 0.034, 0.04, 0.05	46.3	Fumigant
trans-1,4-Dichloro-2-butene	73547	110-57-6	0.36, 0.4, 0.6, 0.7	66.8	Organic synthesis
Dichlorodifluoromethane (CFC-12)	34668	75-71-8	0.1, 0.14, 0.18	30.2	Refrigerant
1,1-Dichloroethane (1,1-DCA)	34496	75-34-3	0.035, 0.04, 0.044, 0.06	82.1	Solvent
1,2-Dichloroethane (1,2-DCA)	32103	107-06-2	0.06, 0.08, 0.1, 0.13	63.9	Solvent
1,1-Dichloroethene (1,1-DCE)	34501	75-35-4	0.02, 0.022, 0.024, 0.044	55.5	Organic synthesis
cis-1,2-Dichloroethene (*cis*-1,2-DCE)	77093	156-59-2	0.02, 0.022, 0.024, 0.038	55.0	Solvent
trans-1,2-Dichloroethene (*trans*-1,2-DCE)	34546	156-60-5	0.018, 0.032	62.2	Solvent
1,2-Dichloropropane	34541	78-87-5	0.02, 0.026, 0.029	65.9	Fumigant
1,3-Dichloropropane	77173	142-28-9	0.06, 0.12	64.6	Fumigant
2,2-Dichloropropane	77170	594-20-7	0.05, 0.06	34.1	Fumigant

Table 5. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for volatile organic compounds and gasoline oxygenates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram(s) per liter; values below the LRL may be reported as estimated concentrations if the compound is present. Constituents are analyzed by gas chromatography/mass spectrometry using methods described in Connor and others, 1998. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Recovery[3] (percent)	Use
1,1-Dichloropropene	77168	563-58-6	0.026, 0.03, 0.04, 0.05	49.4	Organic synthesis
cis-1,3-Dichloropropene	34704	10061-01-5	0.05, 0.06, 0.09, 0.1	51.6	Fumigant
trans-1,3-Dichloropropene	34699	10061-02-6	0.09, 0.1, 0.14	52.4	Fumigant
Diethyl ether	81576	60-29-7	0.08, 0.12, 0.17	57.4	Solvent
Diisopropyl ether (DIPE)	81577	108-20-3	0.06, 0.1	63.9	Gasoline oxygenate
Ethylbenzene	34371	100-41-4	0.02, 0.03, 0.036, 0.04	71.1	Gasoline hydrocarbon
Ethyl *tert*-butyl ether (ETBE)	50004	637-92-3	0.03, 0.032, 0.04, 0.05	64.8	Gasoline oxygenate
Ethyl methacrylate	73570	97-63-2	0.14, 0.18	29.9	Organic synthesis
2-Ethyl toluene (1-Ethyl-2-methylbenzene)	77220	611-14-3	0.02, 0.032, 0.04, 0.06	70.4	Gasoline hydrocarbon
Hexachlorobutadiene	39702	87-68-3	0.06, 0.1, 0.14	35.1	Organic synthesis
Hexachloroethane	34396	67-72-1	0.14, 0.19	57.2	Solvent
2-Hexanone (*n*-Butyl methyl ketone)	77103	591-78-6	0.4, 0.46, 0.6, 0.7	47.5	Solvent
Iodomethane (Methyl iodide)	77424	74-88-4	0.26, 0.35, 0.4, 0.5, 0.8	43.0	Organic synthesis
Isopropylbenzene	77223	98-82-8	0.038, 0.04, 0.042, 0.06	34.0	Gasoline hydrocarbon
4-Isopropyl-1-methylbenzene	77356	99-87-6	0.06, 0.08, 0.12	45.1	Gasoline hydrocarbon
Methyl acrylate	49991	96-33-3	0.4, 0.56, 0.6, 1, 2	62.9	Organic synthesis
Methyl acrylonitrile	81593	126-98-7	0.2, 0.26, 0.4, 0.57, 0.76	94.4	Organic synthesis
Methyl *tert*-butyl ether (MTBE)	78032	1634-04-4	0.1, 0.17	65.9	Gasoline oxygenate
Methyl *iso*-butyl ketone (MIBK)	78133	108-10-1	0.2, 0.32, 0.37, 0.4	93.3	Solvent
Methylene chloride (Dichloromethane)	34423	75-09-2	0.038, 0.04, 0.06, 0.16	74.2	Solvent
Methyl ethyl ketone (2-butanone, MEK)	81595	78-93-3	1.6, 2, 4, 5	42.3	Solvent
Methyl methacrylate	81597	80-62-6	0.2, 0.22, 0.35	66.4	Organic synthesis
Naphthalene	34696	91-20-3	0.18, 0.2, 0.4, 0.5, 0.52	49.8	Gasoline hydrocarbon
Perchloroethene (PCE, Tetrachloroethene)	34475	127-18-4	0.026, 0.027, 0.03, 0.04, 0.06	51.9	Solvent, degreaser
n-Propylbenzene	77224	103-65-1	0.036, 0.04, 0.042	67.0	Solvent
Styrene	77128	100-42-5	0.03, 0.04, 0.042	48.9	Gasoline hydrocarbon
1,1,1,2-Tetrachloroethane	77562	630-20-6	0.03, 0.04	56.9	Solvent
1,1,2,2-Tetrachloroethane	34516	79-34-5	0.08, 0.09, 0.1, 0.14, 0.16	73.5	Solvent
Tetrahydrofuran	81607	109-99-9	1, 1.2, 1.4, 2.2	ND	Solvent
1,2,3,4-Tetramethylbenzene	49999	488-23-3	0.08, 0.14, 0.23	73.1	Gasoline hydrocarbon
1,2,3,5-Tetramethylbenzene	50000	527-53-7	0.08, 0.12, 0.14, 0.18, 0.2	45.2	Gasoline hydrocarbon
Toluene	34010	108-88-3	0.018, 0.02, 0.05	70.7	Gasoline hydrocarbon
1,2,3-Trichlorobenzene	77613	87-61-6	0.06, 0.08, 0.12, 0.18, 0.27	50.4	Organic synthesis
1,2,4-Trichlorobenzene	34551	120-82-1	0.04, 0.08, 0.12	46.3	Solvent
1,1,1-Trichloroethane (1,1,1-TCA)	34506	71-55-6	0.02, 0.03, 0.032, 0.04	53.8	Solvent
1,1,2-Trichloroethane (1,1,2-TCA)	34511	79-00-5	0.04, 0.046, 0.06, 0.064	59.4	Solvent
Trichloroethene (TCE)	39180	79-01-6	0.02, 0.022, 0.038	67.1	Solvent
Trichlorofluoromethane (CFC-11)	34488	75-69-4	0.08, 0.09, 0.16	70.6	Refrigerant

Table 5. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for volatile organic compounds and gasoline oxygenates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram(s) per liter; values below the LRL may be reported as estimated concentrations if the compound is present. Constituents are analyzed by gas chromatography/mass spectrometry using methods described in Connor and others, 1998. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	USGS parameter code	CASRN[1]	Laboratory reporting levels[2]	Recovery[3] (percent)	Use
1,2,3-Trichloropropane (1,2,3-TCP)	77443	96-18-4	0.12, 0.16, 0.18	66.4	Solvent/organic synthesis
Trichlorotrifluoroethane (CFC-113)	77652	76-13-1	0.034, 0.038, 0.04, 0.06	46.1	Refrigerant
1,2,3-Trimethylbenzene	77221	526-73-8	0.06, 0.08, 0.09, 0.12	63.8	Gasoline hydrocarbon
1,2,4-Trimethylbenzene	77222	95-63-6	0.032, 0.04, 0.056	72.2	Gasoline hydrocarbon
1,3,5-Trimethylbenzene	77226	108-67-8	0.032, 0.04, 0.044	62.7	Organic synthesis
Vinyl bromide (Bromoethene)	50002	593-60-2	0.1, 0.12	63.2	Fire retardant
Vinyl chloride (Chloroethene)	39175	75-01-4	0.06, 0.08, 0.11	45.3	Organic synthesis
m- and *p*-Xylene	85795	108-38-3 / 106-42-3	0.06, 0.08	72.6	Gasoline hydrocarbon
o-Xylene	77135	95-47-6	0.032, 0.038, 0.04, 0.07	70.2	Gasoline hydrocarbon
1,2-Dichloroethane-d4	99832	—	percent recovery	ND	Surrogate
1-Bromo-4-fluorobenzene	99834	—	percent recovery	ND	Surrogate
Toluene-d8	99833	—	percent recovery	ND	Surrogate

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[2]The LRLs in effect at different times during the study.

[3]Matrix spike recoveries were calculated using the spike-recovery calculation tool, which provides users with a quick, easy, and reproducible ability to calculate spike recoveries for spiked quality-control water samples stored in the QWDATA module of the U.S. Geological Survey National Water Information System. See text for more information.

Table 6. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for pesticides and pesticide degradates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram per liter; values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	Reference	Schedule[1]	USGS parameter code	CASRN[2]	Laboratory reporting levels[3]	Recovery[4] (percent)	Use
Acetochlor	Lindley and others, 1996	2001, 2033	49260	34256-82-1	0.006, 0.01	ND	Herbicide
Alachlor	Zaugg and others, 1995	2001, 2033	46342	15972-60-8	0.0045, 0.005, 0.006, 0.008	102.5	Herbicide
Atrazine	Zaugg and others,1995; Furlong and others, 2001	2001, 2033	39632	1912-24-9	0.007	60.4	Herbicide
Azinphos-methyl	Zaugg and others, 1995	2001, 2033	82686	86-50-0	0.05, 0.08, 0.12	80.5	Insecticide
Azinphos-methyl oxon	Zaugg and others, 1995	2001, 2033	61635	961-22-8	0.016, 0.042, 0.07	ND	Insecticide degradate
Benfluralin	Zaugg and others, 1995	2001, 2033	82673	1861-40-1	0.004, 0.01, 0.014	86.5	Herbicide
Butylate	Zaugg and others, 1995	2001	04028	2008-41-5	0.002, 0.004	94.9	Herbicide
Carbaryl	Zaugg and others, 1995	2001, 2033	82680	63-25-2	0.041, 0.06, 0.2	102.5	Insecticide
Carbofuran	Zaugg and others, 1995	2001	82674	1563-66-2	0.02	48.6	Insecticide
2-Chloro-2,6-diethylacetanilide	Sandstrom and others, 2001	2033	61618	6967-29-9	0.005, 0.0065, 0.01	ND	Herbicide degradate
4-Chloro-2-methylphenol	Sandstrom and others, 2001	2033	61633	1570-64-5	0.0032, 0.005, 0.0056	ND	Herbicide degradate
Chlorpyrifos	Zaugg and others, 1995	2001, 2033	38933	2921-88-2	0.005, 0.01	90.7	Insecticide
Chlorpyrifos oxon	Sandstrom and others, 2001	2033	61636	5598-15-2	0.05, 0.0562, 0.06	ND	Insecticide degradate
Cyanazine	Zaugg and others, 1995	2001	04041	21725-46-2	0.018	21.2	Herbicide
Cyfluthrin	Sandstrom and others, 2001	2033	61585	68359-37-5	0.008, 0.016, 0.0267, 0.053	ND	Insecticide
Cypermethrin	Sandstrom and others, 2001	2033	61586	52315-07-8	0.0086, 0.014, 0.02, 0.046	ND	Insecticide
Dacthal (DCPA)	Zaugg and others, 1995	2001, 2033	82682	1861-32-1	0.003, 0.006, 0.0076	108.4	Herbicide
Deethylatrazine (2-Chloro-4-isopropyl-amino-6-amino-*s*-triazine) {CAIT}	Furlong and others, 2001	2001, 2033	04040	6190-65-4	0.006, 0.014	4.0	Herbicide degradate
Desulfinylfipronil	Madsen and others, 2003	2033	62170	—	0.004, 0.012	ND	Insecticide degradate
Desulfinylfipronil amide	Madsen and others, 2003	2033	62169	—	0.009, 0.029	ND	Insecticide degradate
Diazinon	Zaugg and others, 1995	2001, 2033	39572	333-41-5	0.005	98.3	Insecticide
3,4-Dichloroaniline	Sandstrom and others, 2001	2033	61625	95-76-1	0.004, 0.0042, 0.0045, 0.006	ND	Herbicide degradate
Dichlorvos	Sandstrom and others, 2001	2033	38775	62-73-7	0.0118, 0.013, 0.02	ND	Insecticide
Dicrotophos	Sandstrom and others, 2001	2033	38454	141-66-2	0.08, 0.0843	ND	Insecticide
Dieldrin	Zaugg and others, 1995	2001, 2033	39381	60-57-1	0.0048, 0.009	83.2	Insecticide
2,6-Diethylaniline	Zaugg and others, 1995	2001, 2033	82660	579-66-8	0.006	46.6	Herbicide degradate
Dimethoate	Zaugg and others, 1995	2033	82662	60-51-5	0.006, 0.0061	ND	Insecticide

Table 6. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for pesticides and pesticide degradates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram per liter; values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	Reference	Schedule[1]	USGS parameter code	CASRN[2]	Laboratory reporting levels[3]	Recovery[4] (percent)	Use
Disulfoton	Zaugg and others, 1995	2001	82677	298-04-4	0.021	79.0	Insecticide
EPTC	Zaugg and others, 1995	2001	82668	759-94-4	0.0020, 0.004	94.1	Herbicide
Ethalfluralin	Zaugg and others, 1995	2001	82663	55283-68-6	0.009	94.1	Herbicide
Ethion	Sandstrom and others, 2001	2033	82346	563-12-2	0.004, 0.006, 0.008, 0.012, 0.016	ND	Insecticide
Ethion monoxon	Sandstrom and others, 2001	2033	61644	17356-42-2	0.002, 0.021, 0.0336	ND	Insecticide degradate
Ethoprophos	Zaugg and others, 1995	2001	82672	13194-48-4	0.005	92.4	Insecticide
2-Ethyl-6-methylaniline	Sandstrom and others, 2001	2033	61620	24549-06-2	0.0045, 0.0098, 0.01	ND	Herbicide degradate
Fenamiphos	Sandstrom and others, 2001	2033	61591	22224-92-6	0.029, 0.03	ND	Insecticide
Fenamiphos sulfone	Sandstrom and others, 2001	2033	61645	31972-44-8	0.0077, 0.0491, 0.053	ND	Insecticide degradate
Fenamiphos sulfoxide	Sandstrom and others, 2001	2033	61646	31972-43-7	0.031, 0.0387, 0.04, 0.08, 0.2	ND	Insecticide degradate
Fipronil	Madsen and others, 2003	2001, 2033	62166	120068-37-3	0.007, 0.016, 0.018, 0.02, 0.04	ND	Insecticide
Fipronil sulfide	Madsen and others, 2003	2001, 2033	62167	120067-83-6	0.005, 0.013	ND	Insecticide degradate
Fipronil sulfone	Madsen and others, 2003	2001, 2033	62168	120068-36-2	0.005, 0.024	ND	Insecticide degradate
Fonofos	Zaugg and others, 1995	2001, 2033	04095	944-22-9	0.0027, 0.003, 0.0044, 0.0053, 0.006, 0.01	100.8	Insecticide
α-HCH	Zaugg and others, 1995	2001	34253	319-84-6	0.005, 0.0046	97.4	Insecticide degradate
Hexazinone	Sandstrom and others, 2001	2033	04025	51235-04-2	0.008, 0.0129, 0.026	ND	Herbicide
Iprodione	Sandstrom and others, 2001	2033	61593	36734-19-7	0.01, 0.014, 0.026, 0.538, 1.4223	ND	Fungicide
Isofenphos	Sandstrom and others, 2001	2033	61594	25311-71-1	0.0034, 0.006	ND	Insecticide
Lindane	Sandstrom and others, 2001	2001	39341	58-89-9	0.004, 0.0040	100.8	Insecticide
Linuron	Zaugg and others, 1995	2001	82666	330-55-2	0.035	231.8	Herbicide
Malaoxon	Sandstrom and others, 2001	2033	61652	1634-78-2	0.008, 0.02, 0.0298, 0.039, 0.08	ND	Insecticide degradate
Malathion	Zaugg and others, 1995	2033	39532	121-75-5	0.016, 0.02, 0.027	28.4	Insecticide
Metalaxyl	Zaugg and others, 1995	2033	61596	57837-19-1	0.0051, 0.0069, 0.007	ND	Fungicide
Methidathion	Sandstrom and others, 2001	2033	61598	950-37-8	0.012	ND	Insecticide
Methyl parathion	Sandstrom and others, 2001	2001, 2033	82667	298-00-0	0.008	ND	Insecticide

Table 6. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for pesticides and pesticide degradates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram per liter; values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	Reference	Schedule[1]	USGS parameter code	CASRN[2]	Laboratory reporting levels[3]	Recovery[4] (percent)	Use
Metolachlor	Zaugg and others, 1995	2001, 2033	39415	51218-45-2	0.006, 0.01, 0.013, 0.014	108.4	Herbicide
Metribuzin	Zaugg and others, 1995	2001, 2033	82630	21087-64-9	0.006, 0.012, 0.016, 0.028	8.7	Herbicide
Molinate	Zaugg and others, 1995	2001	82671	2212-67-1	0.003, 0.0016	96.6	Herbicide
Myclobutanil	Sandstrom and others, 2001	2033	61599	88671-89-0	0.008, 0.01, 0.033	ND	Fungicide
1-Naphthol	Sandstrom and others, 2001	2033	49295	90-15-3	0.036, 0.04, 0.0882	ND	Insecticide degradate
Napropamide	Zaugg and others, 1995	2001	82684	15299-99-7	0.007	89.9	Herbicide
p,p'-DDE	Zaugg and others, 1995	2001	34653	72-55-9	0.0048	ND	Insecticide
Paraoxon-methyl	Sandstrom and others, 2001	2001, 2033	61664	950-35-6	0.01, 0.019, 0.0299	133.6	Insecticide degradate
Parathion	Zaugg and others, 1995	2001	39542	56-38-2	0.01	111.7	Insecticide
Parathion-methyl	Zaugg and others, 1995	2001, 2033	82667	298-00-0	0.006, 0.008, 0.015	97.4	Insecticide
Pebulate	Zaugg and others, 1995	2001	82669	1114-71-2	0.004, 0.0041	100.8	Herbicide
Pendimethalin	Zaugg and others, 1995	2001, 2033	82683	40487-42-1	0.012, 0.02, 0.022	206.1	Herbicide
cis-Permethrin	Zaugg and others, 1995	2001, 2033	82687	54774-45-7	0.006, 0.01, 0.014	82.3	Insecticide
Phorate	Zaugg and others, 1995	2001, 2033	82664	298-02-2	0.011, 0.02, 0.04, 0.055	ND	Insecticide
Phorate oxon	Sandstrom and others, 2001	2033	61666	2600-69-3	0.027, 0.0973, 0.1048	ND	Insecticide degradate
Phosmet	Sandstrom and others, 2001	2033	61601	732-11-6	0.0079, 0.034, 0.2	ND	Insecticide
Phosmet oxon	Sandstrom and others, 2001	2033	61668	3735-33-9	0.0511, 0.0553	ND	Insecticide degradate
Prometon	Zaugg and others, 1995	2001, 2033	04037	1610-18-0	0.005, 0.01, 0.012, 0.015	82.3	Herbicide
Prometryn	Sandstrom and others, 2001	2033	04036	7287-19-6	0.0054, 0.0059, 0.006	ND	Herbicide
Pronamide (Propyzamide)	Zaugg and others, 1995	2001, 2033	82676	23950-58-5	0.0036, 0.004, 0.0041	91.6	Herbicide
Propachlor	Zaugg and others, 1995	2001	04024	1918-16-7	0.025, 0.010	48.9	Herbicide
Propanil	Zaugg and others, 1995	2001	82679	709-98-8	0.011	110.0	Herbicide
Propargite	Zaugg and others, 1995	2001	82685	2312-35-8	0.023	24.3	Acaricide
Simazine	Zaugg and others, 1995	2001, 2033	04035	122-34-9	0.005, 0.006, 0.01	11.6	Herbicide
Tebuthiuron	Zaugg and others, 1995; Furlong and others, 2001	2001, 2033	82670	34014-18-1	0.016, 0.02, 0.028	30.9	Herbicide
Terbacil	Zaugg and others, 1995; Furlong and others, 2001	2001	82665	5902-51-2	0.034	14.0	Herbicide
Terbufos	Zaugg and others, 1995	2001, 2033	82675	13071-79-9	0.012, 0.017, 0.018	77.3	Insecticide

Table 6. Laboratory reporting levels, matrix spike recovery, primary use or source, and reporting information for pesticides and pesticide degradates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. Laboratory reporting levels (LRLs) are in microgram per liter; values below the LRL may be reported as estimated concentrations if the compound is present. **Abbreviations**: CASRN, Chemical Abstract Services Registry Number; ND, not determined; —, CASRN not assigned]

Constituent	Reference	Schedule[1]	USGS parameter code	CASRN[2]	Laboratory reporting levels[3]	Recovery[4] (percent)	Use
Terbufos oxon sulfone	Sandstrom and others, 2001	2001, 2033	61674	56070-15-6	0.045, 0.0676	ND	Insecticide degradate
Terbuthylazine	Sandstrom and others, 2001	2033	04022	5915-41-3	0.006, 0.0083, 0.0102	ND	Herbicide
Thiobencarb	Zaugg and others, 1995	2001	82681	28249-77-6	0.010, 0.0048	105.0	Herbicide
Triallate	Zaugg and others, 1995	2001	82678	2303-17-5	0.002, 0.0023	102.5	Herbicide
Tribufos	Sandstrom and others, 2001	2033	61610	78-48-8	0.018, 0.035	ND	Defoliant
Trifluralin	Zaugg and others, 1995	2001, 2033	82661	1582-09-8	0.006, 0.009, 0.012, 0.018	88.2	Herbicide
alpha-HCH-d6	Sandstrom and others, 2001	2033	99995	—	percent recovery	ND	Surrogate
Diazinon-d10	Sandstrom and others, 2001	2033	99994	—	percent recovery	ND	Surrogate

[1]Pesticide and pesticide degradate analyses for water samples collected in March 2004, were done using pesticide schedule 2001. After that date, pesticide and pesticide degradate analyses were done using pesticide schedule 2033. See text for more information.

[2]This report uses the CASRN®, which is a registered trademark of the American Chemical Society. The CASRN online database provides the latest registry number information: http://www.cas.org/. Chemical Abstracts Services (CAS) recommends the verification of CASRNs through CAS Client Services℠.

[3]The LRLs in effect at different times during the study.

[4]Matrix spike recoveries were calculated using the spike-recovery calculation tool which provides users with a quick, easy, and reproducible ability to calculate spike recoveries for spiked quality-control water samples stored in the QWDATA module of the U.S. Geological Survey National Water Information System. See text for more information.

Quality Assurance/Quality Control

The quality assurance/quality control (QA/QC) plan used for this study was modified from the protocols described in the USGS National Field Manual (U.S. Geological Survey, variously dated) and included the collection of quality-control data from blanks, sequential replicate samples, and laboratory surrogates and spikes. Quality-control data are those generated from the collection and analysis of quality-control samples and are used to estimate the magnitude of errors in the process of obtaining environmental data (Mueller and others, 2015). Additionally, the USGS Branch of Quality Systems maintains a web page with results from the USGS inorganic blind sample project (https://bqs.usgs.gov/) to document bias and variability for the NWQL through the use of blind quality-assurance samples.

Blanks are intended to be free of the analytes of interest and can be prepared in the laboratory or field to test for bias that could result from contamination of environmental samples by the analytes of interest or by interfering constituents during any stage of sample collection, processing, storage, transportation, or laboratory analysis. A travel (trip) blank is used to identify contamination that may occur during sample transport and analysis rather than as a result of sample collection and processing. Travel blanks were processed for VOCs from unopened cartridges sent from the lab and processed with the environmental samples.

Blanks are not feasibly collected for isotopic ratios. Isotopic ratios of hydrogen, oxygen, carbon, and nitrogen are an intrinsic property of these elements, therefore, the concept of a blank does not apply to these ratios. In addition, blanks were not collected for tritium. Tritium is ubiquitous in water in contact with the modern atmosphere, and tritium blank water is not readily available, making it impractical to collect a blank for tritium. However, tritium was not reported to be present above the detection limit in some samples, which demonstrates the ability to collect samples without influence from near-surface sources of tritium.

Additional quality-assurance samples included the collection of sequential replicate pairs to assess the precision of the water-quality data; surrogate compounds, processed with the environmental sample, to evaluate extraction efficiency and matrix interference; and laboratory spikes, to evaluate bias and variability of analytical results related to matrix interferences.

Blank Samples

Blank samples were collected during field operations in conjunction with water-quality samples using either blank water certified by the NWQL or de-ionized water from the USGS San Diego Projects office that has a concentration less than the LRL of the analytes investigated during the study (J.A. Lewis, Chemist, U.S. Geological Survey, written commun., 2002). The qualifying threshold for accepting environmental data, the study reporting level (SRL), was determined by summing the blank concentration and the LT-MDL, or MDL (one-half the LRL), for the constituent in question (Wright and others, 2005).

Inorganic-free blank water was used for blanks analyzed for major and minor ions, nutrients, and trace elements. Nitrogen-purged, organic-free blank water was used for blanks analyzed for organic constituents (VOCs, pesticides, and pesticide degradates). Field blanks were collected by pumping blank water through the same sampling equipment (fittings and tubing) used to collect groundwater samples. A blank sample was collected, processed, and shipped after 8 to 12 liters of blank water were pumped through the sampling equipment using the same protocols used for the groundwater samples. Source-solution blanks were collected by pouring NWQL certified blank water directly into sample containers that were preserved, stored, shipped, and analyzed in the same manner as the groundwater samples. Eight field blanks were collected at environmental sampling locations. Four source-solution blanks were collected to show that the laboratory certified reagent water is free of the analytes of interest.

Sequential Replicates

Sequential replicate samples are footnoted in the Water-Quality Data Analysis results tables (table 7*B*, “Time” column). Sixteen sequential replicate samples were collected to evaluate variability in major and minor ion, nutrient, and trace metal data, and one sequential replicate pair was collected to evaluate variability in VOC data. The acceptable limit for the difference in measured concentrations between replicate-paired samples was determined using one of two criteria. The criterion selection depended on the magnitude of the measured concentration of a constituent relative to its reporting level. If the measured concentration of a constituent was less than five times its reporting level, a standard deviation (SD) for the replicate pair of less than half the reporting level was considered acceptable. If the measured concentration of a constituent was greater than or equal to five times its reporting level, a relative standard deviation (RSD) of less than 20 percent was considered acceptable. The RSD is defined as the SD divided by the mean concentration for each replicate pair of samples expressed as a percentage. This analysis has been used in other studies to evaluate sequential replicate data (Mathany and others, 2012; Kjos and others, 2014). For constituents with multiple reporting levels during the study period, the highest reporting level was used, which results in the most conservative evaluation of the data.

Surrogates

Surrogate compounds analyzed with nine OWC samples included caffeine-13C, decafluorobiphenyl, and fluoranthene-d10. Surrogate compounds analyzed with 44 VOC samples included 1,2-dichloroethane-d4, 1-bromo-4-fluorobenzene, and toluene-d8. Surrogate compounds analyzed with 17 pesticide samples included alpha-HCH-d6 and diazinon-d10. Project-specific data quality objectives determined surrogate compounds have an acceptable tolerance if within plus or minus 30 percent of the surrogate value.

Matrix Spikes

Two laboratory matrix spike samples for VOCs and gasoline oxygenates and one laboratory matrix spike sample for pesticides and pesticide degradates were collected. Project-specific data quality objectives determined matrix spike recoveries have an acceptable tolerance if within plus or minus 30 percent of the spike value. The matrix spikes were prepared by adding a solution containing known amounts of VOCs or pesticides to replicate the constituents being analyzed in the water samples. This enables an analysis of matrix interferences on a compound-by-compound basis (Wright and others, 2005). The matrix spikes were done by the NWQL. The matrix spike recoveries were calculated by using the spike-recovery calculation tool, which provides users with a quick, easy, and reproducible ability to calculate spike recoveries for spiked quality-control water samples stored in the QWDATA module of NWIS. For matrix spikes where the constituent concentration in the background sample is censored and the recovery is reported as a range, or for multiple recoveries for an individual compound, the lowest recovery is reported (tables 5 and 6). The pesticide matrix spike recoveries included 45 pesticides or pesticide degradates (table 6).

Results of Quality-Assurance Analyses

Results for over 240 water-quality samples are listed in tables 7*A–E*. Results for quality-assurance blank samples are listed in tables 8*A–C*. Two field blank samples were collected and analyzed for major and minor ions, nutrients, and trace elements (table 8*A*); three major and minor ions, eight trace elements, and one nutrient were detected. Ten field blanks were analyzed for VOCs (table 8*B*), with 23 detections. One field blank was analyzed for pesticides and pesticide degradates (table 8*C*). Simazine was the only pesticide or pesticide degradate detected in the field blank. The qualifying threshold for accepting environmental data, the study reporting level (SRL), was determined by blank data. Groundwater constituents that were determined to have an SRL ("Censor threshold" column) are listed in table 9 and censored samples are signified on tables 7*B* and 7*D* using "V" codes. The environmental data were not changed in the USGS database because project-specific quality-assurance data may result in different study censoring levels.

Concentrations in groundwater samples were greater than the established SRLs for major ions (calcium, magnesium, sodium, silica), nutrients, and strontium; therefore, the blank detections did not result in censoring of any data. Concentrations in environmental groundwater samples were below the established SRLs for the trace elements aluminum, barium, boron, manganese, selenium, and zinc; therefore, these compounds are coded accordingly in the tables (no data were changed in the NWIS database). Approximately 2.4 percent of values for major and minor ions, trace elements, and nutrients fall below the acceptable SRL and are censored with a "V" code.

Qualifying thresholds for censoring OWC data were not determined because no source-solution or field blanks were collected and analyzed for OWCs during the study period.

Four source-solution blanks, five field blanks, and one trip blank were processed and analyzed for VOCs (table 8*B*). No detections in groundwater samples were below the established SRLs for 1,2,3,4-tetramethylbenzene, bromomethane, ethyl *tert*-butyl ether (ETBE), iodomethane, methyl *iso*-butyl ketone (MIBK), methyl ethyl ketone (MEK), and styrene; therefore, these blank detections did not result in censoring of any data.

Concentrations in groundwater samples for acetone, benzene, *n*-butylbenzene, *sec*-butylbenzene, carbon disulfide, chloromethane, ethylbenzene, *o*-ethyl toluene, isopropylbenzene, methyl *tert*-butyl ether (MTBE), *n*-propylbenzene, trichloroethene, trichlorofluoromethane (CFC-11), *m*- and *p*-xylene, and *o*-xylene, were below the established SRLs and coded accordingly in the tables (no data were changed in the NWIS database).

Toluene was detected in five field blanks collected during this study. Statistical analysis of hundreds of VOC blanks for the Groundwater Ambient Monitoring and Assessment (GAMA) study resulted in an SRL of 0.08 µg/L for toluene (Fram and others, 2012) and it is used for this report. One trip blank processed for VOCs had no detections. Approximately 1.5 percent of VOC values fall below the acceptable study reporting limits and are censored with a "V" code.

Data from the replicate-paired samples indicated that variability between measurements was acceptable for most constituents, with the exception of aluminum, antimony, arsenic, bromide, iodide, iron, manganese, organic nitrogen, and phosphorus, confirming that the procedures used to collect and process the samples were consistent for the major and minor ions and nutrients, and most trace elements (table 3). Only 19 percent of major and minor ion and trace element replicates and 20 percent of nutrient replicates were out of range. No results were changed based on replicate data.

Table 7*A*. Specific conductance, major and minor ions, selected trace elements, and nitrate plus nitrite analyzed in water samples from multiple-well monitoring site *C*, SBMP, in the Bunker Hill Subbasin, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: C, Celsius; mg/L, milligram per liter; mm/dd/yy, month/day/year; NR, not reported; SiO_2, silicon dioxide; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; <, actual value less than value shown]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time	Specific conductance, field (µS/cm at 25 degrees C) (00095)	Calcium (mg/L) (00915)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Chloride (mg/L) (00940)
SBMP1	340615117170902	001S004W10B002S	03/07/77	NR	340	47	9.0	3	12	4.6
SBMP2	340615117170903	001S004W10B003S	03/07/77	NR	356	44	6.4	3	23	5.9
SBMP3	340615117170904	001S004W10B004S	03/07/77	NR	1,300	100	<0.100	7	39	8.4

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time	Fluoride (mg/L) (00950)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Nitrogen, nitrate plus nitrite (mg/L as N) (00631)	Boron (µg/L) (01020)	Iron (µg/L) (01046)
SBMP1	340615117170902	001S004W10B002S	03/07/77	NR	0.5	21	26	0.94	<20	<10.0
SBMP2	340615117170903	001S004W10B003S	03/07/77	NR	0.5	21	21	0.63	40	<10.0
SBMP3	340615117170904	001S004W10B004S	03/07/77	NR	0.4	12	67	2.3	30	<10.0

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	23.0	0.0	7.9	—	628	—	72.0
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	20.8	5.2	7.5	7.7	573	608	64.5
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	19.1	8.4	8.0	—	439	—	—
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	22.4	0.2	9.3	9.5	86	88	4.75
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	22.5	0.6	11.2	—	960	—	120
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	24.3	2.2	10.9	10.8	963	897	127
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	22.7	7.3	7.3	—	652	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	18.6	12.2	7.8	7.8	442	433	50.9
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	18.6	7.0	7.7	7.7	370	373	52.0
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	18.6	7.0	7.7	7.7	370	373	52.0
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	20.1	0.1	8.5	8.4	266	270	9.24
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	24.2	1.2	7.9	7.7	343	356	48.0
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	22.2	0.5	7.7	7.8	329	348	48.5
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	27.5	0.0	7.2	7.3	746	749	87.0
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	23.9	0.1	7.2	7.5	668	731	92.7
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	18.3	7.4	7.7	7.6	557	574	65.6
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	23.8	3.2	7.3	7.5	572	587	66.8
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	—	—	—	7.4	—	585	66.9
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	20.3	6.4	7.6	7.6	583	599	72.0
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	17.2	8.5	7.7	7.8	588	606	67.5
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	22.1	7.4	7.4	7.7	624	585	72.6
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	16.9	8.6	7.6	7.8	585	582	76.8
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	14.7	13.8	7.7	7.6	382	396	36.2
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	28.5	4.4	7.1	—	443	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	18.3	12.8	7.4	7.5	388	401	49.2
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	18.3	7.4	7.4	7.4	405	410	49.6

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	15.6	14.7	7.4	—	402	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	18.6	14.3	7.5	—	407	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	19.8	8.8	7.3	7.5	436	398	49.8
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	19.8	8.8	7.3	—	436	—	50.5
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	18.3	13.7	7.4	7.6	430	439	56.8
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	18.3	13.7	7.4	—	430	—	57.8
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	18.0	7.6	7.5	7.6	237	245	15.8
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	22.9	15.0	7.5	7.7	259	254	26.0
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	18.3	9.2	7.3	7.6	246	250	25.3
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	16.8	11.3	7.3	7.4	244	250	23.3
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	17.9	10.6	7.4	7.7	245	241	24.2
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	17.1	9.3	7.4	7.9	244	240	23.1
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	18.9	9.3	7.2	7.7	256	254	24.5
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	17.6	11.4	7.3	7.7	310	307	30.4
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	17.6	11.4	7.3	—	310	—	30.5
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	18.9	>15.0	7.0	7.3	390	374	34.6
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	16.9	>14.0	7.3	7.5	252	254	26.3
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	18.3	9.0	7.0	7.9	302	297	27.4
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	21.8	>15.0	7.1	7.5	267	216	20.7
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	15.6	6.1	7.3	7.4	241	250	27.5
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	22.4	>15.0	7.2	7.7	258	221	21.4
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	16.4	4.6	7.3	7.3	271	268	30.7
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	16.4	4.6	7.3	—	271	—	30.8
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	22.6	—	8.4	—	2,540	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	18.2	8.8	7.4	7.8	359	353	36.2
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	19.0	1.2	E7.7	7.6	344	344	38.8

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	21.0	11.2	7.5	7.8	346	364	38.5
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	16.0	9.0	7.7	7.9	363	371	41.5
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	16.6	12.5	7.7	—	388	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	16.9	10.2	7.8	7.7	362	370	38.3
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	20.5	6.0	7.4	7.7	368	368	41.2
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	25.8	3.6	7.3	—	355	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	19.0	—	7.8	7.6	355	386	45.7
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	20.8	12.3	7.6	7.8	364	395	43.5
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	18.5	10.4	7.5	7.5	462	307	27.5
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	20.5	9.4	7.6	7.6	459	471	57.4
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	30.9	3.8	7.3	—	437	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	20.0	0.7	E7.3	7.6	516	527	69.2
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	19.5	13.5	7.5	7.6	567	531	67.6
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	17.3	12.0	7.7	7.7	556	571	77.6
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	19.0	10.2	7.5	—	318	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	20.3	9.5	7.2	7.5	313	307	37.7
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	27.9	5.7	7.2	—	302	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	18.5	5.5	7.6	7.7	232	252	31.6
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	18.7	14.3	7.7	7.7	250	252	30.5
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	15.5	12.6	7.4	7.7	319	330	39.6
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	16.3	—	7.3	7.5	288	313	12.5
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	21.6	5.7	7.3	7.5	255	245	28.0
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	25.0	5.5	7.1	—	245	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	22.5	1.2	E7.1	7.3	314	314	42.4
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	18.3	8.3	7.3	7.4	303	298	37.9
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	19.9	8.0	7	7.4	319	316	42.6

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	21.8	8.2	7.1	7.3	342	322	41.5
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	16.1	9.2	7.3	7.4	251	253	33.0
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	36.5	0.8	6.9	7.2	2,630	2,850	390
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	21.0	0.0	7.6	7.4	1,080	1,070	170
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	24.1	0.1	7.2	—	850	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	24.6	0.2	7.2	7.2	840	919	123
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	22.3	0.1	7.4	—	792	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	23.6	0.0	8.2	8.0	478	483	31
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	23.5	0.7	8.2	—	443	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	24.5	0.2	8.4	8.3	463	461	26.1
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	22.4	—	8.4	—	470	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	21.0	0.8	8.0	7.6	1,120	1,110	120
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	24.5	0.1	7.7	—	1,050	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	27.7	0.2	7.3	7.0	985	1,160	122
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	22.0	—	8.8	—	666	—	—
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	22.0	—	8.8	—	666	—	—
SBVD5	340439117173907	001S004W22D007S	07/20/95	1500	23.0	0.0	7.1	—	954	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	26.1	0.2	7.0	7.3	598	573	49.5
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	26.1	0.2	7.0	7.3	598	624	49.2
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	22.6	0.1	6.8	—	1,150	—	—
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	25.1	0.0	8.0	8.1	472	470	25.5
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	26.5	0.7	7.8	7.8	297	299	24.3
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	25.6	4.4	7.8	8.1	407	406	16.3
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	28.0	1.2	7.4	7.8	440	443	26.1
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	24.4	1.4	8.1	—	406	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	22.5	1.8	7.9	8.1	412	416	19.9

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	—	—	—	7.5	—	3,600	522
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	19.7	8.0	7.6	7.7	465	452	59.1
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	22.6	8.4	7.5	7.7	464	455	59.9
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	19.5	1.4	7.6	7.7	429	468	62.4
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	17.0	7.0	7.7	7.9	464	463	61.2
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	18.2	7.1	7.7	—	463	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	19.8	9.1	7.6	7.7	463	460	61.2
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	16.9	8.9	7.8	7.8	458	470	63.5
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	17.5	7.2	7.7	7.8	454	454	59.7
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	17.5	7.2	7.7	—	454	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	17.8	0.6	7.5	—	460	459	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	16.8	10.4	7.7	—	453	457	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	19.6	8.6	7.6	7.9	461	460	59.7
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	19.6	7.6	7.6	—	460	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	19.6	7.6	7.6	—	460	—	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	17.2	7.9	7.5	—	452	—	—
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	16.3	8.8	7.5	—	447	—	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	19.7	10	7.5	7.7	453	437	54.6
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	20.2	12.4	7.5	7.8	465	467	58.9
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	20.9	10.2	7.5	—	471	—	—
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	23.0	1.2	7.3	7.0	467	464	60.2
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	16.1	9.8	7.7	7.9	463	466	59.2
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	18.5	10.0	7.6	—	462	—	—
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	18.4	12.8	7.6	—	461	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	17.6	11.9	7.5	—	464	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	19.4	7.6	7.6	7.7	463	460	53.5

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	20.9	9.2	7.5	7.6	419	462	56.1
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	20.9	9.2	7.5	—	419	463	56.1
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	16.6	11.6	7.6	7.7	456	468	59.4
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	19.9	12.5	7.4	7.7	466	455	60.7
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	22.1	10.2	7.5	7.8	456	458	54.9
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	18.1	9.4	7.7	7.7	462	474	61.1
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	16.7	10.0	7.6	7.8	452	458	53.9
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	21.1	7.6	7.3	—	476	—	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	16.8	10.0	7.6	—	470	475	—
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	18.8	11.1	7.5	—	486	—	—
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	17.1	11.5	7.5	—	484	—	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	19.4	8.0	7.5	7.6	431	425	52.0
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	21.8	7.9	7.5	7.8	434	430	53.6
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	19.5	2.5	7.5	7.5	375	440	57.4
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	16.8	11.4	7.6	7.9	443	440	53.9
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	18.3	11.3	7.6	7.7	442	445	53.8
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	18.1	12.3	7.6	7.7	434	450	51.2
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	18.5	13	7.5	7.8	441	438	52.8
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	18.7	8.5	7.5	7.7	436	428	50.6
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	19.6	9.3	7.6	7.6	445	444	56.0
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	20.6	10.2	7.3	7.7	452	453	55.3
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	16.0	9.9	7.6	7.7	478	484	58.5
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	16.0	9.9	7.6	7.7	478	483	57.7
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	19.8	12.0	7.5	7.8	483	500	54.5
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	15.0	13.1	7.7	7.7	509	511	60.6
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	16.6	14.1	7.4	7.7	494	505	55.9

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	20.1	13.7	7.4	—	502	—	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	19.2	10.3	7.3	—	484	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	19.3	8.5	7.6	—	491	—	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	19.3	—	7.6	—	492	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	19.7	12.7	7.7	—	488	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	17.1	10.4	7.5	—	474	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	17.1	10.4	7.5	—	474	—	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	15.8	9.1	7.5	—	468	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	22.5	9.1	7.5	—	452	—	—
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	16.8	10.3	7.4	—	429	—	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	19.2	9.3	7.6	7.7	445	449	28.6
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	17.4	9.1	7.6	7.7	531	532	16.2
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	20.2	9.8	7.0	7.4	642	632	25.7
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	21.6	12.8	7.1	7.5	586	582	41.8
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	18.3	7.4	7.4	7.3	591	602	43.6
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	17.5	12.2	7.6	7.8	427	440	52.7
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	19.7	9.7	7.6	—	389	—	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	19.3	10.3	—	—	422	—	—
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	18.2	7.9	7.5	—	437	—	—
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	16.1	7.6	7.5	—	438	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	21.0	6.9	7.5	—	474	—	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	17.7	9.3	7.4	—	477	—	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	18.4	1.8	8.6	8.3	1,600	1,590	44.4
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	23.3	—	8.6	8.5	1,680	1,660	44.1
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	19.5	3.2	8	7.8	1,510	1,490	49.9
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	—	—	—	8.2	—	1,480	49.0

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	22.0	0.8	8.3	7.8	1,570	1,540	50.8
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	22.4	0.3	8.4	—	1,500	—	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	19.8	<2.0	8.3	—	1,490	—	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	23.2	<2.0	8.4	7.9	1,440	1,510	56.0
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	19.5	0.5	—	8.0	760	662	52.1
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	23.0	1.0	7.8	7.9	675	692	49.1
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	22.2	0.1	7.9	8.0	700	704	55.4
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	22.2	0.1	7.9	—	700	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	19.2	<2.0	7.8	—	696	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	19.2	—	7.8	—	696	—	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	19.2	<0.2	7.6	—	708	—	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	18.4	<0.2	7.8	8.2	693	706	58.6
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	22.0	<0.2	7.7	8.1	676	704	56.5
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	21.4	4	7.5	7.5	508	500	39.5
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	21.8	3.3	7.3	7.8	500	508	49.2
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	22.5	8.1	7.7	7.9	499	493	53.5
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	21.9	7.3	7.7	8.0	486	490	51.5
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	20.1	7.6	7.6	—	487	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	20.1	7.6	7.6	—	487	—	—
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	18.5	6.6	7.5	—	489	—	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	18.4	5.0	7.7	8.4	486	490	54.2
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	21.5	8.1	7.7	8.2	467	494	55.2
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	20.2	13.0	7.5	7.8	636	630	64.6
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	18.0	10.4	7.7	8.0	624	637	76.8
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	26.8	0.0	7.9	7.9	510	468	36.3
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	24.6	0.8	8.0	—	497	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	18.0	0.4	8.1	8.2	474	483	40.0
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	21.9	1.8	7.8	7.8	492	458	49.2
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	20.0	—	7.6	7.9	464	416	57.2
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	22.9	4.4	7.5	—	566	—	—
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	19.2	3.3	7.6	7.5	472	476	57.5
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	21.5	6.7	7.6	8.1	505	516	63.1
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	18.9	7.7	7.3	E7.7	619	560	73.8
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	18.9	—	7.3	—	619	—	—
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	23.5	1.7	7.5	—	882	—	—
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	16.9	7.4	7.7	7.6	468	456	57.6
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	21.0	7.8	7.6	8.0	414	440	60.0
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	17.5	1.6	7.6	7.7	889	904	119
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	22.2	0.6	7.5	—	883	—	—
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	18.4	0.4	7.5	7.5	756	886	112
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	19.8	6.6	7.4	7.6	848	843	118
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	20.1	3.2	7.3	7.9	774	795	107
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	21.9	17.7	8.3	8.5	770	752	11.6
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	21.9	4.7	7.8	—	636	—	—
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	21.9	4.7	7.8	7.8	636	612	31.9
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	24.7	6.0	7.5	—	556	—	—
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	23.9	5.4	7.6	7.6	772	757	37.6
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	21.8	6.4	7.6	7.6	729	732	35.9
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	21.0	7.4	7.6	7.8	684	699	33.8
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	18.2	7.5	7.6	—	671	—	—
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	19.4	6.5	7.6	—	676	—	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	22.3	10.0	7.3	7.4	525	528	52.1

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Water temperature, field (°C) (00010)	Dissolved oxygen, field (mg/L) (00300)	pH, field (standard units) (00400)	pH, lab (standard units) (00403)	Specific conductance, field (µS/cm at 25 °C) (00095)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	22.7	8.8	7.3	7.4	547	543	55.8
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	19.1	8.6	7.4	7.5	508	517	53.2
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	18.1	8.9	7.2	—	512	—	—
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	20.3	8.5	7.3	—	502	—	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	13.0	6.30	37.0	97	—	—	27.0	—
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	12.2	4.24	41.6	161	—	0.090	26.6	0.40
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	—	—	—	152	—	<0.300	13.8	0.30
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	1.71	3.35	6.91	39	—	<0.010	3.91	0.19
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	0.17	4.50	27.0	90	—	—	25.0	—
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	0.07	4.30	23.2	78	—	0.120	39.6	E0.11
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	—	—	—	—	—	0.094	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	12.8	3.96	17.3	170	169	E0.014	5.50	0.69
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	9.80	2.90	11.0	151	—	0.030	5.20	0.40
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	9.80	2.80	11.0	151	—	0.030	5.20	0.40
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	5.57	5.53	12.9	129	—	0.010	6.29	0.42
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	7.00	2.40	13.0	153	—	0.030	4.50	0.40
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	7.22	2.52	14.0	159	—	0.020	4.70	0.44
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	16.0	5.40	41.0	216	—	0.090	38.0	1.50
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	16.9	4.41	40.1	230	—	0.130	32.0	1.17
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	15.9	3.10	25.4	—	—	0.080	13.9	0.76
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	16.2	2.98	25.5	176	—	0.050	14.2	0.93
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	16.2	3.03	26.0	—	—	0.050	14.2	0.88
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	17.7	2.87	25.5	192	197	0.075	15.5	0.78

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	17.3	2.80	24.4	187	198	0.073	15.5	0.83
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	17.6	2.79	24.4	—	203	0.066	16.1	0.84
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	18.2	2.89	26.5	180	202	0.073	15.7	0.81
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	9.46	2.21	30.3	—	—	0.040	7.35	0.45
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	11.4	2.33	15.3	147	149	0.035	7.67	0.46
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	11.3	2.24	15.7	142	153	0.034	8.98	0.50
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	—	—	—	143	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	—	—	—	147	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	11.8	2.33	15.3	—	154	0.030	9.01	0.49
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	11.8	2.41	15.2	—	152	0.031	8.91	0.48
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	13.1	2.59	17.8	155	162	0.043	9.77	0.46
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	13.0	2.54	17.4	155	163	0.036	9.71	0.46
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	3.40	2.05	28.8	—	—	0.020	4.69	0.31
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	5.37	2.17	17.7	96	104	0.024	5.38	0.33
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	5.20	2.03	18.7	95	100	E0.017	5.24	0.36
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	4.96	1.99	17.2	94	100	E0.019	5.38	0.32
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	4.91	1.99	17.0	92	99	E0.019	5.55	0.32
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	4.89	2.01	18.8	85	99	E0.019	5.63	0.34
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	5.19	2.05	20.9	98	100	E0.019	5.79	0.37
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	6.15	2.33	24.1	95	97	0.092	23.1	0.33
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	6.14	2.35	23.8	95	97	0.093	23.2	0.31
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	7.41	2.49	26.4	93	96	0.136	36.5	0.32
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	5.72	2.07	20.4	101	108	0.026	5.20	0.33
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	5.48	2.18	25.1	106	107	0.037	9.33	0.30
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	4.54	2.01	16.6	87	89	E0.013	4.73	0.37
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	5.83	1.95	16.3	101	103	0.025	5.35	0.29

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	5.05	2.23	14.1	87	88	E0.014	4.76	0.36
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	6.90	2.18	16.2	106	103	0.029	10.7	0.30
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	6.88	2.12	15.8	106	104	0.042	10.6	0.30
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	—	—	—	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	10.0	3.42	22.6	—	—	0.040	6.55	0.73
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	10.2	2.31	18.6	—	144	0.026	6.41	0.74
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	10.6	2.44	19.7	144	151	0.030	7.32	0.73
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	11.7	2.52	21.4	145	151	0.029	8.41	0.72
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	—	—	—	126	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	10.6	2.65	19.2	—	—	0.040	7.86	0.71
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	11.3	2.02	16.2	141	—	0.030	8.28	0.78
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	—	—	—	141	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	12.0	2.17	16.3	—	128	0.066	11.2	0.79
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	11.7	2.31	16.8	128	133	0.045	11.6	0.76
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	6.34	2.43	27.6	—	—	0.050	16.3	0.57
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	14.5	1.78	12.5	138	—	0.070	14.0	0.77
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	—	—	—	138	—	—	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	17.9	1.96	13.6	—	174	0.048	11.1	0.77
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	17.6	2.05	13.8	181	183	0.049	11.5	0.74
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	19.7	2.10	15.1	193	198	0.048	12.4	0.71
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	—	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	7.57	1.79	12.3	113	—	0.030	6.10	0.48
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	—	—	—	113	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	5.78	1.72	11.0	113	101	E0.016	4.50	0.61
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	5.69	1.79	11.8	100	101	0.028	5.77	0.57
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	7.79	1.90	13.2	89	92	0.137	33.2	0.53
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	3.39	3.49	51.2	—	—	0.010	4.53	0.32

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	5.01	2.61	12.2	98	—	0.020	4.28	0.33
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	—	—	—	98	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	6.79	3.07	11.6	—	134	E0.017	5.30	0.27
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	6.40	3.06	12.3	113	130	0.032	6.20	0.26
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	7.49	3.43	12.7	134	136	0.030	6.23	0.27
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	7.22	3.19	12.0	136	143	0.035	6.49	0.26
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	5.53	2.66	11.1	103	107	0.013	5.75	0.25
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	76.4	7.20	202	648	—	0.860	162	1.06
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	20.0	3.30	47.0	260	—	0.130	27.0	0.50
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	—	—	—	—	—	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	16.6	3.15	46.3	—	—	0.130	44.5	0.35
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	—	—	—	255	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	2.20	1.90	64.0	129	—	0.080	51.0	3.20
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	—	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	1.88	2.21	67.5	116	—	0.050	48.5	3.55
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	—	—	—	134	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	9.70	9.30	110	134	—	0.140	73.0	0.30
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	—	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	8.43	4.70	107	130	—	0.150	82.9	0.35
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	—	—	—	—	—	<0.200	58.0	<0.20
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	—	—	—	—	—	<0.200	59.0	<0.20
SBVD4	340439117173906	001S004W22D006S	07/20/95	1500	—	—	—	414	—	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	9.31	3.74	63.8	159	—	0.070	56.2	1.73
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	9.26	3.80	63.1	159	—	0.070	57.5	1.65
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	—	—	—	292	—	—	—	—
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	1.51	2.16	69.2	—	—	0.110	38.4	1.05
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	2.44	1.98	30.6	88	—	<0.010	11.0	0.55

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	1.25	1.82	66.7	—	—	0.060	29.8	2.61
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	3.79	2.01	59.5	122	—	0.080	28.8	1.54
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	—	—	—	—	—	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	1.50	1.81	65.3	122	—	0.060	27.1	2.18
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	101	10.2	221	—	—	1.01	298	0.48
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	13.5	2.38	15.3	178	186	0.030	7.38	0.59
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	13.8	2.15	16.2	—	188	E0.013	6.86	0.53
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	14.8	2.18	15.7	—	183	0.030	7.29	0.57
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	14.7	2.23	16.4	173	186	0.027	7.26	0.57
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	—	—	—	175	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	14.6	2.12	15.1	—	189	0.026	7.78	0.55
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	14.9	2.16	16.1	182	188	0.028	7.77	0.54
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	14.6	2.08	15.9	179	179	0.040	7.83	0.58
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	—	—	—	179	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	—	—	—	174	—	E0.031	7.70	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	—	—	—	—	187	0.034	7.34	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	14.4	2.01	15.9	179	186	0.032	7.39	0.55
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	—	—	—	—	—	0.035	7.36	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	—	—	—	—	—	0.035	7.43	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	—	—	—	—	185	<0.030	7.73	—
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	—	—	—	—	185	0.033	7.75	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	15.1	1.86	14.1	159	171	0.040	8.96	0.71
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	16.4	1.92	14.8	—	166	0.040	9.21	0.61
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	—	—	—	160	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	16.7	1.93	14.2	—	162	0.044	9.73	0.64
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	16.6	1.92	15.0	148	165	0.045	9.81	0.64
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	—	—	—	146	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	—	—	—	151	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	—	—	—	145	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	16.1	1.88	14.5	138	164	0.044	10.3	0.64
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	15.8	1.92	14.4	159	165	0.045	9.98	0.65
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	15.8	1.89	14.1	159	165	0.042	9.95	0.63
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	15.8	1.84	14.6	160	166	0.044	10.2	0.65
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	16.8	1.99	15.4	—	164	0.041	10.8	0.63
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	15.9	1.84	15.2	135	155	0.050	10.5	0.64
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	16.3	1.84	14.9	162	169	0.038	10.1	0.63
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	14.7	1.63	13.4	155	159	0.047	10.2	0.67
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	—	—	—	159	—	0.088	16.9	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	—	—	—	—	—	0.073	19.4	—
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	—	—	—	—	153	0.136	39.0	—
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	—	—	—	—	155	0.123	37.0	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	14.3	1.98	14.7	160	165	0.050	9.41	0.71
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	14.5	1.73	13.9	—	163	0.042	8.80	0.61
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	15.3	1.78	13.7	—	155	0.046	9.93	0.64
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	14.7	1.74	13.8	151	158	0.044	9.99	0.62
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	14.8	1.69	14.0	141	158	0.042	10.2	0.63
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	14.8	1.68	13.3	147	157	0.044	10.4	0.59
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	14.2	1.69	13.2	137	160	0.042	10.8	0.63
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	15.3	1.78	14.2	143	162	0.047	11.2	0.62
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	15.3	1.86	14.7	159	161	0.062	15.3	0.62
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	15.7	1.79	13.6	—	166	0.065	17.0	0.61
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	16.0	1.78	14.6	151	158	0.146	40.5	0.58
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	15.9	1.75	14.6	151	153	0.149	40.5	0.58
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	15.6	1.76	14.0	95	113	0.244	68.0	0.62

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	16.3	1.77	14.7	111	116	0.244	70.8	0.57
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	15.8	1.74	14.4	101	103	0.253	73.7	0.59
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	—	—	—	100	—	0.252	73.1	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	—	—	—	96	—	0.223	69.8	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	—	—	—	—	—	0.201	64.8	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	—	—	—	—	—	0.197	64.5	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	—	—	—	—	102	0.185	60.1	—
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	—	—	—	—	103	0.163	53.9	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	10.4	3.21	46.3	124	144	0.052	7.38	0.41
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	5.65	2.63	90.2	—	169	0.193	46.1	0.58
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	7.28	3.26	102	—	162	0.264	80.5	0.51
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	12.4	3.10	55.6	101	115	0.303	88.5	0.49
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	12.5	3.21	54.8	113	117	0.276	84.7	0.45
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	14.9	1.55	13.7	—	114	0.173	48.7	0.51
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	—	—	—	95	—	0.136	43.4	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	—	—	—	—	—	0.203	63.7	—
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	—	—	—	—	83	0.271	83.8	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	—	—	—	—	82	0.264	82.8	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	1.82	3.08	312	—	31	0.050	42.1	7.97
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	1.82	2.77	304	—	31	0.044	40.5	8.27
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	1.04	2.8	295	—	31	0.050	40.0	7.84

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	0.99	2.8	278	—	31	0.050	39.5	7.91
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	0.85	2.44	284	—	31	0.044	39.3	8.31
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	—	—	—	28	—	<0.060	39.6	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	—	—	—	—	—	0.037	37.5	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	0.83	2.56	294	—	30	0.036	37.1	7.71
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	4.70	3.35	97.7	—	101	0.040	19.6	1.08
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	4.74	2.97	90.0	—	108	0.043	18.1	1.09
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	5.01	2.96	91.6	—	101	0.041	18.8	1.06
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	—	—	—	—	—	0.042	18.7	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	—	—	—	—	100	0.036	19.5	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	—	—	—	—	—	0.037	19.0	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	—	—	—	—	100	0.039	19.2	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	5.11	3.03	94.6	—	—	0.034	19.0	1.11
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	4.99	2.98	91.2	—	102	0.031	18.9	1.12
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	5.71	3.02	71.1	—	185	0.050	12.9	0.76
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	6.67	2.51	49.0	—	186	0.043	14.1	0.74
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	6.98	2.30	48.1	165	186	0.051	15.2	0.70
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	6.93	2.54	46.8	—	187	0.060	15.4	0.70
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	—	—	—	—	186	0.044	15.4	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	—	—	—	—	—	0.048	15.4	—
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	—	—	—	—	187	0.045	14.5	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	6.64	2.59	49.3	—	—	0.043	14.1	0.71
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	6.88	2.66	50.8	—	188	0.046	14.3	0.71
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	12.6	2.99	58.5	204	213	0.081	23.5	0.56
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	14.5	3.14	47.1	202	209	0.067	26.3	0.57
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	3.77	3.86	72.4	—	132	0.140	23.1	0.70
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	—	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	3.53	3.94	68.9	121	128	0.082	22.3	0.68
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	7.38	3.09	50.0	—	169	0.090	18.3	0.57
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	11.0	2.62	26.6	—	196	0.050	—	0.46
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	—	—	—	93	—	—	—	—
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	10.3	2.37	24.5	175	184	0.056	12.5	E0.28
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	12.1	2.45	31.4	—	177	0.079	15.9	0.42
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	14.6	2.31	34.1	—	210	0.110	—	0.49
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	—	—	—	—	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	—	—	—	118	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	11.2	1.94	19.1	173	188	0.040	—	E0.63
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	11.3	2.10	22.9	—	188	0.035	9.36	0.47
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	20.2	2.12	42.1	—	242	0.222	37.5	0.27
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	—	—	—	117	—	—	—	—
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	20.3	2.12	39.1	227	229	0.242	—	E0.35
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	22.2	1.94	30.7	—	248	0.125	22.1	0.22
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	19.9	1.90	37.2	—	222	0.159	27.8	0.25
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	2.53	1.59	149	91	102	0.046	25.9	14.4
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	—	—	—	138	—	—	—	—
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	7.16	1.71	91.2	138	206	0.077	21.7	3.37
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	—	—	—	209	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	10.1	0.54	102	—	—	—	27.1	3.15
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	9.71	1.07	103	148	140	0.081	27.2	4.14
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	9.58	1.03	101	—	158	0.084	25.7	4.09
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	—	—	—	144	—	0.086	26.5	—
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	—	—	—	—	165	0.074	26.7	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	15.5	0.86	33.5	—	—	—	11.8	0.66
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	17.0	0.70	33.6	202	218	0.066	16.5	0.67

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Alkalinity, field (mg/L as $CaCO_3$) (39086)	Alkalinity, lab (mg/L as $CaCO_3$) (29801)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)	Fluoride (mg/L) (00950)
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	16.2	0.69	31.0	—	182	0.077	21.8	0.69
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	—	—	—	182	—	0.064	22.6	—
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	—	—	—	—	193	0.053	25.4	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	—	—	130	—	—	—	—
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	—	20.7	82.8	384	E0.040	<0.10	5.16
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	—	—	47.2	—	—	—	2.80
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	—	0.73	E0.16	44	1.28	1.6	<0.05
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	—	—	200	—	—	—	—
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	—	8.0	212	450	0.95	1.5	0.99
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.002	—	—	—	—	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	—	13.5	35.9	245	—	—	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	<0.001	20.0	18.0	220	<0.020	<0.20	1.80
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	<0.001	20.0	18.0	223	<0.020	<0.20	1.80
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	—	1.09	<0.11	80	15.8	16.0	E0.03
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	0.002	19.0	14.0	207	0.030	<0.20	0.24
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	—	19.3	13.2	208	<0.040	<0.10	0.18
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	0.012	20.0	100	467	<0.020	<0.20	1.50
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	—	19.6	98.5	461	E0.020	E0.07	2.00
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	0.002	24.7	49.0	363	<0.020	<0.10	11.1
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	—	25.5	50.1	369	<0.020	0.14	9.29
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	—	25.7	50.3	375	<0.020	0.10	9.60
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.002	26.1	49.0	383	<0.020	—	10.3

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	<0.002	26.7	50.7	375	—	—	—
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	<0.002	25.8	49.8	382	—	—	—
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	<0.001	27.1	49.0	373	—	—	—
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	0.002	22.0	26.4	244	<0.020	<0.10	3.54
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.002	22.4	29.6	243	<0.020	—	4.09
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	<0.002	21.7	30.7	255	—	—	—
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	<0.002	22.5	30.0	249	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	0.003	22.6	29.8	268	—	—	—
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	<0.001	25.4	34.3	259	—	—	—
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	<0.001	24.2	34.3	258	—	—	—
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	0.002	17.5	15.2	153	<0.020	<0.10	0.60
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.002	20.4	17.9	165	0.077	—	0.70
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	<0.002	19.2	19.2	166	—	—	—
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	<0.002	20.2	18.9	160	—	—	—
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	E0.001	21.0	18.2	167	—	—	—
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	<0.002	20.0	19.2	159	—	—	—
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	E0.001	19.2	20.9	165	—	—	—
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	E0.001	19.4	22.5	186	—	—	—
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	E0.001	19.7	22.5	190	—	—	—
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	E0.001	18.5	26.9	224	—	—	—
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	0.001	21.4	14.8	156	—	—	—
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	E0.002	18.8	29.4	188	<0.020	E0.06	0.51
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	E0.001	20.0	13.8	133	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	0.001	18.5	16.1	151	—	—	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	E0.001	20.8	14.2	128	<0.020	<0.10	0.11
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	0.001	18.2	18.2	162	—	—	—
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	0.002	18.3	18.2	147	—	—	—
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	—	—	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	0.001	26.4	21.6	226	—	—	—
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.002	25.5	23.8	213	<0.020	—	0.86
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	<0.002	24.9	23.3	223	—	—	—
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	<0.001	27.1	23.9	231	—	—	—
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	<0.001	24.3	22.8	229	<0.020	<0.10	3.02
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	—	25.6	24.5	227	<0.020	<0.10	2.88
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.002	25.3	25.7	245	E0.010	—	6.53
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	<0.002	24.9	25.1	253	—	—	—
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	0.001	22.2	20.1	203	<0.020	<0.20	1.55
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	—	25.4	36.6	290	<0.020	<0.10	10.0
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	—	—	—	—	—	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.002	25.5	44.8	322	<0.020	—	8.82
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	<0.002	24.9	44.4	332	—	—	—
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	<0.001	27.1	47.5	360	—	—	—
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	—	—	—	—	<0.020	<0.20	9.89
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	—	20.9	21.3	187	<0.020	0.11	2.31
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.002	20.4	17.7	150	E0.011	—	0.68
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	<0.002	20.7	16.6	152	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	<0.001	21.6	14.3	194	—	—	—
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	0.002	22.3	16.2	208	—	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	—	19.2	13.6	213	<0.020	<0.10	0.56
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	—	—	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.002	21.3	13.2	180	E0.013	—	1.77
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	<0.002	21.5	13.7	192	—	—	—
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	—	27.1	14.0	225	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	<0.002	20.9	13.4	189	—	—	—
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	0.001	22.6	14.8	160	—	—	—
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	—	31.9	837	2,200	1.53	1.8	<0.05
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	0.021	21.0	290	760	0.050	<0.20	<0.05
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	—	—	—	—	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	—	24.1	152	618	0.04	E0.07	<0.05
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	0.017	20.0	17.0	281	0.12	<0.20	<0.05
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	—	20.8	20.7	270	0.11	0.17	<0.05
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	0.015	9.3	350	796	0.32	0.50	<0.05
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	—	10.5	315	788	0.19	0.25	<0.05
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	—	—	165	—	—	—	<0.02
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	—	—	170	—	—	—	<0.02
SBVD4	340439117173906	001S004W22D006S	07/20/95	1500	—	—	—	—	0.060	<0.20	0.05
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	—	27.1	25.5	371	0.040	E0.07	<0.05
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	—	27.0	24.3	371	0.040	E0.07	<0.05

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	—	—	—	—	—	—	—
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	0.032	19.2	40.1	290	<0.020	<0.20	<0.05
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	—	13.0	27.4	179	0.74	0.98	2.12
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	0.003	19.8	29.4	254	—	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	—	21.2	36.4	272	0.16	0.19	2.34
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	—	—	—	—	<0.020	<0.20	1.33
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	—	19.0	31.1	253	<0.020	<0.10	1.01
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	0.016	28.2	1,350	3,260	1.45	1.5	0.18
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	E0.001	26.1	41.9	287	<0.040	—	1.85
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	<0.002	26.9	42.0	305	<0.010	<0.10	2.05
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.002	27.0	42.0	268	E0.012	—	2.01
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	<0.002	27.6	42.4	300	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	<0.002	26.5	42.1	331	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	<0.001	28.0	39.8	287	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	<0.001	27.6	40.5	286	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	—	—	40.8	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	—	—	42.8	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	<0.001	27.3	42.8	274	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	—	—	42.6	253	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	—	—	42.9	253	—	—	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	—	—	44.0	278	—	—	—
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	—	—	43.8	282	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	E0.001	26.0	36.3	269	<0.040	—	3.82
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	<0.002	26.7	42.1	285	<0.020	<0.10	5.58

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	—	—	—	—	<0.020	<0.10	5.82
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.002	26.8	43.3	295	E0.010	—	5.33
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	<0.002	27.4	43.3	294	—	—	—
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	<0.002	26.0	42.6	293	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	<0.002	25.5	42.3	282	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	<0.002	25.8	42.1	286	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	<0.001	27.8	43.6	279	—	—	—
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	<0.001	27.1	44.1	288	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	<0.001	26.2	43.9	315	—	—	—
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	<0.001	28.3	42.8	287	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	<0.001	27.0	43.5	294	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	—	—	43.7	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	—	—	42.5	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	—	—	38.8	282	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	—	—	40.9	308	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	E0.002	25.6	31.8	264	<0.040	—	4.28
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	<0.002	26.0	32.2	267	<0.010	E0.08	5.34
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.002	26.1	36.9	276	E0.010	—	5.28
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	<0.002	26.5	37.6	283	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	<0.002	25.2	38.1	276	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	<0.002	26.5	37.6	275	—	—	—
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	<0.002	27.0	34.1	286	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	<0.002	25.7	32.7	277	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	<0.002	26.3	31.4	271	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	<0.002	26.1	28.0	289	<0.020	<0.10	3.98
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	<0.001	27.4	22.5	309	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	<0.001	28.9	22.6	287	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	0.002	25.7	22.6	299	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	0.001	26.7	23.9	307	—	—	—
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	0.002	26.4	26.4	281	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	—	—	28.5	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	—	—	34.0	301	—	—	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	—	—	34.0	294	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	—	—	33.7	283	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	—	—	33.9	292	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	—	—	33.4	259	—	—	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	E0.001	24.8	49.0	265	<0.020	—	2.74
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	0.004	26.1	15.8	328	<0.010	0.08	5.19
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	0.006	27.8	19.5	383	—	—	—
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	0.006	25.2	23.1	350	<0.010	<0.05	0.56
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	0.004	29.0	26.7	369	—	—	—
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	0.003	24.9	27.1	250	—	—	—
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	—	—	27.8	221	—	—	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	—	—	25.5	269	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	—	—	25.6	319	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	—	—	25.3	294	—	—	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	0.034	13.8	634	1,100	<0.040	<0.10	<0.06
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	0.045	14.0	639	1,120	<0.020	<0.10	<0.06
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	0.035	13.3	597	1,030	<0.040	<0.10	<0.06
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	0.035	13.4	593	1,030	<0.040	<0.10	<0.06
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	0.044	13.2	599	1,050	<0.020	<0.10	<0.06
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	—	—	639	1,030	—	—	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	—	—	596	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	0.039	13.2	590	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	0.013	20.5	203	480	<0.040	E0.07	1.06
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	0.022	20.5	188	462	E0.012	<0.10	0.72
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	0.018	18.6	220	482	—	—	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	—	—	218	484	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	—	—	227	477	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	—	—	222	457	—	—	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	—	—	219	477	—	—	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	0.023	19.0	218	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	0.021	18.8	218	476	—	—	—
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	0.002	25.7	53.4	346	<0.040	E0.06	3.14
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	0.002	23.7	38.4	318	<0.020	<0.10	3.91
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	<0.001	23.9	35.2	301	<0.010	<0.07	4.45
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	0.001	22.0	36.8	317	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	—	—	37.7	296	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	—	—	37.9	289	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	—	—	36.7	304	—	—	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	<0.001	23.6	35.6	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	0.001	23.9	35.7	316	—	—	—
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	<0.001	26.6	40.4	401	<0.010	<0.07	10.8
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	0.001	25.7	39.3	393	<0.010	<0.07	11.6
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	0.011	20.1	79.4	322	—	—	—
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	—	—	—	—	<0.020	<0.10	1.26
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	0.013	21.0	75.2	290	<0.010	<0.07	1.35
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	0.007	22.9	52.5	301	<0.040	<0.10	1.46
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	E0.001	24.8	—	292	E0.030	<0.10	3.80
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	—	—	—	—	<0.020	<0.10	7.00
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	<0.002	26.8	30.5	301	E0.014	E0.06	4.05
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	<0.001	23.4	34.6	330	<0.010	<0.07	8.59
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	E0.001	23.8	—	391	<0.040	<0.10	9.32
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	—	—	—	—	<0.040	<0.10	9.34
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	—	—	—	—	<0.020	E0.06	20.1
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	<0.002	24.3	—	281	E0.012	<0.10	2.58
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	<0.001	22.8	25.2	265	<0.010	<0.07	2.37
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	E0.001	23.2	101	575	<0.020	<0.10	19.9
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	—	—	—	—	<0.020	E0.06	20.5
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	E0.001	22.3	—	559	E0.017	0.13	21.0
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	<0.001	25.5	149	570	<0.010	<0.05	10.1
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	0.001	21.9	118	534	<0.010	<0.07	11.6
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	0.019	16.7	189	477	<0.020	<0.10	0.40
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	—	—	—	—	<0.020	E0.07	1.60
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	0.005	23.4	55.0	379	<0.020	E0.05	4.62

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Iodide (mg/L) (71865)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	—	—	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	0.004	25.1	173	496	<0.020	<0.10	2.82
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	0.003	25.0	155	458	<0.020	<0.10	3.64
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	0.002	25.1	124	445	<0.010	<0.07	4.81
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	—	—	127	433	<0.010	<0.07	4.71
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	—	—	121	448	—	—	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	0.001	26.0	19.9	326	<0.020	<0.10	6.29
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	E0.002	26.8	24.0	350	<0.020	E0.05	5.12
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	<0.001	26.5	23.6	309	<0.010	<0.07	5.10
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	—	—	25.4	307	<0.010	<0.07	4.72
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	—	—	21.8	307	—	—	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	2.38	0.020	—	—	—	—	—
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	5.15	0.007	<0.020	<0.006	—	V6.2	<0.048
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	2.80	<0.020	—	<0.40	—	—	—
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.050	<0.010	<0.010	0.01	—	V1.4	<1.00
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	2.67	0.100	—	—	—	—	—
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	0.856	0.130	<0.020	0.01	—	169	0.468
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	—	—	—	—	—	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	—	—	—	—	—	V3.4	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	1.80	<0.010	<0.010	<0.01	—	—	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	1.80	<0.010	<0.010	<0.01	—	—	—
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	E0.029	<0.006	<0.020	<0.006	—	<1.0	<0.048
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	0.240	<0.010	0.010	<0.01	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	0.182	<0.006	0.030	0.02	—	V1.5	<0.048
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	1.41	0.090	<0.010	<0.01	—	—	—
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	1.91	0.089	E0.010	0.01	—	V1.1	E0.042
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	11.1	<0.010	0.030	0.01	—	—	—
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	9.27	0.021	<0.010	0.01	—	V1.6	<1.00
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	—	<0.010	0.020	0.01	—	V1.6	<1.00
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	10.3	0.008	0.014	—	—	<4.0	E0.031
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	—	—	—	—	—	<3.4	<0.054
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	—	—	—	—	—	V,E3.2	0.071
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	—	—	—	—	—	<2.2	0.155
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	3.54	<0.010	0.050	1.03	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	4.09	<0.002	0.015	—	—	<4.0	<0.040
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	—	—	—	—	—	<3.4	<0.054
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	—	—	—	—	—	V3.6	0.147
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	—	—	—	—	—	V,E2.7	0.110
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	—	—	—	—	—	V4.5	0.072
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	—	—	—	—	—	V6.8	0.077
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	0.597	<0.010	0.530	0.53	—	—	—
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	0.678	0.017	0.026	—	—	134	0.199
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	—	—	—	—	—	<3.4	E0.027
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	—	—	—	—	—	V,E3.0	<0.054
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	—	—	—	—	—	V5.3	E0.038
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	—	—	—	—	—	13.3	E0.050
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	—	—	—	—	—	11.4	<0.054

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	—	—	—	—	—	V,E2.5	0.073
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	—	—	—	—	—	V,E2.7	0.063
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	—	—	—	—	—	V,E2.4	0.073
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	—	—	—	—	—	<6.6	0.091
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	0.505	<0.002	0.024	E0.02	E0.50	8.4	<0.054
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	—	—	—	—	—	<3.4	0.112
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	—	—	—	—	—	<2.2	0.105
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	0.112	<0.002	0.028	E0.03	1.01	V,E2.1	E0.036
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	—	—	—	—	—	<2.2	0.084
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	—	—	—	—	—	<2.2	0.081
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	—	—	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	—	—	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	0.855	<0.002	0.018	—	—	<4.0	<0.040
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	—	—	—	—	—	V,E2.0	E0.032
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	—	—	—	—	—	<2.2	<0.027
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	3.02	<0.010	0.100	0.09	—	—	—
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	2.88	<0.010	0.050	0.04	—	V1.9	<1.00
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	6.53	<0.002	0.019	—	—	<4.0	<0.040
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	—	—	—	—	—	<3.4	<0.054
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	1.55	<0.010	1.53	3.57	—	—	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	10.0	<0.010	0.100	0.11	—	V2.0	<1.00
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	—	—	—	—	—	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	E8.82	E0.001	0.021	—	—	<4.0	<0.040
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	—	—	—	—	—	V6.5	E0.030
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	—	—	—	—	—	<2.2	<0.027

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	9.88	0.011	1.02	1.93	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	2.31	<0.010	0.130	0.14	—	V2.5	<1.00
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	E0.679	E0.002	0.012	—	—	V4.5	<0.040
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	—	—	—	—	—	<3.4	<0.054
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	—	—	—	—	—	<2.2	<0.027
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	—	—	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	0.561	<0.010	0.620	0.68	—	<1.0	<1.00
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	—	—	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	1.77	<0.002	0.180	—	—	12.1	0.062
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	—	—	—	—	—	33.1	0.063
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	—	—	—	—	—	320	0.071
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	—	—	—	—	—	V,E2.7	E0.045
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	—	—	—	—	—	<2.2	<0.027
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	<0.050	<0.010	0.140	0.17	—	V1.5	<1.00
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	<0.050	<0.010	<0.010	<0.01	—	—	—
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	—	—	—	—	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.050	<0.010	<0.010	V,E0.004	—	V1.4	<1.00
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	<0.050	<0.010	<0.010	0.01	—	—	—
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.050	<0.010	<0.010	V,E0.005	—	9.7	<1.00
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	<0.050	<0.010	<0.010	<0.01	—	—	—
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.050	<0.010	<0.010	<0.006	—	<1.0	<1.00
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	<0.020	<0.020	—	<0.40	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	<0.020	<0.020	—	<0.40	—	—	—
SBVD4	340439117173906	001S004W22D006S	07/20/95	1500	0.040	0.010	<0.010	<0.01	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.050	<0.010	0.040	0.04	—	<1.0	<1.00
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	—	<0.010	0.040	0.04	—	V1.8	<1.00
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	—	—	—	—	—	—	—
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	<0.050	<0.010	0.030	0.02	—	—	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	1.99	0.126	0.110	0.15	—	V5.7	<1.00
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	—	—	—	—	—	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	2.33	0.012	0.180	0.20	—	V5.0	<1.00
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	1.33	<0.010	1.68	2.85	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	1.01	<0.010	0.040	0.05	—	V2.8	<1.00
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	0.024	0.156	1.09	1.32	—	—	—
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	1.85	<0.008	E0.020	—	0.67	V1.4	—
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	2.05	<0.002	0.017	<0.04	—	V,E1.2	—
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	E2.01	E0.002	0.016	—	—	<4.0	<0.040
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	—	—	—	—	—	V,E2.0	—
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	—	—	—	—	—	V5.0	E0.029
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	—	—	—	—	—	V4.0	0.064
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	—	—	—	—	—	V3.4	<0.027
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	—	—	—	—	—	<2.2	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	3.82	<0.008	0.060	—	0.61	V1.2	—
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	5.58	<0.002	0.016	<0.04	—	V,E1.2	—
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	5.82	<0.002	0.016	<0.04	0.52	—	—
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	E5.33	E0.001	0.014	—	—	V,E2.1	<0.040
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	—	—	—	—	—	V4.8	—
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	—	—	—	—	—	<10.2	E0.085
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	—	—	—	—	—	V,E2.5	0.071
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	—	—	—	—	—	V5.5	0.066
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	—	—	—	—	0.36	V2.2	0.568
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	—	—	—	—	—	V2.5	0.079
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	—	—	—	—	—	<1.7	1.58
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	—	—	—	—	—	<2.2	0.029
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	—	—	—	—	—	<2.2	0.042
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	4.28	<0.008	0.210	—	0.71	V1.6	—
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	5.34	<0.002	0.034	0.04	—	V,E1.4	—
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	5.28	<0.002	0.026	—	—	<4.0	<0.040
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	—	—	—	—	—	<3.4	—
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	—	—	—	—	—	<3.4	0.081
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	—	—	—	—	—	<3.4	0.077

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	—	—	—	—	—	<3.4	0.096
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	—	—	—	—	—	<10.2	0.169
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	—	—	—	—	—	V7.7	0.102
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	3.98	<0.002	0.029	<0.04	—	V,E3.3	0.145
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	—	—	—	—	0.28	<1.7	0.056
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	—	—	—	—	—	V2.1	<0.027
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	—	—	—	—	—	V2.3	0.101
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	—	—	—	—	—	V4.1	0.037
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	—	—	—	—	—	V2.5	0.074
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	2.74	0.005	2.03	—	E0.51	10.3	0.430
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	5.19	<0.001	5.96	5.97	0.56	61.2	0.329
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	—	—	—	—	—	11.2	0.818
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	0.546	0.011	9.07	9.02	0.63	V2.6	0.626
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	—	—	—	—	—	V5.1	0.772
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	—	—	—	—	—	V3.1	0.067
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	—	—	—	—	—	—	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<0.050	0.010	0.040	0.04	0.68	15.1	—
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	<0.060	<0.002	0.016	<0.04	0.54	V6.4	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<0.056	E0.004	0.740	0.85	0.53	11.8	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	—	<0.008	0.740	0.86	—	13.3	—
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	<0.060	<0.002	0.356	0.37	E0.24	10.2	—
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	—	—	—	—	—	12.2	0.251
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	1.03	0.025	0.670	0.79	0.66	V6.1	—
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	0.705	0.011	0.369	0.37	E0.34	V1.6	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	—	—	—	—	—	<2.2	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	—	—	—	—	—	8.3	0.095
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	—	—	—	—	—	V3.0	0.111
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	E3.14	E0.005	4.95	4.91	0.68	V3.4	—
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	3.91	<0.002	0.347	0.34	E0.27	V1.7	—
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	4.45	<0.001	0.120	0.10	<0.23	V5.8	0.053
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	—	—	—	—	—	V2.7	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	—	—	—	—	—	33.1	0.081
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	—	—	—	—	—	V4.0	0.047
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	10.8	<0.001	0.715	0.66	0.38	172	0.189
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	11.6	<0.001	0.164	0.14	—	<3.0	—
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	—	—	—	—	—	173	—
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	1.25	0.008	0.041	E0.04	E0.27	—	—
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	1.34	0.004	0.016	<0.02	—	V3.4	—
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	1.44	0.019	0.300	0.31	—	V4.2	—
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	3.80	<0.008	0.190	0.17	E0.32	V5.2	—
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	7.00	<0.002	1.83	1.83	E0.39	—	—
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	4.05	<0.002	2.60	2.48	<0.40	V4.8	—
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	8.59	<0.001	0.064	0.07	—	<3.0	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	9.32	<0.008	0.270	0.28	E0.32	V3.6	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	—	<0.008	0.260	0.28	E0.27	—	—
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	20.1	<0.002	2.77	2.76	0.62	—	—
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	2.58	<0.002	0.071	0.06	E0.24	V5.5	—
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	2.37	<0.001	0.146	0.12	—	<3.0	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	19.9	<0.002	0.931	0.96	—	77.8	—
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	20.5	<0.002	0.566	0.62	0.63	—	—
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	21.0	<0.002	0.379	0.36	0.45	<4.0	—
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	10.1	<0.001	1.49	1.56	0.40	V2.5	0.120
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	11.6	<0.001	0.468	0.44	—	V4.9	—
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	0.392	0.004	0.013	<0.04	—	V6.7	—
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	1.53	0.072	0.024	E0.02	0.99	—	—
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	4.61	0.005	0.044	E0.03	—	V2.4	—
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nitrogen, nitrate (mg/L as N) (00618)	Nitrogen, nitrite (mg/L as N) (00613)	Phosphorous, orthophosphate (mg/L as P) (00671)	Phosphorous (mg/L as P) (00666)	Dissolved organic carbon (DOC) (mg/L) (00681)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	2.82	<0.010	0.050	0.03	—	—	—
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	3.64	<0.002	0.021	E0.03	E0.35	V2.9	—
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	4.81	<0.001	0.028	0.02	0.31	<2.2	0.066
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	4.71	<0.001	0.023	0.03	—	—	—
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	—	—	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	6.29	<0.010	0.110	0.07	—	—	—
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	5.12	<0.002	0.041	E0.04	0.51	<1.6	—
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	5.10	<0.001	0.044	0.04	0.45	V2.6	0.044
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	4.72	<0.001	0.044	0.04	—	—	—
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	—	—	—	—	—	—	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	—	—	—	—	—	—	—	—	—	—
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	0.70	47.6	<0.060	156	<0.037	<0.80	0.206	4.3	47.3	<0.080
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	—	—	—	—	—	—	—	—	—	—
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.90	4.3	<1.00	32	<1.00	<0.80	<1.00	<1.0	<10.0	<1.00
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	—	—	—	—	—	—	—	—	—	—
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	2.6	20.2	<0.060	75	<0.037	<0.80	0.271	3.9	E8.3	0.139
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	—	—	—	—	—	—	—	—	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	E0.08	40.7	—	29	—	—	—	—	62.1	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	1.0	33.0	—	V10	—	—	—	—	30.0	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	1.0	32.0	—	V10	—	—	—	—	25.0	—
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	0.4	88.4	<0.060	V14	<0.037	<0.80	0.034	2.9	124	<0.080
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	<1.0	44.0	—	50	—	—	—	—	140	—
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	1.1	39.0	<0.060	33	<0.037	E0.60	0.085	3.0	25.4	0.110
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	<1.0	66.0	—	520	—	—	—	—	260	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	1.2	77.4	<0.060	367	0.118	<0.80	0.979	4.6	66.1	<0.080
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	<1.0	28.4	—	32	—	—	—	—	<10.0	—
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.90	30.6	<1.00	V24	<1.00	3.2	<1.00	1.1	E5.7	<1.00
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	<0.90	30.5	<1.00	V25	<1.00	3.1	<1.00	1.4	<10.0	<1.00
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	0.14	31.5	<0.020	V22	0.037	2.8	0.172	<1.0	9.3	<0.060
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	0.19	32.7	<0.012	V22	0.025	2.9	0.298	<1.0	E3.7	E0.027
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	0.18	30.4	<0.012	V19	0.024	2.7	0.123	1.2	13.8	0.070
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	0.18	33.8	<0.006	V21	0.016	2.8	0.082	<0.80	<3.2	<0.025
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	1.0	15.1	—	33	—	—	—	—	<10.0	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	0.08	30.1	<0.020	V23	0.030	0.37	0.053	<1.0	<4.0	<0.060
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	0.11	28.6	<0.012	26	E0.019	0.42	0.099	<1.0	<6.0	E0.022
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	—	—	—	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	—	—	—	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	0.13	27.1	<0.012	V22	<0.020	0.42	0.089	<1.0	6.2	<0.030
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	0.09	27.5	<0.012	V22	<0.020	0.37	0.204	<1.0	E4.6	<0.030
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	0.07	32.9	<0.006	V20	0.049	0.46	0.155	<0.80	6.4	<0.025
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	0.08	33.4	<0.006	V21	0.047	0.46	0.170	<0.80	7.2	<0.025
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	<1.0	11.6	—	44	—	—	—	—	<10.0	—
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	0.13	28.2	0.051	46	0.044	0.57	0.344	6.9	427	1.06
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	0.13	19.3	<0.012	47	E0.013	2.1	0.223	<1.0	20.2	<0.030
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	0.14	19.1	<0.012	44	E0.013	E0.08	0.111	<1.0	<6.0	E0.022
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	0.14	18.1	<0.012	44	E0.019	0.14	0.344	4.2	<6.0	<0.030
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	0.12	19.9	<0.012	53	E0.013	E0.08	0.180	<1.0	9.6	<0.030
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	0.14	18.4	<0.012	47	E0.020	0.14	0.050	E0.64	76.4	0.037
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	0.14	20.1	<0.012	46	E0.011	E0.10	0.225	<1.0	<6.0	<0.030
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	0.16	20.1	<0.012	46	<0.020	E0.09	0.056	<1.0	<6.0	<0.030
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	0.10	23.1	<0.012	44	E0.013	E0.10	0.136	<1.0	6.3	E0.026

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	0.12	29.5	<0.018	48	<0.048	<0.21	0.082	<2.4	6.7	<0.075
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	0.19	20.5	<0.012	40	E0.014	0.23	0.069	1.5	21.8	E0.016
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	0.22	13.2	<0.012	29	<0.020	0.18	0.108	<1.0	<6.0	E0.016
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	0.16	17.9	<0.006	V19	<0.016	0.08	0.035	0.83	<3.2	<0.025
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	0.17	14.7	<0.012	31	<0.020	E0.07	0.073	<1.0	<6.0	<0.030
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	0.14	21.7	<0.006	29	<0.016	<0.07	0.039	0.92	5.8	<0.025
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	0.15	21.6	<0.006	30	<0.016	<0.07	0.051	1.0	9.3	<0.025
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	—	—	—	—	—	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	<1.0	18.2	—	30	—	—	—	—	<3.0	—
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	0.20	21.9	<0.020	V24	0.024	3.4	0.074	<1.0	<4.0	<0.060
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	0.18	20.5	<0.012	V22	0.033	3.2	0.102	1.5	<6.0	E0.018
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	0.17	23.8	<0.006	V20	<0.016	3.3	0.022	<0.80	<3.2	<0.025
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	—	—	—	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	<1.0	16.9	—	29	—	—	—	—	<10.0	—
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.90	19.7	<1.00	V16	<1.00	2.6	<1.00	<1.0	<10.0	<1.00
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	—	—	—	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	0.19	19.1	<0.020	V18	0.035	2.4	0.090	<1.0	<4.0	<0.060
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	0.16	18.8	<0.012	V16	0.031	2.2	0.060	<1.0	<6.0	<0.030
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	1.0	V3.5	—	29	—	—	—	—	145	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.90	16.9	<1.00	V,E9	<1.00	1.8	<1.00	<1.0	<10.0	<1.00
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	—	—	—	—	—	—	—	—	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	0.08	16.1	<0.020	V11	0.035	0.89	0.190	<1.0	<4.0	<0.060
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	0.09	14.9	<0.012	V10	0.028	0.76	0.078	<1.0	E3.2	E0.025
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	0.09	17.7	<0.006	V10	0.023	0.87	0.101	<0.80	3.2	<0.025
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	—	—	—	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.90	14.7	<1.00	V20	<1.00	E0.70	<1.00	1.3	<10.0	<1.00
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	—	—	—	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	0.12	12.0	<0.020	V21	0.034	0.25	0.062	<1.0	<4.0	<0.060

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	0.09	10.8	<0.012	V18	0.029	0.22	0.065	<1.0	8.5	<0.030
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	0.08	14.6	<0.006	V16	<0.016	0.19	0.023	<0.80	<3.2	<0.025
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	3.0	V2.2	—	40	—	—	—	—	85.2	nc
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	E0.50	10.7	<1.00	V24	<1.00	<0.80	<1.00	<1.0	<10.0	<1.00
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	—	—	—	—	—	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	0.30	21.6	<0.020	27	E0.018	0.22	0.949	1.3	13.0	E0.032
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	0.23	21.2	<0.012	31	<0.020	0.16	0.075	<1.0	27.5	E0.022
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	0.32	21.9	0.037	V24	E0.019	0.47	0.286	1.4	501	0.537
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	0.21	20.5	<0.012	V24	E0.011	0.17	0.159	<1.0	<6.0	E0.015
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	0.15	17.4	<0.006	38	<0.016	0.33	0.081	0.84	<3.2	<0.025
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	2.5	64.4	<1.00	72	<1.00	1.2	<1.00	5.2	260	<1.00
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	3.0	140	—	280	—	—	—	—	1,200	—
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	—	—	—	—	—	—	—	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	2.6	123	<1.00	633	<1.00	<0.80	1.25	1.6	3,340	<1.00
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	—	—	—	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	1.0	25.0	—	940	—	—	—	—	300	—
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	—	—	—	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	1.5	16.1	<1.00	869	<1.00	<0.80	<1.00	<1.0	125	<1.00
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	—	—	—	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	<1.0	120	—	300	—	—	—	—	940	—
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	—	—	—	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.90	103	<1.00	305	<1.00	<0.80	1.23	2.0	7,410	<1.00
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	—	—	—	—	—	—	—	—	—	—
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	—	—	—	—	—	—	—	—	—	—
SBVD4	340439117173906	001S004W22D006S	07/20/95	1500	—	—	—	—	—	—	—	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	3.6	54.6	<1.00	1,170	<1.00	<0.80	<1.00	<1.0	174	<1.00
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	3.5	54.4	<1.00	1,120	<1.00	<0.80	<1.00	<1.0	175	<1.00
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	—	—	—	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	2.0	22.5	—	215	—	—	—	—	<3.0	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	4.5	20.2	<1.00	103	<1.00	1.1	<1.00	3.4	24.2	<1.00
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	13.0	10.0	—	712	—	—	—	—	12.3	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	9.6	30.0	<1.00	470	<1.00	2.6	<1.00	3.3	12.9	<1.00
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	—	—	—	—	—	—	—	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	12.1	15.4	<1.00	614	<1.00	5.2	<1.00	2.1	<10.0	<1.00
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	3.0	23.6	—	56	—	—	—	—	<9.0	—
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	<0.20	10.0	—	V,E12	—	—	—	—	<10.0	—
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	E0.08	10.1	—	V13	—	—	—	—	<6.0	—
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	0.09	10.8	<0.020	V15	0.064	2.3	0.114	1.6	<4.0	E0.039
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	0.08	10.0	—	V15	—	—	—	—	<6.0	—
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	0.05	9.5	<0.012	V12	0.020	1.9	0.048	<1.0	<6.0	0.033
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	0.06	10.1	<0.006	V11	0.020	1.9	0.185	<0.80	3.5	<0.025
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	0.07	9.8	<0.006	V12	0.038	2.1	0.092	<0.80	<3.2	<0.025
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	0.10	8.8	—	V13	—	—	—	—	<4.0	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	—	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	E0.10	11.3	—	V,E12	—	—	—	—	<10.0	—
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	E0.08	11.4	—	V13	—	—	—	—	<6.0	—
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	—	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	0.06	12.1	<0.020	V15	E0.016	1.2	0.114	<1.0	<4.0	E0.040
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	0.16	11.6	—	V14	—	—	—	—	<6.0	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	—	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	—	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	—	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	<0.13	V0.47	<0.036	<8	<0.060	<0.36	E0.017	<3.0	<6.0	<0.090
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	E0.04	11.0	<0.012	V11	E0.019	1.0	0.029	<1.0	<6.0	E0.019
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	E0.04	11.0	<0.012	V12	E0.018	1.0	0.027	<1.0	E3.6	E0.018
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	0.06	11.3	<0.006	V11	<0.016	0.91	0.038	<0.50	<3.2	0.031
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	0.03	12.7	<0.006	V11	<0.016	0.99	0.066	0.72	6.8	0.060
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	0.06	11.9	<0.006	V10	0.038	0.87	0.033	6.3	<3.2	0.028
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	0.05	12.6	<0.006	V12	<0.016	1.0	0.046	<0.80	<3.2	<0.025
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	0.05	12.6	<0.006	V10	0.026	1.1	0.032	0.85	<3.2	<0.025
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	—	—	—	V12	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	—	—	—	V15	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	—	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	0.30	10.6	—	V,E10	—	—	—	—	<10.0	—
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	E0.06	9.6	—	V11	—	—	—	—	<6.0	—
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	0.07	10.3	<0.020	V12	0.024	1.1	0.107	E0.65	E3.2	<0.060
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	0.07	9.8	—	V11	—	—	—	—	<6.0	—
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	0.09	10.2	<0.012	V12	0.022	1.0	0.100	<1.0	<6.0	0.036
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	0.10	10.7	<0.012	V14	E0.018	1.0	0.234	<1.0	<6.0	0.034
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	0.08	10.1	<0.012	V11	0.037	1.0	0.041	E0.76	<6.0	E0.026
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	<0.13	10.4	<0.036	V11	E0.036	1.1	0.032	<3.0	<6.0	<0.090
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	0.11	9.5	<0.012	V11	0.030	1.1	0.153	E0.57	<6.0	E0.023
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	0.05	9.5	<0.012	V10	E0.014	1.0	0.198	<1.0	<6.0	E0.021
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	0.04	9.5	<0.006	V10	<0.016	1.1	0.081	<0.50	<3.2	0.025
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	0.05	9.4	<0.006	V10	<0.016	0.90	0.063	<0.50	<3.2	0.032
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	0.08	9.3	0.008	V10	0.019	1.1	0.114	1.2	<3.2	<0.015

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	0.09	10.5	<0.006	V10	<0.016	1.2	0.041	1.1	<3.2	<0.025
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	0.07	10.0	<0.006	V10	0.023	1.5	0.036	1.6	4.1	<0.025
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	—	—	—	V11	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	—	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	4.6	V3.2	<0.036	30	0.090	2.2	0.131	<3.0	7.9	<0.090
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	0.42	V2.3	0.071	V11	0.019	6.0	0.083	0.92	58.4	0.065
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	0.98	V1.8	0.036	V9	0.024	10.5	0.134	2.6	5.5	0.075
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	0.61	V3.0	<0.006	V8	0.026	9.0	0.041	1.2	34.4	0.081
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	1.1	V3.1	<0.006	V9	0.032	5.0	0.131	1.1	3.5	<0.025
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	0.12	15.6	<0.006	V14	0.017	4.7	0.072	<0.80	<4.0	<0.025
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	—	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	—	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	—	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	—	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	—	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	—	—	—	—	—	—	—	—	—	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	1.2	14.5	—	353	—	—	—	—	8.5	—
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	1.1	11.7	—	318	—	—	—	—	E5.2	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	1.3	13.3	—	257	—	—	—	—	<6.4	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	1.4	13.0	—	276	—	—	—	—	<6.4	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	0.95	11.7	—	257	—	—	—	—	<6.0	—
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	—	—	—	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	—	—	—	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	0.89	12.9	<0.02	256	0.046	<0.30	0.074	<0.80	<4.0	<0.040
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	0.70	20.3	—	42	—	—	—	—	<6.4	—
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	0.54	17.7	—	33	—	—	—	—	<6.0	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	0.35	18.9	—	31	—	—	—	—	4.5	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	—	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	—	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	—	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	—	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	0.29	21.8	<0.02	29	<0.030	<0.30	0.051	2.3	4.6	<0.040
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	0.28	21.4	<0.02	28	<0.030	<0.30	0.052	1.0	<4.0	<0.040
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	2.8	5.3	—	38	—	—	—	—	6.9	—
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	0.57	17.9	—	30	—	—	—	—	<6.0	—
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	0.33	23.6	<0.006	31	0.056	3.6	0.170	1.1	<3.2	0.032
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	0.27	20.2	—	31	—	—	—	—	<4.0	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	—	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	—	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	—	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	0.18	20.4	<0.020	32	<0.030	3.6	0.057	1.9	22.2	<0.040
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	0.21	20.2	<0.020	32	<0.030	3.6	<0.050	<0.80	4.0	<0.040
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	0.34	20.8	0.012	31	0.046	3.8	0.259	<0.80	195	0.125
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	0.12	22.3	—	V25	—	—	—	—	<4.0	—
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	0.90	17.7	—	29	—	—	—	—	126	—
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	—	—	—	—	—	—	—	—	—	—
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	0.13	17.6	—	V20	—	—	—	—	<4.0	—
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	0.70	13.6	—	V22	—	—	—	—	<6.4	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	0.70	18.5	—	V19	—	—	—	—	<6.0	—
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	—	—	—	—	—	—	—	—	—	—
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	1.0	20.4	—	V17	—	—	—	—	E3.8	—
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	<0.10	21.7	—	V17	—	—	—	—	<4.0	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	1.0	26.9	—	V21	—	—	—	—	<6.0	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	—	—	—	—	—	—	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	—	—	—	—	—	—	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	0.06	19.7	—	V17	—	—	—	—	E2.3	—
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	<0.10	24.1	—	V17	—	—	—	—	<4.0	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	0.40	34.3	—	V23	—	—	—	—	<6.0	—
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	—	—	—	—	—	—	—	—	—	—
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	0.15	41.3	—	27	—	—	—	—	<4.0	—
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	0.39	48.8	<0.006	28	<0.016	6.6	0.509	<0.50	<3.2	0.015
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	0.21	47.0	—	29	—	—	—	—	7.2	—
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	1.5	6.6	—	356	—	—	—	—	E3.3	—
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	—	—	—	—	—	—	—	—	—	—
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	0.47	18.2	—	111	—	—	—	—	<6.0	—
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	—	—	—	—	—	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	1.0	16.5	—	127	—	—	—	—	<10.0	—
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	0.83	15.1	—	126	—	—	—	—	<6.0	—
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	0.90	14.9	<0.006	111	0.027	2.4	<0.021	1.2	4.5	<0.025
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	—	—	—	—	—	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	—	—	—	—	—	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	<1.0	26.8	—	V23	—	—	—	—	<10.0	—
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	E0.11	27.3	—	V19	—	—	—	—	<6.0	—
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	0.10	27.2	<0.006	V18	0.016	1.5	0.184	5.5	4.2	<0.025
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	—	—	—	—	—	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	—	—	—	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	—	—	—	—	—	—	—	—	—
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	3.98	25.3	3.04	1.13	1.6	<1.00	357	<0.041	—
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	—	—	—	—	—	—	—	—	—
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	0.92	V1.35	1.42	<1.00	<0.70	<1.00	86.1	<0.900	—
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	—	—	—	—	—	—	—	—	—
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	1.37	V0.12	3.14	0.20	1.6	<1.00	541	<0.041	—
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	—	—	—	—	—	—	—	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	4.92	99.5	—	—	—	—	425	—	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	—	V4.00	—	—	—	—	280	—	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	—	V3.00	—	—	—	—	280	—	—
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	2.65	20.1	2.81	0.10	1.3	<1.00	189	<0.041	—
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	—	30.0	—	—	—	—	280	—	—
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	2.03	7.66	4.69	0.10	1.5	<1.00	308	<0.041	—
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	—	110	—	—	—	—	520	—	—
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	7.66	230	44.9	0.47	5.0	<1.00	565	<0.041	—
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	<4.00	<4.00	—	—	—	—	400	—	—
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	1.25	V1.87	8.37	5.03	V,E0.40	<1.00	434	<0.900	—
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	1.28	V1.71	7.94	4.01	<0.70	<1.00	432	<0.900	—
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	1.09	V1.44	6.73	0.55	V0.41	<0.008	399	<0.040	0.489
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	1.05	V,E0.18	7.14	1.90	V0.47	<0.010	434	<0.020	0.560
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	0.98	V1.51	6.48	0.26	V0.38	<0.010	425	<0.020	0.499
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	1.16	V0.67	7.17	0.64	V0.38	<0.005	466	<0.010	0.473
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	<4.00	16.6	—	—	—	—	212	—	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<1.00	V,E0.16	2.65	0.26	V0.16	<0.008	223	<0.040	0.133
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	E0.36	V,E0.22	2.62	0.61	V0.15	<0.010	238	<0.020	0.132
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	—	—	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	—	—	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	E0.40	V2.05	2.54	0.21	V0.12	<0.010	235	<0.020	0.123
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	E0.41	V1.59	2.62	0.17	V0.14	<0.010	237	<0.020	0.123
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	0.43	V0.34	2.61	0.48	V0.16	<0.005	282	<0.010	0.115
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	0.47	V0.37	2.68	0.45	V0.17	<0.005	284	<0.010	0.114
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	9.93	75.0	—	—	—	—	150	—	—
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	10.5	36.2	1.74	1.60	<0.06	<0.008	195	<0.040	0.466
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	8.64	V1.30	1.94	0.46	V,E0.03	<0.010	196	<0.020	0.129
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	10.1	V0.55	2.01	0.71	<0.04	<0.010	197	<0.020	0.082
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	10.6	V0.75	1.93	0.34	V,E0.02	<0.010	191	<0.020	0.072
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	11.3	V0.65	1.97	0.19	V,E0.03	<0.010	195	<0.020	0.091
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	10.8	V5.71	2.15	0.32	V,E0.02	<0.010	193	<0.020	0.053
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	11.0	V6.86	1.81	0.38	V,E0.03	<0.010	233	<0.020	0.045
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	11.1	V6.58	1.87	0.38	V,E0.03	<0.010	234	<0.020	0.042
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	13.3	10.9	1.68	0.41	V,E0.03	<0.010	274	<0.020	0.039
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	11.1	V0.74	2.06	0.33	<0.09	<0.015	214	<0.030	0.350
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	12.0	V7.46	1.89	0.51	<0.04	<0.010	219	<0.020	0.049
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	8.89	V0.42	2.56	0.18	V,E0.03	<0.010	152	<0.020	0.117
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	8.87	V2.58	2.08	0.29	<0.03	<0.005	222	<0.010	0.047
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	11.8	V1.43	2.92	0.25	V,E0.02	<0.010	158	<0.020	0.094
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	10.0	10.5	2.20	0.33	<0.03	<0.005	232	<0.010	0.060
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	12.1	10.6	2.20	0.37	<0.03	<0.005	229	<0.010	0.069
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	—	—	—	—	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	<4.00	63.7	—	—	—	—	222	—	—
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<1.00	V,E0.13	8.43	0.41	V0.24	<0.008	200	<0.040	0.656
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	0.45	V,E0.24	8.27	0.22	V0.25	<0.010	214	<0.020	0.555
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	0.39	V0.13	8.47	0.33	V0.30	<0.005	248	<0.010	0.385
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	—	—	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	<4.00	<4.00	—	—	—	—	241	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	0.67	<1.00	9.22	2.75	<0.70	<1.00	246	<0.900	—
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	—	—	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<1.00	<0.20	8.51	0.54	V0.23	<0.008	237	<0.040	0.941
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	0.44	V,E0.15	8.17	E0.09	V0.21	<0.010	242	<0.020	1.09
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	<4.00	96.7	—	—	—	—	270	—	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	1.36	<1.00	8.08	5.83	<0.70	<1.00	289	<0.900	—
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	—	—	—	—	—	—	—	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	E0.95	V0.21	6.98	0.77	V0.09	<0.008	310	<0.040	0.795
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	0.94	V,E0.16	6.86	0.17	V0.10	<0.010	326	<0.020	0.769
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	0.89	V0.15	6.97	0.63	V0.12	<0.005	386	<0.010	0.648
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	—	—	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	1.34	V2.5	7.35	5.73	<0.70	<1.00	273	<0.900	—
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	—	—	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	E0.89	<0.20	6.17	0.43	V0.07	<0.008	198	<0.040	0.629
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	0.72	<0.26	5.85	0.33	V0.08	<0.010	203	<0.020	0.688
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	0.85	<0.13	5.45	0.33	V0.06	<0.005	285	<0.010	0.371
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	5.82	158	—	—	—	—	199	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	3.36	10.3	1.93	1.89	<0.70	<1.00	182	<0.900	—
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	—	—	—	—	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	3.89	V2.23	0.919	0.75	V,E0.06	<0.008	205	<0.040	2.15
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	4.00	V1.44	0.889	0.28	V0.08	<0.010	220	<0.020	1.18
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	3.80	12.6	0.732	0.82	V0.06	E0.007	229	<0.020	1.33
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	3.81	V0.46	0.818	0.19	V0.05	<0.010	218	<0.020	1.24
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	2.97	V0.13	0.824	0.49	V0.07	<0.005	175	<0.010	0.797
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	1.61	302	1.33	3.42	2.1	<1.00	1,880	<0.900	—
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	—	160	—	—	—	—	1,100	—	—
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	—	—	—	—	—	—	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	18.7	197	<1.00	<1.00	<0.70	<1.00	959	<0.900	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	—	—	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	—	15.0	—	—	—	—	370	—	—
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	—	—	—	—	—	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	2.60	13.4	9.89	<1.00	1.0	<1.00	365	<0.900	—
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	—	—	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	—	96.0	—	—	—	—	2,600	—	—
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	—	—	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	7.96	185	<1.00	<1.00	<0.70	<1.00	1,710	<0.900	—
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	—	—	—	—	—	—	—	—	—
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	—	—	—	—	—	—	—	—	—
SBMC4	340408117165304	001S004W22J004S	07/20/95	1500	—	—	—	—	—	—	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	6.16	368	4.55	6.30	1.3	<1.00	334	<0.900	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	6.30	371	4.58	<1.00	1.2	<1.00	336	<0.900	—
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	—	—	—	—	—	—	—	—	—
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	7.45	33.4	—	—	—	—	282	—	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	3.20	114	6.18	<1.00	1.9	<1.00	185	<0.900	—
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	8.57	9.39	—	—	—	—	137	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	5.96	79.5	8.47	<1.00	1.6	<1.00	211	<0.900	—
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	—	—	—	—	—	—	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	8.88	<1.00	7.67	<1.00	2.6	<1.00	150	<0.900	—
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	14.1	541	—	—	—	—	2,670	—	—
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	<4.00	<2.00	—	—	—	—	213	—	—
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	<2.00	<0.60	—	—	—	—	228	—	—
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<1.00	V,E0.13	5.83	0.66	V0.32	<0.008	216	<0.040	0.376
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	0.11	V,E0.14	—	—	—	—	232	—	—
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	<0.44	<0.26	5.52	0.25	V0.34	<0.010	221	<0.020	0.286
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	<0.22	V0.36	6.00	0.52	V0.33	<0.005	237	<0.010	0.313

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	<0.22	V0.22	5.79	0.40	V0.33	<0.005	233	<0.010	0.282
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	0.08	<0.16	—	—	—	—	220	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	<4.00	<2.00	—	—	—	—	180	—	—
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	0.11	V0.50	—	—	—	—	189	—	—
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<1.00	V,E0.15	4.45	0.64	V0.48	<0.008	186	<0.040	0.123
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	0.10	V,E0.17	—	—	—	—	202	—	—
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	<1.32	<0.78	<0.084	E0.27	<0.12	<0.030	<1.20	<0.060	<0.060
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	<0.44	<0.26	4.33	0.13	V0.46	<0.010	188	<0.020	0.128
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	<0.44	<0.26	4.32	0.12	V0.44	<0.010	189	<0.020	0.129
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	<0.22	V0.27	4.23	0.24	V0.39	<0.005	182	<0.010	0.131
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	<0.22	V0.20	4.35	0.30	V0.46	<0.005	196	<0.010	0.157
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	<0.22	V1.27	4.16	0.88	V0.42	<0.005	196	<0.010	0.107
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	<0.22	<0.13	4.46	0.49	V0.47	<0.005	205	<0.010	0.191
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	<0.22	V0.13	4.34	0.37	V0.49	<0.005	198	<0.010	0.157
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	—	—	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	—	—	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	<4.00	V,E2.43	—	—	—	—	187	—	—
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	<2.00	<0.60	—	—	—	—	186	—	—
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<1.00	V0.23	3.91	0.82	0.62	<0.008	176	<0.040	0.301
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	0.14	<0.20	—	—	—	—	184	—	—
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	<0.44	<0.26	3.82	0.67	0.68	<0.010	189	<0.020	0.463
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	<0.44	V,E0.16	3.94	1.40	0.67	<0.010	190	<0.020	0.436
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	<0.44	<0.26	3.92	0.18	0.67	<0.010	176	<0.020	0.279
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	<1.32	<0.78	3.85	E0.31	0.58	<0.030	176	<0.060	0.281
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	<0.44	V0.29	3.74	0.55	0.54	E0.007	183	<0.020	0.238
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	<0.44	V0.63	3.60	0.67	V0.50	<0.010	184	<0.020	0.248
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	<0.22	V0.24	3.55	0.18	V0.39	<0.005	188	<0.010	0.160
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	<0.22	V0.17	3.55	0.19	V0.40	<0.005	189	<0.010	0.161
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	<0.22	V0.35	3.16	0.26	V0.22	0.005	196	<0.010	0.176
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	<0.22	V0.17	3.53	0.51	V0.23	<0.005	208	<0.010	0.206
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	<0.22	V0.26	3.35	0.43	V0.19	<0.005	200	<0.010	0.164
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	1.79	V2.74	11.2	0.88	0.62	<0.030	246	<0.060	11.6
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	1.67	20.8	1.63	0.49	1.3	<0.005	190	<0.010	1.23

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	2.20	V0.43	3.58	0.75	1.9	<0.005	325	<0.010	4.33
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	1.68	V0.80	2.81	0.27	1.3	<0.005	516	0.010	2.79
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	1.86	V0.45	4.13	0.59	0.60	<0.005	545	<0.010	5.14
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	<0.22	V0.37	3.04	0.47	V0.26	<0.005	177	<0.010	0.149
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	—	—	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	—	—	—	—	—	—	—	—	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	6.10	14.5	—	—	—	—	550	—	—
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	6.60	10.3	—	—	—	—	549	—	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	E2.08	31.3	—	—	—	—	473	—	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	E1.88	31.7	—	—	—	—	461	—	—
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	1.56	13.7	—	—	—	—	464	—	—
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	—	—	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	—	—	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	1.15	10.6	10.1	0.38	<0.05	<0.020	492	<0.030	—
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<3.00	35.4	—	—	—	—	318	—	—
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	1.26	31.5	—	—	—	—	294	—	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	E1.00	18.0	—	—	—	—	306	—	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	0.85	14.9	5.33	0.44	V0.15	<0.020	317	<0.030	—
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	0.84	14.3	5.34	0.34	V0.16	<0.020	314	<0.030	—
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	E2.45	34.8	—	—	—	—	394	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	0.85	<0.20	—	—	—	—	302	—	—
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	0.46	V0.44	4.12	0.40	V0.41	<0.005	249	<0.010	0.644
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	E0.42	<0.16	—	—	—	—	241	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	0.40	V1.13	3.78	0.38	V0.37	0.027	233	<0.030	—
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	0.39	<0.40	3.83	0.34	V0.36	<0.20	236	<0.030	—
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	0.41	26.8	5.15	1.50	0.55	0.010	455	<0.010	0.421
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	<0.13	<0.20	—	—	—	—	355	—	—
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<3.00	29.6	—	—	—	—	279	—	—
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	—	—	—	—	—	—	—	—	—
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	0.15	V7.41	—	—	—	—	304	—	—
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<3.00	58.3	—	—	—	—	341	—	—
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<2.00	V0.78	—	—	—	—	299	—	—
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	—	—	—	—	—	—	—	—	—
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	0.87	V0.60	—	—	—	—	498	—	—
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	<0.13	<0.20	—	—	—	—	325	—	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<2.00	V5.58	—	—	—	—	388	—	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	—	—	—	—	—	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	—	—	—	—	—	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	0.08	V1.06	—	—	—	—	249	—	—
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	0.30	<0.20	—	—	—	—	273	—	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	0.89	V0.55	—	—	—	—	571	—	—
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	—	—	—	—	—	—	—	—	—
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	0.46	V0.32	—	—	—	—	600	—	—
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	0.74	V1.04	1.91	0.52	9.5	<0.005	620	<0.010	0.350
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	0.75	V0.67	—	—	—	—	526	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molybdenum (µg/L) (01060)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Tungsten (µg/L) (01155)
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	1.30	28.4	—	—	—	—	79.9	—	—
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	—	—	—	—	—	—	—	—	—
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	1.46	V4.96	—	—	—	—	187	—	—
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	—	—	—	—	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	<4.00	25.0	—	—	—	—	241	—	—
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	0.70	V,E0.14	—	—	—	—	228	—	—
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	0.52	V0.31	8.88	0.15	V0.43	<0.005	228	<0.010	29.0
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	—	—	—	—	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	—	—	—	—	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	<4.00	12.5	—	—	—	—	246	—	—
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	0.50	V0.31	—	—	—	—	262	—	—
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	0.37	V0.78	1.92	0.33	V0.44	<0.005	247	<0.010	0.226
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	—	—	—	—	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	—	—	—	—	—	—	—	—	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
SBSH1	340707117162706	001S004W02D006S	08/29/95	1730	—	—	—	–50.5	–7.57	—	—	—	—	—
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	2.69	1.4	V2.6	–51.4	–7.67	—	–13.06	99.5	—	—
SBSH2	340707117162707	001S004W02D007S	04/21/95	1210	—	—	—	—	—	—	—	—	—	—
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<1.00	<1.0	<1.0	—	—	—	–9.08	87.7	—	—
SBSH3	340707117162708	001S004W02D008S	08/30/95	1130	—	—	—	–48.7	–7.53	—	—	—	—	—
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.018	3.0	V2.4	–53.1	–7.84	—	–24.23	—	—	—
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	—	—	—	–52.3	–8.26	12.8	—	—	—	—
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	—	—	—	–53.6	–8.51	0.48	–10.6	80.8	—	—
SBMP1	340615117170902	001S004W10B002S	04/20/95	1200	—	—	—	–50.5	–7.98	<0.30	–12.00	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
SBMP1	340615117170902	001S004W10B002S	04/20/95	1205	—	—	—	–49.4	–7.99	<0.30	–12.20	—	—	—
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.018	E0.20	V1.9	–49.4	–7.94	<0.30	–4.31	93.9	—	—
SBMP2	340615117170903	001S004W10B003S	04/06/95	1620	—	—	—	–50.1	–8.01	0.40	–11.80	—	—	—
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	2.52	4.0	V1.9	–50.4	–8.05	<0.30	–11.10	72.0	—	—
SBMP3	340615117170904	001S004W10B004S	04/04/95	1800	—	—	—	–48.9	–7.54	9.9	—	—	—	—
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	3.57	1.2	V2.6	–46.7	–6.95	13.8	—	—	—	—
SBCC1	340541117074401	001S002W07Q001S	03/18/98	1130	—	—	—	–66.4	–9.41	5.0	—	—	—	—
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	4.05	5.9	5.5	—	—	—	–20.23	74.8	—	—
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1521[A]	4.08	6.0	6.0	—	—	—	—	—	—	—
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	3.90	6.3	V2.4	–66.3	–9.43	4.2	–13.18	90.0	—	—
SBCC1	340541117074401	001S002W07Q001S	12/15/09	1600	4.20	6.5	<2.8	–63.3	–8.64	—	—	—	—	—
SBCC1	340541117074401	001S002W07Q001S	07/20/10	1340	3.90	6.6	<2.8	–65.3	–9.44	5.4	—	—	—	—
SBCC1	340541117074401	001S002W07Q001S	11/17/11	1720	4.29	6.9	<1.4	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	03/18/98	1730	—	—	—	–71.3	–10.19	15.2	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	—	11.9	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	9.37	2.3	V,E1.1	–69.2	–10.05	8.3	–12.55	105	—	—
SBCC2	340541117074402	001S002W07Q002S	11/19/09	1200	10.4	2.4	<2.8	–67.5	–10.03	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	12/14/09	1700	—	—	—	–69.3	–10.00	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	02/18/10	1300	—	—	—	–68.4	–9.96	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1830	9.99	2.6	<2.8	–68.5	–10.01	8.9	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/20/10	1831[A]	10.2	2.5	<2.8	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1300	13.5	2.3	<1.4	—	—	—	—	—	—	—
SBCC2	340541117074402	001S002W07Q002S	11/17/11	1301[A]	13.6	2.3	<1.4	—	—	—	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	03/19/98	1330	—	—	—	–63.8	–9.39	13.3	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	14.2	0.94	18.2	–65.5	–9.45	9.9	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	11/19/09	1410	14.4	1.4	<2.8	–65.6	–9.62	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
SBCC3	340541117074403	001S002W07Q003S	12/15/09	1130	15.4	1.4	<2.8	–66.1	–9.62	—	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	02/18/10	0950	16.1	1.5	V,E2.1	–66.1	–9.63	—	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	04/13/10	1710	15.6	1.4	<2.8	–67.1	–9.63	—	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	05/05/10	1110	17.0	1.4	<2.8	—	—	11.8	–10.37	102	—	—
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1000	17.9	1.6	<2.8	–66.7	–9.36	11.6	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	06/17/10	1001[A]	17.8	1.6	V,E2.7	—	—	—	—	—	—	—
SBCC3	340541117074403	001S002W07Q003S	08/18/10	1720	22.9	1.2	<2.8	–66.8	–9.35	10.1	–10.44	105	—	—
SBCC3	340541117074403	001S002W07Q003S	11/17/11	1600	14.8	1.3	<4.2	—	—	—	—	—	—	—
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	17.0	1.4	V,E1.5	–64.6	–9.10	12.0	–10.69	102	—	—
SBCC4	340541117074404	001S002W07Q004S	08/18/10	1640	6.61	1.8	<2.8	–63.6	–9.38	13.0	–9.92	105	—	—
SBCC4	340541117074404	001S002W07Q004S	11/09/11	1030	13.0	1.3	<1.4	—	—	—	—	—	—	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	6.40	1.5	<2.8	–63.4	–9.29	11.7	–9.77	103	—	—
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1220	14.1	1.1	<1.4	—	—	—	—	—	—	—
SBCC5	340541117074405	001S002W07Q005S	11/09/11	1221[A]	14.5	1.2	<1.4	—	—	—	—	—	—	—
SBCC6	340541117074406	001S002W07Q006S	08/20/09	1400	—	—	—	–66.8	–9.37	—	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	06/05/97	1700	—	—	—	–68.9	–9.88	<0.30	–13.97	58.6	—	—
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	2.38	5.1	<2.0	–67.8	–9.87	R0.20	–11.32	88.5	—	—
SBRV1	340503117104101	001S003W15K001S	08/17/10	1540	2.39	4.9	<2.8	–68.7	–9.86	R0.20	–11.38	88.6	—	—
SBRV1	340503117104101	001S003W15K001S	11/15/11	1930	2.69	4.7	<1.4	—	—	R0.10	—	—	—	—
SBRV1	340503117104101	001S003W15K001S	11/16/11	1900	—	—	—	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	03/17/98	1200	—	—	—	–67.7	–9.95	<0.30	–10.76	85.0	—	—
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	2.81	3.3	V2.3	–69.5	–9.96	0.42	–10.99	84.5	—	—
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	—	—	—	—	—	—	—	—	—	—
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	3.18	4.0	<2.0	–68.1	–9.90	0.60	–11.06	85.2	—	—
SBRV2	340503117104102	001S003W15K002S	08/17/10	1700	2.92	3.7	<2.8	–67.6	–9.81	0.40	–11.20	85.9	—	—
SBRV3	340503117104103	001S003W15K003S	06/03/97	1100	—	—	—	–71.1	–10.04	33.3	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	7.56	2.5	4.0	–68.7	–9.86	—	–12.27	89.1	—	—
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	—	—	—	—	—	—	—	—	—	—
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	12.6	2.9	<2.0	–68.4	–9.76	11.4	–12.32	98.4	—	—
SBRV3	340503117104103	001S003W15K003S	08/16/10	2030	13.7	2.8	<2.8	–68.8	–9.92	9.5	–13.54	97.1	—	—
SBRV3	340503117104103	001S003W15K003S	11/10/11	1300	15.5	2.8	3.8	—	—	9.8	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	06/03/97	1700	—	—	—	–68.4	–9.73	22.3	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	12.1	1.6	V2.8	–69.1	–9.85	—	–10.45	116	—	—
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	—	—	—	—	—	—	—	—	—	—
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	7.87	1.9	<2.0	–67.4	–9.94	6.4	–10.50	107	—	—
SBRV4	340503117104104	001S003W15K004S	06/16/10	1830	7.17	1.8	<2.8	–68.0	–9.79	6.8	–11.33	109	—	—
SBRV4	340503117104104	001S003W15K004S	11/14/11	1920	7.27	1.6	<1.4	—	—	6.4	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	03/17/98	1530	—	—	—	—	—	14.0	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	5.94	1.6	<1.0	–65.9	–9.46	—	–15.30	85.5	—	—
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	—	—	—	—	—	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	9.44	1.6	V2.9	–66.6	–9.68	8.4	–13.20	101	—	—
SBRV5	340503117104105	001S003W15K005S	04/13/10	1420	9.63	1.5	<2.8	–68.0	–9.64	—	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	06/15/10	1700	8.87	2.0	4.5	–67.1	–9.60	9.3	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	08/19/10	1540	10.2	1.5	<2.8	–66.1	–9.62	9.8	—	—	—	—
SBRV5	340503117104105	001S003W15K005S	11/08/11	1700	6.56	1.4	<1.4	—	—	11.5	—	—	—	—
SBMC4	340408117165304	001S004W22J004S	07/26/00	1330	<1.00	3.3	V3.4	–54.3	–7.84	—	–15.95	93.3	—	—
SBVD1	340439117173902	001S004W22D002S	04/19/95	1700	—	—	—	–52.0	–7.97	6.8	–7.50	—	—	—
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	—	—	—	—	—	—	—	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<1.00	2.5	<1.0	—	—	6.1	–16.74	69.7	—	—
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	—	—	—	—	—	4.6	—	—	—	—
SBVD2	340439117173904	001S004W22D004S	04/03/95	1640	—	—	—	–62.0	–8.69	<0.30	–5.40	—	—	—
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	—	—	—	—	—	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<1.00	<1.0	<1.0	—	—	<0.30	–14.64	48.0	—	—
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	—	—	—	—	—	0.38	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	04/07/95	1015	—	—	—	–55.4	–8.29	14.0	–14.40	—	—	—
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	—	—	—	—	—	—	—	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<1.00	1.3	V2.3	—	—	—	–14.24	83.7	—	—
SBVD4	340439117173906	001S004W22D006S	04/07/95	1230	—	—	—	—	—	—	—	—	—	—
SBVD4	340439117173906	001S004W22D006S	04/07/95	1235	—	—	—	—	—	—	—	—	—	—
SBVD4	340439117173906	001S004W22D006S	07/20/95	1500	—	—	—	–52.2	–7.81	—	—	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	1.70	2.8	<1.0	—	—	—	–15.31	62.5	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1241[A]	1.70	2.8	V1.7	—	—	—	—	—	—	—
SBVD5	340439117173907	001S004W22D007S	01/28/04	1500	—	—	—	—	—	7.4	—	—	—	—
SBCM1	340408117165301	001S004W22J001S	06/05/97	1000	—	—	—	–60.1	–8.45	<0.30	–12.36	84.1	—	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<1.00	1.6	V2.4	–57.7	–8.51	13.9	—	—	—	—
SBCM2	340408117165302	001S004W22J002S	06/04/97	1100	—	—	—	–61.8	–9.15	<0.30	—	—	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	2.82	20.5	V1.8	–62.0	–9.04	0.64	–12.59	70.0	—	—
SBCM3	340408117165303	001S004W22J003S	06/04/97	1500	—	—	—	–61.7	–8.91	<0.30	—	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	2.74	17.9	V2.1	–62.0	–9.03	<0.30	–16.33	67.4	—	—
SBCM4	340408117165304	001S004W22J004S	06/12/97	0930	—	—	—	–57.3	–8.13	16.5	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	04/22/02	1830	—	—	—	–62.1	–9.27	0.16	–13.44	90.9	—	—
YVWC1	340248117020901	001S002W36A002S	07/27/06	1400	—	—	—	–62.0	–9.26	—	—	—	5.13	1.25
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	1.48	3.2	V,E1.8	–61.8	–9.25	0.40	–13.78	91.1	—	—
YVWC1	340248117020901	001S002W36A002S	10/29/09	1750	—	—	—	–62.2	–9.33	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/17/09	1630	—	—	—	–61.9	–9.20	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	07/19/10	1820	1.39	3.1	<2.8	–61.2	–9.15	0.40	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/10/11	1800	1.47	3.1	<1.4	—	—	R0.30	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/08/12	1630	1.42	3.3	<1.4	–62.93	–9.18	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
YVWC1	340248117020901	001S002W36A002S	02/08/12	1631[A]	—	—	—	–62.52	–9.22	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/06/12	1730	—	—	—	–62.2	–9.25	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	02/13/13	1720	—	—	—	–62.2	–9.23	R0.10	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	05/20/13	1820	—	—	—	–63.1	–9.16	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1500	—	—	—	–62.4	–9.20	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	11/14/13	1501[A]	—	—	—	—	—	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	03/26/14	1600	—	—	—	–62.0	–9.22	—	—	—	—	—
YVWC1	340248117020901	001S002W36A002S	12/17/14	1600	—	—	—	–62.5	–9.15	0.8	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/22/02	1530	—	—	—	–60.8	–9.04	3.9	–13.28	91.9	—	—
YVWC2	340248117020902	001S002W36A003S	11/15/06	1330	—	—	—	–61.3	–9.17	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	06/15/07	1200	—	—	—	—	—	—	—	—	6.16	3.05
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	1.21	3.0	V,E1.9	–62.0	–9.17	4.1	–13.50	92.9	—	—
YVWC2	340248117020902	001S002W36A003S	10/28/09	1800	—	—	—	–62.4	–9.23	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	11/18/09	1230	—	—	—	–61.4	–9.12	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/16/09	1500	—	—	—	–62.2	–9.20	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/16/10	1730	—	—	—	–62.0	–9.19	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	04/15/10	1600	<0.024	<0.48	<8.4	–62.7	–9.20	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/18/10	1230	1.06	2.9	<2.8	—	—	4.5	–13.60	93.3	—	—
YVWC2	340248117020902	001S002W36A003S	08/18/10	1231[A]	1.08	2.8	<2.8	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/17/10	1240	1.03	2.7	4.3	–61.9	–9.12	—	–13.38	94.0	—	—
YVWC2	340248117020902	001S002W36A003S	05/05/11	1650	1.07	2.5	V2.0	–60.8	–9.04	4.4	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/22/11	1900	1.11	2.5	10.7	—	—	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	11/08/11	1420	1.19	3.0	<1.4	—	—	5.0	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	02/07/12	1340	1.12	2.9	V2.0	–62.4	–9.15	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	08/21/12	1340	—	—	—	–61.0	–9.04	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	01/17/13	1700	—	—	—	–62.1	–9.09	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
YVWC2	340248117020902	001S002W36A003S	07/29/14	2000	—	—	—	–62.8	–9.18	—	—	—	—	—
YVWC2	340248117020902	001S002W36A003S	12/18/14	1310	—	—	—	–63.4	–9.14	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/23/02	1300	—	—	—	–60.7	–9.06	7.3	–13.09	91.1	—	—
YVWC3	340248117020903	001S002W36A004S	07/26/06	1720	—	—	—	–60.5	–9.05	—	—	—	5.18	3.06
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	1.02	2.5	<2.0	–61.2	–9.08	5.5	–13.35	92.5	—	—
YVWC3	340248117020903	001S002W36A004S	10/29/09	1020	—	—	—	–61.2	–9.12	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/18/09	1510	1.05	2.4	V,E1.4	–60.4	–9.05	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/16/09	1130	1.08	2.5	<2.8	–60.9	–9.04	4.6	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	02/17/10	1100	1.00	2.5	V,E1.7	–61.5	–9.06	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	04/15/10	1120	0.981	2.4	<8.4	–62.2	–9.02	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	06/16/10	1210	0.939	2.5	V,E2.5	–61.8	–9.02	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/16/10	1140	0.922	2.6	V,E2.3	—	—	4.8	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/16/10	1630	0.694	2.3	5.3	–64.6	–9.33	5.4	–12.91	93.5	—	—
YVWC3	340248117020903	001S002W36A004S	12/16/10	1631[A]	0.713	2.3	4.6	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/24/11	1800	0.555	2.2	V2.1	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/07/11	1720	0.571	2.3	V2.2	—	—	8.0	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	02/06/12	1800	0.515	2.3	<1.4	–69.9	–9.24	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/12	1400	—	—	—	–70.7	–9.19	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	03/13/13	1740	—	—	—	–70.0	–9.32	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	05/21/13	1720	—	—	—	–72.0	–9.24	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	06/20/13	1730	—	—	—	–70.4	–9.27	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	08/22/13	1840	—	—	—	–70.2	–9.34	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1600	—	—	—	–70.2	–9.26	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	11/15/13	1601[A]	—	—	—	—	—	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	12/19/13	1440	—	—	—	–70.1	–9.36	—	—	—	—	—
YVWC3	340248117020903	001S002W36A004S	07/29/14	1520	—	—	—	–70.1	–9.39	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: $CaCO_3$, calcium carbonate; E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; nc, not collected; pCi/L, picocurie per liter; R, non-detect, result below sample specific critical level; SiO_2, silicon dioxide; V, censored data from study reporting level; δ, delta; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; —, not analyzed or measured; <, actual value less than value shown; >, actual value greater than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
YVWC3	340248117020903	001S002W36A004S	11/19/14	1710	—	—	—	–71.1	–9.38	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	0.393	6.2	<8.4	–72.3	–10.37	7.1	–13.15	94.2	—	—
YVWC4	340248117020904	001S002W36A005S	01/21/11	1640	0.786	5.2	V3.2	–63.1	–8.81	8.2	–13.64	93.7	—	—
YVWC4	340248117020904	001S002W36A005S	05/04/11	1700	0.340	5.8	V3.5	–67.4	–9.17	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	08/24/11	1500	0.584	4.1	V3.1	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/08/11	1120	0.171	5.5	V2.8	—	—	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	01/03/13	1320	0.571	3.2	7.0	–73.4	–9.85	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	05/22/13	1330	—	—	—	–74.5	–10.10	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	10/17/13	1610	—	—	—	–73.2	–9.76	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/14/13	1700	—	—	—	–7.3	–9.70	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	12/19/13	1700	—	—	—	–72.7	–9.62	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	07/30/14	1800	—	—	—	–70.9	–9.39	—	—	—	—	—
YVWC4	340248117020904	001S002W36A005S	11/20/14	1700	—	—	—	–71.7	–9.37	—	—	—	—	—
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	—	—	—	–79.9	–11.56	0.06	–11.23	10.1	—	—
YV6E1	340136117033901	002S002W02F002S	06/19/07	1530	—	—	—	–81.2	–11.63	—	—	—	7.73	30.4
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	—	—	—	–79.2	–11.43	–0.03	–10.56	11.3	—	—
YV6E2	340136117033902	002S002W02F003S	02/06/04	1401[A]	—	—	—	—	—	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	06/19/07	0945	—	—	—	–79.7	–11.43	—	—	—	25.2	18.8
YV6E2	340136117033902	002S002W02F003S	06/17/14	1610	—	—	—	–80.2	–11.52	R0.10	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	01/02/16	1600	—	—	—	–79.9	–11.45	—	—	—	—	—
YV6E2	340136117033902	002S002W02F003S	06/09/16	1340	0.059	5.8	40.2	–80.2	–11.40	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	—	—	—	–65.4	–9.50	–0.13	–11.52	14.0	—	—
YV6E3	340136117033903	002S002W02F004S	06/20/07	1100	—	—	—	–64.7	–9.38	—	—	—	7.83	7.20
YV6E3	340136117033903	002S002W02F004S	06/07/13	1300	—	—	—	–64.2	–9.51	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	06/07/13	1301[A]	—	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	03/27/14	1240	—	—	—	–65.3	–9.52	—	—	—	—	—

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	δ^{18}O (per mil) (82085)	Tritium (pCi/L) (07000)	δ^{13}C (per mil) (82081)	Carbon-14 (percent modern) (49933)	δ^{15}N, in nitrate fraction (per mil) (82690)	δ^{18}O, in nitrate fraction (per mil) (63041)
YV6E3	340136117033903	002S002W02F004S	03/27/14	1241[A]	—	—	—	—	—	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	05/22/15	1400	—	—	—	–65.1	–9.51	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	12/30/15	1400	0.589	—	10.9	–65.4	–9.48	—	—	—	—	—
YV6E3	340136117033903	002S002W02F004S	06/10/16	1120	0.594	—	10.7	–65.3	–9.54	0.0	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	—	—	—	–59.1	–8.80	1.2	–12.89	77.6	—	—
YV6E4	340136117033904	002S002W02F005S	06/18/07	1250	—	—	—	–59.4	–8.79	—	—	—	5.92	0.33
YV6E4	340136117033904	002S002W02F005S	05/16/12	1600	1.53	5.4	<1.4	–60.3	–8.71	1.3	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	06/06/13	1620	—	—	—	–58.6	–8.76	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1630	—	—	—	–59.4	–8.83	0.8	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	03/25/14	1631[A]	—	—	—	—	—	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	05/22/15	1630	—	—	—	–59.4	–8.81	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	12/30/15	1600	1.45	5.0	7.1	–59.8	–8.80	—	—	—	—	—
YV6E4	340136117033904	002S002W02F005S	06/09/16	1640	1.45	4.9	11.2	–59.8	–8.78	—	—	—	—	—
YV6E5	340136117033905	002S002W02F006S	05/15/12	1730	2.23	4.6	<1.4	—	—	—	—	—	—	—
YV6E5	340136117033905	002S002W02F006S	04/24/15	1530	—	—	—	–57.6	–8.48	0.9	—	—	—	—
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	—	—	—	—	—	0.03	—	—	—	—
YVDA1	340130117054901	002S002W04L002S	06/22/07	1630	—	—	—	–54.1	–8.16	—	—	—	5.70	10.3
YVDA1	340130117054901	002S002W04L002S	04/23/15	2130	—	—	—	–55.0	–8.14	—	–13.79	39.2	—	—
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	—	—	—	–55.4	–8.09	0.10	—	—	—	—
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	—	—	—	–58.6	–8.69	0.35	—	—	—	—
YVDA3	340130117054903	002S002W04L004S	06/21/07	1230	—	—	—	–58.0	–8.64	—	—	—	7.97	4.31
YVDA3	340130117054903	002S002W04L004S	04/09/09	1240	—	—	—	–58.4	–8.62	—	—	—	7.28	3.73
YVDA3	340130117054903	002S002W04L004S	03/29/15	1520	—	—	—	–59.0	–8.70	—	–12.95	76.2	—	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	—	—	—	–59.5	–8.71	1.2	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	11/18/04	1531[A]	—	—	—	—	—	—	—	—	—	—
YVDA4	340130117054904	002S002W04L005S	06/20/07	1515	—	—	—	–57.1	–8.63	—	—	—	8.68	4.31

Table 7*B*. Field measurements, major and minor ions, selected trace elements, nutrients, and stable and radiogenic isotopes analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)	δ^2H (per mil) (82082)	$\delta^{18}O$ (per mil) (82085)	Tritium (pCi/L) (07000)	$\delta^{13}C$ (per mil) (82081)	Carbon-14 (percent modern) (49933)	$\delta^{15}N$, in nitrate fraction (per mil) (82690)	$\delta^{18}O$, in nitrate fraction (per mil) (63041)
YVDA4	340130117054904	002S002W04L005S	04/08/09	1930	—	—	—	–59.7	–8.72	—	—	—	5.48	1.35
YVDA4	340130117054904	002S002W04L005S	03/15/15	1310	—	—	—	–60.2	–8.92	—	–12.03	83.6	—	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	—	—	—	–58.7	–8.65	1.9	—	—	—	—
YVDA5	340130117054905	002S002W04L006S	06/20/07	1730	—	—	—	–58.7	–8.69	—	—	—	8.62	4.98
YVDA5	340130117054905	002S002W04L006S	04/09/09	1500	—	—	—	–58.2	–8.59	—	—	—	8.59	4.50
YVDA5	340130117054905	002S002W04L006S	01/22/11	1220	1.89	3.7	<1.4	–58.6	–8.59	0.30	—	—	—	—
YVDA5	340130117054905	002S002W04L006S	03/29/15	1730	—	—	—	–58.3	–8.62	0.9	—	—	—	—
YVEP1	340046117020801	002S002W12H001S	01/24/07	1330	—	—	—	–70.5	–10.19	0.38	–14.23	18.3	—	—
YVEP1	340046117020801	002S002W12H001S	06/29/07	2000	—	—	—	–63.3	–9.45	—	—	—	4.59	1.93
YVEP2	340046117020802	002S002W12H002S	11/14/06	2000	—	—	—	–59.4	–8.78	3.8	–13.63	87.8	—	—
YVEP2	340046117020802	002S002W12H002S	07/07/07	1540	—	—	—	–56.8	–8.52	—	—	—	2.50	3.81
YVEP3	340046117020803	002S002W12H003S	07/28/98	1430	—	—	—	–62.8	–9.15	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	07/07/07	1900	—	—	—	–63.4	–9.14	—	—	—	4.22	1.22
YVEP3	340046117020803	002S002W12H003S	02/17/12	1230	0.388	9.3	<1.4	–62.0	–8.92	1.5	–13.69	78.2	—	—
YVEP3	340046117020803	002S002W12H003S	10/28/13	1840	—	—	—	–60.6	–8.88	—	—	—	—	—
YVEP3	340046117020803	002S002W12H003S	11/20/14	1440	—	—	—	–61.4	–8.97	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	07/28/98	1030	—	—	—	–55.0	–8.43	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	06/14/07	1630	—	—	—	–55.9	–8.45	—	—	—	2.03	3.49
YVEP4	340046117020804	002S002W12H004S	02/16/12	1520	0.561	3.2	V2.7	–57.2	–8.49	6.0	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	10/28/13	1440	—	—	—	–57.0	–8.47	—	—	—	—	—
YVEP4	340046117020804	002S002W12H004S	11/20/14	1030	—	—	—	–57.6	–8.53	—	—	—	—	—

[A]Sequential replicate sample, see text for more information.

Table 7*C*. Organic wastewater compounds and surrogates analyzed in water samples from multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,4-Dichloro-benzene (µg/L) (34572)	1-Methyl-naphthalene (µg/L) (62054)	2,6-Dimethyl-naphthalene (µg/L) (62055)	2-Methyl-naphthalene (µg/L) (62056)	3-β-Coprostanol (µg/L) (62057)	3-Methyl-1H-indole (µg/L) (62058)	3-*tert*-Butyl-4-hydroxyanisole (µg/L) (62059)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<0.500	<0.500	<0.50	<0.500	<2.0	<1.00	<5.0
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.080	<0.100	<0.20	<0.080	<1.6	<0.080	<0.60

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	4-Cumyl-phenol (µg/L) (62060)	4-*n*-Octyl-phenol (µg/L) (62061)	4-Nonyl-phenol (total) (µg/L) (62085)	4-Nonyl-phenol diethoxylates (µg/L) (62083)	4-Octyl-phenol diethoxylates (µg/L) (61705)	4-Octyl-phenol monoethoxylates (µg/L) (61706)	4-*tert*-Octyl-phenol (µg/L) (62062)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<1.00	<1.00	<5	<5.0	<1.0	<1.0	<1.00
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<1.00	<1.00	E1	<5.0	<1.0	<1.0	<1.00
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<1.00	<1.00	<5	<5.0	<1.0	<1.0	<1.00
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	<1.00	<1.00	<5	<5.0	<1.0	<1.0	<1.00
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<1.00	<1.00	E1	<5.0	<1.0	<1.0	<1.00
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<1.00	<1.00	<5	<5.0	<1.0	<1.0	<1.00
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<1.00	<1.00	<5	<5.0	<1.0	<1.0	<1.00
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<1.00	<1.00	<5	<5.0	<1.0	<1.0	<1.00
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.140	<0.16	<2	<5.0	<1.0	<1.0	<0.10

Table 7*C*. Organic wastewater compounds and surrogates analyzed in water samples from multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	5-Methyl-1H-benzo-triazole (µg/L) (62063)	Aceto-phenone (µg/L) (62064)	Acetyl hexamethyl tetrahydro naphthalene (AHTN) (µg/L) (62065)	Anthracene (µg/L) (34221)	9,10-Anthra-quinone (µg/L) (62066)	Benzo[a] pyrene (µg/L) (34248)	Benzo-phenone (µg/L) (62067)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<2.0	<0.5	<0.500	<0.500	<0.50	<0.50	<0.50
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<1.8	<0.1	<0.500	<0.080	<0.16	<0.12	<0.18

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Bromacil (µg/L) (04029)	Bromoform (Tribromo-methane) (µg/L) (34288)	Caffeine (µg/L) (50305)	Camphor (µg/L) (62070)	Carbaryl (µg/L) (82680)	Carbazole (µg/L) (62071)	Chlorpyrifos (µg/L) (38933)	Cholesterol (µg/L) (62072)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<0.50	<0.50	<0.50	<0.500	<1.00	<0.500	<0.50	<2.0
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.40	<0.08	<0.20	<0.100	<0.060	<0.080	<0.005	<1.4

Table 7*C*. Organic wastewater compounds and surrogates analyzed in water samples from multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Cotinine (µg/L) (62005)	*p*-Cresol (µg/L) (62084)	Diazinon (µg/L) (39572)	DEET (*N,N*-diethyl-*m*-toluamide) (µg/L) (62082)	Fluoranthene (µg/L) (34377)	Hexahydro-hexamethyl cyclopenta-benzopyran (µg/L) (62075)	Indole (µg/L) (62076)	Isoborneol (µg/L) (62077)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<1.00	<1.00	<0.50	<0.50	<0.500	<0.500	<0.50	<0.50
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<1.00	E0.08	<0.50	<0.50	<0.500	<0.500	<0.50	<0.50
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<1.00	<1.00	<0.50	<0.50	<0.500	<0.500	<0.50	<0.50
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	<1.00	<1.00	<0.50	E0.13	<0.500	<0.500	<0.50	<0.50
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<1.00	<1.00	<0.50	<0.50	<0.500	<0.500	<0.50	<0.50
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<1.00	E0.11	<0.50	<0.50	<0.500	<0.500	<0.50	<0.50
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<1.00	<1.00	<0.50	<0.50	<0.500	<0.500	<0.50	<0.50
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<1.00	<1.00	<0.50	E0.06	<0.500	<0.500	<0.50	<0.50
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.400	<0.18	<0.005	<0.20	<0.080	<0.500	<0.14	<0.06

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Isophorone (µg/L) (34409)	Isoquinoline (µg/L) (62079)	*d*-Limonene (µg/L) (62073)	Menthol (µg/L) (62080)	Metalaxyl (µg/L) (50359)	Methyl salicylate (µg/L) (62081)	Metolachlor (µg/L) (39415)	Naphthalene (µg/L) (34443)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<0.500	<0.500	<0.50	E0.25	<0.50	<0.500	<0.500	<0.500
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<0.500	<0.500	<0.50	E0.20	<0.50	<0.500	<0.500	<0.500
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<0.500	<0.500	<0.50	E0.18	<0.50	<0.500	<0.500	<0.500
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	<0.500	<0.500	<0.50	<0.50	<0.50	<0.500	<0.500	<0.500
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<0.500	<0.500	<0.50	<0.50	<0.50	<0.500	<0.500	<0.500
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<0.500	<0.500	<0.50	<0.50	<0.50	<0.500	<0.500	<0.500
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<0.500	<0.500	<0.50	<0.50	<0.50	<0.500	<0.500	<0.500
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<0.500	<0.500	<0.50	<0.50	<0.50	<0.500	<0.500	<0.500
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.140	<0.400	<0.14	<0.20	<0.20	<0.180	<0.010	<0.100

Table 7*C*. Organic wastewater compounds and surrogates analyzed in water samples from multiple-well monitoring sites in the Yucaipa Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Perchloroethene (Tetrachloroethene, PCE) (µg/L) (34476)	Phenanthrene (µg/L) (34462)	Prometon (µg/L) (04037)	Pyrene (µg/L) (34470)	β-Sitosterol (µg/L) (62068)	β-Stigmastanol (µg/L) (62086)	Tributyl phosphate (µg/L) (62089)	Triclosan (µg/L) (62090)	Triethyl citrate (µg/L) (62091)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	<0.50	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	<0.50	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<0.50	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	E0.11	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	<0.50	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<0.50	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	E0.13	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	E0.08	<0.500	<0.50	<0.500	<2	<2.0	<0.50	<1.00	<0.50
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	E0.06	<0.080	0.012	<0.080	<2	<2.0	<0.20	<0.20	<0.40

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Triphenyl phosphate (µg/L) (62092)	Tris(2-butoxyethyl) phosphate (µg/L) (62093)	Tris(2-chloroethyl) phosphate (µg/L) (62087)	Tris(dichloroisopropyl) phosphate (µg/L) (62088)	Caffeine-13C, surrogate, percent recovery (99584)	Decafluorobiphenyl, surrogate, percent recovery (99585)	Fluoranthene-d10, surrogate, percent recovery (99586)
YV6E1	340136117033901	002S002W02F002S	02/05/04	1700	E0.05	E0.3	<0.50	<0.50	91.3	73.9	91.3
YV6E2	340136117033902	002S002W02F003S	02/06/04	1400	E0.05	E0.3	<0.50	<0.50	87.5	66.7	91.7
YV6E3	340136117033903	002S002W02F004S	02/04/04	1600	<0.50	E0.2	<0.50	<0.50	82.6	56.5	82.6
YV6E4	340136117033904	002S002W02F005S	06/15/04	1230	E0.12	<0.5	<0.50	<0.50	78.0	72.0	122
YVDA1	340130117054901	002S002W04L002S	09/02/04	1900	E0.07	<0.5	<0.50	<0.50	67.9	33.0	80.4
YVDA2	340130117054902	002S002W04L003S	09/01/04	1900	<0.50	<0.5	<0.50	<0.50	68.5	34.8	72.1
YVDA3	340130117054903	002S002W04L004S	11/19/04	1330	<0.50	<0.5	<0.50	<0.50	80.7	48.3	94.8
YVDA4	340130117054904	002S002W04L005S	11/18/04	1530	<0.50	<0.5	<0.50	<0.50	83.5	44.3	95.8
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.16	<0.5	<0.18	<0.18	98.2	55.6	101

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Acetone (µg/L) (81552)	Acrylonitrile (µg/L) (34215)	*tert*-Amyl methyl ether (TAME) (µg/L) (50005)	Benzene (µg/L) (34030)	Bromo-benzene (µg/L) (81555)	Bromo-chloro-methane (µg/L) (77297)	Bromo-dichloro-methane (µg/L) (32101)	Bromoform (Tribromo-methane) (µg/L) (32104)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<7.0	<1.20	<0.11	V0.023	<0.036	<0.04	<0.048	<0.06
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	V,E2.1	<0.80	<0.04	V,E0.015	<0.028	<0.12	<0.028	<0.10
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<6.0	<0.80	<0.04	<0.021	<0.028	<0.12	<0.028	<0.10
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<7.0	<1.20	<0.11	V0.116	<0.036	<0.04	<0.048	<0.06
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<3.4	<0.80	<0.06	<0.026	<0.022	<0.06	<0.034	<0.10
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Acetone (µg/L) (81552)	Acrylonitrile (µg/L) (34215)	*tert*-Amyl methyl ether (TAME) (µg/L) (50005)	Benzene (µg/L) (34030)	Bromo-benzene (µg/L) (81555)	Bromo-chloro-methane (µg/L) (77297)	Bromo-dichloro-methane (µg/L) (32101)	Bromoform (Tribromo-methane) (µg/L) (32104)
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<6.0	<1.20	<0.08	<0.021	<0.028	<0.12	<0.028	<0.10
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<6.0	<1.20	<0.08	<0.021	<0.028	<0.12	<0.028	<0.10
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<7.0	<1.20	<0.11	V,E0.037	<0.036	<0.04	<0.048	<0.06
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<14.0	<2.40	<0.22	25.8	<0.072	<0.09	<0.096	<0.12
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<14.0	<2.40	<0.22	17.9	<0.072	<0.09	<0.096	<0.12
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<6.0	<1.20	<0.08	<0.021	<0.028	<0.12	<0.028	<0.10
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<7.0	<1.20	<0.11	V,E0.007	<0.036	<0.04	<0.048	<0.06
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<6.0	<0.40	<0.04	<0.016	<0.020	<0.06	<0.040	<0.08
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	<0.040	<0.10
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	E0.069	<0.10
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<4.0	<0.40	<0.06	<0.016	<0.020	<0.06	E0.069	<0.10
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<3.4	<0.80	<0.06	V0.111	<0.022	<0.06	<0.034	<0.10

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Bromo-methane (Methyl bromide) (µg/L) (34413)	*n*-Butyl-benzene (µg/L) (77342)	*sec*-Butyl-benzene (µg/L) (77350)	*tert*-Butyl-benzene (µg/L) (77353)	Carbon disulfide (µg/L) (77041)	Carbon tetrachloride (Tetrachloro-methane) (µg/L) (32102)	Chloro-benzene (µg/L) (34301)	Chloro-ethane (µg/L) (34311)	Chloroform (Trichloro-methane) (µg/L) (32106)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	E0.021
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.26	<0.19	<0.032	<0.060	V,E0.02	<0.06	<0.028	<0.12	E0.053
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.26	<0.12	<0.060	<0.060	<0.04	<0.06	<0.028	<0.12	E0.096
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.26	<0.12	<0.060	<0.060	0.15	<0.06	<0.028	<0.12	<0.024
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.26	V,E0.04	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.024

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Bromomethane (Methyl bromide) (µg/L) (34413)	*n*-Butylbenzene (µg/L) (77342)	*sec*-Butylbenzene (µg/L) (77350)	*tert*-Butylbenzene (µg/L) (77353)	Carbon disulfide (µg/L) (77041)	Carbon tetrachloride (Tetrachloromethane) (µg/L) (32102)	Chlorobenzene (µg/L) (34301)	Chloroethane (µg/L) (34311)	Chloroform (Trichloromethane) (µg/L) (32106)
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.024
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.024
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.20	<0.08	<0.034	<0.060	<0.04	<0.05	<0.016	<0.06	<0.030
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	<0.040
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.26	<0.12	<0.060	<0.060	<0.04	<0.06	<0.028	<0.12	<0.024
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.26	<0.12	<0.060	<0.060	<0.04	<0.06	<0.028	<0.12	<0.024
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<0.52	<0.38	5.50	<0.120	<0.14	<0.12	<0.056	<0.24	<0.104

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Bromomethane (Methyl bromide) (µg/L) (34413)	*n*-Butylbenzene (µg/L) (77342)	*sec*-Butylbenzene (µg/L) (77350)	*tert*-Butylbenzene (µg/L) (77353)	Carbon disulfide (µg/L) (77041)	Carbon tetrachloride (Tetrachloromethane) (µg/L) (32102)	Chlorobenzene (µg/L) (34301)	Chloroethane (µg/L) (34311)	Chloroform (Trichloromethane) (µg/L) (32106)
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<0.52	<0.38	3.85	<0.120	<0.14	<0.12	<0.056	<0.24	<0.104
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.26	<0.12	V0.234	E0.073	<0.04	<0.06	<0.028	<0.12	<0.024
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.26	<0.19	<0.032	<0.060	V,E0.03	<0.06	<0.028	<0.12	<0.052
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.26	<0.19	<0.032	<0.060	0.73	<0.06	<0.028	<0.12	<0.052
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.40	<0.14	<0.040	<0.080	<0.06	<0.08	<0.020	<0.10	0.195
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	E0.027
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	0.245
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.40	<0.08	<0.020	<0.060	<0.04	<0.06	<0.020	<0.10	0.218
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.20	<0.08	<0.034	<0.060	V,E0.02	<0.05	<0.016	<0.06	<0.030

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Chloromethane (µg/L) (34418)	3-Chloropropene (µg/L) (78109)	2-Chlorotoluene (µg/L) (77275)	4-Chlorotoluene (µg/L) (77277)	Dibromochloromethane (µg/L) (32105)	1,2-Dibromo-3-chloro-propane (DBCP) (µg/L) (82625)	1,2-Dibromoethane (EDB) (µg/L) (77651)	Dibromomethane (µg/L) (30217)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.250	<0.07	<0.026	<0.060	<0.18	<0.21	<0.036	<0.050
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.250	<0.07	<0.026	<0.060	<0.18	<0.21	<0.036	<0.050
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.170	<0.50	<0.040	<0.050	<0.10	<0.51	<0.036	<0.050
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.170	<0.50	<0.040	<0.050	<0.10	<0.51	<0.036	<0.050
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.250	<0.07	<0.026	<0.060	<0.18	<0.21	<0.036	<0.050
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.250	<0.07	<0.026	<0.060	<0.18	<0.21	<0.036	<0.050
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.250	<0.07	<0.026	<0.060	<0.18	<0.21	<0.036	<0.050
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	V,E0.009	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	V,E0.044	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Chloro-methane (µg/L) (34418)	3-Chloro-propene (µg/L) (78109)	2-Chloro-toluene (µg/L) (77275)	4-Chloro-toluene (µg/L) (77277)	Dibromo-chloro-methane (µg/L) (32105)	1,2-Dibromo-3-chloro-propane (DBCP) (µg/L) (82625)	1,2-Dibromo-ethane (EDB) (µg/L) (77651)	Dibromo-methane (µg/L) (30217)
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	V,E0.011	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.140	<0.08	<0.028	<0.042	<0.12	<0.34	<0.050	<0.050
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.500	<0.20	<0.042	<0.060	<0.18	0.32	<0.036	<0.050
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	V,E0.102	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	V,E0.035	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.170	<0.50	<0.040	<0.050	<0.10	<0.51	<0.036	<0.050
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.170	<0.50	<0.040	<0.050	<0.10	<0.51	<0.036	<0.050
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<1.00	<0.40	<0.084	<0.120	<0.36	<0.42	<0.072	<0.100
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<1.00	<0.40	<0.084	<0.120	<0.36	<0.42	<0.072	<0.100
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.170	<0.50	<0.040	<0.050	<0.10	<0.51	<0.036	<0.050
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.100	<0.08	<0.040	<0.040	<0.12	<0.50	<0.040	<0.040

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Chloro-methane (µg/L) (34418)	3-Chloro-propene (µg/L) (78109)	2-Chloro-toluene (µg/L) (77275)	4-Chloro-toluene (µg/L) (77277)	Dibromo-chloro-methane (µg/L) (32105)	1,2-Dibromo-3-chloro-propane (DBCP) (µg/L) (82625)	1,2-Dibromo-ethane (EDB) (µg/L) (77651)	Dibromo-methane (µg/L) (30217)
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.140	<0.08	<0.020	<0.020	<0.12	<1.00	<0.040	<0.040
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.140	<0.08	<0.028	<0.042	<0.12	<0.34	<0.050	<0.050

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2-Dichloro-benzene (µg/L) (34536)	1,3-Dichloro-benzene (µg/L) (34566)	1,4-Dichloro-benzene (µg/L) (34571)	*trans*-1,4-Dichloro-2-butene (µg/L) (73547)	Dichloro-difluoro-methane (CFC-12) (µg/L) (34668)	1,1-Dichloro-ethane (1,1-DCA) (µg/L) (34496)	1,2-Dichloro-ethane (1,2-DCA) (µg/L) (32103)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.031	<0.030	<0.050	<0.7	<0.27	<0.035	<0.13
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.031	<0.030	<0.050	<0.7	<0.27	E0.020	<0.13
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.048	<0.030	<0.034	<0.7	E6.40	0.201	<0.13
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.048	<0.030	<0.034	<0.7	<0.18	<0.035	<0.13
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.031	<0.030	<0.050	<0.7	<0.27	<0.035	<0.13
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.031	<0.030	<0.050	<0.7	<0.27	<0.035	<0.13
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.031	<0.030	<0.050	<0.7	<0.27	<0.035	<0.13
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.028	<0.024	<0.026	<0.4	<0.10	<0.044	<0.08
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2-Dichloro-benzene (µg/L) (34536)	1,3-Dichloro-benzene (µg/L) (34566)	1,4-Dichloro-benzene (µg/L) (34571)	*trans*-1,4-Dichloro-2-butene (µg/L) (73547)	Dichloro-difluoro-methane (CFC-12) (µg/L) (34668)	1,1-Dichloro-ethane (1,1-DCA) (µg/L) (34496)	1,2-Dichloro-ethane (1,2-DCA) (µg/L) (32103)
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.048	<0.030	<0.034	<0.7	<0.18	<0.035	<0.13
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.048	<0.030	<0.034	<0.7	<0.18	<0.035	<0.13
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<0.096	<0.108	<0.100	<1.4	<0.54	<0.132	<0.26
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<0.096	<0.108	<0.100	<1.4	<0.54	<0.132	<0.26
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.048	<0.030	<0.034	<0.7	<0.18	E0.034	<0.13
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	E0.036	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.040	<0.040	<0.040	<0.6	<0.14	0.299	<0.10
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.020	<0.020	<0.020	<0.4	<0.10	<0.040	<0.06
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.028	<0.024	<0.026	<0.4	<0.10	<0.044	<0.08

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

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Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,1-Dichloro-ethene (1,1-DCE) (µg/L) (34501)	*cis*-1,2-Dichloro-ethene (*cis*-1,2-DCE) (µg/L) (77093)	*trans*-1,2-Dichloro-ethene (*trans*-1,2-DCE) (µg/L) (34546)	1,2-Dichloro-propane (µg/L) (34541)	1,3-Dichloro-propane (µg/L) (77173)	2,2-Dichloro-propane (µg/L) (77170)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.040	<0.038	<0.032	<0.029	<0.12	<0.05
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.040	<0.038	<0.032	<0.029	<0.12	<0.05
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	E0.021	0.986	E0.040	E0.046	<0.06	<0.05
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.024	<0.024	<0.032	<0.029	<0.06	<0.05
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.040	<0.038	<0.032	<0.029	<0.12	<0.05
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.040	<0.038	<0.032	<0.029	<0.12	<0.05
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.040	<0.038	<0.032	<0.029	<0.12	<0.05
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.022	<0.022	<0.018	<0.026	<0.06	<0.06
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,1-Dichloroethene (1,1-DCE) (µg/L) (34501)	*cis*-1,2-Dichloroethene (*cis*-1,2-DCE) (µg/L) (77093)	*trans*-1,2-Dichloroethene (*trans*-1,2-DCE) (µg/L) (34546)	1,2-Dichloropropane (µg/L) (34541)	1,3-Dichloropropane (µg/L) (77173)	2,2-Dichloropropane (µg/L) (77170)
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.024	<0.024	<0.032	<0.029	<0.06	<0.05
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.024	<0.024	<0.032	<0.029	<0.06	<0.05
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<0.080	<0.076	<0.064	<0.136	<0.24	<0.10
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<0.080	<0.076	<0.064	<0.136	<0.24	<0.10
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.024	<0.024	<0.032	<0.029	<0.06	<0.05
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	E0.016	<0.020	<0.018	<0.020	<0.06	<0.06
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.020	<0.020	<0.018	<0.020	<0.06	<0.06
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.022	<0.022	<0.018	<0.026	<0.06	<0.06

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,1-Dichloropropene (µg/L) (77168)	*cis*-1,3-Dichloropropene (µg/L) (34704)	*trans*-1,3-Dichloropropene (µg/L) (34699)	Diethyl ether (µg/L) (81576)	Diisopropyl ether (DIPE) (µg/L) (81577)	Ethylbenzene (µg/L) (34371)	Ethyl *tert*-butyl ether (ETBE) (µg/L) (50004)	Ethyl methacrylate (µg/L) (73570)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.026	<0.09	<0.09	<0.2	<0.10	E0.033	<0.054	<0.18
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.026	<0.09	<0.09	<0.2	<0.10	V0.015	<0.054	<0.18
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.026	<0.05	<0.09	E0.1	<0.10	<0.030	<0.030	<0.18
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.026	<0.05	<0.09	<0.1	<0.10	<0.030	<0.030	<0.18
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.026	<0.09	<0.09	<0.2	<0.10	0.119	<0.054	<0.18
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,1-Dichloropropene (µg/L) (77168)	*cis*-1,3-Dichloropropene (µg/L) (34704)	*trans*-1,3-Dichloropropene (µg/L) (34699)	Diethyl ether (µg/L) (81576)	Diisopropyl ether (DIPE) (µg/L) (81577)	Ethylbenzene (µg/L) (34371)	Ethyl *tert*-butyl ether (ETBE) (µg/L) (50004)	Ethyl methacrylate (µg/L) (73570)
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.030	<0.10	<0.14	<0.1	<0.06	<0.036	<0.032	<0.14
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.026	<0.05	<0.09	<0.1	<0.10	<0.030	<0.050	<0.18
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.026	<0.05	<0.09	<0.1	<0.10	<0.030	<0.050	<0.18
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<0.052	<0.18	<0.18	<0.3	<0.20	0.443	<0.108	<0.36
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<0.052	<0.18	<0.18	<0.3	<0.20	0.315	<0.108	<0.36
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.026	<0.05	<0.09	<0.1	<0.10	<0.030	<0.050	<0.18

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,1-Dichloropropene (µg/L) (77168)	*cis*-1,3-Dichloropropene (µg/L) (34704)	*trans*-1,3-Dichloropropene (µg/L) (34699)	Diethyl ether (µg/L) (81576)	Diisopropyl ether (DIPE) (µg/L) (81577)	Ethylbenzene (µg/L) (34371)	Ethyl *tert*-butyl ether (ETBE) (µg/L) (50004)	Ethyl methacrylate (µg/L) (73570)
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.026	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.040	<0.06	<0.10	<0.1	<0.06	<0.020	<0.040	<0.14
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.040	<0.10	<0.10	<0.1	<0.06	<0.040	<0.040	<0.14
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.030	<0.10	<0.14	<0.1	<0.06	0.218	<0.032	<0.14

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*o*-Ethyl toluene (1-Ethyl-2-methylbenzene) (µg/L) (77220)	Hexachlorobutadiene (µg/L) (39702)	Hexachloroethane (µg/L) (34396)	2-Hexanone (*n*-Butyl methyl ketone) (µg/L) (77103)	Iodomethane (Methyl iodide) (µg/L) (77424)	Isopropylbenzene (µg/L) (77223)	4-Isopropyl-1-methylbenzene (µg/L) (77356)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.060	<0.14	<0.14	<0.4	<0.50	<0.038	<0.08
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.060	<0.14	<0.14	<0.4	<0.50	<0.038	<0.08
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	E0.047	<0.14	<0.19	<0.7	<0.12	V,E0.022	<0.07
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.032	<0.06	<0.14	<0.5	<0.26	<0.042	<0.06

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*o*-Ethyl toluene (1-Ethyl-2-methyl-benzene) (µg/L) (77220)	Hexachloro-butadiene (µg/L) (39702)	Hexachloro-ethane (µg/L) (34396)	2-Hexanone (*n*-Butyl methyl ketone) (µg/L) (77103)	Iodomethane (Methyl iodide) (µg/L) (77424)	Isopropyl-benzene (µg/L) (77223)	4-Isopropyl-1-methyl-benzene (µg/L) (77356)
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.060	<0.14	<0.14	<0.7	<0.35	<0.038	<0.08
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.060	<0.14	<0.14	<0.7	<0.35	<0.038	<0.08
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	1.86	<0.28	<0.38	<1.4	<0.24	26.1	<0.14
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	1.29	<0.28	<0.38	<1.4	<0.24	24.9	<0.14
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.060	<0.14	<0.14	<6.9	<0.35	V0.148	<0.08
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	E0.02
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.060	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.040	<0.10	<0.14	<0.4	<0.40	<0.040	<0.08
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*o*-Ethyl toluene (1-Ethyl-2-methyl-benzene) (µg/L) (77220)	Hexachloro-butadiene (µg/L) (39702)	Hexachloro-ethane (µg/L) (34396)	2-Hexanone (*n*-Butyl methyl ketone) (µg/L) (77103)	Iodomethane (Methyl iodide) (µg/L) (77424)	Isopropyl-benzene (µg/L) (77223)	4-Isopropyl-1-methyl-benzene (µg/L) (77356)
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.020	<0.06	<0.14	<0.6	<0.80	<0.040	<0.06
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	0.095	<0.06	<0.14	<0.5	<0.26	<0.042	<0.06

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Methyl acrylate (µg/L) (49991)	Methyl acrylonitrile (µg/L) (81593)	Methyl *tert*-butyl ether (MTBE) (µg/L) (78032)	Methyl *iso*-butyl ketone (MIBK) (µg/L) (78133)	Methylene chloride (Dichloro-methane) (µg/L) (34423)	Methyl ethyl ketone (2-butanone, MEK) (µg/L) (81595)	Methyl methacrylate (µg/L) (81597)	Naphthalene (µg/L) (34696)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<1.4	<0.60	<0.17	<0.37	<0.16	<1.6	<0.35	<0.25
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<1.4	<0.60	E0.15	<0.37	<0.38	<1.6	<0.35	<0.25
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<1.4	<0.60	<0.17	<0.37	<0.16	<1.6	<0.35	<0.25
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<1.0	<0.40	<0.10	<0.37	E0.06	<2.0	<0.20	<0.52
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<1.0	<0.40	<0.10	<0.37	<0.06	<2.0	<0.20	<0.52
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<1.4	<7.88	<0.17	<0.37	<0.16	<1.6	<0.35	<0.25
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<1.4	<0.60	<0.17	<0.37	<0.16	<1.6	<0.35	<0.25
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<1.4	<0.60	0.28	<0.37	<0.16	<1.6	<0.35	<0.25
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.6	<0.26	<0.10	<0.32	<0.04	<1.6	<0.22	<0.18
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Methyl acrylate (µg/L) (49991)	Methyl acrylonitrile (µg/L) (81593)	Methyl *tert*-butyl ether (MTBE) (µg/L) (78032)	Methyl *iso*-butyl ketone (MIBK) (µg/L) (78133)	Methylene chloride (Dichloro-methane) (µg/L) (34423)	Methyl ethyl ketone (2-butanone, MEK) (µg/L) (81595)	Methyl methacrylate (µg/L) (81597)	Naphthalene (µg/L) (34696)
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<2.0	<0.76	6.19	<0.37	<0.06	<4.0	<0.35	<0.52
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<2.0	<0.76	<0.17	<0.37	<0.06	<4.0	<0.35	<0.52
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<1.4	<0.60	4.35	<0.37	<0.38	<1.6	<0.35	<0.25
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<2.8	<271	<5.39	<0.74	<0.76	<3.2	<0.70	21.9
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<2.8	<147	<5.39	<0.74	<0.76	<3.2	<0.70	14.8
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<2.0	<0.76	1.31	<0.50	E0.15	<4.0	<0.35	<0.52
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<1.4	<0.60	V,E0.07	<0.37	<0.38	<1.6	<0.35	<0.25
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<1.4	<0.60	<0.17	<0.37	<0.38	<1.6	<0.35	<0.25
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.4	<0.40	<0.10	<0.20	<0.04	<1.6	<0.20	<0.40
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.6	<0.20	<0.10	<0.40	<0.04	<1.6	<0.20	<0.20
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.6	<0.26	<0.10	<0.32	E0.01	<1.6	<0.22	<0.18

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Perchloro-ethene (PCE, Tetrachloro-ethene) (µg/L) (34475)	*n*-Propyl-benzene (µg/L) (77224)	Styrene (µg/L) (77128)	1,1,1,2-Tetrachloro-ethane (µg/L) (77562)	1,1,2,2-Tetrachloro-ethane (µg/L) (34516)	Tetra-hydrofuran (µg/L) (81607)	1,2,3,4-Tetramethyl-benzene (µg/L) (49999)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	E0.080	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	E0.016	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	7.35	<0.042	<0.042	<0.030	<0.08	<1.0	<0.14
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.030	<0.042	<0.042	<0.030	<0.08	<1.0	<0.14
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.100	V,E0.040	<0.042	<0.030	<0.09	<2.2	<0.23
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.026	<0.036	<0.030	<0.040	<0.14	<1.4	<0.08
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Perchloro-ethene (PCE, Tetrachloro-ethene) (µg/L) (34475)	*n*-Propyl-benzene (µg/L) (77224)	Styrene (µg/L) (77128)	1,1,1,2-Tetrachloro-ethane (µg/L) (77562)	1,1,2,2-Tetrachloro-ethane (µg/L) (34516)	Tetra-hydrofuran (µg/L) (81607)	1,2,3,4-Tetramethyl-benzene (µg/L) (49999)
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.060	<0.042	<0.042	<0.030	<0.16	<2.2	<0.14
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.060	<0.042	<0.042	<0.030	<0.16	<2.2	<0.14
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<0.200	38.0	<0.084	<0.060	<0.18	<4.4	6.93
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<0.200	35.6	<0.084	<0.060	<0.18	<4.4	4.83
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.060	<0.042	<0.042	<0.030	<0.16	<3.4	<0.14
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	0.586	<0.040	<0.040	<0.040	<0.10	<1.0	<0.14
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.040	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	E0.017	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	E0.018	<0.040	<0.040	<0.040	<0.10	<1.4	<0.08
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	E0.020	V,E0.072	<0.030	<0.040	<0.14	<1.4	<0.08

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2,3,5-Tetramethyl-benzene (µg/L) (50000)	Toluene (µg/L) (34010)	1,2,3-Trichloro-benzene (µg/L) (77613)	1,2,4-Trichloro-benzene (µg/L) (34551)	1,1,1-Trichloro-ethane (1,1,1-TCA) (µg/L) (34506)	1,1,2-Trichloro-ethane (1,1,2-TCA) (µg/L) (34511)	Trichloro-ethene (TCE) (µg/L) (39180)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.200	V0.069	<0.27	<0.19	<0.032	<0.060	<0.038
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	<0.200	V0.068	<0.27	<0.19	<0.032	<0.060	0.111
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	<0.140	V,E0.042	<0.18	<0.12	<0.032	<0.040	0.943
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.140	V,E0.032	<0.18	<0.12	<0.032	<0.040	<0.038
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.200	0.491	<0.27	<0.19	<0.032	<0.060	<0.038
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2,3,5-Tetramethyl-benzene (µg/L) (50000)	Toluene (µg/L) (34010)	1,2,3-Trichloro-benzene (µg/L) (77613)	1,2,4-Trichloro-benzene (µg/L) (34551)	1,1,1-Trichloro-ethane (1,1,1-TCA) (µg/L) (34506)	1,1,2-Trichloro-ethane (1,1,2-TCA) (µg/L) (34511)	Trichloro-ethene (TCE) (µg/L) (39180)
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.080	<0.018	<0.06	<0.08	<0.030	<0.046	<0.022
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.200	V,E0.006	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.200	V,E0.010	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.200	V,E0.012	<0.27	<0.19	E0.009	<0.060	V,E0.046
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.200	V0.006	<0.27	<0.19	<0.032	<0.060	<0.038
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.140	<0.050	<0.27	<0.12	<0.032	<0.064	<0.038
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.140	<0.050	<0.27	<0.12	<0.032	<0.064	<0.038
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.200	V0.005	<0.27	<0.19	<0.032	<0.060	<0.038
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	<0.400	0.884	<0.54	<0.38	<0.064	<0.120	<0.076
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	<0.400	0.614	<0.54	<0.38	<0.064	<0.120	<0.076

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2,3,5-Tetramethylbenzene (µg/L) (50000)	Toluene (µg/L) (34010)	1,2,3-Trichlorobenzene (µg/L) (77613)	1,2,4-Trichlorobenzene (µg/L) (34551)	1,1,1-Trichloroethane (1,1,1-TCA) (µg/L) (34506)	1,1,2-Trichloroethane (1,1,2-TCA) (µg/L) (34511)	Trichloroethene (TCE) (µg/L) (39180)
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.140	<0.050	<0.27	<0.12	<0.032	<0.064	<0.038
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.200	V0.026	<0.27	<0.19	<0.032	<0.060	<0.038
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	V,E0.019
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.120	V,E0.014	<0.12	<0.12	<0.040	<0.040	V,E0.021
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.080	V,E0.016	<0.06	<0.04	<0.020	<0.060	<0.020
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.080	<0.018	<0.06	<0.04	<0.020	<0.060	<0.020
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.080	V,E0.013	<0.06	<0.04	<0.020	<0.060	V,E0.023
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.080	5.68	<0.06	<0.08	<0.030	<0.046	<0.022

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Trichlorofluoromethane (CFC-11) (µg/L) (34488)	1,2,3-Trichloropropane (1,2,3-TCP) (µg/L) (77443)	Trichlorotrifluoroethane (CFC-113) (µg/L) (77652)	1,2,3-Trimethylbenzene (µg/L) (77221)	1,2,4-Trimethylbenzene (µg/L) (77222)	1,3,5-Trimethylbenzene (µg/L) (77226)	Vinyl bromide (Bromoethene) (µg/L) (50002)	Vinyl chloride (Chloroethene) (µg/L) (39175)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	V,E0.02	<0.16	<0.060	<0.120	E0.016	<0.044	<0.10	<0.11
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	1.05	<0.18	<0.038	<0.060	<0.056	<0.044	<0.10	<0.08
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.08	<0.18	<0.038	<0.060	<0.056	<0.044	<0.10	<0.08
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	<0.09	<0.16	<0.060	E0.045	0.154	E0.038	<0.10	<0.11
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	2.53	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Trichloro-fluoro-methane (CFC-11) (µg/L) (34488)	1,2,3-Trichloro-propane (1,2,3-TCP) (µg/L) (77443)	Trichloro-trifluoro-ethane (CFC-113) (µg/L) (77652)	1,2,3-Trimethyl-benzene (µg/L) (77221)	1,2,4-Trimethyl-benzene (µg/L) (77222)	1,3,5-Trimethyl-benzene (µg/L) (77226)	Vinyl bromide (Bromo-ethene) (µg/L) (50002)	Vinyl chloride (Chloro-ethene) (µg/L) (39175)
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.08	<0.12	<0.034	<0.060	<0.032	<0.032	<0.12	<0.06
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	0.68	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	V,E0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	V,E0.12	<0.16	E0.021	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	V,E0.11	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.16	<0.18	<0.038	<0.060	<0.056	<0.044	<0.10	<0.06
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	V0.17	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.16	<0.18	<0.038	<0.060	<0.056	<0.044	<0.10	<0.06
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	V,E0.07	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	0.87	<0.32	<0.120	<0.240	<0.112	<0.088	<0.20	<0.22
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	1.10	<0.32	<0.120	<0.240	<0.112	<0.088	<0.20	<0.22
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.16	<0.18	<0.038	<0.060	<0.056	<0.044	<0.10	<0.06
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.09	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	V0.12	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	V0.14	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	V0.16	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Trichloro-fluoro-methane (CFC-11) (µg/L) (34488)	1,2,3-Trichloro-propane (1,2,3-TCP) (µg/L) (77443)	Trichloro-trifluoro-ethane (CFC-113) (µg/L) (77652)	1,2,3-Trimethyl-benzene (µg/L) (77221)	1,2,4-Trimethyl-benzene (µg/L) (77222)	1,3,5-Trimethyl-benzene (µg/L) (77226)	Vinyl bromide (Bromo-ethene) (µg/L) (50002)	Vinyl chloride (Chloro-ethene) (µg/L) (39175)
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	V0.34	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.08	<0.12	<0.040	<0.080	<0.040	<0.040	<0.12	<0.08
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	<0.08	<0.12	<0.034	0.094	0.319	0.130	<0.12	<0.06

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*m*- and *p*-Xylene (µg/L) (85795)	*o*-Xylene (µg/L) (77135)	1,2-Dichloroethane-d4, surrogate, percent recovery (99832)	1-Bromo-4-fluorobenzene, surrogate, percent recovery (99834)	Toluene-d8, surrogate, percent recovery (99833)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1100	<0.06	<0.038	105	94.0	100
SBSH2	340707117162707	001S004W02D007S	06/22/00	1400	E0.11	V,E0.075	106	120	108
SBSH3	340707117162708	001S004W02D008S	11/28/00	1330	V0.06	V,E0.032	106	98.8	101
SBEP3	340655117184005	001S004W04E005S	02/07/06	1540	V0.06	<0.038	97.2	93.7	98.5
SBEP4	340655117184006	001S004W04E006S	02/24/06	1600	<0.06	<0.038	112	101	102
SBMP1	340615117170902	001S004W10B002S	11/29/00	1100	0.23	0.133	103	103	103
SBMP2	340615117170903	001S004W10B003S	11/29/00	1230	<0.06	<0.038	109	95.2	101
SBMP3	340615117170904	001S004W10B004S	11/29/00	1410	<0.06	<0.038	105	96.5	98.0
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.06	<0.038	104	98.7	101
SBCC1	340541117074401	001S002W07Q001S	08/21/09	1500	<0.08	<0.040	105	94.4	94.5
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.06	<0.038	101	107	101
SBCC2	340541117074402	001S002W07Q002S	08/20/09	1900	<0.08	<0.040	108	93.5	94.6
SBCC3	340541117074403	001S002W07Q003S	09/23/09	1330	<0.08	<0.040	143	87.8	99.2
SBCC4	340541117074404	001S002W07Q004S	05/04/10	1640	<0.08	<0.032	119	91.8	95.5
SBRV1	340503117104101	001S003W15K001S	08/28/09	1800	<0.08	<0.040	121	86.2	96.3
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.06	<0.038	136	67.9	88.7
SBRV2	340503117104102	001S003W15K002S	08/08/00	1650	<0.06	<0.038	102	103	102

Table 7*D*. Volatile organic compounds, gasoline oxygenates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; V, censored data from study reporting level; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*m*- and *p*-Xylene (µg/L) (85795)	*o*-Xylene (µg/L) (77135)	1,2-Dichloroethane-d4, surrogate, percent recovery (99832)	1-Bromo-4-fluorobenzene, surrogate, percent recovery (99834)	Toluene-d8, surrogate, percent recovery (99833)
SBRV2	340503117104102	001S003W15K002S	08/26/09	1800	<0.08	<0.040	121	85.7	95.0
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.06	<0.038	139	64.6	87.8
SBRV3	340503117104103	001S003W15K003S	08/08/00	1550	<0.06	<0.038	103	100	100
SBRV3	340503117104103	001S003W15K003S	08/27/09	1920	<0.08	<0.040	117	85.7	95.8
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.06	<0.038	142	70.4	90.5
SBRV4	340503117104104	001S003W15K004S	08/08/00	1440	<0.06	<0.038	102	101	99.5
SBRV4	340503117104104	001S003W15K004S	08/27/09	1140	<0.08	<0.040	125	85.1	96.6
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.06	<0.038	121	58.9	90.2
SBRV5	340503117104105	001S003W15K005S	08/08/00	1330	<0.06	<0.038	103	105	101
SBRV5	340503117104105	001S003W15K005S	08/27/09	1800	<0.08	<0.040	125	87.7	97.2
SBVD1	340439117173902	001S004W22D002S	05/18/00	1740	<0.06	<0.038	122	84.0	98.8
SBVD1	340439117173902	001S004W22D002S	01/29/04	1615	<0.06	<0.038	113	78.8	96.3
SBVD2	340439117173904	001S004W22D004S	05/17/00	1030	<0.06	<0.038	100	70.7	95.3
SBVD2	340439117173904	001S004W22D004S	01/30/04	1500	<0.06	<0.038	103	75.3	92.9
SBVD3	340439117173905	001S004W22D005S	05/18/00	1030	<0.06	<0.038	124	85.6	101
SBVD4	340439117173907	001S004W22D007S	06/21/00	1240	0.99	E0.125	145	112	112
SBVD4	340439117173907	001S004W22D007S	06/21/00	1241[A]	0.68	V,E0.091	94.8	77.7	77.1
SBVD4	340439117173907	001S004W22D007S	01/28/04	1500	<0.06	<0.038	179	116	109
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.06	<0.038	110	75.0	92.0
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.06	<0.038	108	73.3	91.3
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.06	<0.038	109	64.5	88.8
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.06	<0.038	119	68.9	90.5
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.08	<0.040	123	74.2	96.3
YVWC1	340248117020901	001S002W36A002S	08/24/09	1830	<0.08	<0.040	122	86.9	96.1
YVWC2	340248117020902	001S002W36A003S	08/28/09	1530	<0.08	<0.040	125	85.0	97.1
YVWC3	340248117020903	001S002W36A004S	08/25/09	1140	<0.08	<0.040	127	85.4	94.5
YVWC4	340248117020904	001S002W36A005S	04/14/10	1700	E0.80	0.359	129	97.3	86.5

[A]Sequential replicate sample, see text for more information.

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Aceto-chlor (µg/L) (49260)	Alachlor (µg/L) (46342)	Atrazine (µg/L) (39632)	Azinphos-methyl (µg/L) (82686)	Azinphos-methyl oxon (µg/L) (61635)	Benfluralin (µg/L) (82673)	Butylate (µg/L) (04028)	Carbaryl (µg/L) (82680)	Carbofuran (µg/L) (82674)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.002	<0.002	<0.001	<0.001	—	E0.004	<0.0020	E0.004	<0.003
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.010	<0.008	<0.007	<0.120	<0.042	<0.014	—	<0.060	—
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.010	<0.008	<0.007	<0.120	<0.042	<0.014	—	<0.060	—
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.002	<0.002	E0.004	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.002	<0.002	0.004	<0.010	—	<0.002	<0.0020	<0.003	<0.003
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.002	<0.002	<0.001	<0.001	—	<0.002	<0.0020	<0.003	<0.003
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.006	<0.005	<0.007	<0.080	<0.042	<0.010	—	<0.060	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	2-Chloro-2′,6′-diethyl-acetanilide (µg/L) (61618)	4-Chloro-2-methyl-phenol (µg/L) (61633)	Chlor-pyrifos (µg/L) (38933)	Chlor-pyrifos oxon (µg/L) (61636)	Cyanazine (µg/L) (04041)	Cyfluthrin (µg/L) (61585)	Cyper-methrin (µg/L) (61586)	Dacthal (DCPA) (µg/L) (82682)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	—	—	<0.004	—	<0.004	—	—	<0.002
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	<0.004	—	<0.004	—	—	<0.002
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.010	<0.003	<0.010	<0.05	—	<0.016	<0.020	<0.008
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.010	<0.003	<0.010	<0.05	—	<0.016	<0.020	<0.008
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	—	—	<0.004	—	<0.004	—	—	<0.002
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	—	—	<0.004	—	<0.004	—	—	<0.002
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	—	—	<0.004	—	<0.004	—	—	<0.002

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	2-Chloro-2′,6′-diethyl-acetanilide (µg/L) (61618)	4-Chloro-2-methyl-phenol (µg/L) (61633)	Chlorpyrifos (µg/L) (38933)	Chlorpyrifos oxon (µg/L) (61636)	Cyanazine (µg/L) (04041)	Cyfluthrin (µg/L) (61585)	Cypermethrin (µg/L) (61586)	Dacthal (DCPA) (µg/L) (82682)
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	—	—	<0.004	—	<0.004	—	—	<0.002
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	—	—	<0.004	—	<0.004	—	—	<0.002
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	—	—	<0.004	—	<0.004	—	—	<0.002
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	—	—	<0.004	—	<0.004	—	—	<0.002
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	—	—	<0.004	—	<0.004	—	—	<0.002
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	—	—	<0.004	—	<0.004	—	—	<0.002
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	—	—	<0.004	—	<0.004	—	—	<0.002
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	—	—	<0.004	—	<0.004	—	—	<0.002
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	—	—	<0.004	—	<0.004	—	—	<0.002
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.006	<0.005	<0.005	<0.06	—	<0.053	<0.046	<0.003

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Deethyl-atrazine (2-Chloro-4-isopropyl-amino-6-amino-*s*-triazine) (µg/L) (04040)	Desulfinyl fipronil (µg/L) (62170)	Desulfinyl-fipronil-amide (µg/L) (62169)	Diazinon (µg/L) (39572)	3,4-Dichloro-aniline (µg/L) (61625)	Dichlorvos (µg/L) (38775)	Dicrotophos (µg/L) (38454)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.002	—	—	<0.002	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.002	—	—	<0.002	—	—	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.014	<0.012	<0.029	<0.005	E0.006	<0.02	<0.08
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.014	<0.012	<0.029	<0.005	<0.004	<0.02	<0.08
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.002	—	—	<0.002	—	—	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.002	—	—	<0.002	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.002	—	—	<0.002	—	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.002	—	—	<0.002	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.002	—	—	<0.002	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.002	—	—	<0.002	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.002	—	—	<0.002	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.002	—	—	<0.002	—	—	—

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Deethyl-atrazine (2-Chloro-4-isopropyl-amino-6-amino-*s*-triazine) (µg/L) (04040)	Desulfinyl fipronil (µg/L) (62170)	Desulfinyl-fipronil-amide (µg/L) (62169)	Diazinon (µg/L) (39572)	3,4-Dichloro-aniline (µg/L) (61625)	Dichlorvos (µg/L) (38775)	Dicro-tophos (µg/L) (38454)
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.002	—	—	<0.002	—	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.002	—	—	<0.002	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.002	—	—	<0.002	—	—	—
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.002	—	—	<0.002	—	—	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.014	<0.012	<0.029	<0.005	<0.004	<0.01	<0.08

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Dieldrin (µg/L) (39381)	2,6-Diethyl-aniline (µg/L) (82660)	Dimethoate (µg/L) (82662)	Disulfoton (µg/L) (82677)	EPTC (µg/L) (82668)	Ethalfluralin (µg/L) (82663)	Ethion (µg/L) (82346)	Ethion monoxon (µg/L) (61644)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.009	<0.006	<0.0060	—	—	—	<0.008	<0.021
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.009	<0.006	<0.0060	—	—	—	<0.008	<0.021
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.001	<0.003	—	<0.017	<0.001	<0.004	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.001	<0.003	—	<0.017	<0.002	<0.004	—	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.009	<0.006	<0.0061	—	—	—	<0.016	<0.021

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Ethoprophos (µg/L) (82672)	2-Ethyl-6-methyl-aniline (µg/L) (61620)	Fenamiphos (µg/L) (61591)	Fenamiphos sulfone (µg/L) (61645)	Fenamiphos sulfoxide (µg/L) (61646)	Fipronil (µg/L) (62166)	Fipronil sulfide (µg/L) (62167)	Fipronil sulfone (µg/L) (62168)	Fonofos (µg/L) (04095)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.003	—	—	—	—	—	—	—	<0.003
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.003	—	—	—	—	—	—	—	<0.003
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	—	<0.010	<0.030	<0.053	<0.08	<0.018	<0.013	<0.024	<0.004
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	—	<0.010	<0.030	<0.053	<0.08	<0.018	<0.013	<0.024	<0.004
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.003	—	—	—	—	—	—	—	<0.003
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.003	—	—	—	—	—	—	—	<0.003
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.003	—	—	—	—	—	—	—	<0.003
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.003	—	—	—	—	—	—	—	<0.003
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.003	—	—	—	—	—	—	—	<0.003
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.003	—	—	—	—	—	—	—	<0.003
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.003	—	—	—	—	—	—	—	<0.003
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.003	—	—	—	—	—	—	—	<0.003
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.003	—	—	—	—	—	—	—	<0.003
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.003	—	—	—	—	—	—	—	<0.003
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.003	—	—	—	—	—	—	—	<0.003
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.003	—	—	—	—	—	—	—	<0.003
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	—	<0.010	<0.029	<0.053	<0.04	<0.016	<0.013	<0.024	<0.006

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	α-HCH (µg/L) (34253)	Hexazinone (µg/L) (04025)	Iprodione (µg/L) (61593)	Isofenphos (µg/L) (61594)	Lindane (µg/L) (39341)	Linuron (µg/L) (82666)	Malaoxon (µg/L) (61652)	Malathion (µg/L) (39532)	Metalaxyl (µg/L) (61596)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	—	<0.008	<0.014	<0.006	—	—	<0.080	<0.016	<0.007
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	—	<0.008	<0.014	<0.006	—	—	<0.080	<0.016	<0.007
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	—	—	—	—	<0.004	<0.002	—	<0.005	—

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	α-HCH (µg/L) (34253)	Hexazinone (µg/L) (04025)	Iprodione (µg/L) (61593)	Isofenphos (µg/L) (61594)	Lindane (µg/L) (39341)	Linuron (µg/L) (82666)	Malaoxon (µg/L) (61652)	Malathion (µg/L) (39532)	Metalaxyl (µg/L) (61596)
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	—	—	—	—	<0.004	<0.002	—	<0.005	—
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	—	—	—	—	<0.004	<0.002	—	<0.005	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	—	<0.026	<0.026	<0.011	—	—	<0.039	<0.016	<0.007

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Methidathion (µg/L) (61598)	Metolachlor (µg/L) (39415)	Metribuzin (µg/L) (82630)	Molinate (µg/L) (82671)	Myclobutanil (µg/L) (61599)	1-Naphthol (µg/L) (49295)	Napropamide (µg/L) (82684)	p,p′-DDE (µg/L) (34653)	Paraoxonmethyl (µg/L) (61664)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.006	<0.014	<0.012	—	<0.010	<0.036	—	—	<0.010
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.006	<0.014	<0.012	—	<0.010	<0.036	—	—	<0.010
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	—	<0.002	<0.004	<0.004	—	—	<0.003	<0.006	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.009	<0.010	<0.012	—	<0.033	<0.088	—	—	<0.019

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Parathion (µg/L) (39542)	Parathion-methyl (µg/L) (82667)	Pebulate (µg/L) (82669)	Pendi-methalin (µg/L) (82683)	*cis*-Perme-thrin (µg/L) (82687)	Phorate (µg/L) (82664)	Phorate oxon (µg/L) (61666)	Phosmet (µg/L) (61601)	Phosmet oxon (µg/L) (61668)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	—	<0.008	—	<0.012	<0.014	<0.020	<0.027	<0.034	<0.0511
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	—	<0.008	—	<0.012	<0.014	<0.020	<0.027	<0.034	<0.0511
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	—	—	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	—	<0.008	—	<0.020	<0.010	<0.020	<0.027	<0.008	<0.0511

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Prometon (µg/L) (04037)	Prometryn (µg/L) (04036)	Pronamide (Propy-zamide) (µg/L) (82676)	Propachlor (µg/L) (04024)	Propanil (µg/L) (82679)	Propargite (µg/L) (82685)	Simazine (µg/L) (04035)	Tebu-thiuron (µg/L) (82670)	Terbacil (µg/L) (82665)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.100
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.018	—	<0.003	<0.007	<0.004	<0.013	0.090	<0.010	<0.007
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.012	<0.006	<0.004	—	—	—	E0.005	<0.028	—
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.012	<0.006	<0.004	—	—	—	E0.006	<0.028	—
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Prometon (µg/L) (04037)	Prometryn (µg/L) (04036)	Pronamide (Propyzamide) (µg/L) (82676)	Propachlor (µg/L) (04024)	Propanil (µg/L) (82679)	Propargite (µg/L) (82685)	Simazine (µg/L) (04035)	Tebuthiuron (µg/L) (82670)	Terbacil (µg/L) (82665)
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.018	—	<0.003	<0.007	<0.004	<0.013	0.023	<0.010	<0.007
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.018	—	<0.003	<0.007	<0.004	<0.013	0.011	<0.010	<0.007
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	E0.177	<0.007
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	E0.004	—	<0.003	<0.007	<0.004	<0.013	<0.005	E0.006	<0.007
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	E0.015	—	<0.003	<0.007	<0.004	<0.013	0.010	<0.010	<0.007
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.018	—	<0.003	<0.007	<0.004	<0.013	E0.005	<0.010	<0.007
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.018	—	<0.003	<0.007	<0.004	<0.013	<0.005	<0.010	<0.007
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	0.012	<0.006	<0.004	—	—	—	0.008	0.035	—

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Terbufos (µg/L) (82675)	Terbufos-oxon-sulfone (µg/L) (61674)	Terbuthylazine (µg/L) (04022)	Thiobencarb (µg/L) (82681)	Triallate (µg/L) (82678)	Tribuphos (µg/L) (61610)	Trifluralin (µg/L) (82661)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	<0.013	—	—	<0.002	<0.001	—	<0.002
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	<0.013	—	—	<0.002	<0.001	—	<0.002
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	<0.018	<0.045	<0.006	—	—	<0.018	<0.018
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	<0.018	<0.045	<0.006	—	—	<0.018	<0.018
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	<0.013	—	—	<0.002	<0.001	—	<0.002
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	<0.013	—	—	<0.002	<0.001	—	<0.002
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	<0.013	—	—	<0.002	<0.001	—	<0.002
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	<0.013	—	—	<0.002	<0.001	—	<0.002
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	<0.013	—	—	<0.002	<0.001	—	<0.002
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	<0.013	—	—	<0.002	<0.001	—	<0.002
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	<0.013	—	—	<0.002	<0.001	—	<0.002
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	<0.013	—	—	<0.002	<0.001	—	<0.002
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	<0.013	—	—	<0.002	<0.001	—	<0.002

Table 7*E*. Pesticides, pesticide degradates, and surrogates analyzed in water samples from multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mm/dd/yy, month/day/year; —, not analyzed; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Terbufos (µg/L) (82675)	Terbufos-oxon-sulfone (µg/L) (61674)	Terbuthyl-azine (µg/L) (04022)	Thiobencarb (µg/L) (82681)	Triallate (µg/L) (82678)	Tribuphos (µg/L) (61610)	Trifluralin (µg/L) (82661)
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	<0.013	—	—	<0.002	<0.001	—	<0.002
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	<0.013	—	—	<0.002	<0.001	—	<0.002
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	<0.013	—	—	<0.002	<0.001	—	<0.002
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	<0.012	<0.045	<0.008	—	—	<0.035	<0.009

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	alpha-HCH-d6, surrogate, percent recovery (91065)	alpha-HCH-d6, surrogate, percent recovery (99995)	Diazinon-d10, surrogate, percent recovery (91063)	Diazinon-d10, surrogate, percent recovery (99994)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1520	97.4	—	104	—
SBCC2	340541117074402	001S002W07Q002S	07/31/00	1520	106	—	125	—
SBCC5	340541117074405	001S002W07Q005S	08/19/10	1100	—	95.6	—	82.8
SBCC6	340541117074406	001S002W07Q006S	08/19/10	1240	—	93.7	—	85.4
SBRV2	340503117104102	001S003W15K002S	07/12/00	1110	98.3	—	100	—
SBRV3	340503117104103	001S003W15K003S	07/11/00	1100	93.8	—	104	—
SBRV4	340503117104104	001S003W15K004S	07/12/00	1400	94.5	—	99.1	—
SBRV5	340503117104105	001S003W15K005S	07/13/00	1140	91.9	—	95.0	—
SBVD1	340439117173902	001S004W22D002S	06/21/00	1120	88.5	—	97.2	—
SBVD2	340439117173904	001S004W22D004S	06/19/00	1600	98.8	—	101	—
SBVD3	340439117173905	001S004W22D005S	06/20/00	1440	96.3	—	103	—
SBVD5	340439117173907	001S004W22D007S	06/21/00	1240	89.7	—	104	—
SBCM1	340408117165301	001S004W22J001S	07/25/00	1130	99.1	—	106	—
SBCM2	340408117165302	001S004W22J002S	07/25/00	1500	97.2	—	103	—
SBCM3	340408117165303	001S004W22J003S	07/26/00	1110	93.3	—	111	—
SBCM4	340408117165304	001S004W22J004S	07/26/00	1330	95.2	—	112	—
YVDA5	340130117054905	002S002W04L006S	11/15/06	1710	—	92.5	—	107

Table 8*A*. Major and minor ions, nutrients, and selected trace elements analyzed in field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: E, estimated or having a higher degree of uncertainty; hhmm, hour minute; mg/L, milligram per liter; mm/dd/yy, month/day/year; SiO_2, silicon dioxide; µg/L, microgram per liter; µS/cm, microsiemens per centimeter; <, actual value less than value shown; °C, degrees Celsius]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	pH, lab (standard units) (00403)	Specific conductance, lab (µS/cm at 25 °C) (90095)	Calcium (mg/L) (00915)	Magnesium (mg/L) (00925)	Potassium (mg/L) (00935)	Sodium (mg/L) (00930)	Bromide (mg/L) (71870)	Chloride (mg/L) (00940)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	7.9	E2	0.026	<0.014	<0.24	E0.06	<0.01	<0.29
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	8.7	4	0.235	E0.008	<0.24	E0.06	<0.01	<0.29

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Fluoride (mg/L) (00950)	Silica (as SiO_2) (mg/L) (00955)	Sulfate (mg/L) (00945)	Residue on evaporation at 180 °C (total dissolved solids) (mg/L) (70300)	Nitrogen, ammonia (mg/L as N) (00608)	Nitrogen, ammonia + organic nitrogen (mg/L as N) (00623)	Nitrogen, nitrate + nitrite (mg/L as N) (00631)	Nitrogen, nitrite (mg/L as N) (00613)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.10	<0.090	<0.31	<10	<0.02	<0.10	<0.05	<0.010
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.10	0.254	<0.31	<10	<0.02	<0.10	<0.05	<0.010

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Phosphorous, ortho-phosphate, (mg/L as P) (00671)	Phosphorous, (mg/L as P) (00666)	Aluminum (µg/L) (01106)	Antimony (µg/L) (01095)	Arsenic (µg/L) (01000)	Barium (µg/L) (01005)	Beryllium (µg/L) (01010)	Boron (µg/L) (01020)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.01	<0.006	2.6	<1.00	<0.9	<1.00	<1.00	<12
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.01	E0.003	6.6	<1.00	<0.9	2.79	<1.00	19

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Cadmium (µg/L) (01025)	Chromium (µg/L) (01030)	Cobalt (µg/L) (01035)	Copper (µg/L) (01040)	Iron (µg/L) (01046)	Lead (µg/L) (01049)	Lithium (µg/L) (01130)	Manganese (µg/L) (01056)	Molyb-denum (µg/L) (01060)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<1.00	<0.8	<1.00	<1.0	<10.0	<1.00	<0.30	<1.00	<1.00
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<1.00	<0.8	<1.00	<1.0	<10.0	<1.00	<0.30	6.98	<1.00

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Nickel (µg/L) (01065)	Selenium (µg/L) (01145)	Silver (µg/L) (01075)	Strontium (µg/L) (01080)	Thallium (µg/L) (01057)	Uranium (µg/L) (22703)	Vanadium (µg/L) (01085)	Zinc (µg/L) (01090)
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<1.00	<0.7	<1.00	0.24	<0.900	<1.00	<1.0	2.6
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<1.00	E0.5	<1.00	2.97	<0.900	<1.00	<1.0	2.3

Table 8*B*. Volatile organic compounds and gasoline oxygenates analyzed in source-solution, trip, and field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; R, removed for contamination; µg/L, microgram per liter; <, actual value less than value shown; —, no data]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Acetone (µg/L) (81552)	Acrylonitrile (µg/L) (34215)	*tert*-Amyl methyl ether (TAME) (µg/L) (50005)	Benzene (µg/L) (34030)	Bromobenzene (µg/L) (81555)	Bromochloromethane (µg/L) (77297)	Bromodichloromethane (µg/L) (32101)	Bromoform (Tribromomethane) (µg/L) (32104)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	R	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<7.0	<1.20	<0.11	0.167	<0.036	<0.04	<0.048	<0.06
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<7.0	<1.20	<0.11	<0.035	<0.036	<0.04	<0.048	<0.06

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Bromomethane (Methyl bromide) (µg/L) (34413)	*n*-Butylbenzene (µg/L) (77342)	*sec*-Butylbenzene (µg/L) (77350)	*tert*-Butylbenzene (µg/L) (77353)	Carbon disulfide (µg/L) (77041)	Carbon tetrachloride (Tetrachloromethane) (µg/L) (32102)	Chlorobenzene (µg/L) (34301)	Chloroethane (µg/L) (34311)	Chloroform (Trichloromethane) (µg/L) (32106)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.024
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	R	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.26	0.22	0.279	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.26	<0.19	<0.032	<0.060	E0.07	<0.06	<0.028	<0.12	<0.052
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.26	<0.19	<0.032	<0.060	<0.07	<0.06	<0.028	<0.12	<0.052

Table 8*B*. Volatile organic compounds and gasoline oxygenates analyzed in source-solution, trip, and field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; R, removed for contamination; µg/L, microgram per liter; <, actual value less than value shown; —, no data]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Chloromethane (µg/L) (34418)	3-Chloropropene (µg/L) (78109)	2-Chlorotoluene (µg/L) (77275)	4-Chlorotoluene (µg/L) (77277)	Dibromochloromethane (µg/L) (32105)	1,2-Dibromo-3-chloropropane (DBCP) (µg/L) (82625)	1,2-Dibromoethane (EDB) (µg/L) (77651)	Dibromomethane (µg/L) (30217)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.250	<0.07	<0.026	<0.060	<0.18	<0.21	<0.036	<0.050
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	E0.156	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.500	<0.20	<0.042	<0.060	<0.18	<0.21	<0.036	<0.050

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2-Dichlorobenzene (µg/L) (34536)	1,3-Dichlorobenzene (µg/L) (34566)	1,4-Dichlorobenzene (µg/L) (34571)	*trans*-1,4-Dichloro-2-butene (µg/L) (73547)	Dichlorodifluoromethane (CFC-12) (µg/L) (34668)	1,1-Dichloroethane (1,1-DCA) (µg/L) (34496)	1,2-Dichloroethane (1,2-DCA) (µg/L) (32103)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.031	<0.030	<0.050	<0.7	<0.27	<0.035	<0.13
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.048	<0.054	<0.050	<0.7	<0.27	<0.066	<0.13

Table 8*B*. Volatile organic compounds and gasoline oxygenates analyzed in source-solution, trip, and field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; R, removed for contamination; µg/L, microgram per liter; <, actual value less than value shown; —, no data]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,1-Dichloroethene (1,1-DCE) (µg/L) (34501)	*cis*-1,2-Dichloroethene (*cis*-1,2-DCE) (µg/L) (77093)	*trans*-1,2-Dichloroethene (*trans*-1,2-DCE) (µg/L) (34546)	1,2-Dichloropropane (µg/L) (34541)	1,3-Dichloropropane (µg/L) (77173)	2,2-Dichloropropane (µg/L) (77170)	1,1-Dichloropropene (µg/L) (77168)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.040	<0.038	<0.032	<0.029	<0.12	<0.05	<0.026
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.040	<0.038	<0.032	<0.068	<0.12	<0.05	<0.026

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*cis*-1,3-Dichloropropene (µg/L) (34704)	*trans*-1,3-Dichloropropene (µg/L) (34699)	Diethyl ether (µg/L) (81576)	Diisopropyl ether (DIPE) (µg/L) (81577)	Ethylbenzene (µg/L) (34371)	Ethyl *tert*-butyl ether (ETBE) (µg/L) (50004)	Ethyl methacrylate (µg/L) (73570)	*o*-Ethyl toluene (1-Ethyl-2-methylbenzene) (µg/L) (77220)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.09	<0.09	<0.2	<0.10	E0.010	<0.054	<0.18	<0.060
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.09	<0.09	<0.2	<0.10	E0.014	<0.054	<0.18	E0.044
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.09	<0.09	<0.2	<0.10	<0.030	E0.024	<0.18	<0.060
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.09	<0.09	<0.2	<0.10	<0.030	<0.054	<0.18	<0.060

Table 8*B*. Volatile organic compounds and gasoline oxygenates analyzed in source-solution, trip, and field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; R, removed for contamination; µg/L, microgram per liter; <, actual value less than value shown; —, no data]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Hexachloro-butadiene (µg/L) (39702)	Hexachloro-ethane (µg/L) (34396)	2-Hexanone (*n*-Butyl methyl ketone) (µg/L) (77103)	Iodomethane (Methyl iodide) (µg/L) (77424)	Isopropyl-benzene (µg/L) (77223)	4-Isopropyl-1-methyl-benzene (µg/L) (77356)	Methyl acrylate (µg/L) (49991)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.14	<0.19	<0.7	R	E0.018	<0.07	<1.4
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.14	<0.19	<0.7	<0.12	0.857	<0.07	<1.4
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.14	<0.19	<0.7	<0.12	<0.032	<0.07	<1.4

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Methyl acrylonitrile (µg/L) (81593)	Methyl *iso*-butyl ketone (MIBK) (µg/L) (78133)	Methyl *tert*-butyl ether (MTBE) (µg/L) (78032)	Methylene chloride (Dichloro-methane) (µg/L) (34423)	Methyl ethyl ketone (2-butanone, MEK) (µg/L) (81595)	Methyl methacrylate (µg/L) (81597)	Naphthalene (µg/L) (34696)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.60	<0.37	E0.06	<0.16	<1.6	<0.35	<0.25
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.60	<0.37	<0.17	<0.38	R	<0.35	<0.25
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.60	E0.15	<0.17	<0.38	<1.6	<0.35	<0.25
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.60	<0.37	<0.17	<0.38	<1.6	<0.35	<0.25

Table 8*B*. Volatile organic compounds and gasoline oxygenates analyzed in source-solution, trip, and field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; R, removed for contamination; µg/L, microgram per liter; <, actual value less than value shown; —, no data]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Perchloroethene (PCE, Tetrachloroethene) (µg/L) (34475)	*n*-Propylbenzene (µg/L) (77224)	Styrene (µg/L) (77128)	1,1,1,2-Tetrachloroethane (µg/L) (77562)	1,1,2,2-Tetrachloroethane (µg/L) (34516)	Tetrahydrofuran (µg/L) (81607)	1,2,3,4-Tetramethylbenzene (µg/L) (49999)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.100	<0.042	E0.056	<0.030	<0.09	<2.2	<0.23
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.100	E0.039	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.100	2.45	<0.042	<0.030	<0.09	<2.2	E0.20
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.100	<0.042	<0.042	<0.030	<0.09	<2.2	<0.23

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2,3,5-Tetramethylbenzene (µg/L) (50000)	Toluene (µg/L) (34010)	1,2,3-Trichlorobenzene (µg/L) (77613)	1,2,4-Trichlorobenzene (µg/L) (34551)	1,1,1-Trichloroethane (1,1,1-TCA) (µg/L) (34506)	1,1,2-Trichloroethane (1,1,2-TCA) (µg/L) (34511)	Trichloroethene (TCE) (µg/L) (39180)	Trichlorofluoromethane (CFC-11) (µg/L) (34488)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.200	E0.048	<0.27	<0.19	<0.032	<0.060	<0.038	E0.01
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.200	E0.019	<0.27	<0.19	<0.032	<0.060	0.572	E0.21
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038	E0.41
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	E0.036	<0.09
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038	<0.09
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038	<0.09
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.200	E0.057	<0.27	<0.19	<0.032	<0.060	E0.087	<0.09
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.200	E0.017	<0.27	<0.19	<0.032	<0.060	<0.038	<0.09
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.200	E0.015	<0.27	<0.19	<0.032	<0.060	0.585	<0.09
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.200	<0.050	<0.27	<0.19	<0.032	<0.060	<0.038	<0.09

Table 8*B*. Volatile organic compounds and gasoline oxygenates analyzed in source-solution, trip, and field blank water samples processed at multiple-well monitoring sites in the Bunker Hill Subbasin, San Bernardino County, California.—Continued

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; R, removed for contamination; µg/L, microgram per liter; <, actual value less than value shown; —, no data]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	1,2,3-Trichloropropane (1,2,3-TCP) (µg/L) (77443)	Trichlorotrifluoroethane (CFC-113) (µg/L) (77652)	1,2,3-Trimethylbenzene (µg/L) (77221)	1,2,4-Trimethylbenzene (µg/L) (77222)	1,3,5-Trimethylbenzene (µg/L) (77226)	Vinyl bromide (Bromoethene) (µg/L) (50002)	Vinyl chloride (Chloroethene) (µg/L) (39175)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.16	<0.060	<0.120	<0.056	<0.044	<0.10	<0.11

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	*m*- and *p*-Xylene (µg/L) (85795)	*o*-Xylene (µg/L) (77135)	1,2-Dichloroethane-d4, surrogate, percent recovery (99832)	1-Bromo-4-fluorobenzene, surrogate, percent recovery (99834)	Toluene-d8, surrogate, percent recovery (99833)
SBSH1	340707117162706	001S004W02D006S	11/28/00	1055	E0.02	<0.038	106	95.7	97.0
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1525	<0.06	<0.038	111	113	107
SBCC1	340541117074401	001S002W07Q001S	08/07/00	1527[A]	<0.06	<0.038	115	114	107
SBRV5	340503117104105	001S003W15K005S	07/13/00	1145	<0.06	E0.077	87.7	72.5	91.3
SBRV5	340503117104105	001S003W15K005S	07/13/00	1147[A]	<0.06	<0.038	103	71.4	93.9
SBRV5	340503117104105	001S003W15K005S	07/13/00	1148[B]	<0.06	<0.038	104	73.9	96.4
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	E0.03	<0.038	118	106	96.4
SBVD5	340439117173907	001S004W22D007S	06/21/00	1247[A]	<0.06	<0.038	107	120	107
SBCM4	340408117165304	001S004W22J004S	07/26/00	1335	<0.06	<0.038	106	77.3	93.5
SBCM4	340408117165304	001S004W22J004S	07/26/00	1337[A]	<0.06	<0.038	104	75.5	91.4

[A]Source-solution blank sample, see text for more information.

[B]Trip blank sample, see text for more information.

Table 8*C*. Pesticides and pesticide degradates analyzed in field blank water samples processed at multiple-well monitoring site *F*, SBVD5, in the Bunker Hill Subbasin, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code below the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: hhmm, hour minute; E, estimated or having a higher degree of uncertainty; mm/dd/yy, month/day/year; <, actual value less than value shown; µg/L, microgram per liter]

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	2,6-Diethyl-aniline (µg/L) (82660)	Acetochlor (µg/L) (49260)	Alachlor (µg/L) (46342)	Atrazine (µg/L) (39632)	Azinphos-methyl (µg/L) (82686)	Ben-fluralin (µg/L) (82673)	Carbaryl (µg/L) (82680)	Chlor-pyrifos (µg/L) (38933)	*cis*-Perme-thrin (µg/L) (82687)
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.003	<0.002	<0.002	<0.001	<0.001	<0.002	<0.003	<0.004	<0.005

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Dacthal (DCPA) (µg/L) (82682)	Deethyl-atrazine (2-Chloro-4-isopropyl-amino-6-amino-*s*-triazine) (µg/L) (04040)	Diazinon (µg/L) (39572)	Dieldrin (µg/L) (39381)	Fonofos (µg/L) (04095)	Mala-thion (µg/L) (39532)	Meto-lachlor (µg/L) (39415)
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.002	<0.002	<0.002	<0.001	<0.003	<0.005	<0.002

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Metri-buzin (µg/L) (82630)	Parathion-methyl (µg/L) (82667)	Pendi-methalin (µg/L) (82683)	Phorate (µg/L) (82664)	Prometon (µg/L) (04037)	Pronamide (Propyzamide) (µg/L) (82676)	Simazine (µg/L) (04035)	Tebu-thiuron (µg/L) (82670)
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.004	<0.006	<0.004	<0.002	<0.018	<0.003	E0.005	<0.010

Common well name	USGS site identification number	Station name	Date (mm/dd/yy)	Time (hhmm)	Terbufos (µg/L) (82675)	Trifluralin (µg/L) (82661)	alpha-HCH-d6, surrogate, percent recovery (91065)	Diazinon-d10, surrogate, percent recovery (91063)
SBVD5	340439117173907	001S004W22D007S	06/21/00	1245	<0.013	<0.002	90.4	94.9

Table 9. Major ions, selected trace elements, phosphorous, and volatile organic compounds (VOCs) censored using quality-control blank results from 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Subbasins, San Bernardino County, California.

[The five-digit U.S. Geological Survey (USGS) parameter code next to the constituent name is used to uniquely identify a specific constituent or physical property. **Abbreviations**: mg/L, milligram per liter; SiO_2, silicon dioxide; µg/L, microgram per liter]

Constituent	Laboratory reporting level	Censor threshold	Number of blank detections	Number of compounds censored
Major ions, selected trace elements, and phosphorous				
Calcium (00915)	0.022 mg/L	0.246 mg/L	2	0
Magnesium (00925)	0.014 mg/L	0.015 mg/L	1	0
Sodium (00930)	0.10 mg/L	0.11 mg/L	2	0
Silica (00955)	0.090 mg/L as SiO_2	0.299 mg/L	1	0
Aluminum (01106)	3 µg/L	8.1 µg/L	2	77
Barium (01005)	1.00 µg/L	3.79 µg/L	1	8
Boron (01020)	12 µg/L	25 µg/L	1	87
Manganese (01056)	1 µg/L	7.48 µg/L	1	82
Selenium (01145)	0.07 µg/L	0.535 µg/L	1	62
Strontium (01080)	1.2 µg/L	3.03 µg/L	2	0
Zinc (01090)	2 µg/L	3.6 µg/L	2	34
Phosphorous (00666)	0.006 mg/L as P	0.006 mg/L	1	2
Volatile organic compounds (VOCs)				
Acetone (81552)	7.0 µg/L	134.5 µg/L	1	1
Benzene (34030)	0.035 µg/L	0.184 µg/L	1	6
Bromomethane (methyl bromide) (34413)	0.26 µg/L	1.09 µg/L	1	0
n-Butylbenzene (77342)	0.19 µg/L	0.30 µg/L	1	1
sec-Butylbenzene (77350)	0.032 µg/L	0.295 µg/L	1	1
Carbon disulfide (77041)	0.07 µg/L	0.105 µg/L	1	3
Chloromethane (34418)	0.500 µg/L	0.406 µg/L	1	5
Ethylbenzene (34371)	0.030 µg/L	0.029 µg/L	2	1
Ethyl *tert*-butyl ether (ETBE) (50004)	0.054 µg/L	0.051 µg/L	1	0
o-Ethyl toluene (1-Ethyl-2-methylbenzene) (77220)	0.06 µg/L	0.074 µg/L	1	1
Iodomethane (methyl iodide) (77424)	0.12 µg/L	1.74 µg/L	1	0
Isopropylbenzene (77223)	0.032 µg/L	0.873 µg/L	2	2
Methyl *tert*-butyl ether (MTBE) (78032)	0.17 µg/L	0.145 µg/L	1	1
Methyl *iso*-butyl ketone (MIBK) (78133)	0.37 µg/L	0.35 µg/L	1	0
Methyl ethyl ketone (2-butanone) (MEK) (81595)	1.6 µg/L	568 µg/L	1	0
n-Propylbenzene (77224)	0.042 µg/L	2.47 µg/L	2	2
Styrene (77128)	0.042 µg/L	0.077 µg/L	1	0
1,2,3,4-Tetramethylbenzene (49999)	0.23 µg/L	0.32 µg/L	1	0
Toluene (34010)	0.050 µg/L	0.082 µg/L	5	13
Trichloroethene (TCE) (39180)	0.038 µg/L	0.604 µg/L	4	4
Trichlorofluoromethane (CFC-11) (34488)	0.09 µg/L	0.45 µg/L	3	10
m- and *p*-Xylene (85795)	0.060 µg/L	0.06 µg/L	2	2
o-Xylene (77135)	0.038 µg/L	0.096 µg/L	1	3

Data from the replicate-paired sample for VOCs (table 7*D*), in which 12 constituents were detected in both samples, indicated that variability between measurements was low for isopropylbenzene and *n*-propylbenzene and not acceptable for 1,2,3,4-tetramethylbenzene, benzene, ethylbenzene, *o*- and *p*-xylene, naphthalene, 1-ethyl-2-methylbenzene, *sec*-butylbenzene, toluene, and trichlorofluoromethane. No results were changed based on replicate data.

No surrogate recoveries were above 130 percent but caffeine-13C had two recoveries below 70 percent, and decafluorobiphenyl had seven recoveries below 70 percent. Surrogate compounds analyzed with 44 VOC samples included 1,2-dichloroethane-d4, 1-bromo-4-fluorobenzene, and toluene. 1,2-Dichloroethane-d4 had six recoveries above 130 percent and no recoveries below 70 percent. 1-Bromo-4-fluorobenzene had no recoveries above 130 percent and five recoveries below 70 percent. Toluene had no recoveries above 130 percent or below 70 percent. Surrogates alpha-HCH-d6 and diazinon-d10 analyzed with 17 pesticide and pesticide degradate samples had no recovery above 130 or below 70 percent.

No VOCs had a matrix spike recovery greater than 130 percent, although 64 recoveries were below 70 percent (table 5). The lowest matrix spike recovery was 27.8 percent for chloromethane. Tetrahydrofuran was not included in the VOC matrix spike. For the pesticide matrix spike, paraoxon-methyl had a matrix spike recovery greater than 130 percent, and the recovery for linuron and pendimethalin was over 230 percent. Ten compounds had recoveries below 70 percent, with metribuzin having the lowest recovery of only 8.7 percent.

Summary

In 1974, the U.S. Geological Survey (USGS), in cooperation with the San Bernardino Valley Municipal Water District, began a study to assess the regional groundwater resources in the Bunker Hill Subbasin of the Upper Santa Ana Valley Groundwater Basin in San Bernardino County, California. In 1996, the regional study was expanded east into the Yucaipa Subbasin. This report presents geologic (borehole lithology and geophysical logs) and hydrologic (water-quality and water-level) data collected from 1974–2016 for 11 multiple-well monitoring sites in the Bunker Hill and Yucaipa Groundwater Subbasins.

The USGS constructed seven multiple-well monitoring sites in the Bunker Hill Subbasin and four sites in the Yucaipa Subbasin where municipal supply wells extract groundwater from alluvial deposits. Data collected from these 11 multiple-well monitoring sites included geologic and geophysical logs, cores from selected depths, water levels, and analyses for over 240 water-quality samples. Data-quality assurance included the collection of quality-control data from blanks, sequential replicate samples, and laboratory surrogates and spikes.

Data associated with the 11 sampled sites are available in the tables of this report. In addition, the 11 multiple-well monitoring sites are equipped with real-time water-level recording equipment, with the data available via the USGS National Water Information System for California (https://waterdata.usgs.gov/ca/nwis) and on the project web pages for the San Bernardino Optimal Basin Management study (http://ca.water.usgs.gov/sanbern/) and the Yucaipa Valley Hydrogeology study (http://ca.water.usgs.gov/yucaipa/).

Quality-assurance blank samples processed periodically throughout the study show that approximately 2.4 percent of the analytical results for major and minor ions, trace elements, and nutrients, and 1.5 percent of the results for 23 volatile organic compounds (VOCs) fall below the acceptable study reporting limits and therefore are censored with a “V” code in appropriate tables.

Surrogate and matrix spike recoveries were considered acceptable if within plus or minus 30 percent of known or spike values. Surrogate compounds processed with nine samples for organic wastewater compound determinations had no recoveries above 130 percent and nine recoveries below 70 percent. Surrogate compounds processed with 44 samples for VOC determinations had six recoveries above 130 percent and five recoveries below 70 percent. Surrogate compounds processed with 17 samples for pesticide determinations had no recoveries above 130 percent or below 70 percent.

No VOCs had a matrix spike recovery greater than 130 percent, although 64 recoveries were below 70 percent. Three pesticide matrix spike recoveries were greater than 130 percent and 10 recoveries were below 70 percent.

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