UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division

DATA ON WELLS AND SPRINGS ON VANDENBERG AIR FORCE BASE AND VICINITY SANTA BARBARA COUNTY, CALIFORNIA

By

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Prepared in cooperation with the
Department of the Air Force

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DATA ON WELLS AND SPRINGS ON VANDENBERG AIR FORCE BASE AND VICINITY, SANTA BARBARA COUNTY, CALIFORNIA

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INTRODUCTION

Purpose and Scope of the Report

The data in this report were collected by the U.S. Geological Survey as a part of the water-resources investigation at Vandenberg Air Force Base, Calif. (fig. 1). This report will provide basic data for preparation of future reports to the Air Force dealing with the water resources of the base.

The scope of this report involved the collection and tabulation of all available data pertaining to wells on Vandenberg Air Force Base, the Federal Correctional Institute, and part of the adjacent Sudden Estate Co. property (fig. 2). This included the collection of well logs, water-level measurements, chemical analyses, and pumpage data. A field reconnaissance of the wells in the area was made to check the location of the wells with respect to the public-land net, and to record the depth, casing diameter, type of pumping equipment, and depth of the water surface below a known measuring point.

The work was done by the U.S. Geological Survey, Water Resources Division, under the immediate supervision of L. C. Dutcher, chief of the Garden Grove subdistrict, and under the general supervision of R. Stanley Lord, chief of the California district.

Previous and Related Investigations

Reports by Dibblee (1950), Evenson (1961), Evenson and Miller (1963), Muir (1964), Upson and Thomasson (1951), and Woodring and Bramlette (1950) that describe the geology of the Vandenberg Air Force Base and vicinity, were used in compiling the geologic map for this report (fig. 2). A report by Wilson (1959) also contains geologic information. Reports by the Geological Survey, which contain records of water-level measurements in wells on the base, are listed in table 4.

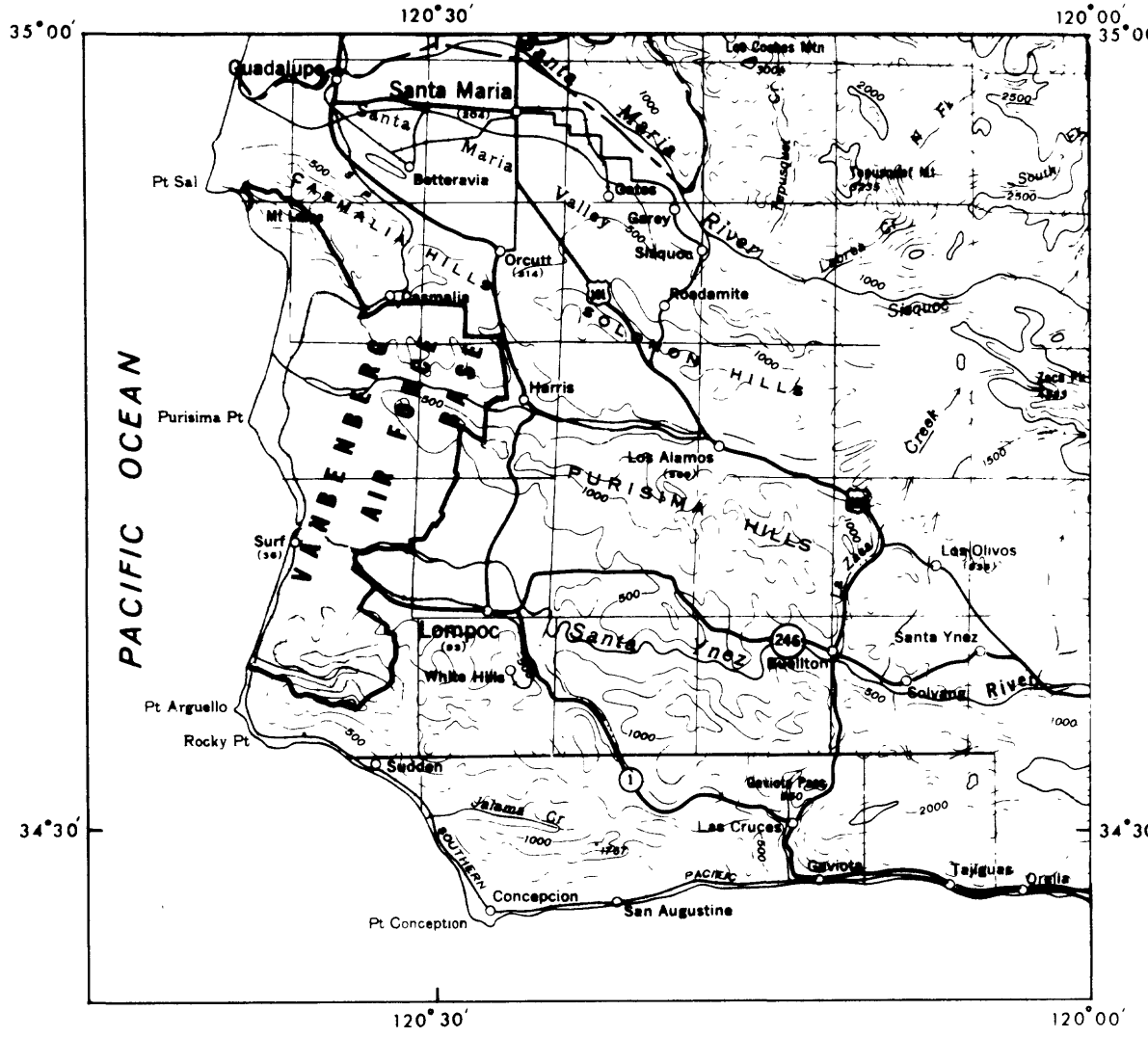
Acknowledgments

The data presented in this report were obtained, in part, from the U.S. Army Corps of Engineers, the California Department of Water Resources, and the California Division of Oil and Gas. The assistance offered by members of these organizations greatly facilitated the collection of data and contributed materially to the completeness of the report.

Location and Extent of the Area

Vandenberg Air Force Base occupies about 150 square miles in the northwestern part of Santa Barbara County, Calif. (fig. 1). The base is on the Pacific coast about 15 miles south of Santa Maria and about 5 miles west of Lompoc.

The base is adjoined by the Sudden Estate Co. property on the south and the Federal Correctional Institute on the east. Well data and geology for both of these properties are included in this report.



Map of part of Santa Barbara County, California, showing area described in this report

0 5 10 Miles

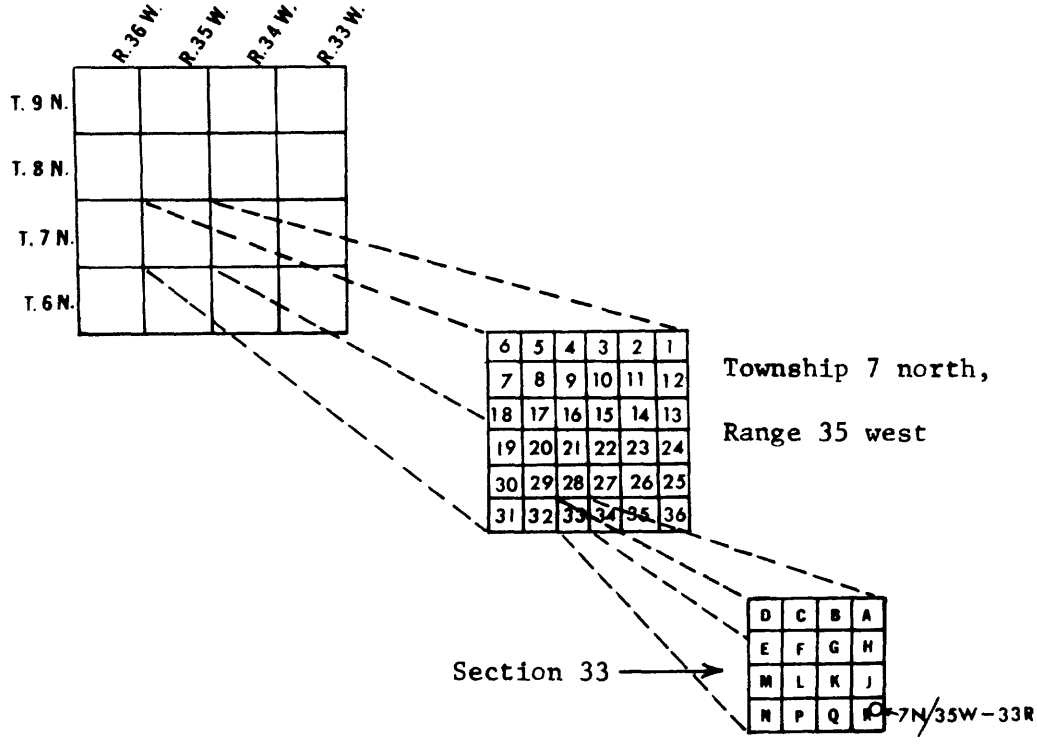
Well- and Spring-Numbering System

The well-numbering system used in this report conforms to that used by the U.S. Geological Survey in California since 1940. It has been adopted as official by the California Department of Water Resources and by the California Water Quality Control Board.

Wells are assigned numbers according to their location in the rectangular system for the subdivision of public land. As shown in the diagram below, the part of the number preceding the slash (as in 7N/35W-33R1) indicates the township (T. 7 N.); the part of the number between the slash and the hyphen indicates the range (R. 35 W.); the number following the hyphen indicates the section (sec. 33); the letter following the section number designates the 40-acre subdivision of the section. Within each 40-acre tract the wells are numbered serially as indicated by the final digit. Thus, well 7N/35W-33R1 is the first well to be listed in the SE¼SE¼ sec. 33.

Numbers assigned to springs and seeps are differentiated from those assigned to wells by the letter "S" as in 5N/35W-1BS1.

Well numbers which contain the letter "Z" (as in 7N/35W-31Z1) were assigned to those wells which were plotted from reported location descriptions that could not be verified by a field check.



GEOLOGIC UNITS AND THEIR WATER-BEARING PROPERTIES

The geologic units which crop out on Vandenberg Air Force Base and vicinity, as shown in figure 2, can be grouped into two categories: Consolidated rocks and unconsolidated deposits. The consolidated rocks consist of igneous, metamorphic, and sedimentary rocks, all of pre-Tertiary and Tertiary age. These rocks contain small quantities of ground water. The unconsolidated deposits consist of the Careaga Sand of Pliocene age, the Paso Robles Formation of Pliocene and Pleistocene(?) age, the Orcutt Sand and terrace deposits both of Pleistocene age, and alluvium, landslides, and windblown sand all of Recent age. These unconsolidated sedimentary deposits contain most of the usable ground water present in the area.

Consolidated Rocks

Igneous and Metamorphic Rocks

The oldest consolidated rocks are the igneous and metamorphic rocks of the Franciscan Formation of Jurassic and Cretaceous age and the igneous and metamorphic rocks of probable Tertiary age. These rocks, exposed near Point Sal and in the southern extremity of the base, underlie the younger formations and generally are not considered as a source of ground water. However, small quantities of ground water may be present in fractures and deeply weathered zones.

Sedimentary Rocks

Consolidated sedimentary rocks of pre-Tertiary and Tertiary age are exposed over much of Vandenberg Air Force Base and the Sudden Estate Co. property. The sedimentary rocks consist of conglomerate, sandstone, siltstone, mudstone, shale, diatomite, and limestone. They yield small to moderate quantities of ground water from fractures.

Tejon Formation

Matilija Sandstone Member of Kerr and Schenck (1928).--This unit, of Eocene age, crops out in the Santa Ynez Mountains near the southern boundary of the base. Here it is about 300 feet thick and consists of white, medium sandstone with some conglomerate. In some areas the sandstone yields small quantities of water to springs and wells.

Cozy Dell Shale Member of Kerr and Schenck (1928).--This unit, of Eocene age, consists of gray and brown marine shale interbedded with thin beds of sandstone. The shale is exposed in the southern part of the base. It probably does not contain usable quantities of ground water.

Vaqueros Sandstone

The Vaqueros Sandstone, of Miocene age, is exposed in the western part of the Santa Ynez Mountains near Tranquillon Mountain. Here the formation consists of about 75 feet of brown, coarse to medium marine sandstone, and conglomerate. The formation also has been penetrated at depths of 600 to 1,000 feet in oil wells drilled near Point Arguello (Evenson, 1961, p. 27).

Several springs discharge from the Vaqueros Sandstone, indicating that it may yield moderate quantities of water to wells.

Tranquillon Volcanics of Dibblee (1950)

The Tranquillon Volcanics of Dibblee (1950), of Miocene age, are exposed on Tranquillon Mountain and the surrounding area. This formation is as much as 1,200 feet thick and is composed of rhyolite, rhyolitic agglomerate, and tuff. Fractures within this formation yield small quantities of water to springs.

Unconsolidated Deposits

Careaga Sand

The Careaga Sand is a fine to medium marine sand of Pliocene age. It is loosely consolidated and contains some silt and an abundance of well-rounded pebbles in the upper part of the formation. The main outcrop occurs north of the Purisima Hills, where it is about 1,400 feet thick. Though the Careaga Sand yields water to wells, few wells are perforated in it because fine sand and silt tend to enter the wells through the perforations. Properly constructed wells, however, probably could eliminate this problem and yield sufficient quantities of water to meet most needs.

Paso Robles Formation

The Paso Robles Formation, of Pliocene and Pleistocene(?) age, is exposed near the east boundary of the base in the San Antonio Valley. The formation in this area is about 2,000 feet thick and is composed of loosely consolidated beds of gravel, sand, silt, and clay, with occasional beds of fresh-water limestone in the lower part of the formation. The sand is usually crossbedded, poorly sorted, and includes stringers of coarse sand and gravel. The formation has a low permeability and does not yield water to wells as readily as does the alluvium. Nevertheless, it can be a major source of ground water if a saturated zone of sufficient thickness is penetrated.

Orcutt Sand

The Orcutt Sand, of Pleistocene age, consists of gravel and sand with lenses of silt and clay. This formation is principally of continental origin but contains some marine beds. It has a maximum thickness of about 200 feet near the Santa Ynez River. The sand is exposed over much of the base and rests unconformably on the Paso Robles and older formations. Because the Orcutt Sand is moderately porous, it contains large quantities of water in the strata below the zone of saturation. However, the clay and silt lenses within the formation restrict ground-water movement; thus, wells perforated in this formation may yield only moderate quantities of water.

Terrace Deposits

Terrace deposits of Pleistocene age were deposited on marine and stream terraces and are exposed on the base and along the coastal part of the Sudden Estate Co. land. These deposits are composed of moderately permeable, crossbedded gravel, sand, silt, and clay and have a maximum thickness which probably does not exceed 75 feet. Most of the terrace deposits are above the zone of saturation and are not a source of ground water.

Alluvium

Most of the valleys and their tributary canyons are underlain by alluvium of Recent age. The alluvium, ranging in thickness from 0 to about 200 feet, is made up of gravel, sand, silt, and clay. In most areas the alluvium, which yields water freely to wells, is one of the main water-bearing deposits.

In San Antonio Valley the alluvium averages about 80 feet in thickness, the lower two-thirds of which is saturated throughout most of the valley. The alluvium is completely saturated in the areas of ground-water discharge in Barka Slough. Logs from test wells 8N/35W-10J1, 15E3, and 16E1 indicate that the alluvium in the western end of San Antonio Valley contains much clay. Thus, wells constructed in this part of the Valley will probably yield less water than wells that tap the alluvium near Barka Slough.

The alluvium in the Lompoc plain is the most productive source of water in the area. Near Vandenberg Air Force Base the alluvium, which is about 200 feet thick, contains an upper and lower member (Wilson, 1959, p. 6). The upper member consists of clay and silt with some sand; the lower member consists of cobbles, gravel, and sand. The lower member, about 100 feet thick, is the main water-bearing zone. The static water level ranges from about 3 to 20 feet below land surface. Beds of clay in the upper member range from 10 to 60 feet in thickness and tend to retard the downward movement of ground water.

Windblown Sand

Windblown sand, of Recent age, extends inland from the coast and covers parts of the Lompoc Terrace, Burton Mesa, San Antonio Terrace, and the coastal area north of Point Sal. The windblown sand is most extensive on San Antonio Terrace and Burton Mesa, where it has formed dunes of three different types--young, mature, and old. The young dunes migrate and support little or no vegetation; the mature dunes are usually anchored by vegetation and are well preserved. The old dunes are also anchored by vegetation but have lost their distinctive shape.

The sand has a maximum thickness of about 100 feet and, for the most part, lies above the zone of saturation. Thus, only small perched water bodies within the sand could yield water to wells.

Landslide Deposits

Landslide and earthflow debris of Recent age is common in the Point Sal area and in the mountainous region at the southern end of the base. These deposits are composed of rock debris which overlies the consolidated formations. Seeps and springs sometimes occur along the lower edge of the landslides, because the debris is more permeable than the underlying formations. Development of some of these springs might yield enough water to meet limited domestic needs in the area.

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Evenson, R. E., and Miller, G. A., 1963, Geology and ground-water features of Point Arguello Naval Missile Facility, Santa Barbara County, California: U.S. Geol. Survey Water-Supply Paper 1619-F, 35 p.

La Rocque, G. A., Jr., Upson, J. E., Worts, G. F., Jr., and Porter, L., Jr., 1950, Wells and water levels in principal ground-water basins in Santa Barbara County, California: U.S. Geol. Survey Water-Supply Paper 1068, pts. 1 and 2, 459 p.

Kerr, P. F., and Schenck, H. G., 1928, Significance of the Matilija overturn: Geol. Soc. America Bull. v. 39, p. 1087-1102.

Muir, K. S., 1964, Geology and ground water of San Antonio Creek valley, Santa Barbara County, California: U.S. Geol. Survey Water-Supply Paper 1664, 53 p.

Upson, J. E., and Thomasson, H. G., Jr., 1951, Geology and water resources of the Santa Ynez River basin, Santa Barbara County, California: U.S. Geol. Survey Water-Supply Paper 1107, 194 p.

U.S. Geological Survey, 1943-57, Water levels and artesian pressure(s) in observation wells in the United States . . . part 6, Southwestern States and Territory of Hawaii: Water-Supply Papers 941, 282 p.; 949, 344 p.; 991, 305 p.; 1021, 302 p.; 1028, 301 p.; 1076, 316 p.; 1101, 316 p.; 1131, 288 p.; 1161, 298 p.; 1170, 279 p.; 1196, 222 p.; 1226, 237 p.; 1270, 253 p.; 1326, 262 p.; 1409, 280 p.

_____1957-64, Water levels in observation wells in Santa Barbara County, California [1956-] 1963: U.S. Geol. Survey open-file rept., 33 p. and apps.

Wilson, H. D., Jr., 1959, Ground-water appraisal of Santa Ynez River basin, Santa Barbara County, California, 1945-52: U.S. Geol. Survey Water-Supply Paper 1467, 119 p.

Woodring, W. P., and Bramlette, M. N., 1950, Geology and paleontology of the Santa Maria district, California: U.S. Geol. Survey Prof. Paper 222, 185 p.

Table 1.--Records of wells and springs

USGS well number: The number given is the U.S. Geological Survey number assigned to the well or spring according to the method described in the section on well and spring numbering.

Other numbers and source of data: The source of data for each line is indicated by the following symbols: CE U.S. Army Corps of Engineers; D driller; DWR California Department of Water Resources; GS U.S. Geological Survey; LBJ Leeds, Hill, Barnard, and Jewett, Consulting Engineers; O owner; OG California Division of Oil and Gas; PGE Pacific Gas and Electric Co.; POA Porter, O'Brien, and Armstrong, Consulting Engineers; USAF U.S. Air Force. For other well numbers see table 2.

Date of observation: The date given is the date on which the well was canvassed.

Owner or user: The name given is that of the apparent owner or user of the well on the date indicated.

Year completed: The year given is the date the well was completed and was obtained from the driller's log or was reported by the owner or others.

Depth: Depths of wells, given in whole feet, were reported by owners, drillers, or others; depths given in feet and tenths of a foot were measured below land-surface datum by the Geological Survey.

Type and diameter: The type of well construction is indicated by the following letters: A auger; C cable tool; D dug; R rotary. The number following the letter is the diameter of the casing or the largest dimension of a cribbed pit, in inches; if the well is not cased or cribbed, the symbol N is used.

Type of pump and power: The type of pump or method of lift is indicated by the following letters: C centrifugal; J jet; L lift; N none; S submersible; T turbine. The type of power is indicated as follows: E electric motor of undetermined horsepower. A number appearing in this column indicates the electric motor horsepower rating; G gasoline engine; H hand; N none; W wind.

Yield: The value given, in gallons per minute (gpm), is the estimated yield of a spring, or the measured yield of a well, usually based on tests performed by the driller or others and is not necessarily the maximum capacity of the well or installed pump.

Use: The use of the well or spring is indicated by the following letters: Dm domestic; Ds destroyed or dry; Ir irrigation; O observation; Ps public supply; Rc road construction; S stock; T test; Un unused.

Measuring point: The point from which water-level measurements by the Geological Survey are made is described as follows: Bhc bottom of hole in casing; Hpb hole in pump base; Lsd land-surface datum; Na no access into casing; Tap top of access pipe; Tc top of casing; Tcc top of casing cover; Tf top of flange. The distance of the measuring point above or below (-) land-surface datum is given in feet and tenths of a foot, and sometimes hundredths of a foot.

Altitude: The altitude given is that of land-surface datum. Land-surface datum is an arbitrary plane that closely approximates land surface and is established at the time of the first measurement. It is a fixed plane of reference for all subsequent measurements. Altitudes given to the nearest foot were interpolated from topographic maps having 40-foot contour intervals. Altitudes given to the nearest tenth or hundredth of a foot are surveyed altitudes.

Water level: Measured depths to water are given in feet, tenths of a foot, and hundredths of a foot, or in feet and tenths of a foot; reported or approximate depths to water are given in whole feet. The distance between land-surface datum and the measuring point has been subtracted from, or added to, the measured water level. Thus, all water levels are referenced to land-surface datum. Water levels with a plus (+) symbol are above land-surface datum.

Other data: C chemical analyses of water from wells and springs are given in table 5; E electric log of well is available; L log of well is given in table 6; La log of well is available; P metered pumpage from well is given in table 7; T pumping tests of well is given in table 8; W water-level measurements are given in table 3; Wp water-level measurements are published in the references listed in table 4.

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 5 N., R. 34 W.														
5/34-7E1	GS	4-19-66	Sudden Estate Co. (SEC)		0.8	D 21	N N	0.5	S	Tc	0	500	0.20	
7E2	GS	4-19-66	SEC		1.9	D 54	N N		S	Tc	0	510	.75	C
7E3	GS	4-19-66	SEC		2.0	D 30	N N		S	Tc	0	500	.95	
T. 5 N., R. 35 W.														
5/35-1BS1	GS	4-19-66	SEC			N	N N		Un			1,130	Flowing	
1F1	GS	4-19-66	SEC		3.0	D 300	N N		Dm,S	Lsd	0	1,000	1.0	C
1J1	GS	4-19-66	SEC		1.0	D 24	N N	.5	S	Tc	0	880	.82	
1NS1	GS	1960	SEC									400	Flowing	C
2DS1	GS	1960	SEC									320	Flowing	C
12B1	GS	4-19-66	SEC		1.5	D 41	N N	2	S	Tc	0	350	1.18	
12CS1	GS	4-19-66	SEC			N	N N		Un			460	Seep	
12F1	GS	4-19-66	SEC		1.7	D 24	N N	.35	S	Tc	0	250	.88	
12GS1	GS	4-19-66	SEC			N	N N		S			290	Seep	
12Z1	GS	4-20-66	Union Oil Co.						Ds			300		
	OG	3- -36		1936	2,221	R								
T. 6 N., R. 34 W.														
6/34-31E1	GS	4-19-66	SEC		3.8	D 42	N N		S	Tc	1.0	1,440	2.49	
T. 6 N., R. 35 W.														
6/35-2D1	GS	4-27-66	U.S. Air Force (USAF)		443.6	8	N N		Un	Na		290		C,L,T,W
	D	7- 8-58	U.S. Navy (USN)	1958	475	C 8	N N	20	T	Tc	1.8		215.85	
4Z1	GS	4-20-66	Texaco Inc.						Ds			631		E
	O	12-26-55		1955	4,696	R 12	N N		Un					
5F1	GS	4-26-66	USAF	1958					Ds			230		L, W
	GS	5-29-58	USN		77	C 8	N N	4.1	T	Tc	1.4		25	
5RS1	GS	4-26-66	USAF			N	N N	.5	Un			440	Flowing	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)		Type of pump and power		Yield (gpm)	Use	Measuring point		Altitude of lsd (feet)	Water level below lsd (feet)	Other data
												Description	Distance above or below(-) lsd (feet)			
T. 6 N., R. 35 W.--Continued																
6/35-8Z1	GS	4-20-66	Top Row Oil Co.								Ds			780		L
	OG	1-18-37		1937	1,302	C	10	N	N		Un				165	
9Z1	GS	4-20-66	MJM & M Oil Co.								Ds			875		E
	OG	7- 5-55		1955	6,241											
13C1	GS	4-27-66	USAF		7.8	D	42	N	N		Un	Tc	2.0	1,240	4.41	
15J1	GS	4-28-66	USAF	1958	77.0	C	8	N	N		Un	Tc	1.5	585	19.12	C,L,W
	GS	6- 6-58	USN		78			N	N	7	T	Tc	1.5		20.5	
16P1	GS	4-28-66	USAF	1958							Ds			400		C,L,W
	GS	6-12-58	USN		76	C	8	N	N	10	T	Tc	1.0		19	
16Z1	GS	4-20-66	Stansbury-Webb & G. J. Greer								Ds			483		E
	OG	6-12-54		1954	5,558	R	12	N	N		Un					
19FS1	GS	5-10-66	SEC				N	N	N		Un			1,280	Seep	
19P1	GS	5-10-66	SEC		1.0	D	20	N	N		S	Tc	0	760	Flowing	
19R1	GS	5-10-66	SEC		.6	D	24	N	N		S	Lsd	0	1,180	Flowing	
20P1	GS	5- 9-66	SEC		1.07	D	16	N	N		S	Tc	0	1,160	.34	
20P2	GS	5- 9-66	SEC		2.78	D	43	N	N		S	Tc	0	1,160	.94	
21D1	GS	4-28-66	USAF	1958							Ds			380		L,W
	GS	6-16-58	USN		59	C	8	N	N	5	T	Tc	1.0		16	
22AS1	GS	4-28-66	USAF				N	N	N	1	Un			760	Flowing	
22J1	GS	4-29-66	USAF		12.7	D	120				Ps	Tc	2.0	1,640	6.16	C
25Q1	GS	4-19-66	SEC		2.0	D	36	N	N		S	Tc	0	1,440	.61	
27E1	GS	4-20-66	SEC		1.0	D	36	N	N		S	Tc	0	1,030	.12	
28C1	GS	5- 9-66	SEC		1.0	D	45	N	N		S	Tc	0	920	.50	C
28CS1	GS	5- 9-66	SEC				N	N	N		S			1,200	Seep	
28J1	GS	4-20-66	SEC		2.0	D	36	N	N		S	Tc	.5	820	Flowing	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 6 N., R. 35 W.--Continued														
6/35-29A1	GS	5- 9-66	SEC		0.95	D 30	N N		S	Tc	0	1,180	0.58	
29A2	GS	5- 9-66	SEC		.90	D 30	N N		Un	Tc	0	1,000	Flowing	
29FS1	GS	5- 9-66	SEC			N	N N		S			800	Seep	
30RS1	GS	1960	SEC									360	Flowing	C
30Z1	GS	4-20-66	Gulf Oil Corp.						Ds			738		E
	OG	8-23-48		1948	2,009	R 11	N N		Un					
31M1	GS	4-27-66	U.S. Coast Guard	1936	194	R 12	S E		Un	Tc	1.0	74	61.58	C,L,W
	GS	1-17-44					T 5			Hpb	1.0			
	GS	7-10-42					L G			Bhc	.65			
35A1	GS	4-20-66	SEC		2.0	D 64	N N		S	Tc	0	1,050	1.88	
35C1	GS	4-20-66	SEC		2.5	D 60	N N		S	Tc	0	1,400	1.78	
35D1	GS	4-20-66	SEC		1.0	D 24	N N	1	S	Tc	0	1,120	Flowing	
35ES1	GS	4-20-66	SEC			N	N N		S			860	Seep	
35KS1	GS	4-20-66	SEC			N	N N		S			1,220	Seep	
36AS1	GS	4-19-66	SEC			N	N N		S			1,400	Seep	
36M1	GS	4-20-66	SEC		1.0	D 25	N N	2	S	Tc	0	620	Flowing	
36MS1	GS	4-20-66	SEC			N	N N		S			670	Seep	
36MS2	GS	4-20-66	SEC			N	N N		S			550	Seep	
T. 6 N., R. 36 W.														
6/36-1Z1	GS	4- 5-66	USAF						Ds			313.4		L
	CE	10-21-64		1964	34	A N	N N		T				Dry	
1Z2	GS	4- 5-66	USAF						Ds			304.3		L
	CE	1- 7-65		1965	30	A N	N N		T				Dry	
1Z3	GS	4- 5-66	USAF						Ds			323.7		L
	CE	1- 8-65		1965	40	A N	N N		T				Dry	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 6 N., R. 36 W.--Continued														
6/36-12Z1	GS	4- 5-66	USAF						Ds			496.3		L
	CE	12-29-64		1964	182	R	N N N		T					
12Z2	GS	4- 5-66	USAF						Ds			413.4		L
	CE	12-29-64		1964	120	A	N N N		T				Dry	
13Z1	GS	4- 5-66	USAF						Ds			459.1		L
	CE	12-10-64		1964	172		N N N		T					
13Z2	GS	4- 5-66	USAF						Ds			313.0		L
	CE	12-10-64		1964	50	A	N N N		T				Dry	
13Z3	GS	4- 5-66	USAF						Ds			352.6		L
	CE	12-15-64		1964	53	A	N N N		T				Dry	
13Z4	GS	4- 5-66	USAF						Ds			334.7		L
	CE	12-17-64		1964	40	A	N N N		T				Dry	
13Z5	GS	4- 5-66	USAF						Ds			474.4		L
	CE	12-21-64		1964	175	R	N N N		T					
13Z6	GS	4- 5-66	USAF						Ds			314.3		L
	CE	1-13-65		1965	40	A	N N N		T				Dry	
13Z7	GS	4- 5-66	USAF						Ds			353.5		L
	CE	1-19-65		1965	35	A	N N N		T				Dry	
14Z1	GS	4- 5-66	USAF						Ds			162.5		L
	CE	12-17-64		1964	52	A	N N N		T				Dry	
23R1	GS	5- 2-66	USAF						Ds			346		C,L
	D	1924		1924	135		8		Un	Lsd	0		120	
23R2	GS	4-27-66	USAF				12 T 7.5		Un	Hpb	2.0	346.8	158.24	C,L,T
	GS	12- 3-59							S	Tc	2.0		158.30	
	CE	12-30-43	U.S. Army (USA)	1943	174			215	Ps		-1.5		132.3	
23Z1	GS	4- 5-66	USAF						Ds			400.5		L
	CE	12-16-64		1964	30	A	N N N		T				Dry	
24J1	GS	5-10-66	USAF		3.2	D	29 N N		Un	Tc	0	800	.79	
24Z1	GS	4- 5-66	Amerada Petroleum Corp.						Ds			590		E
	O	6- 3-53		1953	1,884	R	12 N N		Un					

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 6 N., R. 36 W.--Continued														
6/36-24Z2	GS	4- 5-66	USAF						Ds			458.3		L
	CE	12-10-64		1964	80	A N	N N		T				Dry	
24Z3	GS	4- 5-66	USAF						Ds			369.0		L
	CE	12-21-64		1964	42	A N	N N		T				Dry	
24Z4	GS	4- 5-66	USAF						Ds			401.7		L
	CE	1-22-65		1965	50	A N	N N		T				Dry	
25H1	GS	5-10-66	SEC		4.0	D 70	N N	10	S	Tc	0	510	Flowing	C
25Z1	GS	4- 4-66	Intex Oil Co.						Ds			440		E
	OG	4- 9-48		1948	2,513	R 12	N N		Un					
25Z2	GS	4- 5-66	USAF						Ds			488.1		L
	CE	1-12-65		1965	49	A N	N N		T				Dry	
25Z3	GS	4- 6-66	USAF						Ds			629.6		L
	CE	1-15-65		1965	120	R N	N N		T					
25Z4	GS	4- 5-66	USAF						Ds			659.8		L
	CE	1-20-65		1965	130	N	N N		T					
26C1	GS	4-27-66	USN		476	12	S 3	3	Ps	Tcc	3.0	170	a109.67	T
26E1	GS	4-27-66	USN	1940	452.2	R 12	N N		Un	Tc	.1	150	105.86	C,L,T,W
	GS	3-13-41			476		L 5	12	Un	Tc	.5			
26G1	GS	4-27-66	SEC	1927	220.2	R 8	N N		Un	Tc	1.0	330	103.81	C,T,W
	GS	8-28-45					J 3	10	S					
		3-13-41			220									
26G2	GS	4- 5-66	Hollywood Oil Co.						Ds			330		La
	O	6- -25		1925	1,218	R								
26Z1	GS	4- 5-66	USAF						Ds			280		L
	CE	1- 8-65		1965	50	A N	N N		T				Dry	
26Z2	GS	4- 5-66	USAF						Ds			468.9		L
	CE	1-11-65		1965	30	A N	N N		T				Dry	
35Z1	GS	5- 4-66	Standard Oil Co.						Ds			125		La
	O	10-26-29		1929	2,013	12	N N		Un				Flowing	
36Z1	GS	4- 4-66	Intex Oil Co.						Ds			68		E
	OG	4-23-48		1948	2,507	R 12	N N		Un					

See footnotes at end of table.

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below (-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 6 N., R. 36 W.--Continued														
6/36-36Z2	GS	4- 4-66	Gulf Oil Corp.						Ds			98		E
	OG	8- 2-48		1948	2,284	R 11	N N		Un					
T. 7 N., R. 34 W.														
7/34-5KS1	GS	4-28-66	USAF			N	N N		Un			320	Flowing	C
7Z1	GS	4- 5-66	USAF						Ds			130		L
	USAF	7-15-58		1958	60	N	N N		T					
17Z1	GS	4- 5-66	Lompoc Petroleum Co.						Ds			180		
	OG	1933		1933	4,061									
18L1	GS	4-25-66	Federal Correctional Institute (FCI)						Ds			60.19		Wp
	GS	4-24-41	Santa Barbara County		25.0		L W		Un	Tc	-0.5		1.89	
18L2	GS	4-25-66	FCI	1941					Ds			60		
	GS	11-12-41								Tc	.6		5.20	
	GS	10-28-41								Tc	.6		5.16	
	GS	10- 1-41	USA			R 12				Tc	.6		5.16	
18L3	GS	4-25-66	FCI						Ds			60.3		L,Wp
	GS	1- 5-43	USA		72		N N		Un					
19H1	GS	4-26-66	FCI	1900					Ds			112.91		Wp
	GS	2-27-43	USA		110		L 5		Dm	Tc	.2		63.39	
	GS	6-24-41			110.0	R 8	L W		Dm,S	Tc	1.5		60.40	
19J1	GS	4-25-66	USAF	1941	182	R 18			Ps	Tap	1.0	61	56.57	C,L,P,T,W
	PGE	11- 1-55	USA				T 25	608	Ps					
19J2	GS	4-26-66	FCI	1917					Ds			70		C
	GS	10-13-41	USA		101		8 L G		Dm					
		1935											16	
19J3	GS	4-26-66	USAF			14	T 75		Ps	Tap	1.0	60	a79.0	C,E,L,P
	USAF	12-21-62											50	
	USAF	6- 8-62											49	
	CE	5-12-59		1959	161	R			Un	Tc	2.0		35.0	
19J4	GS	4-26-66	FCI			12	T 25		Ir	Tc	0	60	46.8	
19L1	GS	4-26-66	FCI	1941	135.8	R 18	N N		Un	Tc	.8	50	24.21	L
	GS	10-13-41	USA		180				Un	Tc	.8		11.05	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 34 W.--Continued														
7/34-19L2	GS	4-25-66	USAF			R 14	T 75		Ps	Tap	1.0	60	a95.4	C,E,L,P
	USAF	12-31-62											31	
	USAF	6- 8-62											31	
	CE	5-17-59		1959	156		T		Un	Tc	2.0		18	
19Q1	GS	4-26-66	USAF						Ds			60		E,L
	D	4-14-59		1959	180	R N	N N		T					
19Z1	GS	5- 9-66	USAF						Ds			60		E,L
	CE	5- 4-59		1959	200	N	N N		T	Lsd	0		18.0	
20C1	GS	4-28-66	FCI		96.3	12	L W		S	Tc	2.0	78	26.32	
20J1	GS	4-21-66	FCI	1905					Ds			75.83		Wp
	GS	10-13-41	USA		62.0	R 6	L W		Dm	Tf	1.2		15.23	
20K1	GS	4-20-66	FCI	1924					Ds			72		L
	GS	1941	USA		153	12			Un					
20K2	GS	4-20-66	FCI	1920	28.8	12			Ds	Tc	1.3	75	Dry.	
	GS	10-13-41	USA		140		T 25		Ir	Tc	1.3		13.91	
20K3	GS	4-20-66	FCI						Ds			75		
	GS	10-13-41	USA		42.0	6	L H		Dm	Tc	1.0		17.66	
20K4	GS	4-20-66	FCI	1941	144.5	R 18	N N		Un	Tc	1.0	75	b51.29	C,L,P,T
	PGE	11- 1-55	USA				T 60	1,130					29.8	
	GS	5- 4-42					T 60	1,600	Ps					
	GS	10-13-41			186					Tc	1.0		15.7	
20K5	GS	4-20-66	USAF				T 60		Ps	Tap	1.5	75	a68.9	C,L,P,T
	USAF	6-21-62											44.5	
	USAF	6- 6-62											43.5	
	D	12- 1-58		1958	177	R 14	N N	2,100	Un	Tc	2.0		20.0	
20L1	GS	4-20-66	USAF				T 75		Ps	Tap	1.0	80	a64.4	C,E,L,P,T
	USAF	12-21-62											48	
	USAF	6- 8-62											48	
	CE	4- 8-59		1959	184	R 14	N N	2,050	Un	Tc	2.0		35.0	
20M1	GS	4-21-66	FCI	1936					Ds			70		
	GS	10-14-41	USA		159.0	12	N N	1,200	Un	Tc			17.49	
20M2	GS	4-21-66	USAF		192	R 18	T 60	1,600	Ps	Hpb	1.0	70	a93.9	C,L,P,T,W
	CE	11- 4-41	USA	1941	197			1,770	Un	Lsd	0			

See footnotes at end of table.

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)		Type of pump and power		Yield (gpm)	Use	Measuring point		Altitude of lsd (feet)	Water level below lsd (feet)	Other data
												Description	Distance above or below(-) lsd (feet)			
T. 7 N., R 34 W.--Continued																
7/34-20N1	GS	4-21-66	FCI	1926							Ds			67.50		L,Wp
	GS	5- 5-41	USA		90.3		6	L			Un	Tc	1.8		11.0	
20N2	GS	4-20-66	FCI	1962	40.4	A	1¼	N	N		Un	Tc	3.3	50	14.22	C,L,W,Wp
20N3	GS	4-20-66	FCI	1962	38.4	A	1¼	N	N		Un	Tc	5.3	62	22.96	C,L,W,Wp
20R1	GS	4-21-66	FCI				14	T			Ir	Hpb	2.0	75	a78.4	C,E,L,T
	CE	4-25-59		1959	177	R				940	Un	Tc	2.0		26	
21E1	GS	4-20-66	FCI	1948	119.5	C	8	N	N	17	Un	Tc	1.1	82	30.22	C,L,W,Wp
	GS	11-19-48	USA		145			N	N		Un	Tc	1.1		19.50	
21J1	GS	4-21-66	FCI			R	12	T	G		Ir	Tc	4.0	75.83	23.37	C,L,T,Wp
	GS	4-13-41	Union Oil Co.		63.5				G			Tc	.1		7.25	
	D	1-20-30			80					375					12	
21J2	GS	4-21-66	FCI	1966				T	15		Ir	Tap	.5	80		
21N1	GS	4-21-66	FCI	1925		R	12	T	E		Ir	Hpb	1.0	81.32	33.79	C,L,Wp
	GS	6-27-41	USA		80			T		800	Ir	Tc	0		16.74	
21N2	GS	4-21-66	FCI	1925							Ds			82		L
	GS		USA		140	R										
21N3	GS	4-21-66	FCI								Ds			60		Wp
	GS						1½	N	N		Un					
21N4	GS	4-21-66	FCI								Ds			60		Wp
	GS						1½	N	N		Un					
21N5	GS	4-21-66	FCI								Ds			58		Wp
	GS						1½	N	N		Un					
21P1	GS	4-21-66	FCI								Ds			60.5		Wp
	GS						1½	N	N		Un					
21Z1	GS	4- 5-66	Texaco Inc.								Ds			80		E
	O	5-24-55		1955	2,722	R	12	N	N		Un					
22E1	GS	4-21-66	FCI	1948	87.7	R	8	L	N		Un	Tc	2.0	100	46.91	C,L
	GS	6-28-49			97			L	W	10	S	Tc	2.0		38.16	
29A2	GS	4-21-66	FCI								Ds			54		Wp
	DWR						1½									

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below (-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 34 W.--Continued														
7/34-29A3	GS	4-21-66	FCI				T E		Dm	Na		80		Wp
29A4	GS	4-21-66	FCI	1959					Ds			70		E,L
	GS	12-11-59	USA		190	R N	N N		T					
T. 7 N., R. 35 W.														
7/35-1Z1	GS	4- 5-66	USAF						Ds			430		L
	USAF	7-15-58			60	N	N N		T					
1Z2	GS	4- 5-66	USAF						Ds			440		L
	USAF	7-15-58			36	N	N N		T					
4Z1	GS	4- 5-66	USAF						Ds			335.8		L
	POA	11- 9-62		1962	101	R N	N N		T					
5Z1	GS	4- 5-66	Standard Oil Co.						Ds			320		La
	O	8- 5-29		1929	2,661	R 24	N N		Un					
6Z1	GS	4- 5-66	Murphy Bros., Ltd.						Ds			50		E
	OG	8-24-53		1953	1,821	R 9	N N		Un					
8Z1	GS	4- 5-66	USAF						Ds			169		L
	CR	5-17-60		1960	201	R N	N N		T				148	
10Z1	GS	4- 5-66	Anglo-Californian Oil Syndicate						Ds			400		
	OG	10-30-28		1909	3,490									
11Z1	GS	4- 5-66	W. H. Taylor						Ds			370		La
	OG	10- 1-30		1930	5,587	R 24	N N		Un					
11Z2	GS	4- 5-66	Walter F. Parker						Ds			370		E
	OG	12-10-53		1953	1,773	R 12	N N		Un					
12Z1	GS	4- 5-66	Anglo-Californian Oil Syndicate						Ds			360		
	OG	10-30-28		1909	2,100									
13N1	GS	4-25-66	USAF						Ds			46.50		C,Wp
	GS	4-24-41	USA		56.5	16	L W		Dm, S	Tc	0.7		5.02	
15P1	GS	9-15-65	USAF						Ds			25.60		Wp
	GS	4-24-41	USA		45.8	6	L W		Un	Tc	.16		10.13	
15R1	GS	9-15-65	USAF						Ds			30.37		Wp
	GS	4-24-41	USA		43.4	6	L W		Un	Tc	.97		5.28	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below (-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued														
7/35-16F1	GS	4-21-66	USAF	1925					Ds			13		L
	GS		USA		60		N N		T					
16G1	GS	4-21-66	USAF						Ds			18.20		C, Wp
	GS	4-24-41	USA		46.0	10	L W		Un	Tc	0		6.10	
16N1	GS	4-21-66	USAF	1925					Ds			17		L
	GS	1925	Packard Ranch		116		N N	200	T	Lsd	0		3	
17B1	GS	4-21-66	USAF						Ds			25.68		C,L,Wp
	GS	4-24-41	USA		31.5	12	L W		Dm,S	Tc	0		14.95	
		1926	Packard Ranch	1926	45									
17B2	GS	4-21-66	USAF						Ds			24.1		Wp
17K1	GS	4-21-66	USAF	1965	186.7	C 8	N N		Un	Tc	3.0	10	2.17	C,L
	GS	12- 1-65								Tc	3.0		1.34	
	GS	10-29-65								Tc	3.0		2.60	
	GS	9-27-65								Tc	3.0		2.92	
17M1	GS	4-20-66	USAF	1964	165.0	C 8	N N		O	Tc	1.75	9.74	3.22	C,L,W
	DWR	4- 8-65						18						
17Z1	GS	4- 5-66	USAF						Ds			10		L
	LBJ	10-17-41	USA		36	N	N N		T					
17Z2	GS	4- 5-66	USAF						Ds			10		L
	LBJ	10-17-41	USA		36	N	N N		T					
17Z3	GS	4- 5-66	USAF						Ds			10		L
	LBJ	10-17-41	USA		38	N	N N		T					
17Z4	GS	4- 5-66	USAF						Ds			10		L
	LBJ	10-17-41	USA		36	N	N N		T					
18H1	GS	4-21-66	Santa Barbara County	1943	111.5	C 9	N N	70	O	Tc	4.0	5.87	1.78	C,L,T,W,Wp
18H2	GS	4-21-66	U.S. Geol. Survey	1964	187.8	C 8	N N		O	Tc	1.86	7.23	3.07	C,L,W
	GS	7-15-64			192			100						
18J1	GS	4-21-66	Santa Barbara County	1927		R 10	C E		Dm			6.20		C,L,Wp
	GS	4-18-41			111.2				Un	Tc	2.45		1.37	
18J2	GS	4-21-66	Santa Barbara County	1963	121.7	C 9	N N	60	Un	Tc	4.0	7.38	3.86	C,L,T,W,Wp

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued														
7/35-20H1	GS	4-22-66	USAF						Ds			17.80		L,Wp
	GS	10-28-42	USA		17.5	R 12	N N		Un	Tc	0.8		2.97	
	D		N. Huyck		133									
20J1	GS	4-28-66	USAF		20.5		N N		Un	Tc	.67	19.07	6.26	C,L,W,Wp
	GS	5- 1-41	USA		108.0	6	L W		Un	Tc	1.0			
	D	6-18-28		1928	125	6							7	
20J2	GS	4-21-66	USAF		5.8	D 60	N N		Un	Tc	1.5	53	1.85	
	GS	5- 1-41	USA		9.3		L W		Un	Tc	1.5		1.5	
20J3	GS	4-21-66	USAF		21.0	33			Ds	Tc	1.0	83.85	Dry	Wp
	GS	5- 1-41	USA		26.2		N N		Un	Tc	1.0		16.10	
20J4	GS	4-21-66	USAF						Ds			18.8		L,T
	D	6-27-26	USA	1926	160	16	N N	1,000	Un				12	
20J5	GS	4-21-66	USAF						Ds			20		L
	GS	1943	USA		100	R			Ds					
20J6	GS	4-21-66	USAF		2.2	D 27	N N		Ds	Tc	0	50	Dry	
20J7	GS	4-21-66	USAF		2.5	D 48	N N		Ds	Tc	0	20	Dry	
20K1	GS	4-21-66	USAF		4.9		N N		S	Tc	0	50	.26	
	GS	5- 1-41	USA						Dm, S				Flowing	
20K2	GS	4-21-66	USAF						Ds			67.07		Wp
	GS	5- 1-41	USA		5	D 48	N N		Un	Tc	1.3		+.13	
20K3	GS	4-21-66	USAF						Ds			40		
	GS	5- 1-41	USA		9.3	D 48	C 1	8	Ir	Tc	.5		.43	
20K4	GS	4-21-66	USAF						Ds			18.8		
	GS	10-28-42	USA		2.5	R 6	N N		Un	Tc	1.0		.70	
20K5	GS	4-21-66	USAF		2.7	D 48	N N		Un	Tcc	.5	60	1.68	
20Z1	GS	4- 5-66	Gaviota Oil Co.						Ds			225		
	OG	8- 3-29		1929	2,662									
21D1	GS	4-26-66	USAF	1924					Ds			17.91		C,L,Wp
	GS	3-27-41	USA		180	R 16	T 40	1,500	Dm, Ir	Hpb	.3		6.96	
21G1	GS	4-26-66	USAF			R 12	T E			Na		23.56		L,Wp
	GS	3-27-41	USA		182		T 20		Ir	Bhc	.4		8.42	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued														
7/35-21H1	GS	4-26-66	USAF			R 16	N N		Un	Hpb	1.0	23.99		C,L,Wp
	GS	9-20-41	USA		176		T E		Ir	Na				
21J1	GS	4-25-66	USAF						Ds			24.0		L
	GS	10-28-42	USA		191				Un					
21L1	GS	4-26-66	USAF	1921					Ds			20		C,L,Wp
	GS	3-27-41	USA		190	R 12	T 20	1,000	Ir	Hpb	1.4		8.40	
21L2	GS	4-26-66	USAF						Ds			19.52		Wp
21L3	GS	4-26-66	USAF						Ds			23		
	GS	4-10-43	USA				L E		Dm	Na				C
21L4	GS	4-22-66	USAF	1954		C 16	T 100		Ps	Hpb	2.0	20	10.45	C,L,P,T,W, Wp
	GS	12-13-54	USA		181		T 60	1,300	Ir	Hpb	2.0		8.68	
21M1	GS	4-26-66	USAF						Ds			22.68		Wp
	GS	3-27-41	USA		21	D 18	L W		S	Tc	1.5		12.96	
21R1	GS	4-25-66	USAF						Ds			26.43		C,Wp
	GS	4-24-41	USA		82.4	6	L W		Dm	Tc	3.2		4.63	
22A1	GS	4-26-66	USAF	1924					Ds			29.43		L,Wp
	GS	1941	USA		145	R 16	N N		Un					
22F1	GS	4-26-66	USAF	1924		R 16	T N		Un	Tc	.3	25.79	9.00	C,L,Wp
	GS	4-24-41	USA		173		T 50	1,600	Ir	Hpb	1.0		7.17	
22F2	GS	4-25-66	USAF	1947					Ds			19.12		Wp
	GS	10-21-47	USA		12	A 2				Tc	.5		5.37	
22F3	GS	4-26-66	USAF		183.7	C 16	N N		Un	Tcc	.7	20	10.47	L,T
	GS	2- 7-55	USA				T 30		Ir	Bhc	.3		10.69	
	D	3-26-54		1954	190			1,300	Ir				14	
22L1	GS	4-25-66	USAF			12	T 15		Ir	Bhc	0	30	14.42	C,L,T
	D	8- -34	C. Ingram	1934	219			1,080					24.6	
22M1	GS	4-25-66	USAF			12	T 15			Hpb	1.0	28.84	6.27	C,L,W,Wp
	GS	4-24-41	USA		180		T 15		Ir	Na				
22M2	GS	4-25-66	USAF	1947					Ds			28.20		L,Wp
	GS	10-20-47	USA		22	A 2			O	Tc	.8		14.08	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued														
7/35-22N1	GS	4-26-66	USAF						Ds			26		
	GS	3- 5-54											Dry	
	GS	7- 3-53								Tc			8.44	
	GS	4-24-41	USA			6	L W		Dm, S	Na				
22N2	GS	4-25-66	USAF		183.6	C 8	N N	380	O	Tc	1.3	24	4.49	C,L,T,W
	D	7-16-58	USN	1958	194	C 8	N N	75	Un					
22P1	GS	4-25-66	USAF						Ds			29.02		C,Wp
	GS	4-10-41	USA			R 5	L W		Dm, S	Tc	1.0		4.52	
23A1	GS	4-26-66	USAF						Ds			43		L
	D	1941	USA	1941	200	R N	N N		Un				Dry	
23B1	GS	4-26-66	USAF						Ds			38		C,L,P,T
	PGE	11- 1-55						363					18.3	
	GS	5- 4-42	USA		190	R 18	T 50	1,600	Ps					
	D	9-30-41		1941				1,800					22.7	
23D1	GS	4-26-66	USAF	1941					Ds			35		L,T
	GS	11-12-41	USA		206	R 18		100		Tc	.7		26.73	
24B1	GS	4-25-66	FCI	1941					Ds			48		L
	GS	9-22-41	USA		180	R 18	N N		Un	Tc	1.7		18.3	
24B2	GS	4-25-66	FCI	1941					Ds			48		L
	GS	1941	USA		202	R 18	N N	1,500	Un	Tc	1.7		15.8	
24H1	GS	4-25-66	FCI			16	T N		Un	Tc	.4	48.01	22.27	C,L
	GS	9-22-41	USA		182		T E		Ir					
24H2	GS	4-25-66	FCI	1941		R 18	N N		Un	Na		48		C,L,P
	PGE	11- 1-55	USA										20.8	
	GS	5- 4-42			202		T 50	1,450	Ps				17.5	
26N1	GS	4-27-66	USAF			14	N N		Un	Bhc	1.0	40	4.19	
26P1	GS	4-26-66	USAF	1954	133.7	C 16	N N		Un	Tc	1.0	40	7.76	L,T
	GS	2- 3-55	USA				N N		Un				Flowing	
	D	5-10-54			176			200					Flowing	
27C1	GS	4-25-66	Southern Pacific Co.	1925		R 15	T E					28		
	GS	4- 9-41			151		T G		Un					
27C2	GS	4-25-66	Southern Pacific Co.	1912		R 15	N N		Un	Na		32.42		C,Wp
	GS	4- 9-41			118				O	Tc	0		5.75	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued														
7/35-27C3	GS	4-25-66	USAF	1926		R 12	T N		Un	Tc	0	28.44	6.74	W,Wp
	GS	4-18-41	USA		158		T		Un	Tc	0		2.73	
27F1	GS	4-26-66	USAF			R 12	N N		0	Tcc	.3	27.63	3.25	C,L,W,Wp
	GS	10-28-42	USA		123		T 20		Un	Hpb	.4			
27H1	GS	4-26-66	USAF	1937		R 16	T N		Un	Hpb	.5	27	6.11	L,Wp
	GS	5- 1-41	USA		142		T 20	900	Ir	Tc	.5		2.62	
27J1	GS	4-26-66	USAF						Ds			28.44		L,Wp
	GS				137		N N		T					
27K1	GS	4-26-66	USAF						Ds			30		L,Wp
	GS	5- 1-41	USA		167.2		16		Dm	Tc	1.3		3.96	
	D	7- -35	S. Colli	1935	182									
27K2	GS	4-26-66	USAF						Ds			38.10		Wp
	GS	5- 1-41	USA		5	D 8	L W		Dm, S	Hpb	.8			
27P1	GS	4-27-66	USAF	1963	582	R 7	N N		Un	Tc	2.5	260	222.76	C,E,L,W
	DWR	12-12-63						8						
28A1	GS	4-27-66	USAF						Ds			34.50		Wp
28H1	GS	4-27-66	USAF						Ds			41.16		C,Wp
	GS	5- 1-41	USA				J ½	500	Dm,S	Na				
28H2	GS	4-27-66	USAF						Ds			38.55		Wp
	GS	5- 1-41	USA		67.4		12		Dm	Tc	1		a11.38	
28K1	GS	4-27-66	USAF	1936					Ds			76.72		Wp
	GS	5- 1-41	USA		40	R 8	L 3/4		Dm, S	Na				
28K2	GS	4-27-66	USAF	1958	232.9	C 8	N N	5	0	Tc	1.1	89	17.16	C,L,W
	DWR	12-12-63						10						
28R1	GS	4-27-66	USAF	1962	510	R 7	N N		0	Tc	1.0	120	60.55	C,E,L,W
	DWR	12-11-63						10						
30G1	GS	4-27-66	USAF	1958	276.9	C 8	N N	.04	0	Tc	1.1	130	97.24	C,L,W
31B1	GS	4-27-66	USAF	1962					Ds			85		E,L
	GS	2-21-63	USN		472	R N	N N		T					
31J1	GS	4-26-66	USAF	1962	557.5	R 6	N N		0	Tc	2.5	160	50.39	C,E,L,W
	DWR	12-11-63						10						
	GS	3-12-63	USN		625		N N		0	Tc	2.5			

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)		Type of pump and power		Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued																
7/35-31M1	GS	4-27-66	USAF	1963							Ds			200		E,L
	GS	3-12-63	USN		428	R	N	N	N		T					
31M2	GS	4-27-66	USAF				16	N	N		Un	Tc	5.0	200		
31Z1	GS	4- 5-66	Bear Creek Oil and Mining Co.								Ds			360		
	OG	1907		1907	3,500						Un					
31Z2	GS	4- 5-66	USAF								Ds			171.9		L
	CE	11-20-64		1964	40	A	N	N	N		T				Dry	
31Z3	GS	4- 5-66	USAF								Ds			218.0		L
	CE	11-24-64		1964	40	A	N	N	N		T				Dry	
31Z4	GS	4- 5-66	USAF								Ds			256.1		L
	CE	11-28-64		1964	60	A	N	N	N		T				Dry	
31Z5	GS	4- 5-66	USAF								Ds			260.5		L
	CE	12- 1-64		1964	70	A	N	N	N		T				Dry	
31Z6	GS	4- 5-66	USAF								Ds			249.0		L
	CE	12-17-64		1964	70	A	N	N	N		T				Dry	
32N1	GS	4-26-66	USAF		214.8		8	N	N		O	Tc	11.2	175	5.83	C,L,T,W
	GS	7-23-62										Tc	1.4			
	D	5-27-58	USN	1958	300	C	8	N	N	21						
33A1	GS	4-27-66	USAF								Ds			122.23		Wp
33E1	GS	4-27-66	USAF	1962							Ds			370		E,L
	GS	12-21-63	USN		1,004	R	N	N	N		T					
33J1	GS	4-27-66	USAF		186.0		8	N	N	125	O	Tc	1.0	177	b126.60	C,L,T,W
	D	6-18-58	USN	1958	380	C	8	N	N	50	Un					
33J2	GS	4-27-66	USAF	1958		R	14	T	100	900	Ps	Tap	1.0	177	a177.8	C,E,L,P,T
	GS	10-17-58	USN		465					1,200						W
33J3	GS	4-27-66	USAF	1960	518	R	14	T	75	500	Ps	Tap	.56	220	176.3	C,L,P,W
33M1	GS	4-27-66	Intex Oil Co.								Ds			480		E,La
	O	9-14-54		1954	2,799		12	N	N		Un					
33M2	GS	4-27-66	USAF	1963							Ds			450		E,L
	GS	3-12-63	USN		926		N	N	N		T					

See footnotes at end of table.

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 7 N., R. 35 W.--Continued														
7/35-33R1	GS	4-27-66	USAF	1958	425	C 8	N N	180	O	Tc	1.5	216	115.51	C,L,T,W
34K1	GS	4-27-66	USAF	1963	0				Ds			500		E,L
	GS	2-21-63	USN		1,000	R N	N N		T					
35C1	GS	4-27-66	USAF						Ds			36.12		L,Wp
	GS		USA		105	R 12								
35C2	GS	4-27-66	USAF	1934					Ds			36.3		C,L,T,Wp
	GS	5- 1-41	USA		122	R 16	T 25	1,050	Ir					
35C3	GS	4-27-66	USAF						Ds			35.71		Wp
	GS	1- 5-43	USA			3	N N		Un	Tc	4.45			
35C4	GS	4-27-66	USAF	1947					Ds			36.68		L,Wp
	GS	10-21-47	USA		9	A 2				Tc	1.0		3	
35C5	GS	4-27-66	USAF	1955					Ds			40		L,T
	GS	10-29-55	USA		157	C 16	N N	350	Un				1.75	
35D1	GS	4-27-66	USAF	1939	80	R 6	J ½		Un	Tcc	0	40	16.86	
35D2	GS	4-27-66	USAF	1963	152.4	R 7	N N		O	Tc	2.0	70	16.24	C,E,L,W
	DWR	12-12-63						10						
T. 7 N., R. 36 W.														
7/36-36Z1	GS	4-5-66	Keystone Petroleum Corp.						Ds			200		La
	OG	12-12-29		1929	3,002	R 16	N N		Un					
36Z2	GS	4- 5-66	USAF						Ds			200		L
	CE	12- 8-64		1964	60	A N	N N		T				Dry	
T. 8 N., R. 34 W.														
8/34-4N1	GS	4-28-66	USAF	1950	180	C 6	L W	15	S	Tcc	1.25	460	139.96	L
	GS	2-14-52								Tc	1.0		133	
		6- 9-50											136	
5Z1	GS	4- 6-66	USAF						Ds			430		L
	CE	4- 4-60		1960	70	N	N N		T					
7Q1	GS	4-28-66	USAF		41.2	8	L W		Un	Tc	1.0	280	3.03	
7QS1	GS	5- 9-66	USAF			N	N N		Un			280	Seep	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 8 N., R. 34 W.--Continued														
8/34-7Z1	GS	4- 6-66	USAF						Ds			570		L
	USAF	7-15-58			50	N	N N		T					
8/34-15F1	GS	4-29-66	USAF		86.1	R 8	L W		S	Tc	2.5	350	72.31	
	GS	12- 8-43	USA				L W		Dm,S					
16FS1	GS	4-29-66	USAF			N	N N		Un			290	Seep	
	GS	1-14-59						2	S				Flowing	
16G1	GS	4-29-66	USAF			— 14	T 60	200	Rc	Tap	8.33	291	Flowing	C,L,P,T,W
	D	4-30-58		1958	687	R		1,180						
16G2	GS	4-29-66	USAF			14	T 50		Ps	Tap	1.0	320	18.39	C,E,L,T
	D	12-18-64		1964	700	R		1,500					18	
16J1	GS	4-29-66	USAF			14	T 60		Ps	Tap	1.0	320	6.56	C,E,L,P,T
	D	10- 2-61		1961	578	R		1,620					2.5	
17B1	GS	4-28-66	USAF						Ds			320		C
	GS	12- 8-43	USA		40	R 16			Un	Tc	1.3		.01	
17B2	GS	4-28-66	USAF						Ds			320		
	GS	10-23-59											Flowing	
	GS	7-22-58											Flowing	
	GS	12- 8-43	USA		25	D 48	L		Un				Flowing	
17FS1	GS	4-29-66	USAF						Ds			280	Dry	
	GS	2- -58				N	N N		Un				Flowing	
17K1	GS	4-30-66	USAF			6				Hpb	2.62	273	+1.10	C,W
	DWR	10-26-60						1.5						
18C1	GS	4-28-66	USAF	1957					Ds			200		L,T
	D	7- 5-57	USA		75	C 8	N N	70	T				17.5	
18Z1	GS	4- 6-66	Union Oil Co.						Ds			799		E
	O	9- 4-52		1952	3,848									
20Z1	GS	4- 5-66	Union Oil Co.						Ds			849		E
	O	7- 2-54		1954	5,282									
20Z2	GS	4- 6-66	Union Oil Co.						Ds			800		
	O	8- -52		1952	4,262									
29R1	GS	5- 9-66	USAF		8.7	10	N N		Ds	Tc	.5	410	Dry	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point		Altitude of lsd (feet)	Water level below lsd (feet)	Other data
										Description	Distance above or below(-) lsd (feet)			
T. 8 N., R. 34 W.--Continued														
8/34-29Z1	GS	4- 6-66	Sudden Oil Co.						Ds			600		
	OG				1,700									
29Z2	GS	4- 6-66	Union Oil Co.						Ds			510		
	O	10- -09		1909	4,043									
30Z1	GS	4- 5-66	Union Oil Co.						Ds			480		La
	OG	8-22-08		1905	4,455	C 12								
T. 8 N., R. 35 W.														
8/35-3E1	GS	4- 6-66	Union Oil Co.						Ds			320		E
	O	8-25-52		1952	3,893									
3M1	GS	4- 6-66	Union Oil Co.						Ds			320		E
	O	4-13-53		1953	3,763									
3Z1	GS	4- 6-66	Union Oil Co.						Ds			300		E
	O	9-25-54		1954	4,129									
3Z2	GS	4- 6-66	Union Oil Co.						Ds			360		E
	O	11-22-55		1955	3,725									
3Z4	CE	4-23-58	USAF	1958	182	A 8	T N	52	T	Hpb	1.5	402	80.5	C,L,T,W
3Z5	GS	1-21-66	USAF						Ds			402.6		L
	CE	5- 4-58		1958	220	A N	N N		T					
3Z6	GS	1-24-66	USAF						Ds			439		L
	CE	6- 5-58		1958	50	A N	N N		T					
3Z7	GS	1-24-66	USAF						Ds			495		L
	CE	6- 7-58		1958	180	A N	N N		T				44	
4H1	GS	4- 6-66	Union Oil Co.						Ds			290		E
	O	6-22-53		1953	3,250									
4J1	GS	4- 6-66	Union Oil Co.						Ds			310		E
	O	6- 2-53		1953	3,499									
4Z1	GS	4- 6-66	Union Oil Co.						Ds			240		E
	O	9- 4-53		1953	2,429									
5Z1	GS	4- 6-66	USAF						Ds			180		L
	USAF	7-15-58		1958	38	N	N N		T					

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 8 N., R. 35 W.--Continued														
8/35-5Z2	GS	4- 6-66	USAF						Ds			200		L
	USAF	7-15-58		1958	58	N	N N		T					
7R1	GS	4-28-66	USAF						Ds			40		C,L,T
	D	7- 1-57		1957	100	C 8		100	Un				2.5	
7Z1	GS	4- 6-66	USAF						Ds			120		L
	USAF	7-15-58		1958	60	N	N N		T					
7Z2	GS	4- 6-66	USAF						Ds			80		L
	USAF	7-15-58			76	N	N N		T					
7Z3	GS	4- 6-66	USAF						Ds			164.9		L
	CE	4-28-60		1960	201	R N	N N		T				112	
8Z1	GS	4- 6-66	USAF						Ds			120		L
	USAF	7-15-58		1958	58	N	N N		T					
8Z2	GS	4- 6-66	USAF						Ds			80		L
	USAF	7-15-58		1958	48	N	N N		T					
8Z3	GS	4- 6-66	USAF						Ds			80		L
	USAF	7-15-58		1958	42	N	N N		T					
9G1	GS	4-28-66	USAF	1964					Ds			250		L
	GS	10- 6-64			80	C N	N N	3	T					
9H1	GS	4-28-66	USAF	1964					Ds			240		L
	GS	10- 8-64			60	C N	N N		T					
10D1	GS	4-28-66	USAF						Ds			280		
	GS	3- 5-58	USA		8	D 120			Un	Tcc	0			
10J1	GS	6-21-65	USAF	1965	42	A 1½	N N		O	Tc	1.8	118	11.77	L,W
11FS1	GS	4-28-66	USAF						Ds			220		
	GS	7-22-58	USA										Flowing	
11Z1	GS	4- 6-66	Union Oil Co.						Ds			130		
	OG	10- -54		1954	4,174									
14Z1	GS	4- 6-66	USAF						Ds			487.2		L,W
	POA	11-20-62		1962	96	R	N N	3	T				44.5	
15E1	GS	4-28-66	USAF						Ds			50		L
	GS	12-10-43	USA		642	R 12	N N		Un				9	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)		Type of pump and power		Yield (gpm)	Use	Measuring point		Altitude of lsd (feet)	Water level below lsd (feet)	Other data
												Description	Distance above or below(-) lsd (feet)			
T. 8 N., R. 35 W.--Continued																
8/35-15E2	GS	4-28-66	USAF								Ds			50		L
	D	7- 3-57		1957	42	C	8	N	N		Un				20	
15E3	GS	4-28-66	USAF	1965							Ds			50		L,W
	GS	1965			73	A	1½	N	N		O					
16E1	GS	6-21-65	USAF	1965	50	A	1½	N	N		O	Tc	3.0	50		L,W
17B1	GS	4-28-66	USAF								Ds			40		L,T
	GS	2- -59													3.6	
	D	7- 1-57		1957	70	C	8	N	N	70	Un				3.5	
28Z1	GS	4- 5-66	USAF								Ds			363.9		L,W
	POA	11-15-62		1962	94	R		N	N		T				12.5	
31Z1	GS	4- 5-66	USAF								Ds			280.2		L
	CE	5-21-60		1960	200		N	N	N		T					
T. 8 N., R. 36 W.																
8/36-13Z1	GS	4- 6-66	USAF								Ds			143.0		L
	CE	2-19-58		1958	40	R	N	N	N		T				Dry	
23Z1	GS	4- 6-66	USAF								Ds			126.0		L
	CE	4-12-57		1957	64		N	N	N		T					
23Z2	GS	4- 6-66	USAF								Ds			90		L
	CE	11-19-57		1957	73		N	N	N		T					
23Z3	GS	4- 6-66	USAF								Ds			104		L
	CE	10-19-57		1957	63		N	N	N		T					
24Z1	GS	4- 6-66	USAF								Ds			198.9		L
	CE	2-20-58		1958	58		N	N	N		T					
24Z2	GS	4- 6-66	USAF								Ds			218.6		L
	CE	4-12-57		1957	43		N	N	N		T					
24Z3	GS	4- 6-66	USAF								Ds			184.4		L
	CE	4-12-56		1956	74		N	N	N		T					
24Z4	GS	4- 6-66	USAF								Ds			200		L
	USAF	7-15-58			36		N	N	N		T					
25Z1	GS	4- 6-66	USAF								Ds			60		L
	USAF	7-15-58			32		N	N	N		T					

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 9 N., R. 34 W.														
9/34-29Z1	GS	4- 6-66	Shell Oil Co.						Ds			653		La
	O	12-19-18		1918	3,951			3					600	
32P1	GS	4-28-66	USAF		77.9	9	L W		S	Tc	1.0	480	15.91	
33Z1	GS	4- 6-66	West Hausna Oil Co.						Ds			600		La
	OG	10- -32		1932	4,042	16			Un					
33Z2	GS	4- 6-66	Hogan Petroleum Co.						Ds			829		La
	OG	8-24-39		1939	4,155	R 11								
T. 9 N., R. 35 W.														
9/35-6E1	GS	5-11-66	USAF		3.6	D 24	N N		Un	Tc	1.0	1,320	1.93	
7AS1	GS	5-11-66	USAF			N	N N	.1	Un			880	Flowing	
7AS2	GS	5-11-66	USAF			N	N N	.1	Un			840	Flowing	
7BS1	GS	5-11-66	USAF			N	N N		Un			680	Seep	
7BS2	GS	5-11-66	USAF			N	N N		Un			600	Seep	
7ES1	GS	5-12-66	USAF			N	N N		Un			260	Seep	C
7LS1	GS	5-11-66	USAF			N	N N	.1	Un			280	Flowing	
7PS1	GS	5-11-66	USAF			N	N N		Un			200	Seep	C
7PS2	GS	5-11-66	USAF			N	N N		Un			170	Seep	
8D1	GS	5-11-66	USAF		4.0	D 48	N N		S	Tc	0	800	2.55	
8E1	GS	5-11-66	USAF			D 3/4	N N	.3	S			720	Flowing	C
8ES1	GS	5-11-66	USAF			N	N N		Un			800	Seep	
17M1	GS	5-10-66	USAF			3/4	N N	.5	Un			400	Flowing	C
17Z1	GS	4- 6-66	USAF						Ds			562		L
	CE	6-22-60		1960	60	N	N N		T				29.0	
17Z2	GS	4- 6-66	USAF						Ds			250.5		L
	POA	12- 6-62		1962	111	R N	N N		T					

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)		Type of pump and power		Yield (gpm)	Use	Measuring point		Altitude of lsd (feet)	Water level below lsd (feet)	Other data
												Description	Distance above or below(-) lsd (feet)			
T. 9 N., R. 35 W.--Continued																
9/35-17Z3	GS	4- 6-66	USAF				N	N	N		Ds			537.2		L
	POA	12-16-62		1962	110	R				1.1	T				74	
18DS1	GS	5-12-66	USAF				N	N	N		Un			10	Seep	
18ES1	GS	5-12-66	USAF				N	N	N		Un			10	Seep	
18GS1	GS	5-10-66	USAF				N	N	N	.5	Un			140	Flowing	
18HS1	GS	5-10-66	USAF				N	N	N		Un			200	Seep	
18HS2	GS	5-10-66	USAF				N	N	N	.3	Un			180	Flowing	C
18L1	GS	4-28-66	USAF		96.6		8	T	5	48	Dm	Hpb	1.0	80	73.01	C,L,T
	CE	5-17-61		1961	99	C	8			31					73	
18Z1	GS	4- 6-66	USAF								Ds			78.8		L
	CE	6- 5-60		1960	100		N	N	N		T				68.5	
18Z2	GS	4- 6-66	USAF								Ds			174.6		L
	POA	12- 4-62		1962	110		N	N	N		T					
18Z3	GS	4- 6-66	USAF								Ds			74.8		L,T,W
	POA	12- 4-62		1962	110	R	5	N	N	86	T				32.4	
19Z1	GS	4- 6-66	USAF								Ds			175.2		L
	POA	12-17-62													96.3	
	POA	12 -6-62													112.0	
	POA	11-30-62													123.5	
	POA	11-28-62		1962	130						T				128.0	
20J1	GS	4-28-66	USAF		68		6	T	5		Dm	Hpb	.5	100	12.75	C,L,T
	D	10- 1-60		1960		R				60					15	
20Z1	GS	4- 6-66	USAF								Ds			290		L
	CE	5-19-60		1960	100		N	N	N		T					
20Z2	GS	4- 6-66	USAF								Ds			297		L
	CE	6- 9-60		1960	100		N	N	N		T					
20Z3	GS	4- 6-66	USAF								Ds			190		L
	CE	3-30-60		1960	74		N	N	N		T					
21CS1	GS	5-10-66	USAF				N	N	N		Un			240	Seep	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 9 N., R. 35 W.--Continued														
9/35-27Z1	GS	4- 6-66	Union Oil Co.						Ds			424		E
	O	8- 9-48		1948	2,205									
27Z2	GS	4- 6-66	Union Oil Co.						Ds			421		
	OG	11- -48		1948	1,664									
28Z1	GS	4- 6-66	USAF						Ds			245		L
	CE				65		N N N		T					
32Z1	GS	4- 6-66	USAF						Ds			180		L
	USAF	7-15-58		1958	80		N N N		T					
34Z1	GS	1-21-66	USAF						Ds			326		L
	CE	1-27-58		1958	181	A	N N N		T				37	
34Z2	GS	1-21-66	USAF						Ds			528		L
	CE	1-30-58		1958	85	A	N N N		T				55	
34Z3	GS	1-21-66	USAF						Ds			496		L
	CE	1-30-58		1958	57	A	N N N		T				39.5	
35Z1	GS	1-21-66	USAF						Ds			559		L
	CE	2-14-58		1958	83	A	N N N		T				76.0	
35Z3	GS	1-21-66	USAF						Ds			559		L
	CE	3-15-58		1958	45	A	N N N		T				Dry	
36CS1	GS	4-28-66	USAF				N N N		Un			660	Seep	
T. 9 N., R. 36 W.														
9/36-1AS1	GS	5-11-66	USAF				N N N		S			1,000	Flowing	
1AS2	GS	5-11-66	USAF				N N N		Un			920	Seep	
1CS1	GS	5-11-66	USAF				N N N	1	Un			880	Flowing	
1CS2	GS	5-11-66	USAF				N N N	1	Un			880	Flowing	
1NS1	GS	5-12-66	USAF				N N N	2	Un			100	Flowing	C
1PS1	GS	4-28-66	USAF				N N N		Dm			280	Seep	C
1Z1	GS	4- 6-66	USAF				N N N		D			150		L
	CE	5- 6-60		1960	101	R	N N N		T				72	

USGS well number	Other numbers and source of data	Date of observation	Owner or user	Year completed	Depth of well (feet)	Type and diameter (inches)	Type of pump and power	Yield (gpm)	Use	Measuring point: Description	Measuring point: Distance above or below(-) lsd (feet)	Altitude of lsd (feet)	Water level below lsd (feet)	Other data
T. 9 N., R. 36 W.--Continued														
9/36-2JS1	GS	5-12-66	USAF			N	N N		Un			20	Seep	
2Z1	GS	4- 6-66	USAF						Ds			146.7		L,W
	POA	11-15-62		1962	107	4	N N	2.2	T				87.2	
11Z1	GS	4- 6-66	USAF						Ds			100		C,L
	CE	5-20-60							T				49	
	CE	5-10-60		1960	99	N	N N	.7	T				42.0	
12QS1	GS	5-12-66	USAF			N	N N	.1	Un			100	Flowing	
12QS2	GS	5-12-66	USAF			N	N N		Un			80	Seep	
12Z1	GS	4- 6-66	USAF						Ds			261.2		L,W
	POA	11-21-62		1962	124	R 4	N N		T				119.5	
13AS1	GS	5-12-66	USAF			N	N N	.1	Un			20	Flowing	

a. Well being pumped.

b. Nearby well being pumped.

Table 2.--Cross index of well numbers

In part 1 the USGS well number is referenced to designations used by the Air Force and to other designations associated with that well. The Camp Cooke well numbers were assigned by the U.S. Army before Camp Cooke became Vandenberg Air Force Base. The abbreviations used are: FCI Federal Correctional Institute, USGS U.S. Geological Survey, USN U.S. Navy. In part 2 the USGS number is referenced to the oil-well owner and the owner's number.

USGS well number	Vandenberg A.F.B. well designation	Other designation
	Part 1. Water-Well Numbers	
6N/35W- 2D1		USGS test well 10
5F1		5
15J1		7
16P1		8
21D1		9
22J1	Tranquillon Mountain Spring	
31M1		Coast Guard Life Boat Station well
6N/36W-23R2		Army well
25H1		Red Tank Spring
26E1		Navy well
26G1		Sudden well
7N/34W-18L1		Camp Cooke 119-A
18L3		98-B
19H1		98-A
19J1	Supply well 3	49
19J2		98-C
19J3	Supply well 10	
19J4		FCI irrigation well 4
19L1		Camp Cooke 47
19L2	Supply well 12	
19Q1	Test well 8	
19Z1	Test well 11	
20K2		Camp Cooke 75
20K3		75-A
20K4	Supply well 5	54
20K5	Supply well 5A	
20L1	Supply well 6	
20M2	Supply well 4	Camp Cooke 51
20R1		FCI irrigation well 7
21J1		Camp Cooke 48
21J2		New FCI irrigation well
21N1		FCI irrigation well 2
21N2		Camp Cooke 63-A
21N3		R61-C
21N4		R61-D
21N5		R61-E
21P1		R50
29A4	Test well 9	

USGS well number	Vandenberg A.F.B. well designation	Other designation
7N/35W-13N1		Camp Cooke 136
15P1		170
15R1		160-A
16G1		178-A
17B1		178
17B2		178-X
18J1		183
20H1		172
20J1		175-A
20J3		175-C
20J5		175-X
20K2		175-B
20K4		175
21D1		177
21G1		167
21H1		169
21J1		167-X
21L1		171-X
21L2		171
21L4	South base well 2	
21M1		Camp Cooke 171-A
21R1		163
22A1		160
22F1		165
22L1		158-A
22M1		163-C
22N1		163-R
22N2		USGS test well 11
22P1		Camp Cooke 162
23A1		40
23B1	Supply well 1	38
23D1		36
24B1		44
24H1		119
24H2	Supply well 2	45
27F1		161
27P1		USN test well 3
28A1		Camp Cooke 163-B
28K1		163-E
28K2		USGS test well 3
28R1		USN test well 6
30G1		USGS test well 1
31B1		USN test well 1

USGS well number	Vandenberg A.F.B. well designation	Other designation
7N/35W-31J1		USN test well 8
31M1		9
32N1		USGS test well 4
33A1		Camp Cooke 163-F
33E1		USN test well 2
33J1		USGS test well 6
33J2	South base well 1	
33J3	South base well 3	
33M2		USN test well 7
33R1		USGS test well 2
34K1		USN test well 5
35D2		4
8N/34W-16G1	Former San Antonio well 1	
16G2	San Antonio well 1	
16J1	San Antonio well 2	
9N/35W-18L1	Minuteman well 14	
20J1	Minuteman well 13	
9N/36W-1PS1	Minuteman Spring	

USGS well number	Owner and well number
	Part 2. Oil-Well Numbers
5N/35W-12Z1	Union Oil Co., Sudden 1
6N/35W- 4Z1	The Texas Co., Intex Lagomarsino 1
8Z1	Top Row Oil Co., Spanne 1
9Z1	MJM & M Oil Co., Spanne 2
16Z1	Stansbury-Webb and G. J. Greer, Spanne 1
30Z1	Gulf Oil Corp., Sudden 4
6N/36W-24Z1	Amerada Petroleum Corp., Sudden 1
25Z1	Intex Oil Co., Sudden 1
26G2	Hollywood Oil Co., 1
35Z1	Standard Oil Co., Sudden 1
36Z1	Intex Oil Co., Sudden 2
36Z2	Gulf Oil Corp., Sudden 3
7N/34W-17Z1	Lompoc Petroleum Co., Beuterbaugh 2
21Z1	The Texas Co., Lompoc Comm 7NCTN
7N/35W- 5Z1	Standard Oil Co., Packard-Shyvers 1
6Z1	Murphy Bros., Ltd., Sinclair 74-6
10Z1	Anglo-Californian Oil Syndicate, Packard 2
11Z1	W. H. Taylor, Packard 1
11Z2	Walter F. Parker, Packard 1
12Z1	Anglo-Californian Oil Syndicate, Packard 1
20Z1	Gaviota Oil Co., 1
31Z1	Bear Creek Oil and Mining Co., 1
33M1	Intex Oil Co., Lagomarsino 1
7N/36W-36Z1	Keystone Petroleum Corp., Ltd., Mary A. True 1
8N/34W-18Z1	Union Oil Co., Jesus Maria 3
20Z1	Union Oil Co., Arkley 23-20
20Z2	Union Oil Co., Rudolph 1
29Z1	Sudden Oil Co., 1
29Z2	Union Oil Co., Nichols 1
30Z1	Union Oil Co., Burton 1

USGS well number	Owner and well number
8N/35W- 3E1	Union Oil Co., Jesus Maria 4
3M1	Union Oil Co., Jesus Maria 46-3
3Z1	Union Oil Co., Jesus Maria 31-11
3Z2	Union Oil Co., Jesus Maria 87-3
4H1	Union Oil Co., Jesus Maria 25-3
4J1	Union Oil Co., Jesus Maria 36-3
4Z1	Union Oil Co., Jesus Maria 75-4
11Z1	Union Oil Co., Jesus Maria 28-12
9N/34W-29Z1	Shell Oil Co., Shell Newhall 1
33Z1	West Hausna Oil Co., 1
33Z2	Hogan Petroleum Co., Zabala 1
9N/35W-27Z1	Union Oil Co., Jesus Maria 1
27Z2	Union Oil Co., Jesus Maria 2

Table 3.--Records of water levels in wells

All water-level measurements are referenced to land-surface datum. Thus, the figures shown are depths to water, in feet, below or above(+) land-surface datum. The altitude given is that of land-surface datum and where given to the nearest foot was interpolated from topographic maps having 40-foot contour intervals. Altitudes given to the nearest tenth or hundredth of a foot were surveyed. The 1966 water-level measurement and latest measuring point used by the Geological Survey are given in table 1. Also, if fewer than five measurements have been made, they are shown in table 1.

Date	Water level	Date	Water level	Date	Water level
6N/35W-2D1. Depth of well 475 ft July 8, 1958; 443.6 ft April 27, 1966. Altitude about 290 ft.					
July 8, 1958	215.85	Oct. 28, 1959	211.65	Apr. 27, 1964	212.00
17	212.40	Jan. 28, 1960	212.00	July 31	212.19
Aug. 28	212.10	Apr. 29	211.74	Oct. 26	212.42
Oct. 29	211.96	July 29	212.08	Jan. 27, 1965	213.28
Nov. 25	211.93	Nov. 28	211.96	Apr. 28	213.04
Apr. 8, 1959	211.64	Oct. 30, 1963	212.00	July 28	212.82
30	211.45	Jan. 22, 1964	211.85	Aug. 4	212.70
6N/35W-5F1. Depth of well 77 ft May 29, 1958. Altitude about 230 ft.					
June 3, 1958	25.60	June 25, 1958	27.31	Sept. 16, 1958	29.71
6	25.90	July 17	28.26	Apr. 30, 1959	30.15
14	26.50	31	28.55		
18	26.82	Aug. 21	29.30		
6N/35W-15J1. Depth of well 78 ft June 6, 1958; 77.0 ft April 28, 1966. Altitude about 585 ft.					
June 12, 1958	20.80	Sept. 3, 1958	20.36	Apr. 30, 1959	20.24
July 17	20.66	10	20.36	Aug. 4, 1965	23.87
31	20.56	16	20.35		
Aug. 19	20.49	Apr. 8, 1959	25.07		
6N/35W-16P1. Depth of well 76 ft June 12, 1958. Altitude about 400 ft.					
June 21, 1958	17.92	Aug. 19, 1958	20.62	Apr. 8, 1959	23.05
July 17	19.67	Sept. 3	20.94	30	23.20
30	20.09	10	21.15		
31	20.08	16	21.24		
6N/35W-21D1. Depth of well 59 ft June 16, 1958. Altitude about 380 ft.					
June 21, 1958	16.60	Aug. 19, 1958	20.14	Apr. 8, 1959	22.07
July 17	18.23	Sept. 3	20.97	30	22.95
30	18.91	10	21.33		
31	18.97	16	21.61		

Date	Water level	Date	Water level	Date	Water level

6N/35W-31M1. Depth of well 194 ft July 10, 1942. Altitude about 74 ft.

1936	g65	Jan. 17, 1944	61.44	Dec. 1, 1959	62.70
July 10, 1942	58.55				

6N/36W-26E1. Depth of well 476 ft March 13, 1941; 452.2 ft April 27, 1966. Altitude about 150 ft.

June 7, 1940	g125	Sept. 13, 1943	g133	Aug. 28, 1945	140.86
Aug. 5 1942	g101	Oct. 28	132	Dec. 1, 1959	120

6N/36W-26G1. Depth of well 220 ft March 13, 1941; 220.2 ft April 27, 1966. Altitude about 330 ft.

1928	66	1931	100	Oct. 1935	96.6
1929	80	1932	106	Apr. 27, 1966	103.81
1930	87	1933	120		

7N/34W-19J1. Depth of well 182 ft October 10, 1941. Altitude about 61 ft.

Oct. 10, 1941	g21.8	Nov. 14, 1961	a65	Dec. 21, 1962	47
Nov. 1, 1955	g30.5	June 8, 1962	53	Apr. 25, 1966	56.57

7N/34W-20M2. Depth of well 192 ft November 4, 1941. Altitude about 70 ft.

Nov. 4, 1941	g18.7	Nov. 1, 1955	g27.0	Oct. 23, 1956	g31
May 4, 1942	g18.5				

7N/34W-20N2. Depth of well 40.4 ft April 20, 1966. Altitude about 50 ft.

Feb. 4, 1964	14.68	Sept. 28, 1964	17.28	Mar. 30, 1965	19.49
May 27	17.30	Oct. 29	18.39	Apr. 30	15.15
June 25	17.04	Nov. 25	17.34	May 27	16.30
July 31	17.70	Jan. 28, 1965	17.65	June 30	18.12
Aug. 27	16.27	Feb. 26	18.95		

7N/34W-20N3. Depth of well 38.4 ft April 20, 1966. Altitude about 62 ft.

Feb. 4, 1964	24.39	Sept. 28, 1964	27.33	Mar. 30, 1965	28.20
May 27	26.79	Oct. 29	27.92	Apr. 30	25.50
June 25	26.93	Nov. 25	27.24	May 27	25.79
July 31	27.16	Dec. 30	27.89	June 30	26.31
Aug. 27	26.70				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level

7N/34W-21E1. Depth of well 145 ft November 19, 1948; 119.5 ft April 20, 1966. Altitude about 82 ft.

May	26, 1964	k31.67	Oct.	29, 1964	33.95	Apr.	30, 1965	25.37
June	25	32.07	Nov.	25	33.07	May	27	30.41
July	31	33.00	Jan.	28, 1965	31.55	June	30	31.51
Aug.	27	33.46	Feb.	26	31.56			
Sept.	28	33.98	Mar.	30	34.57			

7N/35W-17M1. Depth of well 165.0 ft April 20, 1966. Altitude is 9.74 ft.

July	15, 1964	2.80	Feb.	25, 1965	2.34	Aug.	23, 1965	3.32
Sept.	25	4.93	Mar.	29	2.17	Sept.	27	3.49
Oct.	28	2.80	May	5	2.52	Oct.	29	3.13
Nov.	25	2.17		26	3.21	Dec.	1	2.55
Dec.	29	1.83	June	30	3.10		28	2.13
Jan.	27, 1965	2.54	July	28	3.22			

7N/35W-18H1. Depth of well 111.5 ft April 21, 1966. Altitude is 5.87 ft.

July	29, 1964	1.01	Oct.	28, 1964	1.05	Sept.	27, 1965	1.49
Aug.	28	1.08	July	28, 1965	1.54	Oct.	29	1.26
Sept.	25	.83	Aug.	23	1.56			

7N/35W-18H2. Depth of well 192 ft July 15, 1964; 187.8 ft April 21, 1966. Altitude is 7.23 ft.

July	15, 1964	3.44	Feb.	25, 1965	2.71	Aug.	23, 1965	2.96
Sept.	25	2.10	Mar.	29	2.33	Sept.	27	2.94
Oct.	28	2.42	Apr.	28	3.31	Oct.	29	2.36
Nov.	25	1.81	May	26	3.40	Dec.	1	2.52
Dec.	29	2.05	June	30	2.95		28	1.78
Jan.	27, 1965	2.98	July	28	2.87			

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level

7N/35W-18J2. Depth of well 121.7 ft April 21, 1966. Altitude is 7.38 ft.

May	26, 1964	3.23	Dec.	29, 1964	2.34	July	28, 1965	4.02
June	25	3.41	Jan.	27, 1965	3.46	Aug.	23	3.87
July	29	3.48	Feb.	25	3.20	Sept.	27	3.62
Aug.	28	3.45	Mar.	29	2.93	Oct.	29	3.50
Sept.	25	3.17	Apr.	28	3.88	Dec.	1	3.20
Oct.	28	3.34	May	26	3.98		28	2.62
Nov.	25	2.66	June	30	4.00			

7N/35W-20J1. Depth of well 125 ft June 18, 1928; 108.0 ft May 1, 1941; 20.5 ft April 28, 1966. Altitude is 19.07 ft.

May	28, 1964	7.64	Dec.	29, 1964	7.91	June	30, 1965	7.77
June	17	7.85	Jan.	26, 1965	7.68	July	28	8.23
	24	7.79	Feb.	24	7.44	Aug.	22	8.63
Sept.	25	8.61	Mar.	29	7.45	Sept.	29	9.08
Oct.	28	8.68	Apr.	29	8.78	Oct.	25	9.07
Nov.	25	8.17	May	26	7.20	Nov.	22	7.79

7N/35W-21L4. Depth of well 181 ft December 13, 1954. Altitude about 20 ft.

Oct.	26, 1954	9.09	Feb.	26, 1960	12.75	Dec.	29, 1964	9.42
Dec.	13	8.68	Mar.	31	8.36	Jan.	26, 1965	9.00
June	17, 1958	8.39	June	22	12.28	Feb.	24	8.64
	19	7.81	July	28	15.63	Mar.	29	8.65
Apr.	8, 1959	7.88	Aug.	25	13.93	Apr.	29	9.58
June	10	p9	Oct.	27	13.39	May	26	8.30
	24	8.94	Nov.	29	15.38	June	30	9.35
July	31	9.40	Dec.	28	13.11	July	28	10.34
Aug.	28	9.71	May	28, 1964	9.39	Aug.	22	10.20
Sept.	29	9.78	June	17	8.62	Sept.	29	8.94
Oct.	28	9.96		24	8.60	Oct.	25	9.28
Nov.	25	9.83	Sept.	25	9.30	Nov.	22	10.08
Dec.	23	9.41	Oct.	28	9.33			
Jan.	28, 1960	8.73	Nov.	25	9.40			

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level

7N/35W-22M1. Depth of well 180 ft April 24, 1941. Altitude is 28.84 ft.

Jan.	29, 1963	7.00	Jan.	22, 1964	7.14	Jan.	27, 1965	6.45
Feb.	26	7.31	Feb.	27	7.74	Feb.	25	7.88
Mar.	27	6.11	Mar.	27	7.59	Mar.	29	9.16
June	26	7.34	May	28	8.21	Apr.	29	5.50
July	25	8.31	June	25	8.57	May	27	6.25
Aug.	28	7.71	Aug.	28	15.91	June	30	7.61
Sept.	26	5.95	Sept.	25	10.41	Sept.	29	7.18
Oct.	30	7.30	Oct.	28	8.29	Oct.	25	7.15
Nov.	29	7.73	Nov.	25	7.54			
Dec.	20	6.78	Dec.	29	7.39			

7N/35W-22N2. Depth of well 194 ft July 16, 1958; 183.6 ft April 25, 1966. Altitude about 24 ft.

July	16, 1958	b6.50	Nov.	29, 1960	4.89	Aug.	30, 1963	7.61
	30	15.00	Dec.	28	4.17	Sept.	26	7.24
	31	14.69	Jan.	24, 1961	5.16	Oct.	28	6.79
Aug.	6	5.66	Feb.	24	4.81	Nov.	29	6.34
	6	5.75	Mar.	30	12.40	Dec.	20	6.39
	19	10.99	Apr.	25	11.90	Jan.	22, 1964	6.85
	21	c9.45	June	27	13.53	Feb.	27	7.30
Sept.	10	4.12	July	25	10.72	Mar.	27	7.14
Oct.	2	4.32	Aug.	25	11.84	Apr.	27	14.32
Nov.	25	b6.09	Sept.	28	10.42	May	26	7.53
Dec.	30	3.76	Oct.	25	9.74	June	25	8.09
Jan.	30, 1959	3.12	Nov.	28	7.41	July	28	20.38
Apr.	8	4.47	Jan.	23, 1962	k7.15	Aug.	26	18.20
	30	5.75	Feb.	15	k3.46	Sept.	23	9.54
June	2	5.39	Mar.	14	k3.18	Oct.	26	8.07
	24	5.94	Apr.	18	k4.41	Nov.	24	7.26
July	31	6.43	May	16	k5.25	Dec.	23	6.98
Aug.	28	6.63	June	27	k6.52	Jan.	27, 1965	6.21
Sept.	29	6.02	July	23	k7.66	Feb.	24	7.32
Oct.	28	k6.27	Aug.	29	k15.40	Mar.	29	8.55
Nov.	25	5.97	Sept.	26	8.11	Apr.	28	5.37
Dec.	23	k5.48	Oct.	23	16.83	May	26	5.82
Jan.	28, 1960	4.43	Nov.	26	6.98	June	30	7.10
Feb.	26	3.55	Dec.	26	6.62	July	28	16.34
Mar.	31	5.88	Jan.	29, 1963	6.59	Aug.	3	17.29
May	27	7.05	Feb.	26	5.73		23	17.70
June	23	16.87	Mar.	26	5.77	Sept.	28	6.99
July	28	9.90	Apr.	24	15.53	Oct.	25	6.89
Aug.	25	15.97	May	24	6.28	Nov.	30	5.20
Oct.	7	6.80	June	24	6.61	Dec.	28	5.07
Nov.	2	6.50	July	25	7.60			

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/35W-27C3. Depth of well 158 ft April 18, 1941. Altitude is 28.44 ft.					
May 27, 1964	9.48	Dec. 29, 1964	8.22	June 30, 1965	8.75
July 29	18.13	Jan. 27, 1965	7.53	July 28	14.13
Aug. 28	15.08	Feb. 25	8.86	Aug. 23	15.83
Sept. 25	10.83	Mar. 30	10.00	Sept. 29	8.22
Oct. 28	9.28	Apr. 29	6.30	Oct. 25	8.20
Nov. 25	8.56	May 27	7.27	Nov. 22	7.09
7N/35W-27F1. Depth of well 123 ft October 28, 1942. Altitude is 27.63 ft.					
Oct. 28, 1942	5.77	Oct. 25, 1961	11.08	Oct. 29, 1963	8.43
July 3, 1953	14.40	Nov. 24	9.93	Nov. 29	8.00
Mar. 5, 1954	3.51	Dec. 28	12.99	Dec. 20	8.00
Oct. 26	7.72	Jan. 23, 1962	8.58	Jan. 22, 1964	8.59
Mar. 29, 1955	7.86	Feb. 27	4.67	Feb. 27	8.92
Oct. 14	7.79	Mar. 29	5.28	Mar. 27	8.75
Mar. 22, 1956	5.42	Apr. 24	7.05	Apr. 27	11.81
Oct. 30	6.06	May 28	6.78	May 28	9.34
Mar. 28, 1957	5.83	June 27	8.16	June 17	10.11
Nov. 13	6.58	July 23	9.31	July 28	17.47
Apr. 21, 1958	2.52	Aug. 29	12.54	Aug. 26	15.20
Oct. 2	5.23	Sept. 26	9.95	Sept. 23	11.00
Mar. 20, 1959	3.78	Oct. 23	13.95	Oct. 26	9.71
Oct. 7, 1960	9.83	Nov. 26	8.63	Nov. 24	8.88
Nov. 2	10.18	Dec. 26	10.43	Dec. 23	8.64
28	7.85	Jan. 29, 1963	8.22	Jan. 26, 1965	7.92
Dec. 28	7.35	Feb. 26	7.40	Feb. 24	8.89
Feb. 24, 1961	8.56	Mar. 26	7.40	Mar. 29	9.97
Mar. 30	11.78	Apr. 24	12.73	Apr. 28	6.83
Apr. 25	12.34	May 24	7.83	May 26	7.49
May 26	9.79	June 24	8.35	June 30	8.88
July 25	12.18	July 25	9.09	July 28	13.58
Aug. 25	16.67	Aug. 30	10.25	Aug. 22	10.76
Sept. 28	11.88	Sept. 25	8.76	Sept. 28	8.70
				Oct. 25	8.58
				Nov. 22	7.52

Date	Water level	Date	Water level	Date	Water level

7N/35W-27P1. Depth of well 582 ft April 27, 1966. Altitude about 260 ft.

Jan.	29, 1963	229.60	Dec.	20, 1963	222.64	Dec.	29, 1964	223.14
Feb.	26	222.30	Jan.	22, 1964	223.05	Jan.	26, 1965	223.07
Mar.	26	223.00	Mar.	27	223.11	Feb.	24	222.95
Apr.	24	222.24	Apr.	27	223.26	Mar.	29	223.26
May	24	222.48	May	28	223.45	Apr.	28	223.03
June	24	222.67	June	17	223.42	May	26	222.78
July	24	222.95		24	223.47	June	30	223.68
Aug.	27	223.02	July	28	224.61	July	28	223.50
Sept.	26	222.79	Aug.	26	224.48	Aug.	22	224.25
Oct.	30	222.82	Sept.	23	224.08	Sept.	28	223.52
Nov.	29	222.58	Oct.	26	223.67	Oct.	25	223.41
Dec.	12	222.58	Nov.	24	223.38	Nov.	22	222.99

7N/35W-28K2. Depth of well 232.9 ft April 27, 1966. Altitude about 89 ft.

May	15, 1958	14.42	June	2, 1959	15.22	July	25, 1961	16.19
	16	14.40		24	15.30	Aug.	25	16.20
	19	14.40	July	31	15.38	Sept.	28	16.30
	20	14.42	Aug.	28	15.51	Oct.	25	16.30
	21	14.37	Sept.	29	15.50	Nov.	24	16.23
	22	14.34	Oct.	28	15.55	Dec.	28	16.15
	28	14.42	Nov.	25	15.54	Jan.	23, 1962	16.10
June	3	14.44	Dec.	23	14.92	Feb.	27	15.80
	13	14.62	Jan.	28, 1960	15.55	Mar.	29	14.40
	25	14.55	Feb.	26	15.31	Apr.	24	14.58
July	15	14.74	Mar.	31	15.43	May	28	14.88
	17	14.72	Apr.	29	15.39	June	27	15.07
	31	14.90	May	26	15.50	July	23	15.27
Aug.	19	14.88	June	22	15.74	Aug.	29	15.49
	28	15.90	July	28	15.50	Sept.	26	15.61
Sept.	10	14.92	Aug.	24	15.82	Oct.	23	15.77
	16	14.80	Oct.	27	16.01	Nov.	26	15.83
Oct.	29	15.09	Nov.	28	15.72	Dec.	26	15.93
Nov.	25	15.13	Dec.	28	15.02	Jan.	29, 1963	15.97
Dec.	30	15.22	Jan.	24, 1961	15.78	Feb.	26	15.80
Jan.	30, 1959	15.14	Feb.	24	15.31	Mar.	26	15.74
Feb.	27	14.97	Mar.	30	15.93	Apr.	24	15.59
Mar.	12	15.02	Apr.	25	15.94	May	24	15.73
Apr.	8	15.08	May	26	15.73	June	24	15.75
	30	15.05	June	27	16.05	July	25	16.00

Date	Water level	Date	Water level	Date	Water level
7N/35W-28K2.--Continued					
Aug. 27, 1963	16.24	June 17, 1964	16.77	Mar. 29, 1965	17.16
Sept. 26	16.29	24	16.79	Apr. 28	16.94
Oct. 30	16.42	July 28	16.88	May 26	17.08
Nov. 29	16.33	Aug. 26	17.92	June 30	17.25
Dec. 12	16.44	Sept. 23	16.95	July 28	17.32
Dec. 20	16.51	Oct. 26	17.07	Aug. 3	17.28
Jan. 22, 1964	16.52	Nov. 24	16.95	22	17.38
Feb. 27	16.61	Dec. 29	17.05	Sept. 28	17.50
Mar. 27	16.56	Jan. 26, 1965	17.08	Oct. 25	17.54
Apr. 27	16.59	Feb. 24	17.12	Nov. 22	17.25
May 28	16.71				
7N/35W-28R1. Depth of well 510 ft April 27, 1966. Altitude about 120 ft.					
Jan. 4, 1963	58.00	Dec. 20, 1963	59.20	Feb. 25, 1965	60.00
Feb. 26	58.20	Jan. 22, 1964	58.13	Mar. 29	60.12
Mar. 26	58.52	Feb. 27	59.22	May 26	60.20
Apr. 24	58.59	Mar. 27	59.33	June 30	60.38
May 24	58.76	Apr. 27	59.47	July 28	60.53
June 24	58.90	May 26	59.61	Aug. 3	60.41
July 25	59.05	Aug. 31	60.22	22	60.59
Aug. 27	59.26	Sept. 25	60.20	Sept. 28	60.68
Sept. 26	59.15	Oct. 26	60.07	Oct. 25	60.70
Oct. 20	59.18	Nov. 24	60.05	Nov. 30	60.27
Nov. 29	56.10	Dec. 29	59.93	Dec. 28	60.27
Dec. 11	58.1	Jan. 27, 1965	60.00		
7N/35W-30G1. Depth of well 276.9 ft April 27, 1966. Altitude about 130 ft.					
Apr. 18, 1958	196.00	May 2, 1958	98.03	Aug. 21, 1958	97.34
19	172.30	3	97.94	Sept. 16	97.30
21	125.80	9	97.87	Apr. 8, 1959	97.31
22	107.01	16	97.74	30	97.28
23	102.10	28	97.64	Oct. 28	97.05
24	100.17	28	97.68	Jan. 28, 1960	97.00
25	99.21	30	97.66	Apr. 29	96.90
26	98.92	June 14	97.42	July 29	96.95
28	98.40	18	97.40	Nov. 28	96.88
29	98.24	25	97.41	Mar. 30, 1961	96.89
30	98.18	July 17	97.37	Oct. 30, 1963	97.30
May 1	98.07	31	p98.34	Dec. 12	97.15

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/35W-30G1.--Continued					
Jan. 22, 1964	97.19	Jan. 26, 1965	97.17	July 28, 1965	97.25
Apr. 27	97.20	Apr. 28	97.20	Aug. 2	97.24
July 31	97.22				
7N/35W-31J1. Depth of well 625 ft March 12, 1963; 557.5 ft April 26, 1966. Altitude about 160 ft.					
Jan. 4, 1963	66.49	Dec. 20, 1963	63.16	Dec. 29, 1964	50.40
8	61.98	Jan. 22, 1964	58.12	Jan. 26, 1965	50.34
29	59.14	Feb. 27	55.98	Feb. 24	50.33
Feb. 26	56.78	Mar. 27	54.83	Mar. 29	50.32
Mar. 20	55.39	Apr. 27	53.88	Apr. 28	50.20
May 24	52.14	May 28	53.12	May 26	50.20
June 24	51.14	June 17	52.62	June 30	50.27
July 25	50.29	July 31	51.83	July 28	50.25
Aug. 30	49.42	Aug. 28	51.41	Aug. 2	50.29
Sept. 26	48.82	Sept. 23	51.05	Aug. 22	50.69
Oct. 30	48.18	Oct. 28	50.69	Sept. 28	50.35
Dec. 11	57.5	Nov. 24	50.46	Oct. 28	50.35
7N/35W-32N1. Depth of well 300 ft May 27, 1958; 214.8 ft April 26, 1966. Altitude about 175 ft.					
May 28, 1958	9.39	June 2, 1959	7.42	Feb. 24, 1961	6.48
June 3	9.29	24	7.48	Mar. 30	6.55
6	9.32	July 31	7.63	Apr. 25	6.69
14	9.33	Aug. 28	7.66	May 26	6.91
18	9.37	Sept. 29	7.62	July 25	6.97
25	9.47	Oct. 28	7.70	Aug. 25	7.45
July 17	9.29	Nov. 25	7.69	Sept. 28	7.25
23	9.23	Dec. 23	7.54	Nov. 24	7.42
31	9.19	Jan. 28, 1960	7.00	July 23, 1962	6.15
Aug. 21	9.17	Feb. 26	6.62	Aug. 29	6.40
Sept. 10	9.05	Mar. 31	6.70	Sept. 26	6.44
Oct. 29	8.72	June 22	6.96	Oct. 22	6.45
Nov. 25	8.58	July 28	7.25	Nov. 26	6.50
Dec. 31	8.42	Aug. 24	7.27	Jan. 29, 1963	6.38
Jan. 30, 1959	8.28	Oct. 27	7.31	Feb. 26	6.25
Feb. 27	7.73	Nov. 28	6.68	Mar. 20	6.12
Apr. 8	7.11	Dec. 28	6.57	May 24	6.20
30	7.15	Jan. 24, 1961	6.65	June 24	6.24

Date	Water level	Date	Water level	Date	Water level
7N/35W-32N1.--Continued					
July 25, 1963	6.26	June 17, 1964	6.39	Mar. 29, 1965	6.37
Aug. 30	6.37	July 31	6.52	Apr. 28	6.19
Sept. 26	6.35	Aug. 28	6.65	May 26	6.23
Oct. 30	6.41	Sept. 23	6.74	June 30	6.40
Dec. 20	6.36	Oct. 28	6.77	July 28	6.48
Jan. 22, 1964	6.25	Nov. 24	6.51	Aug 2	6.47
Feb. 27	6.34	Dec. 29	6.38	22	6.57
Mar. 27	6.25	Jan. 26, 1965	6.38	Sept. 28	6.75
Apr. 27	6.29	Feb. 25	6.32	Oct. 25	6.87
May 28	6.38				
7N/35W-33J1. Depth of well 380 ft. June 18, 1958; 186.0 ft April 27, 1966. Altitude about 177 ft.					
June 19, 1958	111.50	Jan. 24, 1961	119.10	July 25, 1963	c k121.50
26	111.62	Feb. 24	118.06	Sept. 26	120.12
30	111.50	Mar. 30	c118.54	Oct. 30	121.24
July 8	111.54	Apr. 25	c118.87	Nov. 29	120.40
15	111.55	June 27	124.40	Dec. 20	120.66
17	111.54	July 25	124.45	Jan. 22, 1964	119.48
31	111.52	Aug. 25	122.10	Feb. 27	121.33
Sept. 16	111.56	Sept. 28	c118.46	Mar. 27	120.34
Oct. 29	112.36	Oct. 25	121.24	May 26	122.43
Nov. 25	109.87	Dec. 28	117.72	June 24	121.62
Apr. 8, 1959	112.65	Jan. 16, 1962	k118.14	July 28	122.91
30	112.45	Feb. 27	k119.35	Aug. 26	123.90
June 2	113.15	Mar. 14	k117.83	Sept. 25	124.66
24	113.80	Apr. 18	k118.41	Oct. 28	123.79
July 21	113.52	May 16	k118.19	Nov. 24	c121.82
Aug. 28	c115.68	June 27	119.84	Dec. 29	121.69
Sept. 29	d114.01	July 23	120.95	Jan. 27, 1965	122.15
Oct. 28	c k115.52	Aug. 29	121.22	Feb. 25	c122.12
Nov. 25	115.97	Sept. 26	d131.83	Mar. 29	c122.76
Dec. 23	c k115.09	Oct. 22	d119.53	Apr. 28	c122.63
Jan. 28, 1960	115.46	Nov. 26	119.50	May 26	c130.28
Feb. 26	113.91	Dec. 26	119.19	June 30	c124.98
Mar. 31	114.55	Jan. 29, 1963	120.08	July 28	c123.63
May 26	d114.81	Feb. 26	119.17	Aug. 22	c123.99
July 28	116.38	Mar. 26	121.21	Sept. 28	124.03
Aug. 24	118.58	Apr. 24	121.28	Oct. 25	124.78
Oct. 27	119.46	May 24	122.31	Nov. 30	121.46
Nov. 28	118.67	June 24	121.20	Dec. 28	123.93
Dec. 28	118.03				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/35W-33J2. Depth of well 465 ft October 17, 1958. Altitude about 177 ft.					
Oct. 8, 1958	114	Oct. 27, 1960	a162.1	July 23, 1962	b149.79
29	112.94	Nov. 28	b171.2	Aug. 29	148.40
Dec. 30	113.10	Apr. 25, 1961	a141.40	Oct. 22	129.90
Jan. 30, 1959	c121.48	May 12	131.50	Dec. 26	124.60
Feb. 27	c122.62	26	a138.50	Jan. 29, 1963	144.30
Mar. 12	c114.31	June 27	a133.20	June 24	138.90
June 10	p126	July 25	130.30	Sept. 26	125.55
24	p128	Aug. 25	b144.65	Oct. 30	b129.37
July 31	p128	Sept. 28	123.69	Nov. 29	130.60
Sept. 29	122.05	Oct. 25	127.23	Dec. 20	142.60
Mar. 31, 1960	e159	Nov. 24	123.78	Jan. 22, 1964	121.38
Apr. 27	121.35	Dec. 28	122.84	Feb. 27	140.17
May 26	b120.28	Feb. 27, 1962	126.10	Mar. 27	126.80
June 22	b131.90	Mar. 29	122.00	Apr. 27	131.40
July 28	123.65	Apr. 24	a166.40	May 28	138.96
Aug. 24	a158.50	May 28	125.40	Oct. 28	149.64
25	a160.69	June 27	140.90	Sept. 28, 1965	151.0
Oct. 7	b139.8				
7N/35W-33J3. Depth of well 518 ft April 27, 1966. Altitude about 220 ft.					
Sept. 7, 1960	130.61	Dec. 28, 1961	144.29	Jan. 22, 1964	138.04
Oct. 7	153.68	Jan. 23, 1962	149.90	Mar. 27	139.65
27	150.88	Feb. 27	144.30	Apr. 27	150.47
Nov. 28	142.08	Mar. 29	139.80	June 17	c165.37
Dec. 28	136.39	Apr. 24	154.20	Sept. 25	161.44
Jan. 24, 1961	c138.23	Oct. 22	166.80	Oct. 28	164.74
Feb. 24	c135.89	Jan. 29, 1963	161.16	Nov. 24	145.41
Mar. 30	c135.99	Apr. 24	152.04	Dec. 29	147.99
Apr. 25	c135.87	May 24	170.45	July 7, 1965	148
May 26	c146.00	July 25	155.60	Oct. 25	158.37
June 27	c136.50	Aug. 26	159.90	Nov. 30	152.39
July 25	a254.50	Sept. 26	143.49		
Oct. 25	144.29	Nov. 29	b160.50		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/35W-33R1. Depth of well 425 ft April 27, 1966. Altitude about 216 ft.					
Apr. 28, 1958	110	Nov. 25, 1958	110.23	July 23, 1962	112.63
30	111.11	Jan. 30, 1959	109.66	Aug. 29	112.84
May 1	109.95	Feb. 27	109.62	Sept. 26	112.70
2	109.26	Apr. 30	109.08	Oct. 22	112.27
3	109.0	June 2	108.96	Nov. 26	k112.25
5	109.23	24	109.25	Dec. 26	112.31
6	b121.00	July 31	109.69	Jan. 29, 1963	112.30
7	116.34	Aug. 28	109.73	Feb. 26	111.65
8	114.31	Sept. 29	109.72	Mar. 26	111.66
9	113.42	Oct. 28	k109.79	Apr. 24	111.26
10	112.70	Nov. 25	109.92	May 24	111.86
12	111.80	Dec. 23	109.77	June 24	k112.30
13	111.46	Jan. 28, 1960	109.49	July 25	112.86
14	111.10	Feb. 26	109.65	Aug. 30	112.47
15	110.84	Mar. 31	109.80	Oct. 28	112.01
16	110.69	Apr. 29	110.24	Nov. 29	111.44
19	110.27	May 26	110.24	Dec. 20	111.62
20	110.12	June 22	110.24	Jan. 22, 1964	111.55
21	b116.70	July 28	111.70	Feb. 27	112.00
22	114.06	Aug. 24	113.48	Mar. 27	112.16
23	112.95	Oct. 7	k115.08	Apr. 27	112.45
26	111.44	27	113.30	May 26	112.53
28	111.08	Nov. 28	113.04	June 25	112.88
June 3	110.22	Dec. 28	112.62	July 28	113.45
4	110.09	Jan. 24, 1961	112.24	Aug. 26	113.82
5	114.35	Feb. 24	112.18	Sept. 23	113.82
6	b157.44	Mar. 30	111.99	Oct. 28	113.99
7	138.56	Apr. 25	112.24	Nov. 24	113.95
9	127.06	May 26	112.73	Dec. 29	112.36
10	124.10	June 27	112.45	Jan. 28, 1965	112.00
11	121.95	July 25	112.52	Feb. 25	112.50
12	120.06	Aug. 25	113.45	Mar. 29	113.16
13	118.94	Sept. 28	114.57	Apr. 28	c112.57
14	117.90	Oct. 25	113.83	May 26	c113.57
16	116.28	Nov. 24	113.34	June 30	c114.20
25	112.55	Dec. 28	112.55	July 28	c114.37
July 8	110.61	Jan. 23, 1962	k112.10	Aug. 3	114.44
17	110.10	Feb. 27	k111.63	22	114.16
Aug. 28	109.38	Mar. 14	k111.88	Sept. 28	c114.76
Sept. 10	109.28	Apr. 18	k112.47	Oct. 25	114.73
16	109.20	May 16	k113.12	Nov. 30	113.38
Oct. 29	110.87	June 27	113.04		

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
7N/35W-35D2. Depth of well 152.4 ft April 27, 1966. Altitude about 70 ft.					
Jan. 30, 1963	15.18	Dec. 20, 1963	14.38	Mar. 30, 1965	16.41
Feb. 26	13.83	Jan. 22, 1964	14.68	Apr. 28	15.44
Mar. 26	14.07	Feb. 27	15.19	May 26	15.65
Apr. 24	13.75	Mar. 27	15.53	June 20	16.60
May 24	15.40	Apr. 27	16.14	July 28	17.13
June 24	15.11	May 28	16.40	Aug. 3	17.21
July 25	15.61	Sept. 23	17.42	22	16.95
Aug. 27	15.81	Oct. 26	17.46	Sept. 28	17.09
Sept. 25	15.07	Nov. 24	16.19	Oct. 25	17.20
Oct. 28	14.88	Dec. 23	16.00	Nov. 22	16.05
Nov. 29	14.25	Jan. 26, 1965	15.76		
Dec. 12	14.26	Feb. 24	15.65		
8N/34W-16G1. Depth of well 687 ft April 30, 1958. Altitude about 291 ft.					
Apr. 30, 1958	Flowing	Nov. 24, 1959	+7.94	Mar. 29, 1961	+11.70
28, 1959	+7.28	Dec. 29	+8.06	Apr. 26	+11.45
May 27	+7.48	May 26, 1960	+8.43	June 28	+12.00
June 22	+7.60	June 21	+8.13	July 26	+11.52
July 27	+7.56	July 28	+8.53	Aug. 24	+12.60
Aug. 25	+7.64	Aug. 31	+10.45	Sept. 27	+13.27
Oct. 28	+7.89	Feb. 20, 1961	+11.50	Aug. 4, 1965	+5.64
8N/34W-17K1. Altitude about 273 ft.					
Feb. 17, 1958	Flowing	Oct. 26, 1960	Flowing	Mar. 10, 1961	Flowing
Sept. 11, 1959	Flowing				
8N/35W-3Z4. Depth of well 182 ft April 23, 1958. Altitude about 402 ft.					
Apr. 24, 1958	g77.4	Apr. 26	g83.5	Apr. 28, 1958	g74.5
25	g77.5	27	g78.5	May 1	g75.0
8N/35W-10J1. Depth of well 42 ft June 21, 1965. Altitude about 118 ft.					
June 29, 1965	11.77	Aug. 31, 1965	10.12	Oct. 29, 1965	10.42
July 30	9.87	Sept. 29	10.22	Nov. 30	9.51

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
8N/35W-14Z1. Depth of well 96 ft November 20, 1962. Altitude is 487.2 ft.					
Nov. 21, 1962	g42.5	Nov. 30, 1962	g44.0	Dec. 6, 1962	g44.0
26	g44.0				
8N/35W-15E3. Depth of well 73 ft in 1965. Altitude about 50 ft.					
June 29, 1965	41.74	Aug. 31, 1965	18.09	Oct. 29, 1965	12.58
July 30	25.90	Sept. 29	14.40		
8N/35W-16E1. Depth of well 50 ft June 21, 1965. Altitude about 50 ft.					
June 29, 1965	28.70	Aug. 31, 1965	4.05	Oct. 29, 1965	4.47
July 30	6.82	Sept. 29	4.26	Nov. 30	2.34
8N/35W-28Z1. Depth of well 94 ft November 15, 1962. Altitude is 363.9 ft.					
Nov. 16, 1962	g16.5	Nov. 18, 1962	g20.0	Dec. 6, 1962	g54.0
17	g24.5	21	g55.0		
9N/35W-18Z3. Depth of well 110 ft December 4, 1962. Altitude is 74.8 ft.					
Dec. 5, 1962	g32.4	Dec. 12, 1962	g32.0	Dec. 17, 1962	g32.4
6	g32.2				
9N/36W-2Z1. Depth of well 107 ft November 15, 1962. Altitude is 146.7 ft.					
Nov. 16, 1962	g87.2	Nov. 30, 1962	g86.8	Dec. 17, 1962	g87.1
23	g87.1				

See footnotes at end of table.

Date	Water level	Date	Water level	Date	Water level
9N/36W-12Z1. Depth of well 124 ft November 21, 1962. Altitude is 261.2 ft.					
Nov. 21, 1962	g115.3	Nov. 30, 1962	g83.6	Dec. 17, 1962	g43.8
23	g100.4				

a. Well being pumped.

b. Well pumped recently.

c. Nearby well being pumped.

d. Nearby well pumped recently.

e. Estimated.

g. Measurement by outside agency or person.

k. Measurement from water-level recorder chart.

p. Measurement questionable.

Table 4.--References to publications containing water-level measurements in wells

[For complete citation see selected references]

Well number	Reference	Period of record
7N/34W-18L1	La Rocque and others (1950)	1930-34, 41
18L3	La Rocque and others (1950)	1930-34
19H1	La Rocque and others (1950)	1930-34
20J1	La Rocque and others (1950)	1930-42
20N1	La Rocque and others (1950)	1932-42
20N2	U.S. Geological Survey (1957-64)	1962-64
20N3	U.S. Geological Survey (1957-64)	1962-64
21E1	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956-64
21J1	La Rocque and others (1950)	1930-34, 41
	U.S. Geological Survey (1943), Water-Supply Paper 941	1941
	U.S. Geological Survey (1944), Water-Supply Paper 949	1942
21N1	La Rocque and others (1950)	1930-42
21N3	La Rocque and others (1950)	1930-31
21N4	La Rocque and others (1950)	1930-31
21N5	La Rocque and others (1950)	1930-31
21P1	La Rocque and others (1950)	1930-31
29A2	La Rocque and others (1950)	1930-31
29A3	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948

Well number	Reference	Period of record
7N/35W-13N1	La Rocque and others (1950)	1930-34, 41
15P1	La Rocque and others (1950)	1930-41
15R1	La Rocque and others (1950)	1930-41
16G1	La Rocque and others (1950)	1930-41
17B1	La Rocque and others (1950)	1930-41
17B2	La Rocque and others (1950)	1930
18H1	U.S. Geological Survey (1957-64)	1963
18J1	La Rocque and others (1950)	1930-42
	U.S. Geological Survey (1944), Water-Supply Paper 949	1942
	U.S. Geological Survey (1945), Water-Supply Paper 991	1943
	U.S. Geological Survey (1947), Water-Supply Paper 1021	1944
	U.S. Geological Survey (1949), Water-Supply Paper 1028	1945
	U.S. Geological Survey (1949), Water-Supply Paper 1076	1946
	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
18J2	U.S. Geological Survey (1957-64)	1963-64
20H1	La Rocque and others (1950)	1930-33
20J1	La Rocque and others (1950)	1930-42
	U.S. Geological Survey (1944), Water-Supply Paper 949	1942
	U.S. Geological Survey (1945), Water-Supply Paper 991	1943
	U.S. Geological Survey (1947), Water-Supply Paper 1021	1944
	U.S. Geological Survey (1949), Water-Supply Paper 1028	1945
	U.S. Geological Survey (1949), Water-Supply Paper 1076	1946

Well number	Reference	Period of record
7N/35W-20J1	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956-64
20J3	La Rocque and others (1950)	1930-31
20K2	La Rocque and others (1950)	1930-34
21D1	La Rocque and others (1950)	1930-36, 41
21G1	La Rocque and others (1950)	1930-31
	U.S. Geological Survey (1944), Water-Supply Paper 949	1942
21H1	La Rocque and others (1950)	1930-41
21L1	La Rocque and others (1950)	1941-42
21L2	La Rocque and others (1950)	1930-32
21L4	U.S. Geological Survey (1957-64)	1961-64
21M1	La Rocque and others (1950)	1930-42
21R1	La Rocque and others (1950)	1930-42
	U.S. Geological Survey (1944), Water-Supply Paper 949	1942
	U.S. Geological Survey (1945), Water-Supply Paper 991	1943
22A1	La Rocque and others (1950)	1930-34
22F1	La Rocque and others (1950)	1930

Well number	Reference	Period of record
7N/35W-22F2	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
22M1	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956-62
22M2	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950

Well number	Reference	Period of record
7N/35W-22M2	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
	U.S. Geological Survey (1953), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956
22P1	La Rocque and others (1950)	1930-42
27C2	La Rocque and others (1950)	1930-32, 41
	U.S. Geological Survey (1943), Water-Supply Paper 941	1941
	U.S. Geological Survey (1944), Water-Supply Paper 949	1942
	U.S. Geological Survey (1945), Water-Supply Paper 991	1943
	U.S. Geological Survey (1947), Water-Supply Paper 1021	1944
	U.S. Geological Survey (1949), Water-Supply Paper 1028	1945
	U.S. Geological Survey (1949), Water-Supply Paper 1076	1946
	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
27C3	La Rocque and others (1950)	1932-34 1939-42
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954

Well number	Reference	Period of record
7N/35W-27C3	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956-64
27F1	La Rocque and others (1950)	1930-32
27H1	La Rocque and others (1950)	1935-42
27J1	La Rocque and others (1950)	1930-35
27K1	La Rocque and others (1950)	1941-42
27K2	La Rocque and others (1950)	1930-42
28A1	La Rocque and others (1950)	1930-34
28H1	La Rocque and others (1950)	1930-34
28H2	La Rocque and others (1950)	1930-34
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956-59
28K1	La Rocque and others (1950)	1930-34
33A1	La Rocque and others (1950)	1930-32
33C1	La Rocque and others (1950)	1932-34
35C2	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
35C3	La Rocque and others (1950)	1930-41

Well number	Reference	Period of record
7N/35W-35C4	U.S. Geological Survey (1951), Water-Supply Paper 1101	1947
	U.S. Geological Survey (1951), Water-Supply Paper 1131	1948
	U.S. Geological Survey (1952), Water-Supply Paper 1161	1949
	U.S. Geological Survey (1953), Water-Supply Paper 1170	1950
	U.S. Geological Survey (1954), Water-Supply Paper 1196	1951
	U.S. Geological Survey (1955), Water-Supply Paper 1226	1952
	U.S. Geological Survey (1956), Water-Supply Paper 1270	1953
	U.S. Geological Survey (1957), Water-Supply Paper 1326	1954
	U.S. Geological Survey (1957), Water-Supply Paper 1409	1955
	U.S. Geological Survey (1957-64)	1956-60

Table 5.--Chemical analyses of water from wells and springs

All results are reported in parts per million (ppm) unless the value for dissolved solids exceeds 7,000 ppm; in that case, the results are reported in milligrams per liter (mgl).

The well depth shown is the most recent depth available and is not necessarily the depth of the well at the time the water samples were collected.

The values for sodium preceded by the letter "a" indicate a combination of sodium and potassium.

Analyzing laboratory: A U.S. Army; CE Corps of Engineers, U.S. Army; DPH California Department of Public Health; DWR California Department of Water Resources; GS U.S. Geological Survey; N Eleventh Naval District; O Osborne Laboratories; P Permutit Co.; SE Smith Emery Co.; T Terminal Testing Laboratories, Inc.; UC University of California; W Carl Wilson Laboratory.

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)													Dissolved solids		Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Calculated (Sum of determined constituents)	Residue on evaporation at 180°C						
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
5N/34W-7E2	12- 2-59	1.9				126	68	62	3.5	520	0		116			0.1			595	169	18	1,240	8.1	GS 32445
5N/35W-1F1	12- 2-59	3.0				102	54	42	2.7	450	0		85			.1			478	109	16	997	8.2	GS 32447
1NS1	12- 2-59					126	99	184	5.0	422	16		390			.2			720	348	36	2,080	8.4	GS 32446
2DS1	12- 2-59					100	52	128	4.8	222	0		248			.2			465	283	37	1,410	8.2	GS 32448
6N/35W-2D1	7- 7-58	443.6	65	50	0	162	74	320	10	266	0	490	502	0.7	1.3	.3	1,740	1,840	770	522	49	2,700	7.0	GS 26836
15J1	6- 6-58	77.0	64	24	0	75	60	246	3.6	487	0	171	275	1.0	2.3	.8	1,100	1,120	434	35	55	1,920	8.0	GS 26834
16P1	6-10-58	76	64										382						570			1,940		GS 32449
22J1	5-15-58		63			42	15	44	4.1	149	73		83			.1			167	46	65	525	8.0	GS
	8-18-59	12.7		22	.1							102	88					550	260			785	7.4	N
	1-27-60			26	.3							110	76	.4	0	0		615	264			745	8.1	N
	7- 1-63			35	.1	50	21	44	2.5	161		52	100	.4	0	.1	384	420	210		31	605	6.6	N
	11- 3-64			26	.01	67	23	38	3.1	172	0	87	76	.6	.8	0	406	417	262	121	24	676	7.8	GS 48009
28C1	12- 2-59	1.0				248	106	184	14	308	0		130			.7			1,060	807	27	2,290	8.1	GS 32443
30RS1	12- 1-59		65			140	89	158	9.2	468	0		318			.2			715	331	32	1,920	8.2	GS 32442
31M1	1936	194											598						1,180					
	1937												600						357					
	7-22-40												588						977					
	10-10-40												680						905					
	3-14-41												598						1,180					
	10-20-42				3	197	158	a161				264	570	0				1,880	1,160				6.9	DPH
	2-23-43				2.5							220	420						855				7.3	P P-119707
	8-18-58			57	.2							150	568	.2		.1		2,200	916				7.5	N
	12- 1-59				.01	178	130	272	25	566	0		635			.2			980	516	37	2,860	8.2	GS 32439
	7-27-60			39	0							160	574	.2		.1		2,500	926			3,580	7.1	
	3-22-62			38								210	576					1,900	960			2,690	7.5	N
	5-27-62			30				200	14			150	640	.4		.3		2,120	1,030			3,030	7.8	N
	6- 4-63			39	.15	165	123	256	12	476		280	580	.6		.2	1,690	1,700	916		37	2,450	7.3	N
6N/36W-23R1	11- 2-43	135		24	.05	122	66	a159		315		271	252	.5	.2	.2	1,050	1,150	576	294			7.6	CE

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$				
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
6N/36W-23R2	12-29-43	174		31	0.10	129	67	a164		396	1	231	266	0.4	0.4	0.3	1,080	1,170	600	272			7.7	CE
	12-30-43			32	.10	126	65	a162		383	5	244	266	.4	.4	.3	1,090	1,170	583	260			7.3	CE
	12-30-43			27	.10	126	66	a160		399	1	226	266	.4	.4	.3	1,070	1,150	585	256			7.2	CE
	12- 3-59				.01	188	125	188	16	409			254			.2			985	650	29	2,340	7.6	GS 32440
25H1	7- 7-42	4.0											268						900					
	12- 2-59		57			160	79	158	7.2	476	0		274			.1			725	335	32	1,880		GS 32441
26E1	3-14-41	432.2											450						650					
	8-24-43			6.6	.1							30	560						416				7.6	P
	12- 1-59				0	168	122	179	13	504	0		432			.2			920	507	3	2,370	8.2	GS 32438
26G1	3-14-41	220.2											416						1,020					
7N/34W-5KS1	12-18-59			57	.11	12	9.7	99	4.8	49	0	16	162	.3	1.3	.1	386	394	70	30	74	626	6.8	GS 32505
19J1	1948	182				112				262		137	180						353				7.3	DWR
	1949											141	138											DWR
	1950					108				242		107	169						358				7.3	DWR
	1951					101				290		110	156						334				7.3	DWR
	1-16-52					94	25			257		121	152					504	336	79			7.8	A
	1-24-52									252			164						332	120			7.4	A
	1-24-52									284			188						436	152			7.5	A
	1-31-52									262			154						334	72			7.6	A
	1-31-52									264			154						354	90			7.6	A
	2- 7-52									286			152						334					A
	2- 7-52									270			169						364					A
	2-14-52									232			152						302					A
	2-14-52									256			161						358					A
	2-20-52									234			160						304	70			7.8	A
	2-20-52					98	25			248		121	134					626	346	98			7.4	A
	2-27-52									226			131						306					A
	2-27-52									254			131						354					A
	3- 5-52												148											E
	3- 5-52												167											A
	3-20-52												162											A
	3-20-52									254			162											A
	12-29-53												153											DWR

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																					Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 100°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500							
7N/34W-19J1	10-11-55		71	48	0.03	103	24	107	6.4	285	0	116	163	0.1	8.5	0.34	716	738	354	120	39	1,180	7.3	GS 17143
	10-23-56		68	48	0	113	26	107	6.7	302	0	114	177	.2	1.0	.28	742	831	388	140	37	1,250	7.3	GS 20920
	4-24-58		70	43	.03	95	32	97	6.6	278	0	118	165	.2	5.7	.28	701	742	370	142	36	1,140	7.1	GS 25753
	4- 5-60		70	33		110	24	98	4.6	286	0	144	147	.2	0	.14	702	814	375	141	36	1,160	7.4	DWR T-4621
	3- 3-61		65	33		116	59	62	5.0	301	0	228	136	.1	5.0	.39	792	808	531	284	20	1,230	7.5	DWR L-1117
	3-21-61			46	.02	126	26	87	5.3	286	0	190	125	.1	.4	.2	747	782	420	185	31	1,180	7.4	GS 36457
	5- 2-61			48	0	121	31	91	4.7	282	0	172	144	.2	4.4	.3	756	799	428	197	31	1,210	7.4	GS 36957
	8-16-61			45	0	165	46	144	2.4	407	0	245	218	.1	.7	.4	1,070	1,200	600	266	34	1,740	7.5	GS 37744
	8-25-61			48		154	50	154	5.5	346	0	296	229	.4	2.4	.32	1,110	1,190	588	274	36	1,800	7.6	DWR 13047
	10-12-61			38		128	27	105	9.3	287	0	204	145	.1	3.3	.31	801	842	489	194	34	1,200	7.8	DWR L-2093
	11-14-61		71	48	.03	135	28	94	5.9	294	0	206	148	.1	4.2	.3	815	855	454	213	31	1,280	7.5	GS 38539
	6- 6-62		69	36		130	27	103	5.0	299	0	200	152	.1	5.0	.3	805	860	438	193	34	1,270	7.7	DWR L-3199
	11-28-62		68	49	.02	168	35	89	4.8	324	0	276	125	.2	2.6	.3	910	963	564	298	25	1,360	7.3	GS 41997
	7-22-63		70	55		143	37	110	6.2	320	0	238	158	.4	6.2	.28	912	891	510	248	32	1,400	7.5	DWR 15839
	9-30-64					196	44	100	6	369	0	323	169	.1	3	.29	1,020	1,060	667	365	24	1,390	7.9	DWR L-7815
	11- 3-64			44	.01	185	40	90	5.0	344	0	306	151	.2	2.1	.2	992	1,010	625	345	24	1,490	7.8	GS 48003
	7- 7-65					134	45	110	6	248	0	278	178	.4	4.5	.30	878	996	519	316	31	1,450	7.7	DWR R-977
	10- 1-65		71	45	0	172	36	54	6.1	350	0	292	180	.4	4.9	.2	1,020		576	289	29	1,540	8.2	GS 50978
	11-16-65			47	0	173	39	112	5.5	354	0	284	175	.2	3.5	.2	1,010	1,060	590	300	29	1,570	7.6	GS 51141
19J2	12-11-59	101	70	50		94	26	94	5.6	245	0	146	132	.2	.6	.19	670	695	340		37	1,100	8.0	DWR 11191
19J3	4- 5-60	161	66	29		170	68	133	5.7	483	0	302	195	.5	2.0	.42	1,140	1,210	704		29	1,800	7.1	DWR 11417
	8- 3-60			36	.02	181	73	138	5.4	500	0	346	205	0	3.0	.5	1,230	1,360	750	340	28	1,840	7.3	GS 34578
	8-31-60			47	.01	111	54	67	6.8	320	0	188	146	.1	2.7	.3	781	801	500	238	22	1,230	7.3	GS 34640
	9-22-60		68	36	.05	93	29	99	6.8	245	0	169	146	0	6.2	.25	706	724	354	153	37	1,170	7.9	DWR L-418
	10-18-60			59	.03	194	62	139	6.5	470	0	365	178	.1	5.6	.4	1,240	1,310	740	355	29	1,880	8.0	GS 35101
	11-22-60			49	.01	83	44	100	2.7	234	0	170	132	.2	.3	.3	744	824	412	171	34	1,230	7.1	GS 35376
	11-28-60			38	.02	131	50	123	5.8	381	0	246	160	.1	3.6	.3	945	996	533	212	33	1,460	7.0	GS 35368
	1- 9-61			32	.10	159	48	101	5.0	356	0	248	190	0	1.7	.3	960	1,060	592	300	27	1,520	7.4	GS 35886
	2-23-61			36	.06	192	67	136	3.6	468	0	380	190	.1	3.3	.4	1,240	1,340	756	372	28	1,970	7.4	GS 36175
	3- 2-61		65	32		149	66	147	5.9	336	0	377	200	.4	8.7	.31	1,150	1,220	645	370	33	1,820	7.8	DWR R-3877
	3-21-61			35	.05	162	54	122	5.2	414	0	294	178	.1	4.4	.5	1,060	1,130	624	285	30	1,640	7.3	GS 36455
	5- 2-61			39	.07	191	65	135	5.0	479	0	328	204	.2	7.7	.5	1,210	1,270	745	352	28	1,860	7.2	GS 36958
	8-16-61			46	0	167	45	146	4.0	408	0	246	215	.1	1.2	.4	1,070	1,200	600	265	34	1,740	7.4	GS 37743
	11-14-61			47	.06	145	34	107	7.0	322	0	231	151	.2	5.3	.3	887	931	500	236	31	1,380	7.5	GS 38534
	5- 1-62			46	.10	148	32	115	6.8	324	0	242	156	.2	5.3	.3	913	952	505	239	33	1,390	8.0	GS 40071

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$				
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/34W-19J3	6- 6-62			37		146	30	115	5.5	310	0	229	171	0.1	1.0	0.38	888	924	490	235	34	1,400	7.2	DWR L-3197
	9-21-62		67	42		152	35	110	5.3	308	0	279	165	.4	6.0	.28	947	1,050	524	271	31	1,400	7.7	DWR 3466
	11-20-62			46	0.16	166	40	111	6.4	348	0	294	161	.2	6.8	.2	1,000	989	580	295	29	1,500	7.4	GS 41645
	11-28-62		68	46	.02	155	49	108	6.3	348	0	285	166	.2	5.1	.3	992	1,050	590	305	28	1,510	7.2	GS 41998
99	7-22-63		69	55		160	45	119	6.6	343	0	305	163	.5	8.2	.27	1,030	1,050	584	303	30	1,540	7.3	DWR 15838
	11- 6-63		68	36		170	44	114	6.3	349	0	331	168	.2	5.8	.27	1,050	1,090	605	320	29	1,460	7.6	DWR L-5646
	5-18-64		67	33		158	61	119	6.0	354	0	362	173	.2	4.4	.40	1,090	1,160	643	353	28	1,500	7.9	DWR L-6867
	9-30-64					134	46	113	5	325	0	252	183	.1	4.1	.27	898	1,030	525	260	32	1,460	7.6	DWR L-77351
	11- 3-64			45	.02	201	48	126	6.4	370	0	374	195	.3	3.9	.3	1,180	1,190	700	397	28	1,760	7.6	GS 48006
	7- 7-65		69			173	56	125	6.6	323	0	360	198	.4	5	.26	1,080	1,280	663	398	29	1,730	7.4	DWR R-979
	10- 1-65		70	44	0	166	52	127	6.7	272	0	422	192	.3	5.6	.1	1,150		628	405	30	1,690	7.9	GS 50974
	11-16-65			46	0	228	42	133	6.5	382	0	412	180	.3	5.8	.3	1,240	1,340	740	427	28	1,850	7.7	GS 51144
19L2	5-17-59	156		43	.06	129	36	a148		370	0	146	226	.3	0	.09	910	1,070	340	167			7.3	T A-6992
	12-11-59		69	46		71	37	145	5.4	178	0	193	209	.2	4.5	.36	800	790	327		48	1,310	8.0	DWR 11148
	4- 5-60		68	34		144	33	146	4.9	379	0	198	209	.1	0	.22	956	1,120	496	186	39	1,630	8.2	DWR T-4616
	8- 3-60			45	.02	155	45	151	4.8	428	0	254	220	0	1.5	.3	1,090	1,160	570	219	36	1,660	7.3	GS 34579
	8-31-60			47	0	160	46	151	6.4	428	0	260	218	.1	1.5	.2	1,100	1,120	590	239	35	1,660	7.3	GS 34641
	9-22-60		68	33		203	57	161	5.5	503	0	309	272	.1	1.3	.40	1,290	1,340	740	327	32	2,060	7.4	DWR L-437
	10-18-60			61	.04	79	19	261	12	415	0	316	154	.1	4.1	.3	1,110	1,170	276	0	66	1,700	8.0	GS 35102
	11-17-60		70	40	.02	124	50	141	4.8	369	0	216	193	.2	1.6	.3	972	1,040	516	197	37	1,560	7.5	GS 35371
	1- 9-61			36	.06	148	35	142	4.0	393	0	198	215	0	2.5	.3	975	1,040	512	190	37	1,580	7.7	GS 35885
	2-23-61			43	.16	132	33	130	3.6	372	0	174	204	.1	2.6	.2	906	960	466	161	38	1,480	7.5	GS 36173
	3- 2-61		68	41		160	40	136	5.9	418	0	197	216	.4	6.8	.26	1,010	1,070	563	220	34	1,700	7.3	DWR R-3876
	3- 3-61		69	36		139	36	131	4.3	369	0	224	205	.1	2.7	.34	960	978	501	199	28	1,520	7.4	DWR L-1114
	3-21-61			37	0	198	52	158	5.2	482	0	286	260	.1	1.0	.7	1,240	1,320	706	311	33	1,950	7.4	GS 36458
	5- 2-61			44	.01	253	73	182	5.0	532	0	368	345	.1	2.6	.4	1,540	1,700	930	494	30	2,360	7.3	GS 36956
	8-16-61			47	0	163	48	144	3.6	408	0	242	216	.1	1.0	.4	1,070	1,190	640	269	34	1,740	7.5	GS 37745
	8-18-61			50		128	31	96	5.4	290	0	194	141	.4	5.2	.23	794	836	447	209	32	1,280	7.6	DWR 13046
	10-12-61			36		158	48	152	3.3	367	0	295	221	.1	1.7	.45	1,100	1,180	590	289	36	1,640	7.5	DWR L-2119
	11-14-61		69	44	.47	216	51	161	6.7	472	0	314	262	.1	2.7	.4	1,290	1,360	750	363	32	2,010	7.6	GS 38536
	5- 1-62			38	.02	136	45	252	8.5	458	5	226	296	.4	6.0	1.4	1,240	1,280	525	141	51	1,950	8.3	GS 40070
	9-21-62			33		146	67	148	5.0	391	0	319	233	.1	0	.30	1,140	1,320	640	319	33	1,730	7.9	DWR 3465

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)													Dissolved solids		Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Calculated (Sum of determined constituents)	Residue on evaporation at 180°C						
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/34W-19L2	11-28-62		69	42	0.03	222	65	170	27	496	0	366	275	0.2	2.9	0.3	1,410	1,470	820	413	25	1,360	7.3	GS 41996
	4- 3-63		69	39		145	50	149	5.9	302	0	344	218	.4	6.2	.09	1,110	1,110	570	323	36	1,560	7.9	DWR B-4934
	11- 6-63		68	37		173	55	162	5.5	406	0	340	233	.1	2.3	.38	1,260	1,260	657	324	35	2,000	7.9	DWR L-5648
	5-18-64					194	53	158	6.6	437	0	321	245	.3	2.5	.39	1,200	1,310	700	342	33	1,880	7.5	DWR R-405
	9-30-64					198	103	197	7	527		467	307	.1	0	.44	1,540	1,690	918	487	32	2,250	7.8	DWR L-7934
	11- 3-64			44	.02	209	52	153	6.0	418	0	410	214	.2	1.4	.3	1,300	1,310	735	392	31	1,900	7.6	GS 47999
	7- 7-65		69			152	63	154	6	287	0	366	256	.4	.8	.40	1,140	1,300	636	400	34	1,820	7.9	DWR R-976
	10- 1-65		70	43	0	209	54	158	6.3	440	0	390	232	.3	2.2	.3	1,310		744	383	31	2,000	8.0	GS 50973
	11-16-65			44	0	243	54	167	6.4	482	0	416	230	.2	2.8	.3	1,400	1,480	830	435	30	2,120	7.8	GS 51145
20K4	1948	144.5				111				225		145	185						393				7.3	A
	1949					103				208		144	125						334				8.3	A
	1950					96				232		106	128						326				7.3	A
	1951					108				273		132	108						364				7.3	A
	1-14-52					106	24			221		152	118					550	362	141			7.3	A
	1-24-52									227			119						364	137			7.2	A
	1-31-52									227		150	118						368	141			7.2	A
	2- 7-52									223			121						360					A
	2-14-52									221			122						362					A
	2-20-52									223			116						374	151			7.4	A
	2-20-52					106	23			220		152	118					608	364	144			7.3	A
	2-27-52									216			116						344					A
	2-27-52									222			116						364					A
	3- 5-52												118											A
	3- 5-52												115											A
	3-20-52												112											A
	3-20-52									223			112						363	140				A
	12-29-53												105											A
	9-17-54		72										120		.4				368			971		GS 13256
	10-11-55		73	49	.03	108	23	68	3.5	268	0	142	101	0	.1	.15	627	649	366	146	29	988	7.4	GS 17146
	10-23-56		71	50	0	116	22	66	3.2	270	0	126	102	0	0	.14	618	708	379	158	27	1,000	7.4	GS 20919
	4-24-58		72	49	.02	102	28	66	3.7	262	0	125	122	.2	.1	.20	625	639	370	155	28	974	7.3	GS 25755
	8- 3-60		72	50	.02	123	32	80	3.5	298	0	191	115	0	.1	.2	742	821	440	196	28	1,110	7.4	GS 34577
	8-31-60		72	49	.02	123	35	72	4.2	300	0	188	113	0	.3	.1	733	770	450	204	26	1,100	7.3	GS 34638
	11-28-60		72	52	.02	115	32	74	3.4	290	0	150	126	.1	.3	.1	626	771	420	182	27	1,110	7.5	GS 35370
	1- 9-61		72	48	0	120	30	69	2.8	284	0	173	115	0	.4	.2	698	732	424	191	26	1,080	7.6	GS 35890

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																				Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$						
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500								
7N/34W-20K4	2-23-61		72	48	0	129	28	73	3.3	284	0	206	115	0.1	0	0.2	743	813	438	205	26	1,140	7.5	GS 36174
	3-21-61		72	48	.02	124	27	88	4.5	293	0	163	142	0	2.5	.2	743	819	420	180	31	1,190	7.3	GS 36456
	5- 2-61		72	49	0	126	31	70	2.8	288	0	186	115	.1	.7	.2	723	758	442	206	25	1,110	7.5	GS 36960
	8-17-61			52	0	119	28	72	3.0	281	0	184	122	.1	0	.2	718	773	414	184	27	1,070	7.5	GS 37747
	11-28-62			48	.01	126	31	78	3.7	304	0	188	114	.2	.8	.2	740	763	442	193	28	1,100	7.3	GS 41995
	11- 3-64			49	.03	137	24	78	3.3	268	0	235	104	.4	.2	.2	763	772	442	222	28	1,140	7.8	GS 48005
89 20K5	12- 4-38	177		17		119	23	77		297	0	154	110	0	0	0	646		392	148	30		7.3	W
	12-11-59		71	46		103	28	72	3.8	224	0	175	115	.2	3.0	.20	656	640	372		29	1,030	7.9	DWR 1149
	4- 5-60		71	35		126	28	73	3.1	286	0	175	125	.2	0	0	706	803	427	193	27	1,140	7.8	DWR T-4618
	9-22-60			38		120	32	72	3.7	289	0	188	114	0	0	.24	710	736	431	194	26	1,110	7.6	DWR L-420
	10-18-60			57	.01	161	51	130	6.2	400	0	300	169	.1	8.7	.4	1,080	1,130	610	282	31	1,690	8.1	GS 35098
	11-10-60		68	51	0	127	31	76	3.4	284	0	168	117	.1	.2	.2	730	814	444	211	27	1,150	7.5	GS 35375
	3- 2-61		70	42		129	28	74	3.5	286	0	205	117	.1	0	.30	740	754	438	204	27	1,160	7.5	DWR L-1110
	10-12-61			39		138	22	73	2.0	288	0	200	117	.2	0	.21	733	882	435	190	27	1,100	7.0	DWR L-2086
	11-14-61		70	47	.03	131	29	74	3.7	294	0	192	115	.1	.2	.2	737	767	446	205	26	1,140	7.6	GS 38535
	6- 6-62		70	37		122	54	80	1.7	295	0	187	117	.1	0	.19	744	746	426	184	29	1,120	7.7	DWR L-3200
	9-21-62		70	32		124	27	66	3.3	293	0	163	118	.1	0	.19	678	780	423	183	25	1,020	8.0	DWR 3483
	7-22-63		70	38		122	27	77	2.9	351	0	179	118	.2	0	.15	737	770	415	178	29	1,100	7.7	DWR L-4876
	9-30-64					113	30	82	4	256	0	207	121	.1	0	.20	683	750	407	197	30	1,120	7.7	DWR L-7733
	11-16-65			48	0	127	30	75	2.7	300	0	190	102	.2	.7	.1	724	752	440	194	27	1,120	8.0	GS 51151
20L1	4- 8-59	184		55	.09	101	24	a74		286	0	93	136		0		624	707	234	117			7.1	T A-6384
	4- 5-60		70	36		102	24	75	3.1	282	0	102	133	.1	0	0	614	720	356	176	31	1,030	8.2	DWR T-4620
	8- 3-60			55	.02	115	31	76	3.4	311	0	121	132	.3	0	.1	687	776	415	160	28	1,100	7.4	GS 34580
	8-31-60			50	.04	118	35	76	4.0	310	0	146	129	0	.4	0	711	784	440	186	27	1,080	7.4	GS 34639
	9-22-60			39		118	27	72	3.8	289	2	151	1.3	0	0	.20	556	698	408	167	27	1,080	8.3	DWR L-422
	10-18-60			58	.16	178	57	139	3.4	388	30	330	182	.2	1.8	.4	1,170	1,220	679	311	31	1,810	8.4	GS 35099
	11-10-60		68	53	.03	121	31	76	3.4	228	0	184	130	.1	.2	.2	713	819	430	191	28	1,130	7.2	GS 35374
	11-23-60			31	.04	120	23	92	3.4	230	0	143	127	0	1.1	.2	782		164	258	30	1,180	7.2	GS 35367
	1- 9-61			36	.03	103	33	93	2.6	326	0	107	165	0	.2	.1	701	745	394	127	34	1,170	7.6	GS 35888
	2-23-61			49	0	128	29	74	3.3	309	0	157	136	.1	.2	.2	729	830	440	187	27	1,230	7.4	GS 36172
	3- 2-61		71	46		132	30	72	3.5	296	0	166	138	.3	4.0	.28	738	774	455	213	25	1,200	7.2	DWR R-3879
	3-21-61			49	.02	129	28	74	3.7	298	0	165	132	0	.8	.1	729	810	437	193	27	1,160	7.4	GS 36459
	5- 2-61			51	0	129	33	74	3.0	296	0	168	135	.1	.6	.2	740	835	456	213	26	1,180	7.4	GS 36961
	8-17-61			48	0	125	29	72	3.1	288	0	182	111	0	0	.2	712	750	432	196	26	1,120	7.5	GS 37748

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)														Dissolved solids		Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)		Calculated (Sum of determined constituents)	Residue on evaporation at 180°C						
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45			500	500						
7N/34W-20L1	10-12-61			40		146	34	80	2.3	313	0	211	149	0.1	0	0.25		817	1,030	508	251	25	1,260	6.9	DWR L-2083
	11-14-61			50	0.04	144	34	80	3.9	321	0	193	145	.1	.2	.2		804	876	500	244	26	1,270	7.6	GS 38538
	6- 6-62		71	39		146	34	87	3.6	317	0	217	156	.1	2.0	.19		841	891	505	245	27	1,300	7.9	DWR L-3196
	11-28-62		68	50	.02	159	37	88	4.2	336	0	230	156	.5	.6	.2		892	945	548	272	26	1,370	7.5	GS 41994
	7-22-63		71	38		158	34	92	3.4	318	0	243	163	.1	0	.24		889	1,030	534	275	27	1,370	7.5	DWR L-4879
	5-18-64		70	37		56	97	97	3.6	335	0	251	168	.2	0	.30		875	1,020	542	268	28	1,300	8.0	DWR L-6868
69	9-30-64					117	63	94	5	334	0	247	169	.1	0	.24		860	928	552	8	27	1,220	7.9	DWR L-7820
	11- 3-64			49	.04	169	41	95	3.8	336	0	257	180	.1	.7	.2		962	990	590	314	26	1,490	7.9	GS 48004
	7- 7-65		71			164	42	90	4	334	0	256	167	.4	0	.24		889	1,090	581	307	25	1,450	7.8	DWR 18552
	10- 1-65		73	50	.01	166	37	100	4.6	328	0	255	170	.2	.5	.1		945		566	297	28	1,450	8.1	GS 50972
	11-16-65			50	0	167	37	98	3.8	326	0	260	165	.1	.6	.2		943	1,000	570	303	27	1,440	7.9	GS 51143
20M2	1948	192				124				279		152	190							433				7.3	
	1949					103				263			144							396				7.3	
	1951					118				324		132	170							393				7.3	
	1-16-52					112	31			290		150	200						810	422	132			7.3	A
	1-24-52									278			193							414	136			7.3	A
	1-24-52									264			205							408	144			7.3	A
	1-31-52									282			191							400	118			7.5	A
	1-31-52									274			182							394	120			7.4	A
	2- 7-52									294			186							412					A
	2- 7-52									280			196							402					A
	2-14-52									258			167							374					A
	2-14-52									272			194						672	393					A
	2-20-52									269		131	192						672	388	119			7.2	A
	2-27-52									262			183							370					A
	2-27-52									268			183							400					A
	3- 5-52												161												A
	3- 5-52												185												A
	3-20-52												182												A
	3-20-52									268			183							398	130				A
	12-19-53												190												
	9-17-54		70										198		3.1					238			1,090		GS 13255
	10-11-55			50	.04	122	28	122	7.6	327	0	142	187	.1	2.0	.48		822	856	418	150	38	1,360	7.2	GS 17145

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$				
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/3W-20M2	6-11-57												199											
	4-24-58		70	43	0.03	95	41	115	7.6	298	0	128	200	0.2	4.2	0.50	782	836	405	161	38	1,300	7.0	GS 25754
	12-24-58			50	.03	26	72	113	6.0	296	0	102	188	.1	.7	.3	704	708	360	117	40	1,260	7.2	GS 28784
	12-11-59		69	50		90	30	130	7.0	227	0	151	200	.3	8.5	.62	780	800	347		44	1,270	7.9	DWR 11214
	3-21-60		69	50		90	30	130	7.0	227	0	151	200	1.2	8.5	.62	791	800	347		44	1,270	7.9	DWR 11214
	4- 6-60		70	31		107	28	120	6	302	0	114	197	0	1	.44	753	900	384	137	40	1,320	7.0	DWR T-4384
	8- 3-60		70	51	.02	107	27	123	6.2	308	0	133	183	0	4.2	.4	787	870	378	125	41	1,270	7.2	GS 34576
70	8-31-60		70	50	.04	107	34	107	7.2	312	0	138	186	.1	4.4	.3	788	835	405	149	36	1,270	7.2	GS 34637
	9-22-60			38		81	30	122	8.2	232	0	141	196	.1	6.0	.49	737	782	328	138	44	1,240	7.9	DWR L-421
	10-18-60			57	.07	207	66	149	6.4	497	0	392	192	0	4.9	.6	1,320	1,390	788	380	29	2,090	8.0	GS 35103
	11-17-60		70	52	0	105	29	120	7.2	321	0	126	177	.1	3.2	.4	780	836	380	117	40	1,260	7.4	GS 35372
	1- 9-61		70	50	0	108	22	115	5.8	290	0	125	185	0	4.7	.3	759	809	360	122	40	1,260	7.4	GS 35889
	2-23-61		70	48	0	110	24	114	5.4	292	0	142	178	.2	6.0	.4	772	833	372	133	40	1,350	7.4	GS 36171
	3- 2-61		70	45		112	27	112	6.3	287	0	134	188	.3	11.	.46	777	806	390	155	40	1,290	7.1	DWR R-3878
	5- 2-61		70	50	.01	112	28	116	2.6	294	0	134	190	.1	7.7	.4	786	840	396	155	39	1,300	7.3	GS 36959
	8-17-61		70	48	0	123	25	72	2.6	288	0	182	115	0	.3	.2	710	748	408	172	28	1,110	7.6	GS 37742
	8-18-61			50		117	26	122	6.6	293	0	144	192	.3	7.6	.36	810	810	399	159	39	1,330	8.1	DWR 13031
	10-12-61			40		118	22	130	5.0	291	0	166	191	.1	4.3	.40	820	944	386	148	42	1,320	6.8	DWR L-2085
	11-14-61		68	50	.03	117	27	118	7.6	300	0	144	188	.2	6.1	.4	806	875	402	156	38	1,320	7.4	GS 38537
	9-21-62		70	32		117	29	170	6.0	324	0	213	201	.1	4.0	.37	932	990	410	170	47	1,300	7.8	DWR 3476
	11-28-62		69	49	0	117	33	119	7.0	312	0	156	191	.2	6.1	.4	833	892	428	172	37	1,340	7.5	GS 41999
	7-22-63		70	39		135	24	132	5.5	311	0	175	210	.2	0	.46	874	934	439	184	39	1,420	7.4	DWR L-4877
	11- 6-63		70	35		102	40	138	7.0	262	0	186	216	.2	4.3	.45	858	914	420	205	41	1,340	8.0	DWR L-5696
	9-29-64					97	51	148	8	311	0	179	231	.1	5	.36	872	954	452	197	41	1,320	8.1	DWR L-7814
	11- 3-64			47	.01	175	41	161	8.2	348	0	230	305	.2	7.7	.6	1,150	1,170	605	320	36	1,840	7.6	GS 48008
	7- 7-65		70			115	38	130	7	259	0	191	230	.5	9	.36	849	930	443	231	39	1,440	7.8	DWR 18555
	10- 1-65		70	47	0	136	33	129	6.8	310	0	183	222	.3	6.7	.3	917		476	222	37	1,490	8.2	GS 50977
	11-16-65			49	.01	139	32	126	6.4	312	0	188	210	.1	5.3	.3	910	972	480	224	36	1,500	7.6	GS 51142
20N2	6-19-63	40.4	67	24		345	178	285	6.6	513	0	930	569	.7	5.0	.30	2,590	2,800	1,590	1,170	28	2,920	8.0	DWR R-4979
	2- 4-64		65	29		320	1444	479	7.3	724	0	1,110	480	.6	6.4	.8	2,930	3,090	1,390	797	43	3,840	7.4	DWR 16409
20N3	6-19-63	38.4		28		158	91	103	1.2	354	0	427	174	.5	2.5	.23	1,160	1,220	773	483	23	1,690	8.0	DWR R-4979
	2- 4-64		64	17		237	109	124	4.3	391	0	323	459	.4	4.0	.4	1,670	1,820	1,040	720	21	2,280	7.5	DWR 16408

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																			Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium			
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45	-	500	500							
7N/34W-20R1	4-28-59	177		50	0.02	75	22	59		252	0	69	86		0		485	554	207	70			7.1	T A-6752
	9-21-62		72	38		94	21	53	3.1	263	0	109	86	0.2	0	0.43	530	554	320	104	26	840	7.4	DWR 3637
21E1	1- 9-50	119.5											86						288			883		
	1-10-50												99						288			1,050		
	1-10-50		69	43	.15	91	26	64	2.4	282		109	88	.2	.1	.03	563		334	103	29	879	7.3	GS 4304
21J1	9- 2-49	63.5											163						225			938		
21N1	3- 3-61	80	71	37		70	30	66	2.8	224	0	68	131	.1	0	.15	515	582	297	114	32	875	7.9	DWR L-1115
	8-18-61			48		70	31	62	3.2	188	22	56	132	.2	.4	.08	518	520	299	109	31	882	8.4	DWR 13034
22E1	6-11-57	87.7											188											
7N/35W-13N1	6- 2-41	56.5	75										175						300			1,090		
16G1	6- 2-41	46.0	76										488						600			2,280		
17B1	5- 2-41	31.5	76										477						415			2,060		
17K1	5- -65	186.7				321	322	1,150	21	472	0	846	2,350	.6	26	.43	5,270	6,200	2,130	1,740	54	8,430	7.7	DWR R-998
17M1	7-11-64	165.0				156	29	620	29	330	0	39	1,120	.1	0	.71	2,160	2,000	510	239	71	3,200	7.3	DWR L-7536
	4- 8-65					80	479	3,200	100	251	0	615	6,020	.6	16	1.6	10,600	11,700	1,980	1,780	75	17,900	8.2	DWR 18060
18H1	8-30-63	111.5		32		138	363	3,130	109	502	0	795	5,130	.4	12	1.8	9,960	10,800	1,840	1,430	77	1,600	8	GS 45487
18H2	7-15-64	187.8		80	.02	273	442	3,330	99	638	0	825	6,110	3.0	33	1.9	14,500	12,400	2,490	1,970	73	19,000	7.6	GS 47146
	7-15-64					375	385	3,650	110	652	0	825	6,330	.1	0	1.7	12,000	20,600	2,480	1,940	75	16,000	7.2	DWR L-7524
	4- 8-65		64			264	998	6,150	61	264	0	1,650	11,600	1.2	10	2.3	20,900	21,800	4,760	4,540	73	31,400	7.1	DWR 18062
18J1	8-26-48	111.2											4,170						1,200			12,800		
	12-15-48												8,830						3,750			23,400		
	5-14-51		73										16,700			2			7,040			72,000		
	8-21-51												2,100						682			7,970		
	4-25-52					90	128	1,350	48	514	16	252	2,280				4,420		751		78	7,830	8.4	GS 4291
	9-10-52									582	0		2,350									8,350	8.2	GS 5274
	4-23-53												2,090						625			7,220		GS 7245
	5-19-54												1,750						510			6,230		GS 11501
	9-23-54												1,760		.6				498			6,210		GS 13227
	5-20-55												1,650						468			5,880		GS 15797
	9-22-55		62			52	76	1,070	33	546	0	112	1,630	.5	7.3	.58	3,250	3,280	885		83	6,020	8.1	DWR R-845
	11- 1-55												1,690						540			5,990		GS 17746
	3-30-56												1,640						470			5,850		GS 19357
	10-16-56												258						760			2,030		GS 20719
	4- 5-57					62	85	1,100	36	552	0		1,650						504	51	81	5,850	7.5	GS 21946

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$				
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/35W-18J1	6-16-58			40		83	104	175	3.0	406	24	299	224		32	0.22	1,280	1,080	634		37	1,840	8.4	DWR 9232
	9-18-58			38		108	96	184	3.1	493	0	305	233	0	30	.40	1,240	1,420	664		38	1,990	7.3	DWR T-2674
	4-16-59			18		127	97	175	4	350	50	353	260	.3	2	.12	1,260	1,420	716		35	2,030	8.4	DWR T-3449
	9-15-59			21		116	79	185	4.3	451	0	281	239	.7	39	.20	1,190	1,360	614		39	1,890	8.0	DWR T-4129
	4- 5-60			22		102	61	59	3	287	0	330	37	.2	17	.20	772	845	503	268	20	1,140	8.0	DWR T-4394
	9-22-60		58	23		47	92	1,060	50	714	0	93	1,500	.3	3.1	.98	3,220	3,170	498	0	80	5,620	7.5	DWR L-410
72	3- 2-61			30		58	77	1,050	35	640	0	106	1,520	.3	1.7	.78	3,190	3,040	460	0	82	5,250	8.2	DWR L-1108
	10-10-61			24		55	81	1,000	23	506	0	100	1,490	.2	0	1.2	3,020	3,030	472	57	81	5,200	7.7	DWR L-2096
	6- 6-62			28		80	76	1,010	56	494	64	109	1,600	.1	3	1.2	3,270	3,300	513	98	79	5,600	8.4	DWR L-3021
	9-21-62			18		68	80	1,020	30	518	9	135	1,520	.2	2	.86	3,140	3,580	497	57	80	5,100	8.3	DWR 3474
	10-15-63			28		98	88	1,070	33	467	15	98	1,710	.1	1.3	1.1	3,370	3,110	605	197	78	5,200	8.4	DWR L-5613
	5-19-64					57	92	989	34	417	43	80	1,560	.5	12	1.0	3,070	3,060	520	106	79	5,420	8.4	DWR R-454
	9-29-64					70	78	1,010	40	495	1	96	1,590	.1	4	.76	3,130	2,960	495	88	80	4,600	8.3	DWR L-7819
18J2	7-29-63	121.7		26		506	773	5,330	168	785	0	1,620	9,590	.3	15	2.1	18,400	19,100	4,470	3,830	71	27,500	7.5	GS 45488
	12-13-63		60	42		683	1,060	6,000	246	939	0	2,020	11,500	1.1	6.8	2.5	22,000	24,000	6,100	5,300	67	32,700	6.8	DWR 16217
	4- 8-65					87	58	550	27	351	0	1	995	.2	18	.6	1,910	2,080	465	168	70	3,680	7.5	DWR 18061
20J1	5-20-41	20.5	76										375						825			3,300		
	7- 8-41		73										1,690						1,700			6,000		
	8-11-41		77										1,500						1,580			5,490		
	9-11-41		70										2,000						2,250			5,990		
	9-30-41		70										1,530						1,680			5,710		
	10-27-41		70										2,060						2,120			6,860		
	12-11-41		68										1,870						2,000			6,240		
	5-25-42		72										1,630						625			5,160		
	12-19-57												940						435			3,480		GS 26826
	5-15-58												2,820						1,220			10,000		GS 26822
	4-13-60			6		19	84	1,130	18	840	71	29	1,440	0	0	.30	3,210	3,840	391	0	85	5,750	8.6	DWR T-4624
	4-25-62		61	6		29	56	1,440	35	1,110	312	18	1,460	0	1	.5	3,900	3,860	300	0	90	6,490	8.4	DWR T-254
21D1	8-22-58	180		14	0.5							18	300	.1		.09		1,050	322			1,450	8.3	
21H1	3-30-56	176				107	139	153	10	141	0		389						840	724	28	2,150	8.0	GS 19361
	12-15-59		62	9		96	114	127	9.0	477		188	284	.1	.7	.26	1,060	1,130	707		28	1,890	7.3	DWR 11193
	12-15-59		62	10		121	137	155	10	566		240	343	.1	.4	.24	1,300	1,390	864		28	2,250	7.6	DWR 11194
21L1	1935	190				128	70	274		420		256	412			.2	1,350	1,350	608					UC
	9-22-55		62			184	101	263	7.0	454	0	400	464	.4	6.0	.25	1,650	1,780	875		38	2,780	7.8	DWR R-847
21L3	5-14-51		73										535						783			2,520		
	8-21-51		74										512						780			2,560		

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)														Dissolved solids		Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Calculated (Sum of determined constituents)	Residue on evaporation at 180°C						
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/35W-21L3	4-25-52					176	90	210	9.5	196	0	372	565				1,520		809	648	36	2,590	7.9	GS 4290
	9-10-52		75							188	0		540									2,530	6.8	GS 5273
	4-23-53												540						750			2,500		GS 7244
	5-19-54												585						780			2,510		GS 11500
	9-23-54												555		3.8				792			2,540		GS 13226
	5-20-55												540						768			2,520		GS 15796
7N/35W-21L4	9-23-57	181		42		88	98	266	5.6	180	0	409	470	.3	10	0.20	1,480	1,650	623		48	2,360	7.3	DWR R-1887
	9-18-58			34		146	131	281	6.5	442	0	412	480	0	3	.5	1,710	1,950	906		40	2,820	7.6	DWR T-2657
	3-12-59			17	3.2							270	474	.2		.2		1,780	852	466		2,530	7.8	N
	3-17-59			17	1.2							210	474	.2				1,880	856	490		2,680	7.3	N
	4-16-59			25		130	128	292	7	395	0	408	361	0	7	.23	1,550	1,860	850		43	2,850	7.4	DWR T-3450
	4-16-59					186	100	294	8.0	464	0		518				1,340		876	496	42	2,670	7.4	GS 30105
	4-13-60			27	.02	155	108	307	11	440	0	366	532	0	1.5	.3	1,720	1,750	830	469	44	2,720	7.5	GS 33675
	4-13-60			19		143	104	285	8	400	0	386	494	0	0	.30	1,640	1,890	786	458	44	2,800	8.0	DWR T-4396
	4-29-60		65	33		120	100	272	6.3	216	0	407	493	.3	2.4	.37	1,540	1,680	708	531	45	2,560	8.1	DWR L-470
	7-27-60			37								480	492	.2		.3		2,330	816			3,330	7.5	N
	3- 2-61			31		178	103	300	6.0	455	0	438	484	0	2.9	.44	1,770	1,860	871	498	43	2,750	7.4	DWR L-1122
	10-10-61			30		176	97	295	4.8	413	0	436	488	.1	1.9	.41	1,730	1,880	841	502	43	2,600	7.6	DWR L-2095
	6- 6-62			28		170	110	305	16	467	0	419	506	.1	3	.40	1,790	1,930	878	460	42	2,750	7.8	DWR L-3022
	9-21-62			26		229	74	295	7.0	476	0	420	516	.1	0	.30	1,800	2,040	878	488	42	2,660	7.8	DWR 3464
	11- 7-62			33	0	179	101	306	8	482	0	412	498	.3	5.9	.5	1,780	1,770	860	465	88	2,810	7.4	DWR 41828
	6- 4-63			37	4.0	178	100	330	6.3	390	0	410	580	.4		.35	1,840	1,900	856	536	45	2,750	7.3	
	7-22-63			29		178	98	300	7.0	473	0	384	510	.5	2.4	.31	1,740	1,780	846	458	43	2,810	7.6	DWR 15837
	5-19-64		65	28		188	100	325	5.0	468	0	425	539	.2	5.3	.42	1,850	2,310	880	497	44	2,600	7.8	DWR L-6864
	9-30-64					198	88	335	7	467		432	521	.1	2	.38	1,810	1,980	855	473	46	2,850	8.0	DWR L-7933
	11- 3-64			35	.10	180	101	300	7.5	446	0	402	515	.2	2.4	.3	1,760	1,790	865	499	43	2,860	7.8	GS 47998
	7- 7-65					151	106	295	7	412	0	407	495	.6	5	.34	1,670	1,800	812	474	44	2,700	7.7	DWR 18541
21R1	5-26-41	82.4	76										663						850			2,950		
	7- 8-41		72										622						700			2,910		
	8-11-41		67										609						800			2,910		
	9-11-41		70										629						750			2,760		
	9-30-41		70										640						750			3,040		
	10-11-41			29	7.8	183	80	356	3.8	355	0	356	635	.4	3.2		1,830	1,920	786		49			GS 26555
	10-27-41		70										633						500			2,820		
	5-25-42		72										603						550			2,510		

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																Percent sodium	Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$				
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/35W-22F1	1935	173				135	65	78		451		173	160			0.1	833	837	605					UC
22L1	5-14-51	219	73										345						997			2,350		
	8-21-51												337						918			2,390		
	4-25-52					107	96	125	9.5	292	0	281	328				1,090		662		29	1,900	8.0	GS 4292
	4-23-53												365						910			2,280		GS 7243
	3-30-56												414						702			2,080		GS 19359
	4- 5-57					204	115	161	11	474	0		405						980	591	26	2,390	7.2	GS 21948
	9-27-57			43		122	123	175	10	156	0	372	505	0	18	.15	1,450	1,680	806		32	2,260	7.5	DWR R-1889
	6-16-58			30		129	112	154	10	288	0	355	378	.1	13	.18	1,320	1,500	786		30	1,990	7.9	DWR 9167
	9-18-58			47		125	112	172	9.4	201	0	357	420	.1	15	.38	1,360	1,540	773		32	2,100	8.0	DWR R-2281
	3-14-61			43		146	124	168	10	310	0	407	384	.4	12	.28	1,450	1,560	873	619	30	2,280	7.8	DWR 13067
	9-19-62		65	32		337	45	168	9.3	513		435	391	.1	4.0	.28	1,670	1,980	1,020	604	26	2,420	7.7	DWR 12676
22M1	6-10-57	180	63										350						516			1,770		GS 22591
	12-19-57			20		150	42	190	6.7	272	12	188	374	.1	.5	.16	1,120	1,140	547		43	1,840	8.2	DWR 8654
	9-18-58			35		122	52	173	5.7	285	0	170	357	0	0	.2	1,050	1,220	520		41	1,830		DWR T-2675
	7-20-60		65										358									1,740		GS
	4-11-61												342									2,870		GS
	4-11-61			39		128	48	172	6.8	273	0	157	354	.2	3.5	.20	1,040	1,100	517	*293	42	1,770	7.9	DWR 13066
	6- 6-62		64										345									1,760		GS
	11- 6-63		63	26		123	45	187	5.7	266	0	178	355	.1	0	.24	1,050	1,080	493	275	45	1,620	8.1	DWR L-5561
	5-19-64		63			128	47	164	6	266	0	153	351	.2	0	.10	980	1,100	512	294	41	1,750	8.3	DWR R-455
	9-24-64					144	47	195	7	288	0	185	384	.1	0	.43	1,100	1,180	552	316	43	1,650	7.8	DWR L-7818
	7- 7-65		63			127	47	164	6	268	0	156	348	.3	1	.14		1,080	515	295	41	1,760	7.7	DWR 18527
	10- 1-65		64	37	0	127	47	170	6.1	246	6	170	362	.2	.4	.1	1,050	980	512	300	42	1,820	8.3	GS 50976
22N2	7-22-58	183.6		44	0							106	296	0				1,120	418	206		1,720	7.4	N
	11-16-59		65							217	0		251						325			1,280	7.7	DWR 10815
	11-16-59		65										265						330			1,280		GS 32451
	11-16-59		65	40		93	33	134	5.9	226	0	101	261	0	3.1	.06	782	810	369	184	44	1,400	8.1	DWR 10850
	11-16-59		65			96	35	147	8.0	228	0		275						385	198	45	1,390	8.2	GS 32435
	4-13-60			32	.02	73	27	130	6.4	208	0	63	258	.1	1.1	.1	693	701	295	124	48	1,210	7.5	GS 33676
	4-13-60			17		57	24	136	5	171	0	44	252	0	0	0	619	770	241	1	54	1,220	7.5	DWR T-4397
	11- 9-61		62	44		83	27	132	4.6	195	14	82	244	.2	4.5	.12	731	760	318	134	47	1,270	8.2	DWR 13215
22P1	7-10-41		73										272						450			1,600		
23B1	10-17-41	190	65	38	.9	187	95	185	5.3	551	0	399	282	0	.8		1,460	1,530	857					GS 26554
	1948					114				265		180	178						435				7.3	A

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																					Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500							
7N/35W-21B1	- 1951					204				523		431	376						924				7.3	A
	1-15-52					148	94			380		298	456					1,490	754				7.7	A
	1-24-52									414			465						810	396			7.5	A
	1-24-52									426			425						902	476			7.3.	A
	1-31-52									454			450						806	352			7.3	A
	1-31-52									445			405						904	459			7.6	A
	2- 7-52									458			382						918					
	2- 7-52									446			395						922					
	2-14-52									440			412						886					
	2-14-52									434			390						908					A
	10-11-55		65	37	0.10	161	84	252	5.2	486	0	372	358	0.4	3.0	0.56	1,510	1,600	748	349	42	2,400	7.5	GS 17144
	12-15-59			2		20	58	281	3.8	194	0	222	352	.4	.8	.40	1,040	1,010	288		68	1,850	7.5	DWR 11189
	12-15-59			3		21	55	285	3.7	193	0	221	360	.4	.1	.38	1,040	1,030	280		69	1,850	7.6	DWR 11190
	4-13-60		63	5		28	44	238	5.5	162	0	194	301	.4	2.7	.28	899	906	250		67	1,380	7.7	DWR R-3210
	2-27-62			44	.04	133	31	85	4.0	274	9	195	145	0	1.3	.1	783	803	460	219	28	1,190	8.4	GS 39441
24H1	11- 9-61	182	66	37		78	29	104	4.0	304	0	70	147	.2	5.8	.14	625	627	312	63	42	1,100	8.1	DWR 13201
24H2	1948	202				109				295		140	169						407				7.3	A
	1949					112				309			220						428				7.3	A
	1950					106				304		164	226						360				7.3	A
	1951					136				368		161	192						475				7.3	A
	1-16-52					103	36			308		150	290					882	412	104			7.5	A
	1-24-52									300			260						380	80			7.5	A
	1-24-52									304			295						426	122			7.4	A
	1-31-52									320			280						412	92			7.5	A
	1-31-52									324			270						412	88			7.5	A
	2- 7-52									322			259						408					A
	2- 7-52									324			260						430					A
	2-14-52									302			250						388					A
	2-14-52									308			270						414					A
	2-20-52									300			231						378	78			7.8	A
	2-20-52					106	34			306		156	247					910	404	98			7.5	A
	2-27-52									323			230						466					A
	3- 5-52												223											A
	3-20-52												237											A
	3-20-52												233											A
	12-29-53												245											A

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																		Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
7N/35W-24H2	10-11-55		70	47	0.01	114	34	160	7.8	348	0	142	236	0.1	10	0.55	922	950	424	139	45	1,530	7.4	GS 17142
	12-11-59		66	55		131	43	143	6.9	381	0	196	200	0	7	.33	970	1,000	503		38	1,560	7.7	DWR 11192
	4-24-58		68	40	.02	104	41	155	8.6	334	0	134	255	.2	6.5	.59	910	942	430	156	43	1,520	7.4	GS 25752
27C2	1935	118				244	84	238		384	0	289	572			.10	1,620	1,620	954					UC
	5-14-51		73	14									470			.2			791			2,580		
	9-25-53		65	44	0	169	69	221	7.0	302	0	302	450	0	5.1	.32	1,420	1,530	705	458	40	2,320	7.5	GS
	12-17-53												382						585			1,930		
	5-19-54												390						600			2,180		GS 11502
	9-17-54		65	43	.01	150	57	208	6.0	275	0	237	405	.1	2.4	.21	1,240	1,[illegible]40	[illegible]09	383	42	2,020	7.5	GS
	5-20-55												264						728			1,980		GS 15798
	11- 1-55												240						707			1,910		GS 17747
	3-30-56												256						730			1,910		GS 19358
	10-16-56												262						680			2,010		GS 20720
	4- 5-57					146	108	165	3.8	432	0		275						810		31	2,060	7.0	GS 21947
	9-23-57			40		128	106	158	4.1	427	0	364	268	.3	21	.25	1,300	1,930	760	410	30	1,960	8.0	DWR R-1888
	6-16-58			37		118	86	179	4.9	470	0	291	223	.3	27	.20	1,200	1,230	650		37	1,870	8.1	DWR T-2430
	9-18-58			37		112	94	184	3.9	490	0	318	232	0	31	.64	1,320	1,420	666		37	1,960	8.2	DWR T-2673
27F1	10- 7-60	123				68	22	112	4.2	170	0		204						260	121	48	1,070	8.0	GS 35109
	12-13-63		64	50		68	30	110	7.2	183	0	70	218	.1	3.0	.11	646	670	293	143	44	1,110	7.5	DWR 16216
27P1	12-12-63	582	66	13		50	35	71	9.3	71	0	100	187	.1	.5	.07	501	532	269	211	35	910	7.2	DWR 16213
28H1	1935					66	25	128		164		48	256			0	604	605	268					UC
	3-10-58												260						240			1,160		DWR 26815
28K2	5-13-58	232.9	66			60	21	154	5.4	164	0		272						235	101	58	1,210	7.4	GS 26832
	5- 7-59					36	16	151	4.8	134	0		248						154	44	67	1,050	7.2	GS 30101
	5- 7-59												250						128			1,010		GS 30100
	12-12-63		64	37		53	20	158	4.9	168	0	65	252	.2	0	.15	673	668	214	76	61	1,170	7.3	DWR 16212
28R1	12-11-63	510	62	21		15	12	66	6.2	168	0	0	71	.2	1.0	.12	276	249	87	0	60	464	7.5	DWR 16207
30G1	4-14-58	276.9				24	22	487	46	586	0		460						150		84	2,620	7.9	GS 26831
	12-12-63		64	45		10	16	492	32	517	0	1.4	518	.2	26	1.6	1,390	1,340	91	0	89	2,390	7.6	DWR 16211
31J1	12-11-63	557.5	66	13		32	23	114	7.2	46	0	48	238	.3	.5	.04	499	511	175	137	57	945	6.9	DWR 16210
32N1	7-25-58	214.8		20	0							140	300	.3		1.5		1,150	470	278		1,600	7.7	N
	11-18-61		62	33		79	54	140	6.5	324	0	75	268	.1	0	.15	816	1,340	419	154	42	1,460	7.8	DWR L-2042
33J1	6-24-58	186.0	64	34	0	47	26	90	5.0	150	0	55	175	.3	1.7	.1	508	544	225	102	46	890	7.6	GS 26833
	9- 3-58			21	1.1							45	188	.4		0		770	228	88		980	7.3	N

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium		
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500					
7N/35W-33J1	3- 4-59			8	0.2							32	192	0.4				710	238	118		1,010	7.3	N
	3-12-59			7	.1							32	190	.3		0.05		640	222	108		915	7.6	N
	11-17-59		65			34	16	62	4.7	68	0		142			0			152	96	46	626	7.7	GS 32436
	11-17-59		65										135						140			589		GS 32452
	11-17-59		65							63	0		128						138	86		587	7.1	DWR 10811
	11-17-59		65	30		26	20	58	2.8	66	0	16	140	.1	5.5	.04	331	430	148	94	46	620	7.0	DWR 10812
	4-13-60			30	.08	31	17	56	3.7	70	0	30	132	.3	6.1	.1	340	348	148	91	44	599	6.7	GS 33677
	4-13-60			22		28	18	55	2	61	0	25	136	.2	8	0	324	395	148	95	45	646	7.4	DWR T-4385
	11- 8-61		63	34		37	21	64	3.0	81	0	24	152	.2	17	.08	392	450	180	114	43	729	7.1	DWR 13216
	12-11-63		62	44		30	25	75	3.1	84	0	40	154	.3	15	.06	427	438	178	109	47	725	6.9	DWR 16208
33J2	10-11-58	465		37	2.6							136	270	.1		.04		950	480	295		1,360	7.5	N
	3-12-59			7.5	.2							27	188	.3		.16		675	270	132		964	8.0	N
	7-21-59			42	.2							110	236					990	420	266		1,410	7.3	N
	8-19-59			37								53	190					700	200	80		1,000	7.5	N
	11-17-59		66	40		81	27	85	5.9	178	0	75	198	0	9	0	600	660	313		37	1,080	7.8	DWR 10847
	12- 2-59		66			104	32	98	8.2	194	0		238			.1			390	231	35	1,190	8.0	GS 32432
	1-27-60			39	.2							116	244	.2		0		960	430			1,380	7.9	N
	4-13-60		63	36	.02	44	23	99	5.2	136	0	47	190	.3	1.6	.1	513	516	205	93	50	895	7.2	GS 33679
	4-13-60		63	25		42	23	94	4	127	0	42	188	.3	2	0	483	585	199	95	50	920	7.7	DWR T-4386
	4-15-60			43	.02	122	43	90	7.2	207	0	116	278	.1	.8	.1	802	813	480	310	29	1,320	7.5	GS 33678
	9-22-60		67	33		108	35	85	1.6	186	0	107	242	.4	0	.30	704	782	415	262	31	1,300	7.5	DWR L-453
	3- 2-61		61	35		106	39	90	4.2	179	0	130	233	.1	2.0	.13	727	974	425	278	31	1,220	7.7	DWR L-1162
	5- 8-61			39				89	6.2			96	240	.2		0		1,030	394			1,470		N
	6- 6-62		64	27		50	22	105	9.0	154	1	61	181	.4	1	.11	534	604	216	87	50	920	8.3	DWR L-3023
	9-21-62			35		96	37	87	6.5	216	0	81	230	.2	0	.09	679	790	393	217	32	1,080	7.8	DWR 3460
	6- 4-63			35	.10	43	20	104	2.9	117		75	178	.4		1.8	518	640	192	96	54	918	7.3	N
	7-22-63		64	29		46	16	107	2.3	117	0	41	176	.2	3.7	.06	479	516	182	86	56	845	7.3	DWR L-4878
	11- 6-63			28		93	29	96	4.3	173	0	104	226	.2	0	.16	666	724	352	210	37	1,080	8.1	DWR L-5559
	11-21-63					38	20	99	3.4	156		43	184	.3		.2	465	770	176		62	1,100	7.1	N
	5-19-64		66			111	37	82	3	188	0	107	249	.3	.5	.04	683	792	428	274	29	1,260	7.9	DWR R-453
	9-30-64					93	37	97	4	182	0	108	240	.1	0	.15	669	848	385	256	35	1,150	8.0	DWR L-7936
	11- 3-64			34	.02	38	21	92	3.6	114	0	40	180	.4	4.1	.1	469	468	180	87	52	841	7.5	GS 48007
	8- 3-65		65	36		61	23	88	4.0	154	0	54	182	.3	.7	0	525	530	246	120	43	939	7.3	GS 50248

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																			Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium			
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500							
7N/35W-33J3	9-29-60	518		51	0.08	88	28	66	3.9	184	0	79	175	0.1	0	0	582	676	335	184	30	991	8.1	GS 35107
	9-30-60					83	32	66	4.1	186	0		172						340	187	29	1,020	8.2	GS 35110
	9-30-60			56	0			90	5.6			77	190	.1		.11		720	344	186		1,020	7.5	N
	6- 6-62		66	41		114	34	73	6.2	211	0	117	209	.4	0	.12	699	918	423	250	27	1,170	8.1	DWR L-3044
	9-21-62		67	45		120	33	74	4.6	224	0	128	207	.2	0	.05	722	978	437	253	27	1,160	8.1	DWR 3461
	7- -63			41	.3	96	39	86	3.5	195		165	178	.4		.17	705	820	400	240	32	1,170	7.3	N
78	11- 6-63			33		99	51	81	5.0	222	0	147	221	.2	0	.13	746	800	456	274	28	1,160	7.8	DWR L-5558
	11-21-63			36		120	39	85	4.5	220		142	220	.3		.02	755	1,200	460	300	28	1,710	7.3	N
	9-30-64					116	46	86	6	234	0	150	234	.1	2	.14	755	858	480	388	28	1,160	8.2	DWR L-7825
	11- 3-64			53	.01	127	40	80	5.0	228	0	140	230	.2	1.0	0	788	803	480	293	26	1,330	7.6	GS 48000
	7- 7-65		67			109	44	78	5	205	0	142	220	.4	3	.06	702	850	453	285	27	1,230	7.9	DWR 18540
	10- 1-65			49	0	123	38	80	5.4	236	0	139	212	.2	1.8	0	764		462	268	27	1,290	8.1	GS 50975
	11-16-65			48	.01	120	38	80	4.8	246	0	137	207	.2	.8	0	757	824	455	253	27	1,280	7.6	GS 51140
33R1	4-23-58	425		14	0							120	200	.6				1,100	480	255			7.6	N
	5- 5-58		64			168	66	92	7.3	372	0		215						690	385	22	1,600	7.4	GS 26830
	6- 5-58		64	58	0	123	59	92	7.0	244	0	246	215	0	.7	.1	921	1,010	548	348	26	1,450	8.0	GS 26835
	11-17-59		63										228						395			1,150		GS 32453
	11-17-59		63			150	66	96	9.0	300	0		228			.1			645	399	24	1,550	7.8	GS 32437
	11-17-59		63							90	0	210	210						352	278		1,150	7.7	DWR 10820
	11-17-59		63	30		151	64	92	6.4	354	0	245	212	0	0	.08	974	1,100	639	349	24	1,570	7.4	DWR 10821
	4-13-60			27		122	63	94	6	310	0	218	215	0	0	.14	898	1,040	567	313	26	1,510	7.6	DWR T-4387
	4-13-60			40	.03	128	65	100	9.2	340	0	215	220	0	1.4	.1	946	956	585	306	27	1,490	7.6	GS 33680
	11- 8-61		61	30		70	58	97	6.6	229	0	152	200	.2	.5	.12	727	780	411	223	33	1,250	7.9	DWR 13218
	12-11-63		60	35		50	62	101	6.9	215	0	132	203	.2	.5	.10	696	733	380	204	36	1,190	7.8	DWR 16209
35C2	5-26-41	122	76										135						255			793		
35D2	12-12-63	152.4	64	14		47	42	93	7.4	94	0	4.3	230	.2	37	.05	561	604	290	214	40	1,100	6.7	DWR 16214
8N/34W-16G1	4-28-58	687		53		103	26	8.0		185	0	132	74	.1		.03	487	460	364				7.0	O 58088
	4-29-58			28		97	45	3.0		192		106	103	0		.03	477	535	427				7.1	O 58089
	4-30-58			51		84	42	5.0		191		113	101	0		.04	490	510	382				7.3	O 58090
	4-28-59			31		78	13	60	3.5	225	0	101	69	0	1	.12	468	555	253	69	34	801	8.1	DWR 3442
	7- 7-60		66	43		55	20	60	3.2	171	0	125	58	.3	1.0	.10	450	455	218	74	37	662	8.1	DWR 11992
	11- 4-60		70	51	.03	83	22	61	3.0	245	0	134	55	.1	0	.2	531	563	296	83	31	810	7.1	GS 35369
	1-13-61			39	.40	80	23	61	3	253	0	120	76	.1	0	.26	528	610	296	88	31	885	7.3	T B-7655

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																		Specific conductance (micromhos at 25°C)	pH	Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium			
U.S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500						
8N/34W-16G1	1-19-61			38	2.8	80	24	60	4	254	0	121	77	0.1	0	0.08	533	600	298	90	30	829	7.2	T B-7654
	1-21-61			26	1.1	77	26	61	4	249	0	123	77	.3	0	.12	464	610	299	95	33	859	7.1	
	3-10-61		71	44		78	22	55	3.1	238	0	128	57	.2	4.7	.13	509	509	285	96	29	586	7.8	DWR R-3885
	11- 4-61		68	37	1.3	80	22	a71		254	0	132	61	.1	0	0	529	600	209	80			7.4	T C-2654
	11- 9-61									171	0		59						230	90		714	8.1	DWR 13590
	5-15-62			46		78	21	57	2.3	226	0	129	64	.2	4.3	.01	513	522	280	95	31	790	8.0	DWR R-4459
	7-17-62			47	.96	79	19	a80		241	0	113	100	.1	0	0	558	615	198	78		859	7.2	T E-01278
	7-17-62			47	.28	77	18	a79		241	0	131	94	.1	0	.06	566	620	198	72		859	7.2	T E-01279
	7-17-62			47	.88	78	21	a85		241	0	130	99	.2	0	.13	580	625	198	82		859	7.2	T E-01280
	7-17-62			47	.62	79	21	a73		256	0	132	78	0	0	.02	557	610	210	74		831	7.4	T E-01277
	9-28-62		74	39		86	19	58	3.2	245	0	125	72	.2	0	.27	524	528	293	92	30	800	7.5	DWR 3635
	11-29-62		70	38	.01	63	21	70	3.0	216	0	71	102	.4	.4	.1	475	492	243	66	38	788	7.4	GS 42000
	1-22-63			48	.01	79	18	70	3.7	244	0	105	91	.6	.5	.2	536	541	269	69	36	841	7.4	GS 42316
	7-17-63		74	50		77	20	72	4.0	237	0	107	92	.7	.6	.14	540	540	274	80	36	850	7.3	DWR 15801
	10-15-63		73	32		81	21	64	3.4	242	0	135	69	.2	0	.16	525	534	288	89	32	750	8.2	DWR L-5560
	5- 7-64			39		68	21	77	3	230	0	131	73	.2	0	.16	525	542	203	15	42	770	8.1	DWR L-6919
	10- 7-64					78	22	69	4	233	0	107	93	.2	0	.07	488	538	286	96	34	860	7.7	DWR L-8062
	11- 3-64			49	.02	85	20	58	3.4	256	0	141	55	.2	.3	.1	538	535	296	86	30	810	7.7	GS 48001
16G2	1-15-65	700		36		58	16		4.7	232	0	85	85	0	0			565	210	20		814	7.0	T
	7- 9-65		72			73	14	72	2	209	0	77	105	.8	0	.07	447	486	240	69	39	809	7.8	DWR R-1003
16J1	11-28-60	578		50	0	109	38	75	3.0	297	0	152	128	.1	.4	.3	702	629	430	185	27	1,130	7.2	GS 35370
	7- 7-61			34	.66	66	11	a85		205	0	64	109	.2	0	0	471	540	168	45		799	7.7	T C-1873
	9-29-61			31	.1	63	14	a89		191	0	70	112	.5	0	.04	474	540	157	57		770	6.8	T C-3092
	8- 2-62			37	.46	70	11	a82		202	0	64	110	.7	0	.06	475	555	166	54			7.2	T E-01623
	8- 2-62			36	.46	68	12	a81		203	0	69	110	.6	0	.04	477	555	166	54			7.2	T E-01624
	8-24-62			36	1.1	76	11	a83		216	0	70	108		0		491	565	177	58			7.2	T E-02037
	11-28-62			50	.01	67	31	62	3.3	252	0	121	70	.4	1.9	.2	531	558	296	89	31	826	7.3	GS 42002
	1-22-63			46	.03	66	12	70	3.0	196	0	70	104	.5	1.7	.1	470	481	215	54	41	761	7.5	GS 42317
	11- 3-64			47	.01	75	15	69	2.8	220	0	76	103	.5	.3	.1	497	501	250	70	37	808	7.6	GS 48002
1B1	12- 8-43	40	63										42					489	180			730		GS
17K1	3-14-55					20	52	1,020	53	1,620	0	37	1,080	.8	0	11	3,070	3,020	264		87	5,290	7.4	DWR 1938
	5-28-58			50		36	31	1,020	51	1,300	0	60	1,060		26	8.4	2,980	3,040	219		89	5,260	7.8	DWR 9227
	9-17-58			60		58	30	1,070	54	1,290	0	41	1,060	0	207	11	3,230	3,040	267		84	5,110	7.3	DWR 9728
	9-11-59		68							1,420			1,080						277			5,600	7.4	DWR T-4098

Well number	Date of collection	Depth of well (feet)	Water temperature (°F)	Results in parts per million (ppm)																			Analyzing laboratory and sample number
				Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Calculated (Sum of determined constituents)	Dissolved solids: Residue on evaporation at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	
U S Public Health Service drinking-water standards (1962)					0.3							250	250	1.3	45		500	500					
8N/34W-17K1	7- 7-60			47		71	27	1,070	42	1,480	0	33	1,040	0.5	0	18	3,080	3,010	288	0	87	5,490	7.0	DWR L-1452
	9-22-60		66							1,500			1,030						288	0		5,510	7.0	DWR L-423
	3-10-61		65	56		63	33	1,170	52	1,640	0	31	1,060	.4	4.7	21	3,300	3,040	295	0	88	5,700	7.0	DWR R-3884
	11- 9-61									1,700	0		1,100						284	0		5,680	6.9	DWR 13586
80	5-15-62									1,630	0		1,080						285	0		5,520	7.2	DWR R-4447
	9-28-62		67	42		81	30	1,150	50	1,540	0	14	1,160	.1	0	12	3,300	3,970	328	0	87	5,450	7.3	DWR 3634
8N/35W-3Z4	4-25-58	182	70	14	0	85	40	273		511	0	175	263	.5	0	0	1,100		377	0	61		7.1	CE
7R1	6-26-57	100		32		657	1,980	10,000		2,200	0	10,000	13,700				37,500	38,600	9,800			45,200	7.4	SE
9N/35W-7ES1	5-12-66			11	0	643	359	1,420	12	340	0	2,440	2,400	1.2	.2	6.5	7,460	8,040	3,080	2,800	50	10,300	8.2	GS 53037
7PS1	5-11-66			24	0	88	54	336	5.4	280	28	248	438	.9	10	1.1	1,370	1,420	440	164	62	2,350	8.5	GS 53036
8E1	5-11-66			27	0	175	76	350	2.7	332	0	392	575	1.0	0	.4	1,760	2,000	750	478	50	3,130	8.1	GS 53035
17M1	5-10-66			13	.17	8.0	113	100	.2	416	39	21	170	.1	22	.2	692	716	484	77	31	1,250	8.7	GS 53033
18HS2	5-10-66			94	0	20	140	256	1.2	448	55	98	438	.3	14	.4	1,250	1,440	626	167	47	2,240	8.8	GS 53034
18L1	5-17-61	96.6		21	.11	98	191	855	25	848	0	380	1,380	.4	.4	2.4	3,370	3,500	1,030	335	64	5,650	7.0	GS 37247
	11-28-62			23	.07	124	214	900	2.6	924	0	223	1,600	.7	3.6	92	3,570	3,710	1,190	432	62	6,060	7.2	GS 42004
20J1		68		38	0	240	192	760	6.0	500	0	830	1,220	.2	3.2	1.7	3,540	3,790	1,390	980	54	5,490	6.9	GS 42003
9N/36W-1NS1	5-12-66			19	0	388	365	940	7.9	270	20	1,200	1,950	.8	15	.7	4,940	5,660	2,220	1,970	48	7,670	8.3	GS 53038
1PS1	11-28-62		70	23	0	208	256	480	7.0	418	0	900	885	.8	2.3	.4	2,970	3,250	1,570	1,230	40	4,430	7.9	GS 42001
11Z1	6-14-60	99		5	.2	580	320	1,620		207	0	1,190	3,330	.8	0		7,150	6,950			56		7.3	T B-4058

Table 6.--Logs of wells

The depth of wells in this table is the depth reported by the driller and is not necessarily the developed depth of the well. Where depth given on log differs from that given in table 1 or table 3, it indicates that the well has been measured since it was drilled. The depths given in tables 1 and 3 are the measured depths on the date indicated.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/35W-2D1. Drilled by Floyd V. Wells. 8-inch casing to 475 ft; perforated 258-470 ft. Altitude about 290 ft.

Soil, sandy silt, black	30	30	Sand, fine, with some clay, olive gray	220	420
Clay, sandy, light gray	27	57	Clay, sandy, olive gray	23	443
Clay, sandy, with some gravel, light gray	43	100	Sand, fine, with some clay, olive gray	4	447
Clay, sandy, yellow	43	143	Clay, sandy	28	475
Clay, sandy, olive gray	57	200			

6N/35W-5F1. Drilled by Floyd V. Wells. 8-inch casing to 77 ft; perforated 5-57 ft. Altitude about 230 ft.

Soil, with sand and pebbles, brown	30	30	Sand and clay, with some gravel, olive gray	18	55
Sand and gravel, olive gray	7	37	Sand, very fine	22	77

6N/35W-8Z1. Drilled by Top Row Oil Co. 10-inch casing to 355 ft and 6-inch to 1,063 ft, open hole to 1,302 ft. Altitude about 780 ft.

Shale, cherty	120	120	Chert, brown	54	685
Shale, hard, brown	199	319	Shale, brown	5	690
Lime, brown	10	329	Chert, black, with streaks of shale	105	795
Water sand, gray	2	331	Chert, hard, black	57	852
Shale, sticky, brown	208	539	Shale, hard, gray	10	862
Shale, brittle, brown	2	541	Flint, hard, black	20	882
Shale, sticky, brown	72	613			
"Sand shell"	1	614			
Shale, brown	17	631			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/35W-8Z1.--Continued

Shale, brown	11	893	Shale, hard to flaky, brown	49	1,214
Chert, hard, black	132	1,025	Shale, brown	6	1,220
Shale, sticky, brown	14	1,039	Bentonite	61	1,281
"Sand shell"	1	1,040	Chert, hard, black	5	1,286
Chert, with streaks of shale	8	1,048	Shale, flaky, brown	16	1,302
Shale, broken, brown	64	1,112			
Shale, with streaks of flint	53	1,165			

6N/35W-15J1. Drilled by Floyd V. Wells. 8-inch casing to 78 ft; perforated 20-75 ft. Altitude about 585 ft.

Adobe, with broken rock	18	18	Clay, with some shale, sticky, olive gray	18	76
Clay, sandy, with some gravel, olive gray	15	33	Boulders, with clay and shale	2	78
Clay, with some gravel, sticky, olive gray	25	58			

6N/35W-16P1. Drilled by Floyd V. Wells. 8-inch casing to 76 ft; perforated 20-68 ft. Altitude about 400 ft.

Adobe, with broken gravel, brown	16	16	Clay, sandy, with gravel, olive gray	17	70
Clay, sandy, with gravel, olive gray	32	48	Clay, sticky, with gravel, olive gray	6	76
Sand and sticky clay, with gravel, gray	5	53			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/35W-21D1. Drilled by Floyd V. Wells. 8-inch casing to 59 ft; perforated 14-17 ft, 30-55 ft. Altitude about 380 ft.

Adobe, with broken rock, brown	14	14	Clay, sandy, with some gravel	15	45
Clay, sand, gravel, boulders, brown	3	17	Clay and large gravel, brown	5	50
Clay, sandy, brown	13	30	Clay, sticky, with gravel, gray	9	59

6N/35W-31M1. Drilled by Aubrey Lyon. 12-inch casing to 194 ft; perforated 75-95, 120-140, 160-180 ft. Altitude about 74 ft.

Clay, sandy, and rock	29	29	Shale, soft, dark brown	10	111
Clay and rock	8	37	Shale, hard, dark brown	17	128
Shale, yellow to dark brown	53	90	Shale, soft, dark brown	9	137
Shale, hard, dark brown	11	101	Shale, hard to very hard, brown	57	194

6N/36W-1Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 34 ft. Altitude is 313.4 ft.

Sand, brown	9	9
Sand, with shale fragments, light tan	12	21
Sand, with some shale fragments, dark tan	13	34

6N/36W-1Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 30 ft. Altitude is 304.3 ft.

Sand, with some silt, brown	30	30

6N/36W-1Z3. Drilled by U.S. Army Corps of Engineers. Open hole to 40 ft. Altitude is 323.7 ft.

Sand, poorly cemented, light brown	40	40

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/36W-12Z1. Drilled by Fred Cannon Co. Open hole to 182 ft. Altitude is 496.3 ft.

Sand, fine, brown ----	90	90	Shale, siliceous, moderately fractured, gray to black --------	59	182
Sand, fine, some small gravel -------	33	123			

6N/36W-12Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 120 ft. Altitude is 413.4 ft.

Sand, silty, brown ---	70	70	Sand, silty, with shale fragments brown ----------	12	115
Sand and clay, dark brown ----------	5	75	Sand, silty, well cemented, brown -	5	120
Sand, silty, light brown ----------	28	103			

6N/36W-13Z1. Drilled by Fred Cannon Co. Open hole to 172 ft. Altitude is 459.1 ft.

Sand, fine grained, silty, dense, gray ----------	69	69
Gravel and sand, slightly cemented, brown ----------	11	80
Sand, silty, dense, gray ----------	10	90
Shale, massive, hard, gray ----------	82	172

6N/36W-13Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 50 ft. Altitude is 313.0 ft.

Sand, silty, brown ---	30	30	Shale, weathered, fractured, brown ----------	17	50
Sand and clay, brown -	3	33			

6N/36W-13Z3. Drilled by U.S. Army Corps of Engineers. Open hole to 53 ft. Altitude is 352.6 ft.

Sand and clay, brown -	5	5	Sand and clay, with shale fragments, brown ----------	15	30
Clay, sandy, light brown ----------	5	10	Shale, weathered --	23	53
Sand, silty, light brown ----------	5	15			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/36W-13Z4. Drilled by U.S. Army Corps of Engineers. Open hole to 40 ft. Altitude is 334.7 ft.

Sand and clay, brown -	17	17	Shale, weathered -------	12	40
Sand and clay, with gravel, brown ------	11	28			

6N/36W-13Z5. Drilled by Fred Cannon Co. Open hole to 175 ft. Altitude is 474.4 ft.

Sand, fine, silty, dense gray ---------	54	54	Shale, siliceous, soft to hard, brown, weathered -------	111	175
Gravel, sandy, slightly cemented, brown ----	10	64			

6N/36W-13Z6. Drilled by U.S. Army Corps of Engineers. Open hole to 40 ft. Altitude is 314.3 ft.

Sand, silty, light brown ----------	30	30
Sand and clay, light brown ----------	3	33
Shale, weathered, light brown ----------	7	40

6N/36W-13Z7. Drilled by U.S. Army Corps of Engineers. Open hole to 35 ft. Altitude is 353.5 ft.

Sand, silty, black ----------	4	4
Clay, sandy, with shale fragments, brown ----------	17	21
Sand, silty, brown ----------	10	31
Sand and clay, brown ----------	4	35

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/36W-14Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 52 ft. Altitude is 162.5 ft.

Sand, silty, brown	25	25	Sand, silty, brown	5	45
Sand and clay, brown	15	40	Sand, with silt and clay	5	50
			Shale	2	52

6N/36W-23R1. Drilled by U.S. Forestry Department. 8-inch casing to 135 ft. Altitude about 346 ft.

Clay	70	70	Shale, hard, dark brown	31	131
Flint, hard	5	75	Sand, coarse, water bearing	4	135
Shale, dark brown	23	98			
Limestone	2	100			

6N/36W-23R2. Drilled by H. Stoneburger and Sons. Well drilled to 300 ft, backfilled to 174 ft. 12-inch casing to 174 ft; perforated 130-160 ft. Altitude is 346.8 ft.

Clay, silty, with cherty pebbles	42	42
Clay, silty; with coarse sand, pebbles, and boulders, brown	38	80
Shale, light brown	8	88
Shale, hard, black	39	127
Limestone, hard, light brown	16	143
Shale, loose brecciated, very broken, no sand or clay	3	146
Limestone, hard, gray	42	188
Shale, very soft, light gray	54	242
Shale, hard, siliceous, light gray	58	300

6N/36W-23Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 30 ft. Altitude is 400.5 ft.

Sand, silty, dark brown	10	10
Sand and clay, brown	20	30

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/36W-24Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 80 ft. Altitude is 458.3 ft.

Sand, with silt and clay, brown -----	10	10	Sand, silty, brown ---	45	60
Sand, with silt and gravel, brown -------	5	15	Sand and clay, brown ----------	5	65
			Shale, weathered ----	15	80

6N/36W-24Z3. Drilled by U.S. Army Corps of Engineers. Open hole to 42 ft. Altitude is 369.0 ft.

Sand, silty, brown ----	2	2	"Volcanics," multi-colored, weathered --------	30	42
Sand and clay, brown --	10	12			

6N/36W-24Z4. Drilled by U.S. Army Corps of Engineers. Open hole to 50 ft. Altitude is 401.7 ft.

Sand; with some silt, clay, and gravel, brown ----------	50	50

6N/36W-25Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 49 ft. Altitude is 488.1 ft.

Sand, with some silt, clay, and shale fragments ----------	49	49

6N/36W-25Z3. Drilled by Fred Cannon Co. Open hole to 120 ft. Altitude is 629.6 ft.

Shale, siliceous, hard with weathered soft layers, gray, fractured ----------	120	120

6N/36W-25Z4. Drilled by Fred Cannon Co. Open hole to 130 ft. Altitude is 659.8 ft.

Sand, fine to medium, silty, brown ----------	8	8
Shale, siliceous, hard with weathered soft layers, gray, fractured ----------	122	130

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

6N/36W-26E1. Drilled by Lyons Bros. 12-inch casing to 275 ft, 10-inch to 476 ft; perforated 275-476 ft. Altitude about 150 ft.

Sand, fine	32	32	Shale, hard, black to gray	58	381
Sand and gravel, packed, with some clay	2	34	Shale, with black clay	34	415
Sandstone, hard, gray	67	101	Shale, hard, brown	20	435
Boulders, very hard	2	103	Shale, with hard and soft layers, brown	30	465
Shale, hard, brown	20	123	Shale, with streaks of clay, gray	11	476
Silt, soft	4	127			
Shale, hard, brown	194	321			
Clay, dark	2	323			

6N/36W-26Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 50 ft. Altitude about 280 ft.

Sand, silty, with some clay, brown	31	31	Sand, silty, with shale fragments, brown	19	50

6N/36W-26Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 30 ft. Altitude is 468.9 ft.

Sand, with silt and gravel, brown	21	21	Shale, weathered	9	30

7N/34W-7Z1. Open hole to 60 ft. Altitude about 130 ft.

Gravel and sand, with some silt and shale fragments	14	14
Sand, silty	46	60

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-18L3. Altitude is 60.3 ft.

Adobe, black	5	5	Clay, with some gravel	6	44
Adobe, and gravel	16	21	Sand, fine, gray; and gravel	2	46
Sand, fine	6	27	Shale, broken, with some sand	26	72
Gravel, clean	6	33			
Clay	5	38			

7N/34W-19J1. Drilled by Roscoe Moss Co. Well drilled to 186 ft backfilled to 182 ft. 18-inch casing to 186 ft; perforated 130-166 ft. Altitude about 61 ft.

Sand, silty	18	18
Clay, with sand, gray	27	45
Clay, with sand and gravel, gray	13	58
Clay, gray	27	85
Clay, with sand and some gravel, gray	15	100
Clay and gravel, water-bearing	65	165
Sand and clay, cemented	7	172
Sand, fine, with clay, gray	14	186

7N/34W-19J3. Drilled by Floyd V. Wells. 14-inch casing to 161 ft; perforated 80-150 ft. Altitude about 60 ft.

Sand, brown	10	10	Clay, blue, with sand	12	92
Clay, sandy, brown	15	25	Gravel, fine, blue; with sand	38	130
Sand and fine gravel, with some clay	25	50	Clay, sandy, blue	5	135
Gravel and sand, blue	9	59	Sand and gravel, with little clay, blue	23	158
Clay, blue, with gravel and some sand	16	75	Shale, blue	3	161
Sand, coarse, blue	5	80			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-19L1. Drilled by Roscoe Moss Co. 18-inch casing to 184 ft, cemented back to 180 ft; perforated 42-56, 95-100, and 138-164 ft. Altitude about 50 ft.

Sand, silty	22	22	Clay, gray	8	108
Clay and gravel, gray	20	42	Sand, fine, with clay and some gravel	40	148
Sand and gravel	14	56	Sand with gravel and boulders	16	164
Clay, gray, and fine sand	26	82	Sand, fine, muddy	20	184
Sand, fine, and gravel; muddy	13	95			
Sand and gravel	5	100			

7N/34W-19L2. Drilled by Floyd V. Wells. Drilled to 160 ft, backfilled to 156 ft. 14-inch casing to 156 ft; perforated 95-150 ft. Altitude about 60 ft.

Sand and clay, brown	15	15	Sand, with streaks of clay, blue	20	90
Clay, blue	7	22	Sand, blue	25	115
Gravel and sand, with streaks of blue clay	23	45	Sand, with some gravel	5	120
Clay, blue	5	50	Gravel and sand	10	130
Sand, blue	14	64	Gravel	26	156
Clay, sandy, blue	6	70	Shale, blue	4	160

7N/34W-19Q1. Drilled by Floyd V. Wells. Open hole to 180 ft. Altitude about 60 ft.

Sand, silty, brown	7	7
Clay, with sand, brown	13	20
Sand, with streaks of sandy clay	5	25
Sand, with gravel, gray	5	30
Gravel, coarse, with sand	50	80
Gravel, with sand and streaks of clay	15	95
Sand, coarse, some gravel	30	125
Sand, fine, well cemented, brown	51	176
Shale, blue	4	180

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-19Z1. Drilled by Floyd V. Wells. Open hole to 200 ft. Altitude about 60 ft.

Sand, brown -------	15	15	Clay, blue and brown ----------	37	137
Clay, with sand, brown ----------	20	35	Gravel and clay, blue ----------	8	145
Clay, blue --------	10	45	Clay and gravel, blue ----------	5	150
Sand, blue --------	5	50	Clay, white ----------	10	160
Sand, with gravel, blue ----------	10	60	Sand, fine, with clay ----------	40	200
Clay, with sand, blue to brown ---	40	100			

7N/34W-20K1. Drilled by Jack Alexander. 12-inch casing to 153 ft; perforated 115-146 ft. Altitude about 72 ft.

Soil ----------	4	4	Clay, blue ----------	32	109
Clay ----------	31	35	Gravel, with some sand ----------	44	153
Gravel ----------	5	40			
Clay, with some gravel ----------	37	77			

7N/34W-20K4. Drilled by Roscoe Moss Co. 18-inch casing to 186 ft; perforated 90-174 ft. Altitude about 75 ft.

Soil ----------	6	6	Clay, blue to yellow, with sand and gravel to 3", some boulders ----------	47	158
Clay, brown to yellow ----------	28	34	Shells and small gravel ----------	8	166
Sand and gravel ---	11	45	Shells, cemented ----------	20	186
Clay, with sand and gravel ------	11	56			
Clay, with sand, yellow ----------	20	76			
Clay, blue --------	23	99			
Sand and small gravel, yellow --	12	111			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-20K5. Drilled by Floyd V. Wells. 14-inch casing to 177 ft; perforated 97-167 ft. Altitude about 75 ft.

Sand, silty, brown	5	5	Clay, blue	30	105
Clay, with sand, brown	34	39	Gravel, with some sand and clay	70	175
Clay, with some sand and gravel, gray	36	75	Shale, gray to brown, fractured	2	177

7N/34W-20L1. Drilled by Floyd V. Wells. 14-inch casing to 184 ft; perforated 96-172 ft. Altitude about 80 ft.

Sand, silty, brown	15	15	Sand, coarse, with some gravel	20	80
Sand, with clay and gravel	20	35	Sand and gravel, with streaks of blue clay	10	90
Clay, with streaks of sand and gravel	10	45	Sand and gravel	93	183
Clay, blue	15	60	Shale, gray	1	184

7N/34W-20M2. Drilled by Roscoe Moss Co. 18-inch casing to 192 ft; perforated 77-93, 101-177 ft. Altitude about 70 ft.

Sand, packed	4	4	Sand, gravel, and blue clay	5	93
Sand and clay, hard, dry	9	13	Clay, and sand; yellow	8	101
Sand, gravel, and clay; dry	18	31	Sand, gravel, some clay and boulders	66	167
Clay, yellow	28	59	Sand, with small gravel and shale	25	192
Clay, and sand, yellow	12	71			
Clay, yellow, with some gravel	17	88			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-20N1. Drilled by Jack Alexander. 6-inch casing to 107 ft; perforated 93-107 ft. Altitude 67.50 ft.

Soil, sandy -------	29	29	Clay, sandy, blue ----------	20	85
Clay, sandy, blue -	10	39	Sand, blue --------	10	95
Sand, blue --------	20	59	Gravel ----------	12	107
Clay, yellow ------	6	65			

7N/34W-20N2. Drilled by U.S. Geol. Survey. 1¼-inch casing with sand point to 42 ft. Altitude about 50 ft.

Loam, sandy, gray ----------	12	12
Sand, with some small gravel, gray ----------	30	42

7N/34W-20N3. Drilled by U.S. Geol. Survey. Well drilled to 62 ft backfilled to 39 ft. 1¼-inch casing with sand point to 39 ft. Altitude about 62 ft.

Loam, sandy, brown-	7	7	Clay, with very little sand, gray ----------	21	62
Sand and clay, gray ----------	34	41			

7N/34W-20R1. Drilled by Floyd V. Wells. 14-inch casing to 177 ft; perforated 95-165 ft. Altitude about 75 ft.

Clay, sandy ----------	4	4
Sand ----------	11	15
Clay, sandy, with streaks of sand, brown ----------	25	40
Clay, sandy, with streaks of gravel, blue ----------	55	95
Sand, with streaks of clay, gray ----------	45	140
Sand, coarse, with gravel and clay, gray ----------	27	167
Sand and gravel ----------	3	170
Shale, light gray ----------	7	177

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-21E1. Drilled by Alexander Brothers. Well drilled to 150 ft backfilled to 145 ft. 8-inch casing to 150 ft; perforated 73-93 ft. Altitude about 82 ft.

Adobe	15	15	Clay, solid, blue	8	75
Clay, solid, yellow	10	25	Gravel	5	80
Gravel, dry	4	29	Sand and gravel, blue	15	95
Clay, solid, yellow	5	34	Sand, with some black clay	55	150
Gravel, with some clay	33	67			

7N/34W-21J1. Drilled by Jack Alexander. Well drilled to 85 ft backfilled to 80 ft. 12-inch casing to 85 ft. Altitude is 75.83 ft.

Soil	12	12	Boulders	2	66
Sand, blue	12	24	Sandstone, hard	3	69
Clay, yellow	3	27	Gravel	3	72
Gravel, large, blue	30	57	Sand and gravel	6	78
Clay, solid, blue	7	64	Sand, white	7	85

7N/34W-21N1. Drilled by Jack Alexander. 12-inch casing to 80 ft; perforated 38-65, 68-80 ft. Altitude is 81.32 ft.

Soil	27	27	Gravel, large, water-bearing	10	65
Gravel, with some sand	11	38	Sand, white	5	70
Gravel, large, water-bearing	7	45	Sand, coarse; gravel and boulders	10	80
Gravel and clay	10	55			

7N/34W-21N2. Altitude about 82 ft.

Soil, with some black adobe	20	20	Sand, with some gravel, dry	17	62
Clay, blue	5	25	Clay, blue	33	95
Sand	7	32	Gravel and clay, dry	4	99
Gravel, water-bearing	3	35	Clay, blue	21	120
Clay, blue	10	45	Clay, sandy	5	125
			Sand, dry	15	140

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/34W-22E1. Drilled by Alexander Brothers. 8-inch casing to 97 ft; perforated 87-97 ft. Altitude about 100 ft.

Sand, conglomerate, and dry gravel --	40	40	Clay and gravel ---	8	48
			Gravel, "good" ----	49	97

7N/34W-29A4. Drilled by Floyd V. Wells. Open hole to 190 ft. Altitude about 70 ft.

Sand ----------	4	4	Sand, with streaks of gravel ------	75	165
Clay, sandy, brown to gray --------	41	45	Sand, gray, with gravel ---------	20	185
Gravel, sandy, gray ----------	45	90	Clay, sandy, brown-	5	190

7N/35W-1Z1. Open hole to 60 ft. Altitude about 430 ft.

Gravel and sand ---	5	5	Sand, silty ------	46	60
Shale, decomposed -	9	14			

7N/35W-1Z2. Open hole to 36 ft. Altitude about 440 ft.

Sand, silty ------	7	7	Sand, silty ------	24	36
Shale, broken -----	5	12			

7N/35W-4Z1. Drilled by J. N. Pitcher Drilling Co. Open hole to 101 ft. Altitude is 335.8 ft.

Sand, fine to coarse, clay, brown ----------	20	20
Shale, siliceous, brittle, gray, highly fractured ------	81	101

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-8Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 201 ft. Altitude about 169 ft.

Sand, fine, brown --	31	31	Mudstone and shale ----	9	110
Shale, siliceous, hard, weathered --	28	59	Shale, siliceous to cherty, hard, black ----------	47	157
Mudstone, hard, black ----------	7	66	Mudstone, hard, black, slickensides --------	7	164
Shale, hard, gray-black ----------	3	69	Mudstone and shale ----	3	167
Mudstone, hard, black ----------	15	84	Shale, soft to hard, gray ----------	34	201
Shale, cherty, hard, black to gray ----	17	101			

7N/35W-16F1. Drilled by Jack Alexander. Altitude about 13 ft.

Soil ----------	5	5	Sandstone, hard -------	10	40
Clay, soft, yellow to blue ----------	20	25	Sand, blue ----------	2	42
Sand and "muck" ----	5	30	Shale, brown ----------	18	60

7N/35W-16N1. Drilled by Jack Alexander. Altitude about 17 ft.

Soil ----------	6	6	Gravel and clay -------	14	104
Sand, gravel, and clay ----------	36	42	Gravel, water-bearing ----------	6	110
Clay, solid, blue --	48	90	Shale, brown ----------	6	116

7N/35W-17B1. Drilled by Jack Alexander. 12-inch casing to 45 ft. Altitude is 25.68 ft.

Soil, sandy --------	20	20	Rock, solid, white ----	25	45

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-17K1. Drilled by Floyd V. Wells. 8-inch casing to 190 ft; perforated 175-185 ft. Altitude about 10 ft.

Clay, with some silt	134	134	Gravel	8	185
Gravel and sand	43	177	Shale	5	190

7N/35W-17M1. Drilled by Floyd V. Wells. 8-inch casing to 169 ft; perforated 115-120 ft. Altitude is 9.74 ft.

Soil	5	5	Gravel and clay, with some sand	30	122
Clay, blue, and silt	31	36	Clay, brown, with fine gravel	23	145
Gravel and some silt	29	65	Shale, brown	24	169
Clay, blue	10	75			
Clay, blue, with some gravel	17	92			

7N/35W-17Z1. Open hole to 36 ft. Altitude about 10 ft.

Soil, sandy	4	4	Clay, blue, with some sand and gravel	18	36
Clay, soft, blue	14	18			

7N/35W-17Z2. Open hole to 36 ft. Altitude about 10 ft.

Sand, loose	9	9	Sand and gravel	20	36
Clay, soft	7	16			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-17Z3. Open hole to 38 ft. Altitude about 10 ft.

Sand, soft	10	10	Silt and clay, with some sand and gravel	18	38
Clay, medium hard	10	20			

7N/35W-17Z4. Open hole to 36 ft. Altitude about 10 ft.

Soil	4	4	Clay, sandy, with some gravel	11	36
Clay, solid, blue	21	25			

7N/35W-18H1. Drilled by Floyd V. Wells. 9-inch casing to 112 ft; perforated 83-88 ft. Altitude is 5.87 ft.

Clay and gravel	2	2	Clay, sandy, green	10	66
Silt, sandy	16	18	Clay, yellow	8	74
Sand, blue, with streaks of silt	29	47	Gravel, with some silt	16	90
Sand and gravel	9	56	Shale	22	112

7N/35W-18H2. Drilled by Floyd V. Wells. 8-inch casing to 192 ft; perforated 182-187 ft. Altitude is 7.23 ft.

Soil	3	3	Clay and gravel, with streaks of sand	35	140
Clay and silt, blue	19	22	Sand, with small amounts of gravel	15	155
Sand, with some fine gravel, blue	38	60	Clay, blue	18	173
Clay, blue	27	87	Gravel	16	189
Sand, blue	18	105	Shale	3	192

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-18J1. Drilled by Jack Alexander. 10-inch casing to 120 ft. Altitude is 6.20 ft.

Soil	4	4	Sand, blue	4	54
Sand	16	20	Clay, blue	61	115
Clay, blue	30	50	Gravel	5	120

7N/35W-18J2. Drilled by Floyd V. Wells. 9-inch casing to 135 ft; perforated 100-105 ft. Altitude is 7.38 ft.

Clay and gravel	2	2	Clay, blue with some streaks of sand and gravel	22	108
Silt, sandy	14	16	Silt, sandy, with some gravel	14	122
Sand and gravel, with silt	29	45	"Brown Rock"	13	135
Clay, sandy, with some gravel	16	61			
Sand, with some blue clay and gravel	25	86			

7N/35W-20H1. Drilled by A. L. Lowe. 12-inch casing to 133 ft. Altitude is 17.80 ft.

Clay, yellow to blue	58	58	Gravel	13	125
Sand	2	60	Gravel, coarse	5	130
Clay	52	112	Sand and clay	3	133

7N/35W-20J1. Drilled by Jack Alexander. 6-inch casing to 125 ft. Altitude is 19.07 ft.

Sand and clay	120	120	Gravel, "good"	5	125

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-20J4. Drilled by Jack Alexander. 16-inch casing to 160 ft; perforated 116-140 ft. Altitude is 18.3 ft.

Soil	8	8	Clay, sandy	32	110
Sand, white	12	20	Sand	6	116
Clay, yellow to blue	54	74	Gravel	18	134
Sand, water-bearing	4	78	Shale, brown	26	160

7N/35W-20J5. Drilled by A. L. Lowe. Altitude about 20 ft.

Soil	18	18	Clay, blue	64	99
Clay, yellow	12	30	Sand	1	100
Sand	5	35			

7N/35W-21D1. Drilled by Jack Alexander. 16-inch casing to 180 ft; perforated 130-178 ft. Altitude is 17.91 ft.

Soil	4	4	Sandstone	44	113
Clay, blue	46	50	Gravel and sand	17	130
Sandstone	9	59	Gravel, coarse	50	180
Clay, blue	10	69			

7N/35W-21G1. Drilled by A. L. Lowe. 12-inch casing to 182 ft. Altitude is 23.56 ft.

No record	108	108	Gravel and sand	15	135
Gravel and sand	5	113	Sand	15	150
Clay	7	120	Gravel, coarse	32	182

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-21H1. Drilled by Jack Alexander. 16-inch casing to 176 ft; perforated 137-153, 166-174 ft. Altitude is 23.99 ft.

Sand and soil	32	32	Gravel and clay	6	125
Clay, soft, blue	4	36	Gravel, fine, and sand	12	137
Sand, fine, and gravel	22	58	Gravel, coarse	10	147
Gravel and clay, water-bearing	4	62	Clay, blue	2	149
Clay, and sandstone	15	77	Gravel, coarse	9	158
Gravel, coarse	5	82	Sand, blue	4	162
Clay, sandy, hard, blue	37	119	Gravel, coarse	12	174
			Clay, blue	2	176

7N/35W-21J1. Drilled by A. L. Lowe. Altitude is 24.0 ft.

No record	47	47	Gravel	8	126
Clay	71	118	Clay	65	191

7N/35W-21L1. 12-inch casing to 190 ft; perforated 145-186 ft. Altitude about 20 ft.

Clay, yellow	34	34	Sand, gravel, and clay, water-bearing	33	155
Sand and clay	51	85	Gravel, water-bearing	35	190
Clay and sand	37	122			

7N/35W-21L4. Drilled by Alexander Brothers. 16-inch casing to 181 ft; perforated 149-179 ft. Altitude about 20 ft.

Soil, sandy	4	4	Clay, sandy, blue	24	137
Clay, sandy, soft, yellow to blue	93	97	Gravel, sand, and blue clay	12	149
Clay, sandy, with some sand and gravel	16	113	Gravel, "good"	8	157
			Clay, solid, blue	2	159
			Gravel, "good"	22	181

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-22A1. Drilled by Jack Alexander. 16-inch casing; perforated 26-47, 90-115 ft. Altitude is 29.43 ft.

Sand, fine, and soil	32	32	Boulders and clay, yellow	5	105
Clay, soft, blue, with some sand and gravel	68	100	Shale, solid, blue	40	145

7N/35W-22F1. Drilled by Jack Alexander. 16-inch casing to 173 ft; perforated 132-170 ft. Altitude is 25.79 ft.

Soil and clay	38	38	Gravel, sand, and clay	13	113
Sand, fine, blue, with clay	35	73	Sand, fine, blue	12	125
Clay, blue	4	77	Gravel, coarse	46	171
Sand, fine, with clay clay	23	100	Clay, blue	2	173

7N/35W-22F3. Drilled by Alexander Brothers. 16-inch casing to 190 ft; perforated 152-185 ft. Altitude about 20 ft.

Soil	8	8
Clay, sandy, brown to blue	41	49
Clay, very sandy, with some gravel, blue	41	90
Sand, with some gravel, blue	14	104
Sand, with some small gravel	20	124
Sand, coarse, with some gravel	19	143
Sand, blue clay, some gravel	9	152
Gravel, course, with some sand	38	190

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-22L1. Drilled by Alexander Brothers. 12-inch casing; perforated 172-189 ft. Altitude about 30 ft.

Soil	28	28	Clay, with some gravel, blue	22	158
Sand	13	41	Clay, soft, sandy	12	170
Clay, sandy	20	61	Sand and fine gravel	6	176
Clay, soft, yellow	25	86	Gravel	9	185
Clay, with fine gravel	5	91	"Chalk rock"	34	219
Clay, blue	45	136			

7N/35W-22M1. Drilled by A. L. Lowe. 12-inch casing. Altitude is 28.84 ft.

Sand	102	102	Shale	30	180
Gravel	48	150			

7N/35W-22M2. Drilled by Worts. 2-inch casing with sand point to 22 ft. Altitude is 28.20 ft.

Sand, medium	5	5
Clay, sticky, black to brown	6	11
Clay, with some gravel	1	12
Sand and gravel, with some clay	1	13
Clay, sticky, brown	4	17
Sand, fine, and silt, with some clay	5	22

7N/35W-22N2. Drilled by Floyd V. Wells. 8-inch casing to 194 ft; perforated 96-181 ft. Altitude about 24 ft.

Sand, with clay and silt	26	26
Clay, sandy, gray	6	32
Sand, interbedded with clay, gray	13	45
Sand, silty, with some clay, gray	15	60
Clay, with silt and sand, gray	36	96
Sand, with clay and pebbles	21	117
Gravel, with sand and clay, gray	8	125
Sand, with clay, silt, and some pebbles	54	179
Clay, with sand and some pebbles	15	194

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-23A1. Open hole to 200 ft. Altitude about 43 ft.

Silt	9	9	Clay, hard, cemented, blue	10	140
Sand, gray	18	27	Shale and hard blue clay	60	200
Sand, gray, with some gravel	9	36			
Clay, yellow to blue	94	130			

7N/35W-23B1. 18-inch casing to 190 ft; perforated 57-178 ft. Altitude about 38 ft.

Soil and sandy clay	31	31	Gravel and sand	103	170
Clay, yellow to blue	36	67	Shale, hard, black	20	190

7N/35W-23D1. Drilled by Roscoe Moss Co. 18-inch casing to 206 ft; perforated 96-194 ft. Altitude about 35 ft.

Clay, sandy	32	32	Clay, sandy, blue	34	106
Clay, blue	8	40	Sand, gravel, and boulders, water-bearing	78	184
Sand and gravel, with some clay	5	45	Clay, sandy, very hard, with some shale	10	194
Clay, blue	9	54	Shale, very hard	12	206
Sand, blue	5	59			
Clay, blue	7	66			
Sand, fine, blue	6	72			

7N/35W-24B1. Drilled by Roscoe Moss Co. 18-inch casing to 160 ft. Open hole to 180 ft. Not perforated. Altitude about 48 ft.

Silt, sandy	6	6	Clay, sandy, blue	23	97
Clay, gray, with some soil	59	65	Clay, gray, with cemented clay streaks	55	152
Sand, clay, and gravel, gray	9	74	Clay, hard, gray	28	180

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-24B2. Drilled by Roscoe Moss Co. 18-inch casing to 202 ft. Altitude about 48 ft.

No record	9	9	Clay, compact	4	137
Sand, coarse, gray	18	27	Gravel, fine	43	180
Clay, gray	45	72	Clay, compact, white	22	202
Sand, coarse, with some small pebbles	61	133			

7N/35W-24H1. Drilled by Jack Alexander. 16-inch casing to 182 ft; perforated 129-175 ft. Altitude is 48.01 ft.

Soil, sandy	75	75	Clay, sandy	28	120
Gravel, fine, with some sand	6	81	Gravel, fine, sandy	3	123
Gravel	8	89	Gravel, "good"	56	179
Sand, fine	3	92	Shale, brown	3	182

7N/35W-24H2. Drilled by Roscoe Moss Co. 18-inch casing to 202 ft; perforated 62-190 ft. Altitude about 48 ft.

Silt and sand	9	9	Clay, blue	4	137
Sand and fine gravel	18	27	Sand, gravel, and boulders	43	180
Clay, with some gravel, blue to yellow	45	72	Clay, brown, with some shale	22	202
Sand and gravel, with some clay	61	133			

7N/35W-26P1. Drilled by Alexander Brothers. 16-inch casing to 176 ft; perforated 76-86 ft. Altitude about 40 ft.

Adobe, black	5	5	Clay, solid to soft, blue	10	49
Clay, soft, yellow	12	17	Clay, sandy, with some gravel	27	76
Clay, sandy, yellow	14	31	Gravel, yellow	10	86
Clay and gravel, yellow	8	39			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-26P1.--Continued

Sand, hard, yellow to blue	85	171	Sand, and sea shells, white	5	176

7N/35W-27F1. Drilled by A. L. Lowe. 12-inch casing. Altitude is 27.63 ft.

No record	20	20	Gravel	6	96
Clay	46	66	Clay	2	98
Gravel	21	87	Gravel	25	123
Clay	3	90			

7N/35W-27H1. Drilled by A. L. Lowe. 16-inch casing; perforated 80-124 ft. Altitude about 27 ft.

Soil	18	18	Sand and gravel	5	75
Sand	6	24	Gravel, "pure"	50	125
Clay	46	70	Sand	17	142

7N/35W-27J1. Drilled by A. L. Lowe. Altitude is 28.44 ft.

Soil	72	72	Gravel	17	99
Clay	10	82	Clay	38	137

7N/35W-27K1. Drilled by A. L. Lowe. 16-inch casing. Altitude about 30 ft.

Dirt	15	15	Sand, blue	18	180
Clay	97	112	"Sea shells and rocks"	2	182
Gravel,	3	115			
Sand, hard	47	162			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-27P1. Drilled by Floyd V. Wells. Well drilled to 677 ft, backfilled to 582 ft. 7-inch casing to 582 ft; perforated 562-577 ft. Altitude about 260 ft.

Silt	8	8	Silt, sandy, blue	104	404
Sand, fine, with minor amounts of clay	168	176	Sea shells and sand, with some clay	7	411
Sand, coarse	10	186	Clay, sandy	61	472
Sand, coarse, and gravel, with some clay	81	267	Sand, coarse, and gravel with sea shells	115	587
Sand, fine, and some clay	33	300	Shale	90	677

7N/35W-28K2. Drilled by Floyd V. Wells. Well drilled to 315 ft, backfilled to 235 ft. 8-inch casing to 284 ft; perforated 22-23, 46-48, and 60-63 ft. Altitude about 89 ft.

Sand, medium, with pebbles and clay	21	21
Sand, coarse, with pebbles and silt	2	23
Sand, fine to coarse, some pebbles	40	63
Sand, very fine, with clay and silt	252	315

7N/35W-28R1. Drilled by Floyd V. Wells. Well drilled to 551 ft, backfilled to 510 ft. 7-inch casing to 510 ft; perforated 470-510 ft. Altitude about 120 ft.

Soil	5	5	Clay, yellow, with some gravel	88	195
Sand, fine, with some gravel	26	31	Gravel and clay	36	231
Adobe and gravel	20	51	Shale, blue, with sand and gravel	228	459
Gravel and sand	22	73	Sand, coarse	14	473
"Chalk rock"	15	88	Gravel and coarse sand	18	491
Gravel with some clay	19	107	Shale, brown	60	551

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-30G1. Drilled by Floyd V. Wells. 8-inch casing to 277 ft; perforated 115-275 ft. Altitude about 130 ft.

Sand	4	4	Clay, green, with sand and gravel	10	240
Sandstone	60	64	Clay, green, with hard streaks	37	277
Sand and gravel	34	98			
Clay, green, with sand and gravel	52	150			
Clay, green, with hard streaks	80	230			

7N/35W-31B1. Drilled by Floyd V. Wells. Open hole to 472 ft. Altitude about 85 ft.

Soil	7	7	Shale, gray with fine sand	360	403
Clay, sandy, and gravel	5	12	Shale, brown, with some sand	69	472
Gravel and coarse sand	12	24			
Clay, sandy, with some gravel	19	43			

7N/35W-31J1. Drilled by Floyd V. Wells. 6-inch casing to 625 ft; perforated 571-591 ft. Altitude about 160 ft.

Soil	8	8	Shale, blue, with sea shells and some gravel	52	106
Clay, sandy, and gravel	4	12	Shale, blue, and fine sand	331	437
Sand, coarse, and gravel	9	21	Shale, sandy, fine	127	564
"Chalk rock" and gravel	13	34	Gravel and coarse sand	20	584
Clay, yellow, with some gravel	20	54	Shale, brown	41	625

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-31M1. Drilled by Floyd V. Wells. Open hole to 428 ft. Altitude about 200 ft.

Soil	4	4	Sand, fine	43	107
Clay, sandy, yellow	7	11	Sand, coarse, and gravel	72	179
Sand	12	23	Gravel and blue clay	18	197
Clay, sandy, yellow	36	59	Shale	231	428
Gravel and coarse sand	5	64			

7N/35W-31Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 40 ft. Altitude is 171.9 ft.

Sand, silty, brown	36	36	Sand, with shale fragments	2	40
Clay, gray	2	38			

7N/35W-31Z3. Drilled by U.S. Army Corps of Engineers. Open hole to 40 ft. Altitude is 218.0 ft.

Sand, silty, brown	40	40			

7N/35W-31Z4. Drilled by U.S. Army Corps of Engineers. Open hole to 60 ft. Altitude is 256.1 ft.

Sand, silty, brown	60	60			

7N/35W-31Z5. Drilled by U.S. Army Corps of Engineers. Open hole to 70 ft. Altitude is 260.5 ft.

Sand, tan	70	70			

7N/35W-31Z6. Drilled by U.S. Army Corps of Engineers. Open hole to 70 ft. Altitude is 249.0 ft.

Sand, silty, brown	70	70			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-32N1. Drilled by Floyd V. Wells. 8-inch casing to 300 ft; perforated 10-210 ft. Altitude about 175 ft.

Sand, brown	29	29	Sand, brown, with small amounts of clay	42	190
Clay, sandy, gray, with some gravel	72	101	Clay, sandy, with some gravel, gray	110	300
Sand, with some gravel, gray	11	112			
Clay, sandy, with some gravel	36	148			

7N/35W-33E1. Drilled by Floyd V. Wells. Open hole to 1,004 ft. Altitude about 370 ft.

Soil	6	6	Clay, sandy, with some sea shells	44	330
Clay, sandy, yellow	52	58	Shale	21	351
Sand, fine, with some clay	98	156	Shale, sandy, with some sea shells	539	890
Sand, coarse, and gravel	130	286	Shale, brown	114	1,004

7N/35W-33J1. Drilled by Floyd V. Wells. 8-inch casing to 380 ft; perforated 113-155, 173-244 ft. Altitude about 177 ft.

Sand, medium, with small amounts of clay and silt	98	98
Sand, medium to fine, yellow	15	113
Sand, fine to very coarse, yellow-orange	35	148
Sand, fine to coarse, with some pebbles	80	228
Sand, silty, very fine, with sparse pebbles	152	380

7N/35W-33J2. Drilled by Evans Brothers. Well drilled to 530 ft, backfilled to 465 ft. 14-inch casing to 465 ft; perforated 170-210, 375-465 ft. Altitude about 177 ft.

Sand, with some pebbles and clay streaks, buff	130	130
Sand, with sparse shale fragments and some gravel, gray	260	390
Sand, with some gravel	70	460
Sand, fine, with some clay	70	530

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-33J3. Drilled by Midway Drilling and Pump Co. Well drilled to 660 ft, backfilled to 518 ft. 14-inch casing to 518 ft; perforated 96-160, 428-460 ft. Altitude about 220 ft.

Sand, fine, brown ---	40	40	Shale, blue, and sea shells --------	70	240
Sand and clay, brown ----------	10	50	Shale, blue ---------	210	450
Sand, fine, rocks and clay ----------	30	80	Gravel, blue --------	40	490
Sand and rocks ------	40	120	Sand, fine, and gravel ----------	20	510
Sand ----------	50	170	Shale, blue ---------	150	660

7N/35W-33M2. Drilled by Floyd V. Wells. Open hole to 926 ft. Altitude about 450 ft.

Soil ----------	6	6	Clay, yellow, and gravel --------	17	424
Clay, yellow, and sand ----------	15	21	Clay, sandy, blue ---	338	762
Gravel and clay -----	22	43	Shale, hard, blue, with black oil shale ----------	38	800
Sand, fine ----------	198	241	Shale, hard, broken -	65	865
Boulders, coarse, sand, and gravel --	80	321	Shale and coarse black sand --------	12	877
Gravel and white clay ----------	26	347	Shale ----------	49	926
Clay, yellow --------	60	407			

7N/35W-33R1. Drilled by Floyd V. Wells. 8-inch casing to 432 ft backfilled to 425 ft; perforated 402-420 ft. Altitude about 216 ft.

Sand, fine to coarse, with some clay, brown ----------	95	95
Clay, sandy, gray ----------	64	159
Sand, fine, with clay, yellow-brown ----------	11	170
Clay, and very fine sand, brown to gray ----------	39	209
Sand, fine to medium, with clay ----------	34	243
Clay, sandy ----------	157	400
Gravel, sandy ----------	19	419
Sand, fine to coarse, with some clay ----------	11	430
Clay, sandy, gray ----------	2	432

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
7N/35W-34K1. Drilled by Floyd V. Wells. Open hole to 1,000 ft. Altitude about 500 ft.					
Soil	11	11	Clay, sandy	20	470
Clay, yellow	32	43	Shale, sandy	221	691
Sand, fine	373	416	Shale	309	1,000
Gravel, coarse, and rock	34	450			
7N/35W-35C1. Drilled by A. L. Lowe. 12-inch casing. Altitude is 36.12 ft.					
Soil	15	15	Clay	30	75
Sand	20	35	Gravel	19	94
Gravel and sand	10	45	Sand	11	105
7N/35W-35C2. Drilled by Jack Alexander. 16-inch casing; perforated 72-112 ft. Altitude is 36.3 ft.					
Soil, black	3	3	Clay, blue	4	72
Clay, yellow to blue	26	29	Gravel and clay	2	74
Clay, sandy, blue	12	41	Gravel	34	108
Sand, yellow	23	64	Sand and gravel	6	114
Sand, hard	4	68	Sand, white	8	122
7N/35W-35C4. Drilled by Worts. 2-inch casing to 9 ft; perforated 7-9 ft. Altitude is 36.68 ft.					
Soil	2	2	Clay, gritty, light buff	4	9
Clay, black, sticky	3	5			
7N/35W-35C5. Drilled by Alexander Brothers. 16-inch casing to 157 ft; perforated 75-85 ft. Altitude about 40 ft.					
Clay	8	8	Clay, with some gravel	4	89
Clay, sandy, yellow to blue	67	75	Clay, sandy, white	68	157
Gravel	10	85			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

7N/35W-35D2. Drilled by Floyd V. Wells. Well drilled to 425 ft, backfilled to 190 ft. 7-inch casing to 190 ft; perforated 150-190 ft. Altitude about 70 ft.

Soil	7	7	Gravel and coarse sand, with some sea shells	74	176
Sand	12	19	Clay, with fine sand	25	201
Clay, sandy	28	47	Shale	224	425
Sand	55	102			

7N/36W-36Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 60 ft. Altitude about 200 ft.

Sand, brown	20	20	Sand, brown	38	60
Sand, silty, black	2	22			

8N/34W-4N1. Drilled by C. A. Shaw. 6-inch casing to 180 ft; perforated 168-176 ft. Altitude about 460 ft.

Soil	3	3	Clay, yellow	2	157
"Hardpan"	6	9	Sand, coarse	20	177
Clay	141	150	Clay, yellow	3	180
Sand, medium, brown	5	155			

8N/34W-5Z1. Open hole to 70 ft. Altitude about 430 ft.

Sand, fine, silty	29	29	Siltstone, soft, gray	10	55
Clay, brown	4	33	Siltstone, hard	11	66
Sand, poorly graded, with some silt, brown	12	45	Sandstone, coarse, consolidated	4	70

8N/34W-7Z1. Open hole to 50 ft. Altitude about 570 ft.

Sand, silty, with some clay	3	3	Sand, silty	47	50

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

8N/34W-16G1. Drilled by Evans Brothers. 14-inch casing to 687 ft; perforated 159-469, 529-667 ft. Altitude about 291 ft.

Sand, silty	50	50	Clay, sandy, with trace of fine gravel	46	526
Sand, with small amount of gravel and clay	90	140	Sand, with gravel and layers of clay	104	630
Gravel, with trace of fine sand	15	155	Gravel, fine, sandy	15	645
Sand, with streaks of clay	53	208	Sand, with gravel	25	670
Sand, with streaks of gravel and some clay	272	480	Gravel, fine, sandy	10	680
			Sand, hard, with gravel and some clay	7	687

8N/34W-16G2. Drilled by Floyd V. Wells. 14-inch casing to 700 ft; perforated 52-680 ft. Altitude about 320 ft.

Sand and gravel	22	22	Clay	44	487
Clay, sandy, and gravel	25	47	Gravel, and sand, with sea shells	64	551
Sand and gravel	47	94	Clay, sandy	47	598
Clay and sand	21	115	Clay, sandy, coarse	17	615
Sand, fine, minor amounts of clay	292	407	Clay, with minor amounts of sand	85	700
Gravel and coarse sand	36	443			

8N/34W-16J1. Drilled by Floyd V. Wells. Well drilled to 597 ft, backfilled to 578 ft. 14-inch casing to 578 ft; perforated 256-558 ft. Altitude about 320 ft.

Sand, silty	30	30	Sand	30	200
Sand with gravel and some clay streaks	40	70	Clay, with sand	65	265
Gravel, and sand	40	110	Sand	162	427
Clay, with sand and gravel	20	130	Sand, with some clay	103	530
Sand, with clay and gravel	40	170	Sand, gravel, and shells	48	578
			Limestone	19	597

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

8N/34W-18C1. Drilled by Floyd V. Wells. 8-inch casing to 75 ft. Altitude about 200 ft.

Clay, organic, dark-gray	10	10	Clay, green, with gravel and some sand	25	70
Clay, sandy, light-brown	5	15	Shale, green	5	75
Clay, organic, gray	30	45			

8N/35W-3Z4. Drilled by U.S. Army Corps of Engineers. 8-inch casing to 182 ft; perforated 84-182 ft. Altitude about 402 ft.

Sand, silty	6	6
Sand and gravel, clean, poorly graded	6	12
Sand, silty	44	56
Shale, closely fractured, with some interbedded mudstone	126	182

8N/35W-3Z5. Drilled by U.S. Army Corps of Engineers. Open hole to 220 ft. Altitude is 402.6 ft.

Sand, silty, with layers of clay and clay and sand	51	51
Shale, diatomaceous, hard, tan-to-gray, fractured	114	165
Mudstone, diatomaceous, hard, gray	2	167
Shale, diatomaceous, hard, gray	53	220

8N/35W-3Z6. Drilled by U.S. Army Corps of Engineers. Open hole to 50 ft. Altitude about 439 ft.

Sand, silty	4	4	Mudstone, diatomaceous, soft, gray	35	50
Sand, with some clay	11	15			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

8N/35W-3Z7. Drilled by U.S. Army Corps of Engineers. Open hole to 180 ft. Altitude about 495 ft.

Sand and gravel, clean, poorly graded	6	6	Limestone, hard, white	1	59
Sand, with some clay	5	11	Shale, diatomaceous, hard, gray	121	180
Shale, diatomaceous, hard, gray	47	58			

8N/35W-5Z1. Open hole to 38 ft. Altitude about 180 ft.

Sand and gravel, clean, poorly graded	32	32
Mudstone and siltstone, hard, green to gray	6	38

8N/35W-5Z2. Open hole to 58 ft. Altitude about 200 ft.

Sand and gravel, clean, poorly graded	18	18	Sand, silty	27	45
			Silt and clay	3	48
			Shale	10	58

8N/35W-7R1. Drilled by Floyd V. Wells. 8-inch casing to 100 ft; perforated 65-70, 85-95 ft. Altitude about 40 ft.

Clay, organic, dark gray	65	65	Clay, organic, gray	13	80
Clay, organic, broken shale, water-bearing	2	67	Clay, sandy, dark gray	15	95
			Shale, brown	5	100

8N/35W-7Z1. Open hole to 60 ft. Altitude about 120 ft.

Sand and gravel, clean, poorly graded	39	39	Sand, with some clay	5	44
			Shale	16	60

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

8N/35W-7Z2. Open hole to 76 ft. Altitude about 80 ft.

Sand and gravel, clean, poorly graded	44	44	Gravel and sand, clean, well graded	17	61
			Shale	15	76

8N/35W-7Z3. Drilled by U.S. Army Corps of Engineers. Open hole to 201 ft. Altitude is 164.9 ft.

Sand, silty, fine to medium	10	10
Shale, with interbedded layers of mudstone; hard, brown to black, fractured	191	201

8N/35W-8Z1. Open hole to 58 ft. Altitude about 120 ft.

Sand and gravel, clean, poorly graded	42	42	Sand, silty	2	44
			Shale	14	58

8N/35W-8Z2. Open hole to 48 ft. Altitude about 80 ft.

Sand and gravel, clean, poorly graded	38	38
Shale	10	48

8N/35W-8Z3. Open hole to 42 ft. Altitude about 80 ft.

Sand, silty	2	2	Shale	40	42

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

8N/35W-9G1. Drilled by Floyd V. Wells. Open hole to 80 ft. Altitude about 250 ft.

Soil	6	6	Shale, with gravel, olive green, weathered	27	55
Sand, fine, with some gravel	22	28	Shale, olive green, fractured	25	80

8N/35W-9H1. Drilled by Floyd V. Wells. Open hole to 60 ft. Altitude about 240 ft.

Soil	6	6	Shale, green	25	60
Clay, sandy, brown	29	35			

8N/35W-10J1. Drilled by U.S. Geol. Survey. 1½-inch casing with sand point to 42 ft. Altitude about 118 ft.

Clay, sandy, dark	42	42

8N/35W-14Z1. Drilled by J.N. Pitcher Drilling Co. Well drilled to 101 ft, backfilled to 96 ft; perforated plastic casing to 96 ft. Altitude is 487.2 ft.

Sand, fine, silty, with some clay	28	28	Shale, soft, weathered, brown	63	101
Clay, silty, brown	10	38			

8N/35W-15E1. Drilled by Roscoe Moss Co. 12-inch casing; perforated 23-34 ft. Altitude about 50 ft.

Adobe	8	8	Shale, blue to brown	608	642
Clay	15	23			
Gravel	11	34			

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

8N/35W-15E2. Drilled by Floyd V. Wells. 8-inch casing to 42 ft; not perforated. Altitude about 50 ft.

Sand	5	5	Clay, organic, green-gray	6	33
Clay, organic, dark-gray	13	18	Shale, brown	9	42
Gravel, with some sand	9	27			

8N/35W-15E3. Drilled by U.S. Geol. Survey. 1½-inch casing with sand point to 73 ft. Altitude about 50 ft.

Clay	62	62	Sand, medium	11	73

8N/35W-16E1. Drilled by U.S. Geol. Survey. 1½-inch casing with sand point to 50 ft. Altitude about 50 ft.

Clay, sandy	49	49	Shale	1	50

8N/35W-17B1. Drilled by Floyd V. Wells. 8-inch casing to 70 ft; perforated 56-66 ft. Altitude about 40 ft.

Clay, organic, dark-gray	57	57
Sand, with some gravel	9	66
Shale, brown	4	70

8N/35W-28Z1. Drilled by J. N. Pitcher Drilling Co. Well drilled to 101 ft, backfilled to 94 ft; perforated plastic casing to 94 ft. Altitude is 363.9 ft.

Sand, fine, with clay and some silt, brown	31	31
Shale, silty, soft to hard, fractured and weathered	70	101

	Thickness (feet)	Depth (feet)

8N/35W-31Z1. Drilled by Eugene Craft Drilling Co. Open hole to 200 ft. Altitude is 280.2 ft.

Sand, silty, fine to medium	6	6
Shale and siltstone, soft to hard, brown, fractured	194	200

8N/36W-13Z1. Open hole to 40 ft. Altitude is 143.0 ft.

Sand, fine, poorly graded, brown	24	24
Shale, hard, brown	16	40

8N/36W-23Z1. Open hole to 64 ft. Altitude is 126.0 ft.

Sand, fine, poorly graded, tan	64	64

8N/36W-23Z2. Open hole to 73 ft. Altitude about 90 ft.

Sand, fine, clean, light brown	52	52
Shale, soft to extremely hard, fractured, brown	21	73

8N/36W-23Z3. Open hole to 63 ft. Altitude about 104 ft.

Sand, fine, poorly graded, tan	60	60
Sand, fine, and clay, with sparse shale gravel; gray	3	63

8N/36W-24Z1. Open hole to 58 ft. Altitude is 198.9 ft.

Sand, fine, poorly graded, light brown	37	37
Sand, fine, and clay, with some shale gravel	3	40
Shale, hard, brown, fractured with thin layers of chert	18	58

	Thickness (feet)	Depth (feet)
8N/36W-24Z2. Open hole to 43 ft. Altitude is 218.6 ft.		
Sand, fine, poorly graded, tan	42	42
Shale, light-tan, fractured, with some clay and chert gravel	1	43
8N/36W-24Z3. Open hole to 74 ft. Altitude is 184.4 ft.		
Sand, fine, poorly graded, clean	73	73
Sand, fine, with chert gravel and large amount of clay	1	74
8N/36W-24Z4. Open hole to 36 ft. Altitude about 200 ft.		
Sand and gravel, poorly graded, clean	35	35
Sand, silty	1	36
8N/36W-25Z1. Open hole to 32 ft. Altitude about 60 ft.		
Sand and gravel, poorly graded, clean	21	21
Sand, silty	9	30
Shale	2	32
9N/35W-17Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 60 ft. Altitude about 562 ft.		
Clay, sandy, with some silt	10	10
Sandstone and shale, soft, weathered	29	39
Sandstone, fine, hard, green, fractured	10	49
Sandstone and shale, soft to hard	11	60
9N/35W-17Z2. Drilled by J. N. Pitcher Drilling Co. Open hole to 111 ft. Altitude is 250.5 ft.		
Clay, silty, red-brown	8	8
Sand, fine, with clay and silt, brown	7	15
Gravel, fine to coarse, and sand; with clay, red brown	8	23
Shale, soft to hard, weathered, brown	47	70
Sandstone, fine, interbedded with siltstone; slightly fractured, hard, brown	41	111

	Thickness (feet)	Depth (feet)
9N/35W-17Z3. Drilled by J. N. Pitcher Drilling Co. Open hole to 110 ft. Altitude is 537.2 ft.		
Clay, sandy, dark brown	3	3
Shale, siliceous, hard, brown, fractured	19	22
Basalt, with white porcelainized zones; hard, brown, fractured	59	81
Marble, hard, black, occasional silicate and clay filled fractured	29	110
9N/35W-18L1. Drilled by Floyd V. Wells. 8-inch casing to 99 ft; perforated 79-94 ft. Altitude about 80 ft.		
Clay, sandy, silty	15	15
Sand, with silt and gravel	11	26
Shale, moderate soft to very hard, brown, moderately fractured	73	99
9N/35W-18Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 100 ft. Altitude is 78.8 ft.		
Silt, clay, and gravel, loose to dense	25	25
Shale, diatomaceous to cherty, fractured, soft to very hard	61	86
Mudstone, fractured, hard	14	100
9N/35W-18Z2. Drilled by J. N. Pitcher Drilling Co. Open hole to 110 ft. Altitude is 174.6 ft.		
Gravel, sand, clay, and silt, loose to very dense	10	10
Siltstone, siliceous, with chert streaks; hard highly fractured zones	20	30
Shale, with siltstone layers; siliceous, hard	25	55
Chert, with limestone layers	32	87
Shale, calcareous, hard, moderately fractured	23	110

	Thickness (feet)	Depth (feet)

9N/35W-18Z3. Drilled by J. N. Pitcher Drilling Co. 5-inch casing to 110 ft. Altitude is 74.8 ft.

Soil	1	1
Clay, silty, "stiff," brown	15	16
Sand, fine, "very dense," brown	10	26
Sand, fine to coarse, with some gravel and clay	9	35
Clay, with silt and sand, "very stiff to hard"	3	38
Shale, silty, sandy, highly weathered and fractured, soft to hard	20	58
Basalt, hard, fractured, with highly fractured streaks	52	110

9N/35W-19Z1. Drilled by J. N. Pitcher Drilling Co. Open hole to 130 ft. Altitude is 175.2 ft.

Soil	3	3
Clay, sandy, dense, brown, occasional pebbles	21	24
Clay, very dense, brown, numerous shale fragments	15	39
Shale, soft, fractured and weathered	6	45
Shale, brittle, hard, brown-gray	85	130

9N/35W-20J1. Drilled by Fred Pralley Co. 6-inch casing to 68 ft; perforated 5-30 ft. Altitude about 100 ft.

Silt and clay	2	2
Sand and gravel, with silt and clay	28	30
Mudstone	36	66
Sandstone	2	68

9N/35W-20Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 100 ft. Altitude about 290 ft.

Sand, silty, brown	23	23
Shale, soft to medium hard, brown, weathered	7	30
Mudstone, hard, brown, moderately weathered, fractured	70	100

	Thickness (feet)	Depth (feet)
9N/35W-20Z2. Drilled by U.S. Army Corps of Engineers. Open hole to 100 ft. Altitude about 297 ft.		
Sand, silty, brown	24	24
Mudstone, medium hard to hard, gray, weathered and fractured	76	100
9N/35W-20Z3. Open hole to 74 ft. Altitude about 190 ft.		
Sand, fine, silty, with streaks of sandy clay, consolidated	26	26
Shale, with some clay, well-consolidated	2	28
Shale, sandy, hard, gray, fractured	46	74
9N/35W-28Z1. Open hole to 65 ft. Altitude about 245 ft.		
Sand, silty, with some gravel	36	36
Silt and clay, stiff	29	65
9N/35W-32Z1. Open hole to 80 ft. Altitude about 180 ft.		
Sand, and gravel, clean, poorly graded	42	42
Mudstone and siltstone, with some clay, soft	38	80
9N/35W-34Z1. Open hole to 181 ft. Altitude about 326 ft.		
Sand, fine to medium, poorly graded, brown	3	3
Clay, sandy	6	9
Sand, very fine, poorly graded; with some clay	2	11
Sand, fine to medium, poorly graded, clean	67	78
Clay, bluish-gray	87	165
Sand, very fine, poorly graded	6	171
Sand and clay, very fine, poorly graded	5	176
Shale, very thin bedded, soft to medium hard	5	181

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

9N/35W-34Z2. Open hole to 85 ft. Altitude about 528 ft.

Overburden ----------	63	63	Bedrock ----------	22	85

9N/35W-34Z3. Open hole to 57 ft. Altitude about 496 ft.

Overburden ----------	52	52	Bedrock ----------	5	57

9N/35W-35Z1. Open hole to 83 ft. Altitude about 559 ft.

Overburden ----------	82	82	Bedrock ----------	1	83

9N/35W-35Z3. Open hole to 45 ft. Altitude about 559 ft.

Overburden ----------	42	42	Bedrock ----------	3	45

9N/36W-1Z1. Open hole to 101 ft. Altitude about 150 ft.

Sand, with clay, silt, and gravel ----------	71	71
Sandstone, fine grained, hard, blue-green ----------	3	74
Mudstone, hard, blue-gray, fractured, slickensides --------	27	101

9N/36W-2Z1. Drilled by J. N. Pitcher Drilling Co. Well drilled to 110 ft, backfilled to 107 ft; 4-inch perforated plastic pipe to 107 ft. Altitude is 146.7 ft.

Clay, silty, brown, with some sand and gravel ----------	60	60
Sand, fine, and clay, silty, brown --- ----------	27	87
Gravel, fine to coarse, and sand, silty, brown ----------	5	92
Shale, silty, soft to hard, gray ---------- -------	18	110

	Thickness (feet)	Depth (feet)
9N/36W-11Z1. Drilled by U.S. Army Corps of Engineers. Open hole to 99 ft. Altitude about 100 ft.		
Sand, with clay, silt, and gravel	39	39
Mudstone, with layers of sandstone; hard, gray, weathered and fractured, slickensides	60	99
9N/36W-12Z1. Drilled by J. N. Pitcher Drilling Co. Well drilled to 130 ft, backfilled to 124 ft; 4-inch perforated plastic pipe to 124 ft. Altitude is 251.2 ft.		
Clay, sandy, brown	17	17
Sand, fine to medium, silty, brown	19	36
Shale, silty, soft, slickensides	10	46
Shale, silty, hard, fractured, gray	84	130

Table 7.-- Metered pumpage from wells

[From data furnished by the U.S. Air Force at Vandenberg and from data collected by the U.S. Geological Survey. Symbols: Ds well destroyed; N no record; U unused]

PUMPAGE (thousand gallons)

Well number	Calendar year																						
	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
7N/34W-19J1	53,128	N	N	N	1,644	21,124	5,651	34,689	15,875	54,637	50,331	13,187	17,639	31,597	15,595	34,034	115,654	107,879	161,234	124,561	89,543	56,250	100,032
19J3																		N	263,682	301,906	384,370	156,841	264,707
19L2																	202,518	987,820	N	138,386	117,419	84,656	119,343
20K4	256,750	48,105	N	N	21,228	89,181	104,549	205,589	351,905	293,093	123,219	92,869	99,575	118,987	87,513	189,455	Ds						
20K5																	590,580	504,811	479,181	412,066	269,984	389,298	297,564
20L1																		N	386,095	534,773	378,112	433,612	373,483
20M2	6,147	N	N	N	N	79,905	13,717	51,733	110,940	255,210	28,283	76,432	38,702	39,686	113,830	206,570	314,421	271,688	260,524	292,483	438,171	467,603	367,451
7N/35W-21L4																	N	9,086	16,431	7,423	1,261	3,217	
23B1	9,843	6,166	N	N	N	1,706	N	N	N	364	Ds												
24H2	185,929	45,445	N	N	N	8,477	66,489	74,430	39,357	16,229	59	263	32,837	103	3,631	72,137	149,689	467,565	U				
33J2																N	15,964	65,150	43,566	30,890	32,634	40,484	28,580
33J3																		N	26,833	29,476	33,647	35,461	38,767
8N/34W-16G1																					N	126,353	20,626
16J1																					N	248,417	577,473

Table 8.--Pumping tests of wells

Source of data: The source of data for each line is indicated by the following symbols: AF U.S. Air Force; CE U.S. Army Corps of Engineers; D driller; GS U.S. Geological Survey; N U.S. Navy; PGE Pacific Gas and Electric Co.

Depth of well: The depth shown is the depth of the well, in feet, as shown in table 1, and is not necessarily the depth on the date of the pumping test.

Pumping rate: The pumping rate, reported in gallons per minute (gpm), is the rate at which the well was pumped during the test, and is not necessarily the maximum capacity of the well.

Static water level: The static, or standing, water level is the reported depth to water below land surface datum at the time of the test.

Drawdown: The drawdown is the difference, in feet, between the static water level and the pumping water level.

Specific capacity: The specific capacity is a measure of the physical condition of the well and the aquifer or aquifers which it penetrates. A well with a large specific capacity is capable of a greater yield than a well with a small specific capacity. Specific capacity is obtained by dividing the pumping rate, in gallons per minute, by the drawdown, in feet.

Well number	Source of data	Depth of well (feet)	Date tested	Pumping rate (gpm)	Static water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of dd)
6N/35W-2D1	D	475	7- 8-58	20	215.85	107	0.2
6N/36W-23R2	CE	174	12-30-43	90	132.3	4.6	19.5
	CE		12-30-43	215	132.3	7.5	28.7
26C1		476		3		300	.01
26E1	N	476	9-13-43	12	133	261	.05
			10-28-43	8	132	105	.08
26G1		220.2		10		4	2.5
7N/34W-19J1	D	182	10-10-41	500	21.8	89	5.6
	D		10-10-41	1,050	21.8	97	10.8
	PGE		11- 1-55	608	30.5	16	38.0
20K4	CE	186	10-13-41	500	15.7	39	12.8
	CE		10-13-41	1,820	15.7	107	17.0
	PGE		11- 1-55	1,130	29.8	42.4	26.6
20K5	CE	177	12- 1-58	1,000	20.0	55	18.2
	CE		12- 1-58	1,500	20.0	82	18.2
	CE		12- 1-58	1,880	20.0	10[illegible]	18.2
	CE		12- 1-58	2,050	20.0	11[illegible]	18.6
	CE		12- 1-58	2,100	20.0	120	17.5
20L1	CE	184	4- 8-59	890	35.0	12	74.2
	CE		4- 8-59	1,040	35.0	15	69.3
	CE		4- 8-59	1,370	35.0	20	68.5
	CE		4- 8-59	1,850	35.0	28	66.1
	CE		4- 8-59	2,050	35.0	36	56.9

Well number	Source of data	Depth of well (feet)	Date tested	Pumping rate (gpm)	Static water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of dd)
7N/34W-20M2	PGE	192	11- 1-55	1,150	27.0	85.6	13.4
	AF		1958	925		64	14.5
20R1	CE	177	4-25-59	360	26	21	17.1
	CE		4-25-59	490	26	35	14.0
	CE		4-25-59	590	26	49	12.0
	CE		4-25-59	740	26	56	13.2
	CE		4-25-59	940	26	75	12.5
21J1	D	80	1-20-30	375	12	29	12.9
7N/35W-18H1	GS	111.5	9-13-63	70	1.40	5	14.0
18J2	GS	121.7	7-27-63	60	4.11	79	0.9
20J4	D	160	6-27-26	1,000	12	38	26.3
21L4	D	181	4- -54	1,300	7.8	42	31.0
22F3	D	190	3-26-54	1,300	14	41	31.7
22L1	D	219	8- -34	1,080	24.6	22.4	48.2
22N2	D	194	7-16-58	75	6.5	10	7.5
	GS		7-22-58	380		30	12.7
23B1	PGE	190	11- 1-55	363	18.3	67.8	5.4
23D1	CE	206	11-12-41	100	26.73	110	.9
26P1	D	176	5-10-54	200	Flowing	86	2.3
32N1	GS	300	7-23-58	10	9.23	120	.08
33J1	D	380	6-18-58	50		18	2.8
	GS		6-24-58	125		52	2.4
33J2	GS	465	10- 8-58	900	114	148	6.1

Well number	Source of data	Depth of well (feet)	Date tested	Pumping rate (gpm)	Static water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of dd)
7N/35W-33R1	D	425	4-28-58	43	110	50	.9
	GS		4-28-58	180	110	280	.6
35C2	D	122	1934	1,050		30	35.0
	D		1934	1,400		50	28.0
35C5	GS	157	10-29-55	350	1.75	85	4.1
8N/34W-16G1	CE	687	4-30-58	440	Flowing	16.5	26.7
	CE		4-30-58	640	Flowing	28.0	22.9
	CE		4-30-58	850	Flowing	40.0	21.2
	CE		4-30-58	1,050	Flowing	52.0	20.2
	CE		4-30-58	1,180	Flowing	60.0	19.7
16G2	CE	700	12-18-64	510	18	16	31.9
	CE		12-18-64	750	18	23	32.6
	CE		12-18-64	1,000	18	29	34.5
	CE		12-18-64	1,500	18	37	40.5
16J1	CE	578	10- 2-61	650	2.5	36	18.1
	CE		10- 2-61	950	2.5	51	18.6
	CE		10- 2-61	1,060	2.5	54	19.6
	CE		10- 2-61	1,250	2.5	63.5	19.7
	CE		10- 2-61	1,620	2.5	85.5	18.9
18C1	D	75	7- 5-57	70	17.5	28.5	2.5
8N/35W-3Z4	CE	182	4-25-58	5	77.5	31	.2
	CE		4-25-58	10	77.5	47	.2

Well number	Source of data	Depth of well (feet)	Date tested	Pumping rate (gpm)	Static water level (feet)	Drawdown (feet)	Specific capacity (gpm/ft of dd)
8N/35W-7R1	D	100	7- 1-57	100	2.5	39.5	2.5
17B1	D	70	7- 1-57	70	3.5	51.5	1.4
9N/35W-18L1	CE	99	5-17-61	18.5	73	1.5	12.3
	CE		5-17-61	26	73	2.5	10.4
	CE		5-17-61	40	73	5.5	7.3
	CE		5-17-61	48.5	73	8.0	6.1
18Z3	CE	110	12-12-62	86	32.0	47	1.8
20J1	CE	68	10- 1-60	24	15	1	24.0
	CE		10- 1-60	35	15	1.5	23.3
	CE		10- 1-60	37	15	2	18.5
	CE		10- 1-60	56	15	3	18.7
	CE		10- 1-60	60	15	4	15.0