THE RESOURCES AGENCY OF CALIFORNIA

Department of Water Resources

BULLETIN No. 91-10

WELLS AND SPRINGS IN THE LOWER MOJAVE VALLEY AREA

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared By

UNITED STATES DEPARTMENT OF INTERIOR

GEOLOGICAL SURVEY

FEDERAL-STATE COOPERATIVE GROUNDWATER INVESTIGATIONS

DECEMBER 1963

HUGO FISHER
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State of California

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Department of Water Resources

State of California

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This report is one of a series of open file reports prepared by the United States Department of Interior Geological Survey, Ground Water Branch, which presents basic data on wells obtained from reconnaissance surveys of desert areas. These investigations are conducted by the Geological Survey under a cooperative agreement whereby funds are furnished equally by the United States and the State of California. The reports in this Bulletin No. 91 series are being published by the Department of Water Resources in order to make sufficient copies available for use of all interested agencies and the public at large. Earlier reports of this series are:

Bulletin No. 91-1: Data on Wells in the West Part of the Middle Mojave Valley Area, San Bernardino County, California

Bulletin No. 91-2: Data on Water Wells and Springs in the Yucca Valley-Twentynine Palms Area, San Bernardino and Riverside Counties, California

Bulletin No. 91-3: Data on Water Wells in the Eastern Part of the Middle Mojave Valley Area, San Bernardino County, California

Bulletin No. 91-4: Data on Water Wells in the Willow Springs, Gloster, and Chaffee Areas, Kern County, California

Bulletin No. 91-5: Data on Water Wells in the Dale Valley Area, San Bernardino and Riverside Counties, California

Bulletin No. 91-6: Data on Wells in the Edwards Air Force Base Area, California

Bulletin No. 91-7: Data on Water Wells and Springs in the Chuckwalla Valley Area, Riverside County, California

Bulletin No. 91-8: Data on Water Wells and Springs in the Rice and Vidal Valley Areas, Riverside and San Bernardino Counties, California

Bulletin No. 91-9: Data on Water Wells in Indian Wells Valley Area, Inyo, Kern and San Bernardino Counties, California

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division
Ground Water Branch
Sacramento 14, California

June 28, 1963

Mr. William E. Warne, Director
California Department of Water Resources
P. O. Box 388
Sacramento 2, California

Dear Mr. Warne:

We are pleased to transmit for publication by the Department of Water Resources the U. S. Geological Survey report, "Wells and Springs in the Lower Mojave Valley Area, San Bernardino County, California," by H. B. Dyer, J. S. Bader, F. W. Giessner, and others.

This report, one of a series for the Mojave Desert region, was prepared by the Long Beach subdistrict office of the Geological Survey in accordance with the cooperative agreement between the State of California and the Geological Survey. It tabulates all available data on wells and springs in the lower Mojave Valley area and shows reconnaissance geology with special reference to the water-yielding deposits.

Sincerely yours,

Fred Kunkel

Fred Kunkel
District Geologist

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WELLS AND SPRINGS IN THE LOWER MOJAVE VALLEY AREA, SAN BERNARDINO COUNTY, CALIFORNIA

By H. B. Dyer, J. S. Bader, F. W. Giessner, and others

PURPOSE AND SCOPE OF THE WORK AND REPORT

The data presented in this report were collected by the U.S. Geological Survey as a phase of the investigation of water wells and general hydrologic conditions throughout much of the desert region of southern California. The study was made in cooperation with the California Department of Water Resources.

The desert regions of California are characteristically regions of nearly barren mountain ranges and isolated hills surrounding broad valleys that are underlain by alluvial deposits derived from the mountains and hills. The valley areas generally contain ground water that has a wide range in chemical quality, but much of the water can be and has been developed for beneficial use.

The general objective of the cooperative investigation is to collect and tabulate all available hydrologic data for the individual desert basins in order to provide public agencies and the general public with data for planning water utilization and development works and for use in the overall ground-water investigation of the area.

Accordingly, the scope of the work includes: (1) A brief reconnaissance of major geologic features to determine the extent and general character of the deposits that contain the ground-water bodies; (2) a field examination of almost all the water wells in the area to determine the location of wells in relation to geographic and cultural features and the public-land net and to record well depths and sizes, types and capacities of pumping equipment, uses of the water, and other pertinent information available at the well site; (3) measurement of the depth to the water surface below an established and described measuring point at or near the land surface; (4) selection of representative wells to be measured periodically in order to detect and record changes of water levels; and (5) collection and tabulation of well records, including well logs, water-level measurements, and chemical analyses.

The work has been done by the U.S. Geological Survey, under the general supervision of H. D. Wilson, Jr., and Fred Kunkel, successive district engineer and district geologist in charge of ground-water investigations in California, and under the immediate supervision of G. M. Hogenson and P. M. Johnston, successive geologists in charge of the Long Beach subdistrict office. The fieldwork was carried on intermittently between June 1959 and November 1962 from the southern California subdistrict office of the Ground Water Branch at Long Beach.

The reconnaissance geologic map (fig. 2) was compiled by W. R. Moyle, Jr., from published and unpublished mapping of others, from aerial photographs, and field mapping by W. R. Moyle, Jr.

Location of wells is by J. R. Hargreaves, H. B. Dyer, W. R. Moyle, Jr., R. W. Page, J. S. Bader, F. W. Giessner, J. E. Weir, Jr., W. L. Burnham, M. A. Pistrang, and P. M. Johnston.

The text was written by H. B. Dyer and modified and edited by W. L. Burnham.

The tables were compiled and checked by J. S. Bader and F. W. Giessner.

LOCATION AND GENERAL FEATURES OF THE AREA

The lower Mojave Valley area is in the Mojave Desert region of California (fig. 1) and comprises about 1,200 square miles, approximately between long 116°15' and 117°00' W. and lat 34°38' and 35°05' N. The eastern boundary of the area is the eastern edge of the Cave Mountain, Cady Mountains, and Lavic Lake quadrangles; the southern boundary is formed by the Marine Corps Base at Twentynine Palms and the southern edge of Township 7 North; the northern boundary generally corresponds to the northern edge of T. 11 N. The western boundary is the western edge of the Lane Mountain, Daggett, and Ord Mountains quadrangles.

The Atchison, Topeka, and Santa Fe and the Union Pacific railroads cross the area, and U.S. Highways 66, 466, and 91 are the principal routes for automobile travel. Several other paved roads and a network of gravel roads cover much of the alluvial plains. A few gravel roads and jeep trails lead into the more mountainous parts of the area.

The area described in this report includes parts of several drainage basins. Following the usage of Thompson (1929, pl. 7), the area includes the lower Mojave drainage basin and most of the Caves Canyon and Troy drainage basins. In addition, the area includes the adjacent lower parts of Coyote basin as well as small areas tributary to the middle Mojave, Troy, Bessemer, Lucerne Valley, Lavic, Broadwell, Crucero, and West Cronise drainage basins.

The base map (fig. 2) showing the area of this report was compiled from all or parts of the following U.S. Geological Survey topographic quadrangle maps, at a scale of 1:62,500: Alvord Mountain, Cady Mountains, Cave Mountain, Daggett, Lane Mountain, Lavic, Newberry, Ord Mountains, and Rodman Mountains.

PREVIOUS WORK AND ACKNOWLEDGMENTS

The geology of the area has been described in eleven published and a number of unpublished reports that are the principal sources from which the geologic map in this report was compiled. The Calico Mountains have been described by Lindgren (1887), and Erwin and Gardner (1940). Hershey (1902) and Baker (1911) have noted some regional features of the area, and Pack (1914) made a brief reconnaissance. Buwalda (1914) and Blackwelder and Ellsworth (1936) have described the occurrence of the Manix beds, and Gardner (1940) has mapped the geology of the Newberry and Ord Mountains. The geology of the Alvord Mountain quadrangle has been described in a recent report by Byers (1960), and Kunkel and Riley (1959) have described the geology of the Camp Irwin area. Kupfer and Bassett (1953) have prepared a reconnaissance geologic map which includes the Lavic and Cady Mountains quadrangles and the part of the Cave Mountain quadrangle south of the Mojave River. T. H. McCulloh (written communication) mapped the geology of the Lane Mountain quadrangle, and T. W. Dibblee, Jr., (written communication) has prepared geologic maps of the Newberry, Daggett, and Rodman Mountains quadrangles.

Hydrologic data from the lower Mojave area are contained in several U.S. Geological Survey water-supply papers, in reports of the California Division and Department of Water Resources, and in reports by the San Bernardino County Flood Control District. The earliest report is by Thompson (1929, p. 279-288, 437-515), which includes the most comprehensive published description of the geology of the area. This report was followed by a detailed tabulation of well data by the California Department of Public Works, Division of Water Resources (1934, p. 203-248). Burnham (1955) has described data from the northern part of the area. Since 1940, periodic measurements of water level in some of the wells listed in earlier reports have been reported in a series of water-supply papers (U.S. Geological Survey, 1940 and 1941-57).

Water-level measurements for the period 1947-58 are listed in a series of reports by the San Bernardino County Flood Control District (1951, 1954, 1958, and 1960). Since 1956, a series of reports by the California Department of Water Resources (1958, 1960, and 1961) lists water level in a large number of wells. These reports are cited in the list of references and in table 3.

The California Department of Water Resources, the San Bernardino County Flood Control District, and the U.S. Bureau of Reclamation have furnished much of the data tabulated in this report, and many ranchers, drillers, and well owners have freely given their time and information. This aid has facilitated the fieldwork and contributed materially to the completeness of this report.

GEOLOGIC AND HYDROLOGIC FEATURES OF THE AREA

The rocks of the area vary widely in water-bearing characteristics, but, in general, the unconsolidated younger rocks of Quaternary age are more porous and permeable than are the consolidated older rocks of pre-Tertiary and Tertiary age. Because the younger rocks generally underlie the valleys and extend below the water table, they contain most of the ground water that is stored in the area.

Geologic Units and Their Water-Bearing Character

Of the consolidated rocks, the oldest in the area are metamorphosed sedimentary and volcanic rocks and intrusive bodies of granite, quartz diorite, granodiorite, and quartz monzonite, all of pre-Tertiary age. These are included in an undifferentiated group as basement complex. The rocks of the basement complex are generally impermeable and, except for some small springs that issue from jointed and weathered zones, yield little water.

The consolidated continental sedimentary rocks of Tertiary age are composed largely of green tuffaceous mudstone and shale but include coarse fanglomerate, conglomerate, sandstone, siltstone, cherty limestone, waterlaid volcanic tuff and agglomerate and breccia. Most of these rocks are impermeable and would yield little water to wells. In some places, the conglomerate and sandstone are fairly well sorted and would yield water to wells that penetrated them below the water table. However, because the conglomerate and sandstone generally occur as isolated lenses within a sequence of poorly permeable rocks, their storage capacity is limited and they receive little recharge. In parts of the unit large amounts of gypsum are present, and any contained water may be of poor chemical quality.

In addition to the basement complex and the deposits of continental origin that have been described, two sequences of volcanic rocks occur in the area. They are the volcanic rocks, undifferentiated, of Tertiary age; and the basalts of Quaternary age.

The volcanic rocks, undifferentiated, of Tertiary age include the "mafic lavas" of Kupfer and Bassett (1953) and consist of intrusive and extrusive felsite, latite, andesite, rhyolite, dacite, basalt, tuff breccia, and volcanic ash. These rocks are not penetrated by wells, but they are poorly permeable and probably would yield little water.

The basalt flows and dikes of Tertiary age are not penetrated by wells in this area and are not known to underlie large areas or occur in thick sequences below the water table. Although the flows possibly have permeable zones, they probably cannot be developed as an important source of water.

The basalt of Quaternary age consists of flows and cinder cones in two localities near the southeast edge of the mapped area. The upper surfaces of the flows are unweathered to moderately weathered and their edges show only minor erosion. Like basalts in other areas, they may contain zones of high permeability. However, the thin, local surface flows are above the water table wherever known and probably cannot be developed as an important source of water. No wells penetrate these flows and no springs issue from them.

The older alluvium of Pleistocene age consists mainly of poorly sorted sand, but includes smaller amounts of gravel, silt, and clay. The older alluvium is oxidized, and in places is cemented by small amounts of caliche. It underlies most of the valley floor, and because it is porous and permeable and extends below the water table, it yields water freely to wells. It is the most important water-bearing unit in the area.

The older fan deposits of Pleistocene age are composed of gravel with boulders and cobbles and smaller amounts of sand, silt, and clay. These deposits are dissected and have been oxidized and locally cemented with caliche. The older fan deposits occur as isolated remnants which fringe and dip away from the mountains. Where the deposits are saturated, they yield water freely to wells.

Two sequences of older lacustrine deposits are present in the area. In the western part of the area north of the Marine Corps Supply Center (Nebo area), older lacustrine deposits occur in the hills above an altitude of about 2,200 feet where they are composed of marl, silt, and sand. In the eastern and northern part of the area, the older lacustrine deposits consist of generally green or gray sandy silt and clay that was deposited during Pleistocene time in the deeper parts of a large lake. Subsidiary lakeshore deposits of sand and gravel in the form of beach bars were deposited along the shore of the lake at an altitude of about 1,790 feet above sea level. The lacustrine deposits were called the Manix Beds by Buwalda (1914, p. 444) and the Manix Lake Beds by Byers (1960, p. 45). A Pleistocene age was established by Buwalda (1914, p. 451) on the basis of a contained fossil fauna. The deposits were described by Blackwelder and Ellsworth (1936), and the fossil birds that they contain were described by Howard (1955). The silt and clay of the lacustrine deposits interfinger with the older alluvium in the canyon of the Mojave River near Camp Cady and with the older fan deposits elsewhere along both sides of the Mojave River.

The older lacustrine deposits are not a promising source of water because the silt and clay are nearly impermeable, and the beach deposits are above the water table. However, thin beds of permeable sand within the silt and clay may yield small amounts of water to domestic wells.

The old sand dunes occur at the north and southeast edge of Coyote Lake. These deposits are greatly eroded, skeletonized remnants of moderately to well cemented, cross bedded, slightly weathered old sand dunes. They are of very limited extent and are above the water table.

The younger alluvium of Recent age consists of unconsolidated sand with smaller amounts of gravel, silt, and clay, which is being deposited on the lower parts of the fans and over the lowland plain. This alluvium is permeable and would yield water to wells wherever saturated. However, the unit is nearly everywhere above the water table and is not an important water-bearing unit in the area. The younger alluvium transmits water from the intermittent streams to the ground-water body.

The younger fan deposits of Recent age consist of unconsolidated deposits of angular boulders, cobbles, and gravel with smaller amounts of sand and silt. The fans are being formed by the intermittent streams that issue from the mountains and are composed largely of boulders and cobbles near the mountains with gravel near the valley floor. The fan deposits are poorly sorted and are probably poorly permeable. They are generally above the water table.

The playa deposits of Recent age occur in the lowest parts of the closed basins. They consist principally of silt, clay, and sandy clay with small amounts of soluble salts. The deposits are poorly permeable and, even where saturated, generally contain water having moderate to high concentrations of dissolved solids. Consequently, they do not yield useful quantities of water of good quality.

The dune sand of Recent age consists of fine- to medium-grained sand that occurs as belts of dunes in areas where the water table is close to the land surface and as irregular blankets of sand high on the mountains east of the valley area. The stabilized belts occur north of Coyote Lake playa, west of the town of Newberry, and as a broad belt on the west side of Troy Lake playa. These dunes are stabilized by mesquite that grows in places where the water table is close to the surface. Many small interdune playas are included in these areas. The dune sand does not extend far below the water table and does not yield large quantities of water to wells.

The blankets of sand in the mountains are high above the water table and are not stabilized by plants. They consist of sand swept from the alluvial plains by strong winds from the southwest.

The river-channel deposits of Recent age consist of loose gravel and sand deposited in the channel cut by the Mojave River. Generally, the active part of the channel is composed of fine gravel, but coarse sand is common on the flood plain. The river-channel deposits are very loose and permeable and yield fairly large quantities of water to shallow wells. They transmit water to the older deposits during periods of flow in the Mojave River.

Recharge and Discharge of Ground Water

Recharge to the ground-water bodies of the area occurs by direct infiltration of rain, infiltration from the intermittent streams that drain the nearby mountain areas, and by infiltration from the Mojave River. Only a small amount of rain falls in the area, and much of this occurs as summer thunderstorms which produce flashy runoff. In general, infiltration from rain and the intermittent streams is probably small. Furthermore, most runoff from the intermittent streams accumulates on the clayey playa deposits in the valley areas where it cannot percolate to ground water and is evaporated.

During periods of flow in the Mojave River, the water level in wells adjacent to the river rises, indicating recharge by infiltration (U.S. Geological Survey, 1940, p. 50). Also, water levels and gradients shown by water-level measurements suggest that the Mojave River is the principal source of recharge to the area adjacent to the river.

Ground water is discharged from the area by evaporation and transpiration in localities where ground water is at or near land surface such as around Coyote Lake, Troy Lake, and along the lower reaches of the Mojave River. Discharge also occurs from springs along the river near Afton Canyon and by pumping from wells.

WELL-NUMBERING SYSTEM

The well-numbering system used in the eastern part of the lower Mojave Valley area has been used by the Geological Survey in California since 1940. The system has been adopted by the California Department of Water Resources and by the California Water Pollution Control Board for use throughout the state.

Wells are assigned numbers according to their locations in the rectangular system for the subdivision of public land. For example, in the number 8N/4E-7D1, which is assigned to the domestic well of Richard C. Reardon, the part of the number preceding the slash indicates the township (T. 8 N.), the part between the slash and the hyphen is the range (R. 4 E.), the number between the hyphen and the letter indicates the section (sec. 7), and the letter indicates the 40-acre subdivision of the section, as shown in the accompanying diagram.

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Within the 40-acre tract the wells are numbered serially as indicated by the final digit. Thus, well 8N/4E-7D1 is the first well to be listed in the NW$\frac{1}{4}$NW$\frac{1}{4}$ sec. 7.

Springs are numbered in the same way as wells, except that the number following the letter designating the 40-acre subdivision has been replaced by the letter s.

For well numbers where the letter Z has been substituted for the letter designating the 40-acre tract, the Z indicates that the well was plotted from unverified location descriptions; the indicated locations of such wells were visited, but no evidence of a well could be found.

There are a few exceptions to this system of numbering wells according to their position in the 40-acre subdivision of the section. These wells usually have long periods of record, and their numbers had been assigned using earlier, less accurate, base maps. During this investigation the wells have been plotted at the correct location on the map, but the old number has been retained to facilitate finding the older records of the well.

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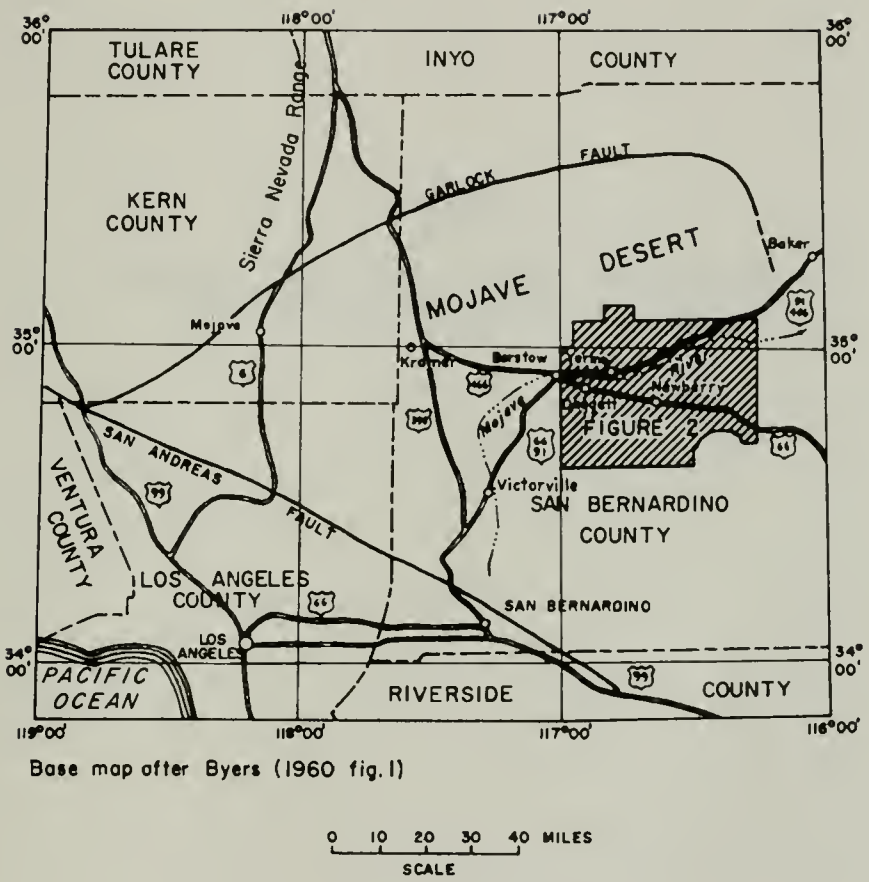

FIGURE 1.—Map of part of southern California showing area described in this report

APPENDIX A

TABLE 1. RECORDS OF WELLS AND SPRINGS IN THE LOWER MOJAVE VALLEY AREA, CALIFORNIA

Table 1.--Records of wells and springs in the lower Mojave Valley area, California

USGS number: The number given is the number assigned to the well or spring according to the system described in the section on well numbering.

Source of data and other numbers: The source of data on each line is indicated by the following symbols: DWR from California Department of Water Resources, Los Angeles, Calif.; F from the San Bernardino County Flood Control District; GS observations and measurements made by the Geological Survey or reported by owners, drillers, or others; L or M from California Department of Public Works, Division of Water Resources (1934, p. 202-248), or from Geological Survey water-supply papers given in table 3; O supplied by the owner; T from Thompson (1929, p. 279-288, 437-515). A number following the letter symbol is the well number used in the report, or by the agency.

Date of observation: Data for each well are presented in reverse chronological order, with the most recent information summarized on the top line opposite the well number. Where only the year is shown, no date was given by the source, but the information is assumed to be contemporaneous with other dated information from the same source.

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

Year completed: The completion date was obtained from the driller's log, or reported by the owner or others judged to have accurate knowledge of the well.

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

Type well and diameter: The type of well construction is indicated by symbols as follows: A auger, C cable tool, D dug, DC dug and deepened by cable tool, R rotary. The number following the letter is the diameter of the casing or pit in inches.

Pump type and power: The type of pump or method of lift is indicated by the following symbols: A airlift, C centrifugal, J jet, L lift, N none, S submersible, T turbine. The type of power is indicated as follows: D diesel engine, E electric motor of undetermined horsepower (where a number appears in this column it indicates the rated horsepower of an electric motor), G gasoline engine, H hand operated, N none, W windmill.

Yield: The yield of a spring as estimated or reported, or the yield of a well, in gallons per minute, usually based on tests performed by the driller or the California Electric Power Co. and reported by the well owners or drillers and is not necessarily the maximum capacity of the well or installed pump.

Use: Dm domestic, Ds destroyed or dry, I irrigation, In industrial, O observation, Ps public supply, RR railroad, S stock, Un unused.

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

Altitude: The figure given indicates the altitude, in feet above mean sea level, of the land-surface datum at the well site. This plane of reference is approximately at the land surface. Altitudes given to the nearest foot were interpolated from Geological Survey topographic maps; those given in feet and tenths were determined by spirit leveling by the U.S. Bureau of Reclamation, C. F. Hostrup and Associates, California Electric Power Co., Southern California Gas Co., or the California Department of Public Works, Division of Water Resources (1934, p. 202-248).

Water level: Measured depths to water level are given in feet, tenths, and hundredths, or feet and tenths; reported or approximate depths to water level are given in whole feet. The difference in altitude between the measuring point and land-surface datum has been subtracted from or added to the measured water level below or above the measuring point; the measurement given is the depth to water below land-surface datum. However, for a few wells reported in Thompson (1929) and California Department of Public Works (1934) the distance between the measuring point and land surface is not known, and the measurements are given as published.

Other data: C chemical analysis of water is given in table 7, L driller's log of well is given in table 6, W unpublished records and selected published records of water level are given in table 5, Wp records of water level are in the references given in table 3.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (feet)	Well data: Type, diameter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Well data: Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 1 E.											
7/1-12R1	GS	5-28-58			6.7	D 60	L W		Un	Tcc	1.0	4,226	dry	
12R2	GS	12- 7-60	Aztec Spring		10.9	D 48	N N		Un	Tc	0	4,360	6.79	
	GS	5-28-58								Tc	0		8.69	
13Ls	GS	12- 7-60					N N		S			4,520		
13Rs	GS	5-28-58							Un			4,680		
25Js	GS	12-13-61							Un			4,800	dry	
30Ds	GS	12-12-61	Goat Spring		85				S			4,283		
33Bs1	GS	12-13-61							S			4,520		
33Bs2	GS	12-13-61							S			4,480		
			T. 7 N., R. 2 E.											
7/2-10D1	GS	5-28-58	R. W. Hadden	1944	115	C 12	L W		Dm	Tcc	1.0	3,750	83.43	
16G1	GS	5-28-58	Willis Well		22.1	D 72	N N		Un	Tf	1.0	3,920	16.16	

17F1	GS	12- 7-60			16.2		24	N	N		Ds			4,300	dry	
18E1	GS	12- 7-60			13.3	D	48	N	N		Un	Tf	0	4,600	7.25	C
	GS	5-28-58										Tf	0		7.69	
18Qs	GS	12- 7-60	Willow Spring							2	S			5,200		
			T. 7 N., R. 3 E.													
7/3-28E1	GS	10- 3-62	B. Hadden		300			L	W	1/2	S			4,300		
28E2	GS	10- 3-62	B. Hadden	1957	312		6	L	G		Dm	Na		4,300		
			T. 8 N., R. 3 E.													
8/3- 1G1	GS	6-25-59					6	S	E		Dm	Tc	.5	1,790	18.52	
1G2	GS	6-25-59					8	S	E		Dm	Tc	.51	1,790	21.94	
1G3	GS	6-25-59	R. W. Davis		55						Dm			1,790		
1G4	GS	6-25-59	F. N. Wolfe				8	J	1/4		Dm	Tcc	.5	1,790	20.00	
1G5	GS	6-25-59	Merriam					C	2		Dm			1,790		
1K1	GS	6-25-59	Rex Head	1954	66		8	J	1/3		Dm			1,790		C
1M1	GS	11-16-62	Dwyer			C	6	L	E		Dm	Na		1,805		
1P1	GS	6-25-59	B. E. Harden	1953	195		12	J	3/4	450	Dm	Tcc	0	1,810	25.45	C
1Q1	GS	6-25-59						N	N		Ds			1,795	filled	
	T-131	1919	I. L. Hannan		42	DC	10	C		400					14	
1R1	GS	6-25-59			29.1		10	N	N		Un	Tc	0	1,793	13.63	

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			T. 8 N., R. 3 E.--Continued											
8/3- 2A1	GS	1- 7-60	H. T. Renolds		60	8	L W		Dm			1,805	35	
2A2	GS	1- 6-60	J. C. Moore	1956	75	C 8	J 2		Dm			1,805	30	
2A3	GS	1- 7-60	Nazarene Church		100	R 8	S E		Dm	Na		1,805		
2A4	GS	1- 7-60	J. S. Oney		85	8	J 1/3		Dm			1,805		
2B1	GS	1- 7-60	Blackshaw		100	12	T E		Dm	Na		1,810		
2B2	GS	1- 7-60	Blackshaw	1945	59		S E		Dm	Tcc	1.0	1,810	25.5	
2B3	GS	1- 7-60	W. O. Walsten		78	8	J 1/2		Dm			1,807	25	
2C1	GS	1- 6-60	Whiting Brothers	1959	95	R 8	S E		Dm	Na		1,815		
2C2	GS	1- 7-60	Read	1932	38	8	J 1/3		Dm			1,815	25	
2C3	GS L-26	1- 7-60 2-20-30	Whiting Brothers Douglas Sayre			12	N N		Un	Tc	0	1,815	21.5	Wp
2D1	GS	1- 6-60	B. C. Branden	1950	65	C	J 1/2		Dm			1,815	29	
2D2	GS	1- 6-60	Nelson	1948	65		S E		Dm	Na		1,815		
2D3	GS	1- 6-60	Bud's Cafe	1948	69	C	J 1/2		Dm			1,815	27	
2D4	GS	1- 6-60	Davidson	1949	66	C 8	J 3/4		Dm	Tc	1.0	1,815	28.22	
2D5	GS	1- 6-60							Dm			1,815		

2D6	GS	1- 6-60	P. I. Garton	1947	60		8	J	1/2	Dm	Na		1,815	
2D7	GS	1- 7-60					6	J	1	Dm	Na		1,815	
2E1	GS	1- 7-60		1956	98	R	6	S	E	Dm			1,815	28
2E2	GS	10-16-62	B. B. Rowland				6	J	1/2	Dm	Tc	1.5	1,818	27.77
2E3	GS	1- 7-60	Richard Szurgot		44.0		8	J	1/2	Dm	Tc	1.5	1,815	24.87
2F1	GS	1- 8-60			56.0	C	8	L	H	Un	Tc	.8	1,815	26.28
2G1	GS	1- 7-60		1954	90	C	10	J	1/2	Dm			1,810	21
2G2	GS	1- 7-60			50		8	L	W	Un			1,810	30
2H1	GS	1- 7-60	Renolds		68			J	1	Dm	Na		1,805	
2H2	GS	11-16-62	Miles Klein	1955	60	C	6	J	1	Dm			1,805	15
2J1	GS	11-16-62	Bessie Winsor	1955	65	C	6	S	1/2	Dm	Na		1,810	23
2J2	GS	11-16-62	Susan Carter	1959	101	C	8	S	1	Dm	Na		1,810	23
2J3	GS	11-16-62	D. E. Kelley	1959	60	C	8	S	1/2	Dm	Na		1,810	
2J4	GS	11-16-62	Lloyd Tatum		63	C	6	J	1/2	Dm	Na		1,810	
2K1	GS	1- 7-60	B. D. Hunt		60	DC		J	1/2	Dm	Tcc	.4	1,820	31.90
2L1	GS	1- 7-60	Claude Williams		80		8	J	1	Dm	Bpb	2.8	1,820	28.06
2L2	GS	1- 8-60	T. D. Taylor	1952	73		10	J	3/4	Dm			1,820	23
2L3	GS	1- 8-60	R. C. Clevinger		69		8	J	1/2	Dm	Tc	2.0	1,815	24.90
2L4	GS	1- 8-60					6	J	1	Dm			1,815	

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			T. 8 N., R. 3 E.--Continued											
8/3- 2M1	GS	1- 7-60	George Jauss	1953	90		J 1/2		Dm			1,830		
2M2	GS	1- 9-60	Mabel Turner		40	10	J 3/4		Dm	Tc	1.5	1,820	32.34	
2P1	GS	1- 8-60		1922	14	12	N N		Ds					
	L-25	2-20-30	Callender						Un	Tc	.5	1,826.2	37.3	Wp
2R1	GS	1- 8-60	G. R. Perry		80	6	J 1		Dm	Na		1,820		C
2R2	GS	1- 9-60	G. R. Perry	1953	104	12	T 10	300	I	Na		1,820		C
3A1	GS	1- 6-60			53.4	7	N N		Un	Tc	2.4	1,815	28.55	
3A2	GS	1- 6-60				D 48	C E		Ds			1,815		
3A3	GS	2- 4-60					J 1/2		Dm	Na		1,815		
3A4	GS	2- 4-60					J 1/2		Dm	Na		1,815		
3D1	GS	2- 5-60	W. A. Buehler	1954	98	C 8	J 2		Dm	Hpb	1.0	1,820	7.08	
3E1	GS	1-13-60			7.0	9	N N		Ds				dry	W
	L-23	3- 1-30	C. W. Beaverstock			C 9			Un	Tc	0	1,819.6	4.5	Wp
3E2	GS	1-13-60			7.0	D 24	N N		Ds			1,819.9	dry	
	T-117	1919				D 72				Ls	0		8.4	
3E3	GS	1-13-60	Keen		120	10	C E		Dm	Na		1,820		
3E4	GS	11-15-62	Keen		36.8	C 8	L W		Dm	Tc	0	1,820	28.62	
	GS	1-13-60			50					Tc	2.0		37.3	

3F1	GS	1-13-60			12.8		10	N	N		Ds	Tc	2.0		dry	
	L-24	5-29-30			32		10					Tc	2.0	1,824.0	20.7	Wp
3F2	GS	1-13-60	Charles Rider				10	J	1/2		Dm	Tc	.6	1,820	27.86	
3F3	GS	1-13-60	E. J. Wheeler	1957	64	R	6	J	1/3		Dm	Tc	1.0	1,820	25.85	
3K1	GS	2- 4-60	O. H. Harter		90		8	J	1/2		Dm	Na		1,820		
3K2	GS	2- 4-60				R	6	N	N		Un	Tcc	.5	1,825	14.72	
3K3	GS	2- 4-60					6	L	W		Dm	Tc	.55	1,830	20.00	
3K4	GS	11-15-62				C	9	N	N		Un	Na		1,840		
3L1	GS	2- 4-60	E. A. Fidler		42		8	L	W		Dm	Tc	1.6	1,830	17.17	
3L2	GS	11-15-62	Anne Dufrene	1959		C	6	J	1/2		Dm	Na		1,830		
3M1	GS	11-15-62	H. S. Spafford	1923	18	D	12	C	1/2		Dm	Na		1,830	12	
3P1	GS	11-15-62	E. O. Earll	1953	62	C	6	S	1/2		Dm	Na		1,840	42	
3P2	GS	11-15-62	Fred Earll	1959	62	C	6	S	1/2		Dm	Na		1,840	42	
4B1	GS	8- 9-61	Porter McCollogh		16		14	L	W	10	Dm	Tc	0			C
	L-21	2-20-30	Lyle Graham				10	L	W		I	Tc	0	1,819.0	2.3	Wp
4B2	GS	8-10-61	Porter McCollogh		50		16	T	5		I					
	F	3-27-58										Ls	0		5.42	
	F	12- 4-57										Ls	0		6.72	
	F	12-26-56										Ls	0		5.78	
	F	4-17-56										Ls	0		4.52	
	L-22	2-20-30	Lyle Graham			D						Ls	0	1,819.6	2.3	Wp
4B3	GS	8-10-61	Porter McCollogh		20		12	J	3/4		Dm	Tc	1.4	1,819.6	10.16	C,W,Wp
4B4	GS	10- 6-61	Porter McCollogh		190	C	12	N	N	10	Dm	Tc	4.1	1,819		C,W
	L-20	4-15-30	Lyle Graham								I				flowing	Wp

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			T. 8 N., R. 3 E.--Continued											
8/3- 4J1	GS	2- 5-60	Newberry Community Center		60	8	J 1/2		Dm	Na		1,825		
12A1	GS	6-25-59	B. Sessler			12	J E		Dm	Tc	-18.0	1,800	23.50	
12A2	GS	6-25-59	L. J. Leichtestern		105		J E		Dm			1,795		
12D1	GS	6-25-59	Porter McCollogh	1956	140	8	S 5		I	Tc	1.0	1,830	a52.62	
12D2	GS	6-25-59			9.3	24	N N		Ds					
	L-27	2-20-30	I. L. Hannan							Tc	0	1,813.4	27.5	Wp
	T-130	11-26-19	I. L. Hannan		133	DC 10	C	180		Tc	0		27.4	
12F1	GS	6-25-59	Vernon Sinclair			12	T 5		Dm	Tc	1.5	1,830	44.96	
12H1	GS	6-25-59					C.E		Un	Na		1,810		
12J1	GS	6-25-59	Percy Staudinger	1947	78	8	J 2		Dm	Tc	0	1,815	a47.35	Wp
12J2	GS	6-25-59	J. W. Ferguson		80	8	J E		Dm	Tc	.5	1,815	49.32	
12J3	GS	6-25-59	Doyle Homer	1955	90	R 12	J 1½	75	Dm			1,815		
12J4	GS	6-25-59	Doyle Homer	1929	40.8	8	N N		Un	Tc	.5	1,815	37.50	C
12J5	GS	6-25-59					J 3/4		Dm	Tcc	.5	1,815	53.40	
31J1	GS	12-13-61	B. Hadden		12.1	D 48	N N		Un	Tc	0	3,180	8.97	
	GS	6-11-59								Tc	0		9.30	
31Js	GS	12-13-61	Kane Spring						S			3,184		

	32Ms	GS	12-13-61								S			3,160			
				T. 8 N., R. 4 E.													
8/4-	4N1	GS	11-16-62								Ds						
		L-32	2-20-30								Un	Tc	0	1,777.2	6.0		Wp
	5P1	GS	6-17-59	Clark French		12.1		10	N	N	Un	Ls	0	1,780	8.80		
	5Z1	GS	11-16-62								Ds			1,780			
		T-134	1919	G. N. King		13	D			180					7		
	6B1	GS	6-18-59					16	N	N	Un	Tcc	1.5	1,790	10.82		
	6E1	GS	6-18-59					6	J	1	Dm	Na		1,785			Wp
	6H1	GS	6-17-59	D. C. Rupp		121.2		12	N	N	Un	Tc	0	1,785	7.50		
		T-133	11-26-19	R. O. Marquiss		110		12	N	N	Un	Tc	2.0		4.2		
	6J1	GS	6-18-59			59.2		6	N	N	Un	Tc	.5	1,785	8.87		
	6L1	GS	6-18-59						C	E	Dm			1,785			
	6M1	GS	6-18-59	C. W. Foster		27.1		24	J	E	Un	Tcc	.12		13.18		
		L-30	5-29-30	Marquiss								Tc	0	1,788.6	11.4		Wp
	6N1	GS	6-18-59	R. E. Blackman		57	C	6	J	1/2	Dm	Tc	.5	1,785	13.02		
	6Q1	GS	6-18-59	C. L. Berry	1952	158	R	12	T	G	540 I	Tc	1.0	1,785	12.90		C
	6Q2	GS	6-18-59		1919	7.1			N	N	Ds						
		L-30a	5-29-30						L	W		Ls	0	1,786.8	9.5		Wp
	6Z1	GS	6-18-59								Ds			1,790			
		T-132	11-26-19	R. W. Porter		150	C		C		Dm	Tcc	0		11.6		

See footnotes at end of table.

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			T. 8 N., R. 4 E.--Continued											
8/4- 7A1	GS	10-16-62			12.8		6	N N		Un	Tc 0	1,790	10.61	
	GS	6-19-59			17.1						Tc 0		13.05	
	T-136	1919	G. C. Shafer		18	D							11	
7B1	GS	6-19-59	Benjamin Morgan	1947	24	DC	12	C G		Un	Tc -12.0	1,790	14.89	
7B2	GS	6-19-59	L. E. Cleminson	1951	140	DC	10	C 5		Dm		1,790	14	
7B3	GS	10-16-62	L. E. Cleminson	1959	135	R	12	S 7½	340	I	Bhc .5	1,790	15.71	C
	GS	6-19-59									Bhc .5		14.07	
7C1	GS	6-19-59	Bert Morgan		173		12	L E		Dm	Tc -10	1,795	15.50	
7D1	GS	6-19-59	R. C. Reardon	1949	45		10	J 1/2		Dm	Bhc .5	1,795	17.10	
7D2	GS	6-19-59	R. C. Reardon		32	D	12	L W		Dm	Tc 1.0	1,795	18.47	
7D3	GS	6-19-59	Bert Morgan	1951	21	D	12	J 1/2		Dm	Tc. .7	1,795	17.70	
7E1	GS	6-19-59	Lawrence Bodine	1909	300		16	C 7½	280	I	Tc -22.2		a54.93	C,W
	L-28a	5-29-30	G. C. Shafer				36				Tc .2	1,803.0	23.2	Wp
	T-135	12-11-19	G. C. Shafer		106			C	360		Tc -		25.1	
7E2	GS	6-19-59	R. W. Roach	1936	80		12	J 1/2		Dm		1,800		
7E3	GS	10-16-62	Lawrence Bodine		228					Dm		1,803		
7N1	GS	6-19-59			35.1		36	N N		Ds				
	L-28	2-20-30	C. E. Burckhartt								Tc 1.4	1,818.7	36.1	Wp
	T-137	1919	Burkhart		135								35	

7Z1	GS	11-15-62								Ds			1,808			
	T-138	1919	C. S. Van Doren	46	D			235						19		
8C1	GS	6-17-59	Clark French	22	D	12	C	G		I	Tcc	-1.0	1,780	6.37		C
8C2	GS	6-17-59	Clark French	26		24	N	N		Un	Tcc	2.0	1,780	5.23		
8C3	GS	6-17-59	Clark French	12	D		L	H		Dm			1,780	6		
8C4	GS	6-17-59		9.5		10	N	N		Un	Ls	0	1,780	6.65		
8F1	GS	11-20-62		12.8	C	10	N	N		Ds			1,785	dry		
8K1	GS	6-17-59		26.1		6	N	N		Un	Tc	.5	1,780	8.70		
8Q1	GS	6-17-59		2,000	R	10	N	N		Un			1,790			
8Q2	GS	6-17-59		21.6		12	N	N		Un	Tc	1.5	1,785	12.01		
8R1	GS	6-18-59		29.1		6	N	N		Un	Tc	.5	1,780	8.44		
8R2	GS	6-18-59		8.5	A	24	N	N		Un	Tcc	0	1,780	8.03		
10N1	GS	6-17-59		24.1		10	N	N		Ds						
	L-34	4-15-30									Tc	.8	1,805.2	26.0		Wp
10R1	GS	6-17-59	V. L. Barnes	66	DC	4	L	W		Un						W
	L-35	2-20-30	G. E. Ladd							Dm	Tcc	.5	1,831.4	51.4		Wp
11C1	GS	10-17-62	Orcutt		R	9	S	2		Dm	Bhc	1.5	1,780	a42.37		
11P1	GS	11-19-62					N	N		Ds						
	L-36	4-15-30	Desert Palm Ranch				L	H		Un	Tc	.2	1,822.2	43.0		Wp

See footnotes at end of table.

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			T. 8 N., R. 4 E.--Continued											
8/4-12L1	GS	6-17-59	L. A. Shepherd	1924	260	12	T 15		Dm	Tc	1.0		31.21	C,W
	L-37	2-20-30								Tcc	0	1,810.1	32.6	Wp
14C1	GS	11-19-62			138.3	12	N N		Un	Tc	0		72.52	
	L-36a	4-19-30							Un			1,850.0	70.7	Wp
17H1	GS	6-18-59	Fisher				N N		Un			1,800		
18E1	GS	6-19-59			45.1		N N		Ds					
	L-29a	5-29-30	Van Doren			36				Tc	0	1,823.8	41.8	Wp
	T-139	12-11-19	Josephine Van Doren		184	DC 36				Tc	0		41.6	
18F1	GS	6-22-59	W. L. Howard	1947	54	D 12	J 3/4		Dm	Tcc	-1.9	1,830	44.54	C,W
18F2	GS	6-23-59	Frank Gordon	1955	85	C 6	J 3/4		Dm			1,830	52	C
18F3	GS	6-23-59	Frank Gordon		76	6	L G		Un			1,830		
	L-29	4-15-30	Midway Service Station				L		Un	Tap	1.8		47.9	Wp
18F4	GS	6-22-59	Arthur Barr	1948	115	DC 10	L W		Dm	Tcc	.6	1,833.3	60.80	
18G1	GS	11-19-62	Kerr				N N		Ds			1,830		
	T-140	12-11-19	C. L. Loman		204	DC 12	C	575		Tc	0		45.0	C
18K1	GS	7- 6-62	Southern California Gas Co. (SCGC)	1961	330	C 16	N N	1500	Un	Na		1,865		
18K2	GS	7- 6-62	SCGC	1961	0	C 16	N N		Ds			1,865		
18M1	GS	6-23-59			81.6	C 8	N N		Un	Tc	1.0	1,860	81.5	

18Q1	GS	7- 6-62	SCGC	1960	400	C	16	N	N	1700	Un			1,890	120	
18Q2	GS	7- 6-62	SCGC	1960	0	C		N	N		Ds			1,890		
18R1	GS	7- 5-62	SCGC	1960	496		4½	N	N		O	Tc	3.0	1,872.8		W
			T. 8 N., R. 5 E.													
8/5- 1P1	GS	6-11-59		1951	350		8	L	W		Un			2,027		C
8Z1	GS	6-11-59									Ds			1,830		
	T-141	1919	G. W. Layman		107						Ds					
10M1	GS	6-11-59	C. G. Dowd	1959	702	R	6	S	E	10	Dm	Bhc	1.0	1,875	276.0	
19R1	GS	6-11-59			218.0		8	N	N		Un	Tc	-5.0	1,980	190.32	
26P1	GS	9-14-60	National Lead Co.			D		N	N		Un			1,960		
			T. 9 N., R. 1 E.													
9/1- 1A1	GS	12-15-61	Yermo Water Co.	1961	250	C	12	N	N		Un			1,930	67	L
1E1	GS	11-14-62	California Div. of Highways		250		12	T	5		Dm	Hpb	0	1,935	78.49	C
	GS	10-20-60										Hpb	0		74.81	
1L1	GS	10-19-60	Union Pacific RR		325		16	S	25		RR	Tcc	.4	1,930	71.40	C
1L2	GS	10-19-60	Union Pacific RR					N	N		Ds			1,930		
	T-36	1919	Los Angeles & Salt Lake RR Co.	1905	306	C	13	A		220	RR				60	L

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			T. 9 N., R. 1 E.--Continued											
9/1- 1L3	GS T-37	10-19-60 1919	Union Pacific RR Los Angeles & Salt Lake RR Co.	1905	275	C 13	N N A	220	Ds RR			1,930	60	L
1L4	GS	10-19-60	Union Pacific RR		625	16	T 40		RR	Na		1,930		C
1N1	GS	10-18-60		1948	202	10	T 7½		Un	Tc	.2	1,940	77.85	L
1P1	GS	10-21-60	Joseph Holland	1958	110	6	S ½		Dm	Tc	.8	1,925		
1Q1	GS	10-19-60	Theodore Hurst	1948	104	8	S ½		Dm	Na		1,925	60	
1Q2	GS	10-21-60	E. F. Rayburg	1951	99	8	J 1		Dm			1,925		L
2E1	GS GS	11-15-62 10-19-60	C. F. Wicks		114	8½	S E		Dm	Tcc Tcc	.5 .5	1,945	88.50 84.50	Wp
2E2	GS	10-19-60	C. F. Wicks	1958	190	C 12	N N	670	Un	Tc	1.0	1,945	80.38	L
2E3	GS	11-15-62	George Culver	1954	116	C 8	S E		Dm	Tc	1.0	1,945	82.91	L
2F1	GS	11-15-62	Frank Palmer	1954	108	C 8	S 2		Dm	Tcc	1.0	1,945	89.38	L
2F2	GS GS	11-15-62 10-25-60	Fortson		113.8	11	N N		Un	Tcc Tcc	1.0 1.0	1,945	86.53 82.34	C
2G1	GS GS	11-15-62 10-20-60	Marcella Smith	1958		C 8	S ½		Dm	Tcc Tcc	1.0 1.0	1,940	82.23 82.97	
2G2	GS	11-15-62	Shaw	1941	120	10	S 1		Dm	Tcc	.72	1,940	85.32	

2H1	GS	11-15-62	H. H. Gossen	1930	138		12	J	1½		Dm	Tc	0	1,940	a82.02	
2H2	GS	10-20-60	Coke	1960	135	R	6	S	1		Dm	Na		1,940	72	
2H3	GS	11-15-62	Jake Stauter	1954	167	C	10	T	2		Un	Tc	.6	1,935	80.15	L
2L1	GS	10-20-60	U.S. Marine Corps		38.0		10	N	N		Ds			1,945		
3E1	GS	10-26-60									Ds			1,960		
	L-45	5-24-30						T				Hpb	-		76.5	Wp
	T-35	11-16-19			101		10	T				Hpb	-		73.3	
3G1	GS	10-20-60	G. H. Matherly	1960	180	R	12	S	5		Dm	Tcc	3.0	1,950	84	L
3H1	GS	10-16-62	H. A. Gores	1945	137	C	12	L	W		Dm	Tc	.9	1,948.0	a86.93	W,Wp
3H2	GS	10-20-60	T. T. Teube		148		8	S	1	25	Dm	Tc	.6	1,950	84.4	
3H3	GS	10-16-62	H. A. Gores	1934	109		10	L	W	4	Dm	Tc	0	1,950	92.24	C
4F1	GS	10-25-62	O. A. Russell	1947	100	C	8	J	2	5	Dm	Tc	1.1	1,965	a94.8	C,L
	DWR	4-10-52										Tc	1.1		83.7	
	DWR	8----48										Tc	1.1		71	
4J1	GS	10-26-60	U.S. Marine Corps	1942	296		12	T	15	291	Ps	Na		1,965		C,L
4J2	GS	10-25-60	U.S. Marine Corps		350	R	14	T	50	1625	Ps	Tap	0	1,965	97.56	L
4M1	GS	10-26-60	Louis Mattis	1953	120	R	8	N	N		Un	Tc	.8	1,965	95.25	
4R1	GS	10-25-60	U.S. Marine Corps	1942	174		12	T	15	250	Ps	Tap	1.0	1,963	103.08	C,L
4Z1	GS	10-25-60	U.S. Marine Corps								Ds			1,965		
	T-34	11-16-19			275	C	12	N	N		Un	Tc	1.5		74.9	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (feet)	Well data: Type, diameter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 9 N., R. 1 E.--Continued											
9/1- 5B1	GS	11-15-62	J. R. Smith	1960	145	C 10	S 1		Dm	Tcc	1.0	1,960	88.58	L
	GS	10-26-60	J. R. Smith				N N		Un	Tcc	1.7		83.6	
5B2	GS	10-20-62	Volney Womack	1961	147	C 8	J 1		Dm			1,960	81	L
5G1	GS	10-26-60	Eppoleto	1950	136	8	S E		Dm	Na		1,980		
5G2	GS	11-15-62	Alta Noffsinger	1954	125	8	J 2		Dm	Tc	1.0	1,980	88.6	C
5H1	GS	10-26-60	R. M. Smith	1955	137	C 8	N N		Un	Na		1,980		L
5H2	GS	2-20-62	R. M. Smith	1960	132	C 8	J 1		Dm	Tcc	.7	1,980	97.23	L
5J1	GS	11-15-62	M. Mangum			C 8	S ½		Dm	Tc	.5	1,980	98.15	
5J2	GS	10-26-60	V. J. A'Day			6	J 3/4		Un	Tc	1.7	1,980	98.60	
	DWR	4-23-52								Tc	1.7		86.2	
5J3	GS	10-26-60	W. R. Cockerham		134	8	S 1½		Dm	Tc	1.1	1,980	95.2	
6G1	GS	10-27-60			139.0	C 8	N N		Ds	Tc	.4	2,020	dry	
6H1	GS	10-26-60	C. O. Pipher	1950	152	8	L G		Dm	Na		1,980		C
9D1	GS	10-17-62				C 8	N N		Un	Na		1,970		Wp
9E1	GS	10-27-60	Atkins	1949	115	C 8	S 2	16	Dm	Tc	.8	1,980	110.10	C,L
	F	3-25-60								Tc	.8		111.03	
	F	11-13-59								Tc	.8		107.88	

9E2	GS	11-27-60	Oliver Johnson	1956	261	C	8	S	3/4	5	Dm	Na		1,980	130	L
9E3	GS	10-17-62	J. W. Greenlee	1954	132	C	8	S	E		Dm	Tcc	.4	1,980	114	L
9E4	GS	11-15-62	Henley Brothers		120		8	S	½		Dm	Tcc	1.0	1,980	115.90	
10L1	GS	10-25-60	U.S. Marine Corps	1942	428		12	T	30	510	Ps	Tap	.65	1,950	90.5?	C,L
10Z1	GS	10-25-60	U.S. Marine Corps								Ds			1,960		
	T-40	1919			54	D					Ds				dry	
10Z2	GS	10-25-60	U.S. Marine Corps								Ds			1,960		
	T-41	1919			53	D					Ds				dry	
11B1	GS	11- 4-60						N	N		Ds			1,950		
	T-39	1919	F. C. Brandt		150	C	10									
12D1	GS	11-18-62	D. W. Hallman				7	S	2		Dm	Tc	.84	1,928.0	67.87	W
	L-47	5-23-30									I	Bpb	.6		45.9	Wp
	T-38	1919	W. S. Wilhelm		180	C		C				Tc	-		30.8	
13E1	GS	10-27-60	California Electric		114.4		12	N	N		Un	Tc	1.2	1,947.7	85.29	C,W
	L-43	5-22-30	Power Co.(CEP)				12				Un	Tc	1.2		67.1	Wp
13E2	GS	10-27-60	CEP		170.2		12	N	N		Un	Tc	.7		85.74	C,W
	L-43a	5-22-30					12				Un	Tc	.7	1,949.6	68.0	Wp
14G1	GS	10-27-60	CEP		478	C	16	T	125		I	Hpb	1.0	1,945	a108.8	C
14M1	GS	10-28-60	CEP	1951	385		12	T	100	2170	I	Hpb	1.7	1,960	a112.3	C
15K1	GS	10-28-60	CEP	1952	390		14	T	125	2700	I			1,960		C
	O	5- 9-56													101.5	
	O	3- 9-55													96.5	

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			T. 9 N., R. 1 E.--Continued											
9/1-15L1	GS	10-27-60			4.5	DC 12	N N		Ds					W
	L-42	2- 1-30	G. Liquenfelder			12				Ls	0	1,963.7	74.4	Wp
15N1	GS	10-27-60	M. B. Phelps	1946		10	T 10	130	Dm			1,970		C
	DWR	5-19-55								Bpb	-		150.4	
	DWR	3-28-52								Bpb	-		97.1	
	DWR	12-18-51								Bpb	-		95	
	DWR	8- 1-51								Bpb	-		90.2	
15N2	GS	10-27-60	M. B. Phelps	1957	504	16	T 30	660	I	Na		1,970		C
15N3	GS	11- 1-60	California Electric Power Co.	1960	200	R 8	T 5		Dm	Na		1,965		
15P1	GS	2-20-62	M. B. Phelps	1960	265	C 16	T 75	2700	I			1,965	108	L
16C1	GS	11-16-62	Calnev Pipeline Co.	1961	204	R 8	S 7½	450	In	Tcc	-1.0	1,960	a97.84	L
16R1	GS	10-28-60	M. B. Phelps		204	16	T G		I	Tc	.8	1,970	121.95	
16Z1	GS	11- 3-60							Ds					
	L-4	5-29-30			58				Ds	Tc	3.0	1,991.0	dry	Wp
	T-45	10-24-19	Town of Daggett		100	D 84	L	60		Tc	3.5		82.5	C
16Z2	GS	11- 3-60							Ds					
	L-7	5-29-30	Town of Daggett						Ps	Tc	1.9	1,975.5	80.1	Wp
17H1	GS	11- 2-60	Daggett Mutual Water Co.	1957	135	R 12	T 20	405	Ps	Tap	1.6	1,980	93.42	L
17Q1	GS	10-19-60		1957		10	N N		Un	Na		2,000		

18E1	GS	11-18-62	California Electric Power Co.		92		10	T	20		I	Tc	-1.0		62.24	C,W
	L-1	1-20-30	B. A. Funk								I	Tc	0	1,996.8	29.6	Wp
18L1	GS	10-18-60			3.0	D	12	N	N		Ds					W
	L-3	2-27-30	R. Greer			D	12				Dm	Tcc	0	1,986.8	27.7	Wp
	T-44	1919	R. H. Greer		23.0	D									22	
18M1	GS	11-16-62	California Electric Power Co.	1949	90		14	N	N		Un	Tcc	0	1,999.8	59.49	
	GS	10-18-60										Tc	0		56.13	
18P1	GS	10-19-60			2.5			N	N		Ds					
	L-2	4- 7-24	R. Greer			DC	12				Dm	Tc	-7.2	1,992.1	19.5	Wp
	T-42	10-23-19	R. H. Greer		70	DC	12	C		200		Tc	0		24.8	Wp
18Z1	GS	10-19-60									Ds			1,980		
	T-43	12-31-17	R. H. Greer		22	D						Tc	0		15.2	
19C1	GS	11- 4-60	Andrea Sowers		63.5	DC	8	J	1		Ds	Tc	.5	2,010	dry	
19C2	GS	11- 4-60			106.9		8	L	W		Un	Tc	1.3	2,005	73.68	
20A1	GS	11-30-60	H. E. Orton		311		14	L	E		Dm	Tcc	.5	2,040	144.9	C
	DWR	4-10-52										Tc	1.0		131.8	
	DWR	4-10-52										Tc	1.0		a138.2	
20B1	GS	11-30-60	Abeytas	1942	242		8	L	E		Dm	Tc.	.4	2,045	170	C
	DWR	3-28-52	C. W. Adams									Tc	.4		177.3	
	DWR	8- 1-51										Tc	.4		100	
	DWR	1942										Tc	.4		90	
20B2	GS	11-27-60	Chester Siembab	1950	282	C	8	L	1		Dm	Tc	1.0	2,040	146	L
20C1	GS	11- 4-60	Mooney	1954	162	C	8	L	G		Dm	Tc	1.0	2,030	160	L

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			T. 9 N., R. 1 E.--Continued											
9/1-20G1	GS	11- 3-60	J. E. Kelley		410	12	N N	100	Un	Tcc	2.0	2,110	200.1	
21C1	GS	11- 2-60	John Kennedy		100	D	N N		Un	Tap	1.84		97.23	
	L-5	5-29-30	B. Lamantain						Dm	Tc	2.5	1,992.0	82.0	Wp
	T-46	10-25-19	B. Lamantain		125	D 60	L	17		Tc	3.0		76.0	Wp
21F1	GS	11- 3-60	Daggett Mutual Water Co.	1931	300	12	T 12	43	Ps	Hpb	0	2,065	205	C,L
21H1	GS	11- 3-60	J. E. Kelley	1957	410	C 16	N N		Un	Tcc	1.4	2,000	124.76	C,L
21L1	GS	11- 2-60	Daggett Mutual Water Co.	1948	426	12	T 25	163	Ps	Hpb	0	2,075	201	L
21L2	GS	11- 3-60	Daggett Mutual Water Co.		369.2	12	N N		Un	Tc	.3	2,070	201.0	
22B1	GS	11-30-60	F. M. Molby		154	12	T 7½		Dm	Hpb	1.0	1,965	106.0	
22B2	GS	11-30-60	F. M. Molby	1955	295	C 12	T 7½	50	Dm	Bhc	1.3	1,965	104.83	C,L
22D1	GS	11- 1-60	Richard Van Dyke	1917	151.6	12	N N	5	Un	Tcc	.1		92.60	C
	DWR	4-10-52								Bhc	.5		88	
	DWR	10- 8-51								Bhc	.5		84	
	L-6	2-20-30	Van Dyke						Dm	Tc	0	1,969.0	70.7	Wp
	T-47	10-25-19	B. A. Funk		154	C 12		15		Tc	0		75.0	
22D2	GS	11- 1-60	E. S. Van Dyke	1955	259	12	S 5		Dm			1,985	100	
23D1	GS	11-30-60	California Electric Power Co.	1959	1,000	8	T 10		Dm			1,955		C
24D1	GS	10-27-60			13.0	6			Ds	Ls	0		dry	
	L-8	2-20-30				6				Tc	.5	1,953.1	71.3	Wp

24H1	GS	10-27-60			1.0		8			Ds						
	L-9	2-20-30	Chester Swan		56.9		8			Ds	Tc	.7	1,943.5	dry		Wp
	T-48	10-24-19	W. W. Clark			C	8	N	N	Un	Tc	.5		50.5		Wp
24Z1	GS	10-27-60								Ds						
	L-9a	2-20-30	Chester Swan								Tcc	0	1,943.6	64.0		Wp

T. 9 N., R. 2 E.

9/2- 1F1	GS	1-12-60					8	N	N	Un	Tcc	1.2	1,845	52.22		
1H1	GS	12-12-62	G. Campbell				8	N	N	Un	Tc	0	1,860	65.30		
1N1	GS	1-12-60					8	N	N	Un			1,860			
1R1	GS	1-12-60	Calico Farms				8	L	H	Dm	Tc	.4	1,850	54.10		
2N1	GS	2- 5-60			8.0		12	N	N	Ds				dry		
	L-53	5-23-30					12				Tc	-.5	1,857.1	10.4		Wp
2Z1	GS	1-12-60								Ds			1,845			
	T-56	1919			12.0	D				Ds				dry		
3A1	GS	1-13-60	Sjolin			DC	12	N	N	Ds						
	L-51	5-23-30	McCormick				12	L		Dm	Tc	.9	1,843.1	15.6		Wp
	T-55A	11-11-19	Bruce McCormick		17.3	D		L	H		Tc	2.0		12.2		
3A2	GS	1-13-60	Sjolin		65		4	S	E	Dm	Tc	.8		39.77		C,W
	L-51a	1-22-31					12				Tc	.8	1,845.4	20.5		Wp
3B1	GS	1-13-60					12	L	W	Dm	Tc	1.1	1,870	21.05		
3C1	GS	1-13-60	Hammond	1950	63	C	10	N	N	Un	Tc	.6	1,870	17.52		C,L
3G1	GS	1-13-60	Sjolin		43.3		16	C	N	Un	Tc	0	1,850	8.2		C

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			T. 9 N., R. 2 E.--Continued											
9/2- 3G2	GS	1-13-60	Sjolin			12	N N		Un	Tc	1.0	1,860	6.86	
	T-55	1919	Bruce McCormick		186	C							3	
3K1	GS	1-13-60	Mitchell		19	8	L W		Dm	Tc	.8		9.84	C,W
	L-52	2-20-30	Fisher			10			Dm	Tcc	1.3	1,858.1	4.2	Wp
	T-54	1919	Jack Fisher		53	C	C	200					5	
3K2	GS	1-13-60	Mitchell	1908	108	14	T G	1000	I			1,860	10	C
3L1	GS	12- 1-60	Mitchell	1934		C	C		Un	Na		1,865		
3Z1	GS	12- 1-60	Mitchell						Ds			1,870		
	T-53	11- 5-19	C. E. Johnson			D 30	C	500		Tc	-		4.0	C,Wp
3Z2	GS	12- 1-60							Ds			1,870		
	T-52	11-11-19	Badger		420	C	N N	135	Un	Tc	-1.0		50.4	
4D1	GS	12- 1-60			283.5	16	N N		Un	Tc	.1	1,895	36.15	W
	L-50	5-23-30				16			Un	Tc	.1		21.0	Wp
	T-50	11-11-19	Yermo Mutual Water Co.		438	C 16	N N		Un	Tc	-		16	
4Z1	GS	12- 1-60							Ds			1,880		
	T-51	11- 5-19			17	D	N N		Un	Tc	-		8.3	Wp
6D1	GS	10-17-62	James Shope	1938	157	C 10	T 10	280	Ps	Hpb	1.0	1,925	66.98	C,L,W
6D2	GS	10-17-62	James Shope	1950	94	10	N N		Un	Tc	.6	1,925	62.27	C
6D3	GS	12-15-61	J. L. Guilliams		93	8	J 1½	150	Dm	Tc	1.2	1,925	62.8	C

6N1	GS	12- 1-60			6.0						Ds			1,910			
	T-49	11- 6-19			157	DC		C				Tc	-		23.9		
7N1	GS	12- 7-60	Hill Brothers					T	40		I	Hpb	0	1,935	71.87		
7Z1	GS	12- 7-60			0			N	N		Ds			1,935			
	L-62	2-28-30			56						Ds	Tc	-		dry		Wp
	T-57	10-24-19			54	D	36	N	N		Un	Tcc	-		51.4		Wp
8J1	GS	12- 7-60	Moller		74.4		10	J	N		Un	Tc	.87		56.52		W
	L-64	2-28-30	Annie Escholtz								Dm	Tcc	.2	1,915.4	40.9		Wp
	T-64a	10-28-19	Annie Elsholz		60	C						Tc	-		35.3		
8K1	GS	12- 7-60	Maller		45.0		12	N	N		Ds			1,915			
	T-64	1919	Annie Elsholz	1918	171	C	12	T		810					33		C,L
8N1	GS	12- 9-60	E. Childers		41.1		12	N	N		Ds			1,920			
	T-63	1919	Leo Mrkva		176	C		N	N		Un				38		
8N2	GS	12- 7-60	E. Childers	1948	295		14	T	20	100	I	Tc	1.5	1,920			C,L
10D1	GS	1-24-62	T. R. Hesel			D	24	N	N		Un			1,880	9		
10D2	GS	12- 9-60	T. R. Hesel	1959	110		6	L			Dm			1,890	50		C
10G1	GS	12- 7-60	George Ryman		23.0	DC	8	L	N		Ds			1,880	dry		C
10G2	GS	2-20-62	George Miller	1961	80	C	8	S	½		Dm	Na		1,880	28		L
10N1	GS	12- 7-60				DC	12	N	N		Un	Tc	1.13		41.57		
	F	4-13-56										Tc	0		37.98		
	F	12-14-55										Tc	0		37.85		
	L-65	5- 8-30	Bowles								Un	Tc	0	1,897.3	28.1		Wp
	T-65	10-28-19	Bowles		110	C	12	C				Tc	-		20.7		

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (feet)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 9 N., R. 2 E.--Continued											
9/2-11C1	GS	1-12-60			10.0	6	L N		Ds			1,885	dry	
11C2	GS	5-25-60	Newbro		8.0	36	N N		Ds				dry	
	L-71	5-23-30	Newbrough				L W			Tc	.2	1,884.5	15.6	Wp
11G1	GS	12- 7-60					N N		Ds					
	L-70a	5-23-30	Pitman			36				Tc	1.5	1,866.8	11.0	Wp
11H1	GS	1-12-60	S. Brown			8	L W		Dm	Tc	-4.5		17.50	C
	L-70	5-23-30	Pitman							Tcc	-	1,865.0	3.4	Wp
	T-78	10-30-19				DC 12							flowing	
11R1	GS	6-23-61	George Lukas		50	D 96	J 3/4		Dm	Na		1,875	37	C
12N1	GS	2- 5-60			6.0	DC 12	N N		Ds				dry	
	L-67	2-28-30	Hunter			10			Un	Tc	1.63	1,871.6	5.7	Wp
	T-79	10-29-19	Hunter		195	C 12	N N		Un	Tcc	-		6.3	
12R1	GS	11-22-62		1959	80.6	4	N N		Un	Tc	1.0	1,860	64.91	
12Z1	GS	2- 5-60							Ds					
	L-66	2-28-30	Hunter			DC 12			Dm	Tc	0	1,867.3	13.8	Wp
	T-79a	10-29-19	Hunter		26.6	D	L W			Tcc	-		13.2	

13N1	GS	6-20-61				DC	10	J ½			Dm	Tc	0	1,875	26.52	
13Q1	GS	12- 7-60	G. M. Severn		230		12	T	30	828	I	Tc	.4	1,870	14.6	C
14N1	GS	6-22-61	L & M Fairbanks	1910			12	J ½			Dm	Na				C,W
	L-68	5-23-22	Scobel & Haimut					L	W		Dm	Tcc	0	1,888.5	22.1	Wp
	T-73	10-29-19	L. N. Skobel		95.5	C	12	L	W	15		Tcc	-		26.5	
14N2	GS	6-22-61	L & M Fairbanks	1928	215.3		12	N	N		Un	Tc	0		36.63	W
	L-68a	2-28-30	Scobel & Haimut									Tc	0	1,886.0	21.1	Wp
14N3	GS	6-22-61	L & M Fairbanks	1907	28.0		12	L	H		Ds				dry	
	F	5-31-60										Tc	0		29.80	
	F	11- 3-59										Tc	0		30.10	
	L-68c	2-28-30	Scobel & Haimut									Tc	0	1,883.2	18.1	Wp
	T-72	1919	L. N. Skobel		173	C	12	T		720					14	
14N4	GS	6-22-61	L & M Fairbanks	1910	413			T	20		I	Na				
	L-68b	10- 9-30	Scobel & Haimut								I	Tcc	-	1,886.3	17.9	Wp
14Q1	GS	8- 8-62						N	N		Ds					
	L-69	2-28-30	McNutt				36					Tc	1.7	1,877.5	15.3	Wp
	T-74	10-29-19			38.5	DC	36	C				Tc	-		14.9	
15R1	GS	6-21-61	Kenneth Staple	1953	250	R	14	T	30	1350	I	Hpb	1.0	1,885	a54.0	
15R2	GS	6-21-62	Kenneth Staple		150	R	6	J ½			Dm	Na		1,885		
15Z1	GS	6-21-62									Ds			1,890		
	T-66	1919	E. Wooldridge	1918	293	C	12	C		900					25	L
18B1	GS	12- 7-60	Hill Brothers	1951	150		6				Dm			1,925		C
18E1	GS	12- 1-60	Moller & Christiansen		159		12	T	50		I	Tap	0	1,935	80.75	C

See footnotes at end of table.

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			T. 9 N., R. 2 E.--Continued											
9/2-18F1	GS	12- 7-60	Jess Goodman		190	16	T 5		Dm	Tc	1.0		74.8	
	L-63	2-28-30				12				Tc	1.0	1,933.7	55.7	Wp
18G1	GS	12- 7-60	Jess Goodman				J 5		Dm	Bpb	0	1,935	72.29	
	T-58	10-24-19	Los Angeles Soap Co.		200	C 12	T	810		Hpb	-.8		54.3	Wp
18H1	GS	12- 7-60	Hill Brothers	1954	302	R 16	T G	1758	I	Na		1,925	60	C,L
18K1	GS	12- 7-60	Hill Brothers	1952	480	12	T 20		I	Tc	1.0	1,930	69.29	
18L1	GS	12- 7-60			246.5	12	N N		Un	Tc	1.0	1,930	72.80	C
19E1	GS	12- 7-60	Hill Brothers	1958	400	20	T G		I	Na		1,935		C
19E2	GS	10-27-60			76.3	12	N N		Ds			1,940		
	T-59	1919	Chester Swan		190	C	T	810						
19J1	GS	6-21-61	H. M. Morona	1920	185	DC 12	L W		Dm	Tcc	.7	1,930	a71.28	
19K1	GS	6-21-61	C. A. Barry	1961	150	C 10	T 5	140	Dm	Bhc	1.0	1,935	76	L
20G1	GS	6-23-61	San Bernardino County	1942	488	16	T 15	300	Ps	Hpb	2.0	1,915	59.52	C,L

20G2	GS	6-23-61	San Bernardino County		52.0			T	N			Ds			1,915	dry	
	T-62	1919	S. W. Odell		220	C	16	T		720						40	
20K1	GS	6-23-61	San Bernardino County	1942	400		16	T	15	1000		Ps	Hpb	1.3	1,918	60.87	C,L
20K2	GS	6-23-61	San Bernardino County	1947	357		16	T	30	1000		Ps	Na		1,915		C,L
20M1	GS	6-22-61	San Bernardino County		0		16	N	N			Ds					
	L-10a	5-22-30	E. D. Barry				16					I	Tc	2.0	1,927.4	51.4	Wp
	T-60	1919	E. D. Barry		500	C	16	A		1170						45	C
20M2	GS	6-22-61	San Bernardino County		0		24	N	N			Ds					
	L-10	5-22-30	E. D. Barry				24					Dm	Tc	.5	1,927.0	50.9	Wp
	T-61	10-24-19	E. D. Barry		200	C	24			45			Ls	0		48.0	
20Q1	GS	6-21-61	San Bernardino County	1933	120		8	J	3			Dm	Hpb	.6	1,921.4	a70.4	C,W,Wp
21C1	GS	6-23-61	San Bernardino County		0		12	L	W			Ds			1,905		
22E1	GS	8- 9-61	A. D. Trotter				10	J	½			Dm	Na		1,895		
22E2	GS	8- 9-61	A. D. Trotter		280		14	T	40			I	Bhc	1.0	1,895	46.90	
22F1	GS	6-21-61			20.0		12	N	N			Ds	Tc	1.6	1,895	dry	
22N1	GS	6-20-61	W. F. Hamilton		132.8		8	N	N		40	Un	Tc	.4	1,895	48.96	C
	T-68	10-28-19	V. B. Cooley		156	DC		C					Tcc			35.0	
22Z1	GS	6-21-61						N	N			Ds			1,895		
	T-67	10-28-19			44	D	48						Tcc	1.3		26.2	
23R1	GS	6-22-61			89.8	C	12	N	N			Un	Tc	.7	1,875	29.52	
	T-77	12-10-19			123	C	12	N	N			Un	Tc	.7		12.8	

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			T. 9 N., R. 2 E.--Continued											
9/2-24D1	GS	11-22-62	C. J. Deflon		200	12	T 25		I	Bpb	1.0	1,870	24.92	C
24D2	GS	6-22-61				8	J ½		Dm	Na		1,870		
24K1	GS	8-10-61			8.0	18	N N		Ds					
	L-15a	5- 8-30				30				Tc	-	1,857.9	2.5	Wp
24K2	GS	8-10-61			11.2	DC 18	N N		Ds			1,865		
	L-15	5- 8-30	Miller			DC 10			Dm	Tc	-		3.8	Wp
24R1	GS	8-10-61					T 5	200	Dm	Na		1,860		
25M1	GS	6-21-61	R. R. Coles	1953	160	10	T 20	900	I	Na		1,880		C
25M2	GS	6-22-61	R. R. Coles	1960	160	R 12	T 20	780	I	Tap	2.0	1,880	a55.0	C
25Q1	GS	12-15-61	R. R. Coles	1961	147	R 12	T 20	700	I	Hpb	1.5	1,875	21.37	
26D1	GS	12-12-62	A. D. Ciranna			12	N N		Un	Tc	0		22.95	
	L-14	5- 8-30	T. Taylor Estate							Tcc	0	1,890.0	23.8	Wp
	T-75	10-30-19	T. Taylor Estate		300	DC 12	C	540		Tcc	-		20.6	C
26E1	GS	6-21-61	A. D. Ciranna			6	J ½		Dm	Na		1,890		
26E2	GS	6-21-61	A. D. Ciranna	1948	165	16	T 40	500	I	Tap	1.5	1,890		C,W,Wp

26E3	GS	6-21-61	A. D. Ciranna	1960	200	R	16	T	75	2550	I	Bhc	.4	1,890	41.40	
26M1	GS	8- 9-61	J. P. Jennings				6	J	1		Dm	Na		1,895		
26Q1	GS	8- 9-61				C	6	J	N		Un	Tc	1.4	1,885	38.82	
26Z1	GS	6-21-61	A. D. Ciranna					N	N		Ds			1,890		
	T-76	10-30-19	T. Taylor Estate		58	C	22	C		315		Tcc	.2		18.6	C
27D1	GS	6-20-61	A. J. Barnett		110			T	30		Dm	Na				
	L-12	2-20-30	F. H. Webber								Dm	Tf	.5	1,900.1	29.9	Wp
	T-69	10-25-19	F. H. Webber		174	C	12	C		720		Tcc	-		24.2	C
27E1	GS	6-21-61	F. R. Roper		150		16	T	7½		I	Tc	1.0	1,905	49.82	
27H1	GS	6-21-61				C	6	N	N		Un	Tc	.7	1,890	46.70	
27L1	GS	8- 9-61	R. H. Mackey	1948	70	C	10	L	W		Dm	Tcc	1.0	1,900	54.3	
27L2	GS	8- 9-61	D. Massinini	1959	105		10	J	1		Dm	Na		1,900		
27L3	GS	8- 9-61	D. Massinini	1949	85		10	S	1		Dm	Tc	1.0	1,900	54.0	C
27Z1	GS	8-10-61						N	N		Ds					
	L-13	2-20-30	D. E. Thompson				36					Tc	1.5	1,901.6	33.0	Wp
	T-71	9- 1-17			46	D	36	N	N		Un	Tc	1.3		28.6	Wp
28B1	GS	1-17-63	R. R. Cole		165		16	N	N		Un	Tc	1.5	1,909	55.25	
28E1	GS	8- 9-61	W. X. Young	1952	92	C	6	T	5		Dm	Na		1,920	52	
28F1	GS	8- 9-61	H. T. Bethard	1950	71	C	10	J	2	16	Dm	Bpb	1.5	1,920	56.16	

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			T. 9 N., R. 2 E.--Continued												
9/2-28F2	GS	8- 9-61	H. T. Bethard	1961	100	C	8	T 3	300	Dm	Na		1,920	56	
28F3	GS	8- 9-61	Carl's Desert Service	1954	79	C	8	J 2		Dm	Na		1,915		
28F4	GS	8- 9-61	Robert Fox	1956	80	R	8	J ½		Dm	Tf	1.0	1,915	54.12	
28F5	GS	8- 9-61	L. W. Burge		80		8	T 5		Dm	Na		1,915	50	
28G1	GS	8- 9-61	Robert Andrew		80	R		J 1		Dm	Tc	.5	1,915		
28H1	GS	6-21-61	Henry Rock, Jr.	1956	100	R	6	S 3/4		Dm	Na		1,910	40	
28K1	GS	8- 9-61			22.3	DC	50	C N		Ds				dry	
	L-11	5-29-30	Minneola Service Station							Dm	Tcc	0	1,908.4	36.2	Wp
	T-70	10-25-19	A. T. Evans		100	DC	54	C	270		Tc	-		31.8	
29C1	GS	6-23-61	State of California	1952	120	C	12	T 3	460	Dm	Na		1,935	68	L
30B1	GS	6-23-61	Cecil Rowell		108		8	J 1		Dm	Na		1,960		

T. 9 N., R. 3 E.

9/3- 1M1	GS	6-25-59	J. V. Brewer				T 5		I	Hpb	1.0	1,805	37.69		
1N1	GS	6-25-59	J. V. Brewer		276		12	N N	Un	Tcc	1.0	1,805	38.55		
1R1	GS	6-25-59			67.0		10	N N	Un	Tc	0	1,800	32.86		
2D1	GS	6-26-59	D. Jones				12	T 10	Dm			1,805			
2H1	GS	6-25-59			36.0		10	L W	Ds			1,805	dry		
2K1	GS	6-26-59	The Snake Pit						Dm	Na		1,805			
2M1	GS	6-26-59	Fred Lauper	1951	178	C	12	T 10	I	Bpb	1.0	1,810	46.24	C	
2M2	GS	6-26-59	Fred Lauper	1939	78	C	8	J ½	Dm	Tc	0	1,810	b47.80		
2N1	GS	6-26-59			157.0		12	N N	Un	Tc	0	1,810	43.03		
2N2	GS	6-26-59			126.0		12	L H	Un	Tc	0	1,810	43.90		
	T-93	11-25-19	G. L. Willits		237	C	14	N N	Un	Tc	2.0		33.0		
2N3	GS	6-26-59			103.0		12	N N	Un	Tc	0	1,810	43.44		
	T-93A	11-25-19	G. L. Willits		114	C	14			Tc	4.0		34.2		
3D1	GS	12- 4-59	Ernest Bailey		44		12	L W	Ds	Tc	0		dry	W	
	L-77	3- 1-30							Un	Tc	0	1,823.2	41.5	Wp	
	T-90	11-25-19			73	C	12	N N	Un	Tc	0		42.0		
3D2	GS	12- 4-59	Ernest Bailey		300		14	T 40	I	Bhc	1.0	1,818	48.09	W,Wp	
3E1	GS	2- 3-60			42.4		8	N N	Un	Tc	.6	1,820	37.76		

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			T. 9 N., R. 3 E.--Continued											
9/3- 3F1	GS	2- 3-60				12	T 5		I	Hpb	1.0	1,820	35.53	
3H1	GS	6-26-59	M. W. Lough	1956	203	R 12	T 20		I	Na		1,820		
3M1	GS	11-19-59	Clifford McCoy			12	J 1		Dm	Tc	2.0	1,820	44.51	
3N1	GS	2- 3-60	C. W. Conway		19.8	D 36	N N		Ds			1,820	dry	
	T-91	11-19-19			34	D 36	N N		Un	Ls	0		32.6	
3N2	GS	11-13-62	C. W. Conway						Dm	Na		1,820		
3R1	GS	6-26-59			20.0	D 60	N N		Ds			1,810	dry	
	T-92	1919	E. W. Whalen		48	D 60	L W	36						
4A1	GS	10-29-59	C. G. Brooks	1952	300	12	T 30		I	Tc	1.5	1,820	48.70	
4E1	GS	10-29-59			150.0	12	N N		Un	Tc	1.8	1,825	48.45	
	L-79	5- 8-30				12			Un	Tc	1.8		38.9	Wp
4J1	GS	10-29-59	William Jackson		144	12	T 5	108	I	Tc	1.5	1,820	41.22	C
4N1	GS	10-29-59	Harold Crandell			10	L 1/3		Dm			1,823		
4N2	GS	10-29-59			191.3	12	N N		Un	Tc	0	1,825	47.24	

4Q1	GS	10-29-59		92.1		12	N	N		Un	Tc	0	1,825	47.97	
4R1	GS	10-29-59		39.4	D	48	L	N		Ds			1,820	dry	
5N1	GS	10-29-59				6	L	W		Dm	Na		1,840		
6M1	GS	10-29-59		34.8	D	36	N	N		Ds			1,855	dry	
7D1	GS	11-14-62		27.6			N	N		Ds	Tap	2.0	1,848	dry	
7E1	GS	10-30-59		35.8	D	48	N	N		Ds			1,850	dry	
7N1	GS	10-30-59		136.8	DC	12	L	W		Dm	Tc	0		63.68	
	L-72	2-28-30	Callender								Tap	2.95	1,858.2	48.3	Wp
	T-80	10-29-19	S. B. Hampton	195	DC	12	N	N	360	Un	Tc	-		44.6	
7P1	GS	10-30-59					J	1		Dm	Na		1,850		
7P2	GS	10-30-59				10	J	1		Dm	Tc	.6	1,850	55.03	
7Q1	GS	10-30-59		63		8	S	E		Dm	Tf	.7	1,850	56.45	
7Q2	GS	11-14-62		82.5	C	10	N	N		Un	Tc	4.0	1,850	57.44	
8E1	GS	11-17-59					T	E		I			1,840		
8J1	GS	11-17-59					T	E		I	Na		1,835		
8N1	GS	10-30-59		50		6	L	W		Ds			1,843	dry	
8N2	GS	10-30-59				10	T	2		Dm	Tc	.5	1,843	62.64	
9H1	GS	11-17-59	R. G. Shaler							Dm	Na		1,825		

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			T. 9 N., R. 3 E.--Continued											
9/3- 9J1	GS	11-17-59	Combs	1952	150	10	S 1		Dm	Tc	0.7	1,825	46.63	
9Q1	GS	11-17-59	El Rancho Alegre			12	T N		Un	Hpb	.8	1,825	47.64	
10D1	GS	8- 6-62	Clifford McCoy		0		N N		Ds					
	F	5- 2-61								Tc	1.0		44.28	
	F	12-14-55								Tc	1.0		38.75	
	F	4-18-55								Tc	1.0		38.29	
	F	5-19-54	Bozarth							Tc	1.0		37.9	
	L-76	3- 7-30	Bozarth						Dm	Tap	-2.0	1,825.9	34.0	Wp
10D2	GS	11-14-62			1.0		N N		Ds			1,825		
	L-76a	3- 7-30	Bozarth							Tc	0		31.2	Wp
	T-94	11-19-19			35.0	D 18	L W			Tc	-		32.0	
10E1	GS	11-17-59	Davis		225	12	T E		I	Tc	.8	1,825	45.11	
10K1	GS	11-17-59	R. W. Bowers			R	T 40		I			1,820		C
10L1	GS	11-17-59	N. F. Brunier		62	C 8	S ½		Dm	Tcc	.6	1,823	46.50	
10M1	GS	11-17-59				8	T 5		Dm	Tc	0	1,825	47.73	
10M2	GS	11-17-59		1950		8	T N		Un	Tc	.5	1,825	50	

10N1	GS	2- 3-60	Woodard	1918	130			J	1		Dm	Tc	1.0		44.97	
	L-75	3- 1-30	Harlow				12				I	Tc	1.0	1,824.4	31.8	Wp
	T-96	1919	E. L. Harlow		150	C	12	C		175					32	
10N2	GS	11-17-59	Woodard		140			T	10		I			1,825	42	
10Q1	GS	11-17-59	R. W. Bowers		320			T	25	400	I	Na		1,820		C
10Q2	GS	11-15-59	R. W. Bowers					J	1		Dm	Tc	.7		39.60	
	L-80	5-16-30					12				Un	Tc	0	1,818.8	28.9	Wp
	T-98	1919	J. W. Burden		50	C	12	L	W							C
10R1	GS	11-17-59	R. W. Bowers					T	40		I	Na		1,820		C
10Z1	GS	11-14-62						N	N		Ds			1,822		
	T-97	11-22-19	Burden & Lippincott		170	C	12	C		485		Tc	-		30.4	L
11E1	GS	1-15-60			0		12	N	N		Ds			1,815		
	T-95	11-25-19			88.4	C	12	N	N		Un	Tc	1.0		29.8	
11F1	GS	11-14-62			26.5		10	N	N		Ds	Tc	1.0	1,815	dry	
11Q1	GS	11-17-59			96.8		12	N	N		Un	Tc	1.6	1,815	43.30	
11Q2	GS	1-21-62			12.3	D	24	N	N		Ds			1,815		
	T-99	11-22-19	W. N. Bozarth		35	DC	48	L	W			Tc	-		29.4	
12D1	GS	11-18-59	H. M. Rouse	1951	444	R	16	N	N		Un	Bhc	1.2	1,810	43.70	
12D2	GS	11-14-62			17.5	C	24	N	N		Ds	Tc	2.0	1,807	dry	
12G1	GS	11-18-59	Tankersley				10	L	H		Dm	Tc	-2.6		27.72	C
	F	1- 3-58										Tc	-2.6		32.00	
	F	5- 2-57										Tc	-2.6		32.13	
	L-93	5- 8-30	Nicholas								Dm	Tcc	.65	1,800.6	24.0	Wp

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (feet)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 9 N., R. 3 E.--Continued											
9/3-12G2	GS	11-14-62	Tankersley		28.9	D 60	N N		Ds	Tc	4.0	1,800	dry	
12N1	GS	11-18-59	A. A. Dorrance		114	DC 10	C E		Dm	Tc	0	1,810	37.89	
12N2	GS	11-18-59	A. A. Dorrance		100	DC	L W		Dm			1,810	40	
12Z1	GS	2- 3-60	A. A. Dorrance				N N		Ds			1,810		
	T-100	11-22-19			37	D 60	L W			Tc	-		33.1	
13B1	GS	6-18-59	G. B. Devenish		255	16	T 50	1450	I	Hpb	0	1,810	44.51	C
13B2	GS	6-18-59	G. B. Devenish		200	16	T 50		I	Na		1,810		
13C1	GS	11-20-59	McGee	1953	80	6	J E		Dm	Na		1,810	35	
13C2	GS	11-20-59	Smith		80.0	8	J E		Dm	Tc	.9	1,810	32.1	
13F1	GS	11-20-59	Ralph Orton	1959	120	R 4	J 1		Dm	Tc	1.0	1,810	31.45	
13P1	GS	12- 2-59	O. J. Gagnon	1950	140	12	T 10	450	I	Tc	1.0	1,805	32.94	C
14D1	GS	11-19-59	Mendenhall		105		J E		Dm	Tc	.4	1,815	43.45	
14E1	GS	11-19-59	E. L. Faust		273	16	T 20	750	I	Tap	2.0	1,815	43.37	

14G1	GS	11-19-59	Walter Knott		307		12	T	30		I	Tc	3.0	1,815	40.81	C
14N1	GS	11-19-59					10	N	N		Un			1,821		
14Z1	GS	11-19-59						N	N		Ds					
	L-81	5-16-30										Tcc	0	1,812.4	28.7	Wp
	T-102	11-22-19	Knott		200	C		L	W	135	Dm	Tc	-		31.7	
15A1	GS	11-20-59	Harold Coppi		88		8	C	5	72	Dm			1,820	42	
15C1	GS	11-18-59	H. W. Brink	1955	199		8	J	1		Dm	Tc	.1	1,823	46.60	
15C2	GS	11-14-62			43.0		11	L	H		Un	Tc	.7	1,822	41.60	
15C3	GS	1-15-60						N	N		Ds			1,822		
	T-101	11-22-19			34.6	D		L	W		Dm	Tcc	-		30.2	
15D1	GS	11-19-59	Francis Packer		73	A	8	J	1		Dm			1,825		
15E1	GS	11-20-59	Arnold				6	J	1		Dm	Na		1,830		
15H1	GS	11-20-59			72.0		8	N	N		Un	Tc	-1.0	1,820	43.84	
15H2	GS	11-20-59	T. D. Brown	1956	120	R	8	S	½		Dm	Tc	.2	1,820	41.78	
15J1	GS	11-19-59			65		8	N	N		Un	Tc	.6	1,820	44.40	
15M1	GS	11-19-59	Louis Uhl		100		6	J	½		Dm	Bhc	.95	1,830		W
15M2	GS	11-19-59	Louis Uhl		0			N	N		Ds			1,830		
	T-103	1919	N. E. Harlow		40	D	48	L		18	Dm				35.5	
15N1	GS	12- 3-59	Newberry School					N	N		Un	Na				W
	L-74	5- 8-30	Newberry School								Dm	Tf	.77	1,832.2	36.7	Wp
	T-104	9- 4-17	Schoolhouse		75	C	12	L	W		Dm	Ls	0		36.6	C

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (feet)	Type, diam. (in.)	Pump type and power	Yield (gpm)	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
T. 9 N., R. 3 E.--Continued														
9/3-15N2	GS	11-18-59	Newberry School	1949	120	R 12	T 5		Dm	Bhc	2.0	1,830	48.37	
15N3	GS	11-19-59	S. Brown	1953	110		J 1		Dm	Na		1,830	30	
15P1	GS	11-19-59	J. E. Brewer	1949	65		S 1		Dm			1,830	36	
15P2	GS	12- 2-59	Tyler		135	R 10	S 2	58	Dm			1,825	42	
15P3	GS	12- 2-59	Ayres		80		L W	25	Dm			1,825	45	
15P4	GS	12- 2-59	Ayres		50		J E	4	Dm			1,825	40	
16D1	GS	12- 2-59	M. T. Viloria		83	R 6	S E		Dm			1,830	38	C
16D2	GS	12- 2-59	M. T. Viloria	1953	325	R 14	T 50	500	I	Tap	.3	1,830	51.45	C
16R1	GS	12- 3-59			246.3	16	T N		Un	Tc	1.2	1,830	66.69	
18B1	GS	12- 3-59			12.5	D 36	N N		Ds	Ls	0	1,850	dry	
18D1	GS	2- 3-60			1.3	D	N N		Ds			1,859		
	T-81	11-26-19			45	D	N N		Ds				dry	
18H1	GS	12- 3-59	Nellie Matthews		307	R 14	T 35		I	Hpb	.5	1,845	57.17	C
18K1	GS	12- 3-59	Stedham			14	T 15		I	Na		1,850		

18M1	GS	12-16-59	A. Sheppard	1951	253		14	T	30	990	I	Tc	2.5	1,860	54	C
18M2	GS	12-16-59	A. Sheppard		115						Dm			1,860	54	C
18M3	GS	12-15-59	M. B. Ferguson	1951	206	R		T	30	936	I			1,860	60	C
18Q1	GS	12- 3-59	K. L. Morris	1944	274	C	12	T	25	752	I	Na		1,856		C,L
	DWR	7----51	K. L. Morris									Tc	1.0		56.5	
	DWR	2-28-44										Tc	1.0		56.5	
18Q2	GS	12- 3-59	K. L. Morris		115	DC	6	S	1		Dm	Tf	.4	1,856	65.06	
19E1	GS	12- 3-59	Gillis DeFlon		74.8		12	N	N		Un	Tc	-4.7		14.89	
	L-16a	5- 8-30	Edwards				12					Tc	-	1,860.1	1.4	Wp
	T-83	10-31-19	M. J. Edwards		200	C	12	C		200					flowing	C,L
19K1	GS	12- 4-59					14	C	G		I	Na		1,860		
19M1	GS	12- 3-59	J. P. Duval		60		12	L	1	5	Dm			1,860	10	
19M2	GS	12- 3-59	J. P. Duval		20	D					Un			1,860	18	
19N1	GS	12- 4-59	H. J. Nichols	1948	328		12	T	15		I	Tap	.3	1,860	15.64	C
19P1	GS	12- 4-59	J. G. Frey		151		12	N	N		Un	Tc	2.0		9.19	
	L-16	5- 8-30	Frey				12				Un	Tc	2.0	1,856.8	+.4	Wp
	T-85	12-10-19	Fry		151.5	C	12	N	N	25		Tc	1.5		flowing	
19Z1	GS	12- 4-59									Ds			1,865		
	T-82	10-29-19	M. J. Edwards			D		N	N		Un	Ls	0		8.6	
20D1	GS	12- 3-59			20.0	D	24	N	N		Ds			1,855	dry	
20D2	GS	12- 3-59									Ds			1,855		
	T-84	11-26-19			25.7	D	36	N	N		Ds	Ls	0		dry	

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			T. 9 N., R. 3 E.--Continued										
9/3-20J1	GS	12-15-59	G. B. Devenish	1952	100	C 10	T 15	600	I		1,845	58	C,L
20J2	GS	12-15-59	G. B. Devenish	1951	141	C 10	T 5	600	I		1,845	58	C,L
20K1	GS	12-15-59	John Devenish	1955	308	C 12	T 10	348	I	Tap .5	1,850	61.35	L
20L1	GS	11-17-62				R 12	S E		Un	Tap 1.3	1,850	65.68	
	GS	12-14-59										62.27	
20M1	GS	2- 3-60			8.0	D 60	N N		Ds		1,855		
	T-86	11-25-19			27.4	D 60			Ds	Ls 0		dry	
20Q1	GS	6- 2-60	G. B. Devenish	1914	390	C 12	T 5	242	S		1,845	58	
20R1	GS	12-15-59	John Devenish	1955	92	C	N N		Ds		1,845		L
20R2	GS	12-15-59	John Devenish	1955	126	C	N N		Ds		1,845		L
21A1	GS	12-15-59	Narkana		450		T 25		I	Hpb 1.2	1,830	53.50	
21A2	GS	12-15-59	E. T. Byers	1952	85	C 10	J 1		Dm	Na	1,830	41	
21E1	GS	12-15-59			320	10	T 10		I	Tc .8	1,846	68.06	

22H1	GS	12-17-59			96		8	S	E		Dm			1,825		
22J1	GS	12-16-59					10	N	N		Un	Na		1,825		
22Q1	GS	12-15-59	E. M. Allison	1952	270		14	T	20	320	I	Bhc	0	1,826		C
22Z1	GS T-105	12-15-59 9- 4-17			0 162	C	12	N L	N		Ds	Tc	.7	1,835	41.2	Wp
23A1	GS	12-16-59	W. L. Lynn								Dm	Na		1,815		
23B1	GS	12-16-59	John Smethers		180		10	J	E		Dm	Na		1,817		
23M1	GS	12-15-59	Viola Reed	1949	150		10	T	7½		I	Bhc	0	1,825	48.31	
24C1	GS	11-18-59	Leonard Harp		200		8	N	N	500	Un	Tc	0	1,810	40	
24C2	GS	12-16-59	Roland Stovall	1956	300	R		T	15		I	Tc	.8	1,810	33.62	
24D1	GS T-118	1-13-60 1919	Herbert Johnson J. J. Cornwall		260	C	10	J	1	235	Dm	Na		1,810		L
24D2	GS	5-22-60	Herbert Johnson		198	DC	48	C	E		I	Na		1,810		
24E1	GS	12-17-59		1920	193.3	DC	8	N	N.		Un	Tcc	.4	1,815	38.21	
24F1	GS	12-17-59					10	T	20		I	Tap	.7	1,810	36.88	
24G1	GS	12-17-59					5	J	½		Dm	Na		1,805		
24G2	GS	12-17-59			161.0		12	N	N		Un	Tcc	2.6	1,805	31.75	
24G3	GS	12-17-59			100.0		12	T	25		I	Bhc	0	1,805	31.39	
24K1	GS	12-17-59	John Rominek		26.0		5	L	W		Ds			1,800	dry	

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			T. 9 N., R. 3 E.--Continued											
9/3-24K2	GS	12-17-59	John Rominek		35	48 C	5 S		S	Tc	0.3	1,800	29.33	
24K3	GS	12-17-59	John Rominek		120.0	8 L	W		S	Tc	2.3	1,800	30.63	
24K4	GS	12-17-59	John Rominek		80	8 J	½		Dm	Tc	1.0	1,800	30	
24M1	GS	12-16-59	S. Carbone		108.6	12 N	N		Un	Tc	1.3	1,810	46.92	
25N1	GS	12-17-59							Dm	Na		1,800		
26D1	GS	12-16-59	John Hawkins		230	12 S	E		I	Tcc	.03	1,825	45.94	C
	T-107	11-22-19	C. W. Beaverstock		271	C 12 A				Tc	0		32.0	
26E1	GS	12-16-59	Harold White	1958	375	R 12 T	30	600	I	Tc	1.0	1,820	41.32	C
26H1	GS	12-17-59			65.3	12 N	N		Un	Tc	.5	1,810	30.11	
26J1	GS	12-17-59	R. F. Reiss	1953	85	C 6 J	E		Dm	Na		1,805		C
26J2	GS	12-16-59	R. F. Reiss	1958	256	R 12 T	7½		I	Bhc	1.0	1,805	35.53	
26J3	GS	12-17-59	R. F. Reiss	1958	135	C	N	N	Un	Tc	.5	1,805	35.91	
26J4	GS	12-17-59	R. F. Reiss	1958	85	12 N	N		Un			1,805		

26L1	GS T-110	12-16-59 1919	Orville Hutchinson G. W. Archer		100 125		6	L	W	Un	Na		1,815	30	C
26L2	GS	12-16-59	Orville Hutchinson				12	N	N	Un	Tc	.5	1,815	44.65	
26L3	GS	12-16-59	Orville Hutchinson	1953	100	T	15			I	Na		1,815		C
26M1	GS	12-16-59					8	L	H	Dm			1,818		
26N1	GS	1-15-63	G. W. Archer	1915			12	N	N	Un	Bhc	1.0	1,820	36.65	
26Q1	GS	12-16-59		1934			12	N	N	Un	Bhc	.5	1,810	47.04	
26Q2	GS	12-16-59					6	J	2	Dm	Na		1,810		
26Q3	GS	12-16-59						S	¼	Dm	Na		1,810		
26Q4	GS	12-16-59	Jack McDonald		57		12	S	¼	Dm	Tc	0	1,805	47.97	
26R1	GS	12-16-59	Dunn	1954	75					Dm	Na		1,805	28	
27A1	GS	12-16-59	Lee Milazzo		85	R	6	J	3	Dm	Tc	.5	1,822	42.57	
27E1	GS	12-16-59	L. Seery	1952		R	12	T	G	Dm	Tf	.5	1,830	45.72	
27K1	GS	12-16-59		1958		R	10	L	H	Dm	Tc	.5	1,825	39.99	
27Q1	GS	12-16-59	C. F. Davis		150		12	T	50	I	Tc	1.0	1,825	c39.43	
27Q2	GS	12-16-59	C. F. Davis				10	T	5	Dm	Bhc	1.0	1,825	a42.61	
27Z1	GS T-109	1-20-60 11-24-19	L. W. Page			D		N	N	Ds Un	Tcc	-	1,830	32.9	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (feet)	Well data: Type, diam-eter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 9 N., R. 3 E.--Continued											
9/3-27Z2	GS	1-20-60							Ds			1,830		
	T-106	9- 4-17			27	D 72	N	N	Ds				dry	
28A1	GS	12-15-59	J. Hyatt	1949	107	12	S	2	Dm	Tcc	1.0	1,830	47.39	
28A2	GS	12-15-59	J. Hyatt				L	W	Dm	Na				
	L-73	5- 8-30	D. Gould						Dm	Tcc	.32	1,829.7	35.4	Wp
28E1	GS	12-15-59				8	J	1	Dm	Na		1,840		
28E2	GS	12-15-59			21.0	24	N	N	Ds			1,840	dry	
28M1	GS	12-15-59	Newberry Pig Farm			8	S	E	S	Na		1,840		
28R1	GS	12-15-59			21.6	8	N	N	Ds			1,830	dry	
	T-108	9- 4-17	Wagner		56	C 8	L	W		Tc	1.7		36.0	
29A1	GS	12-11-59	O. S. Purdy		90	8	J	½	Dm	Tc	1.0	1,846.0	64.35	C,W,Wp
29E1	GS	12-11-59				6	N	N	Un	Tc	.5	1,855	9.89	
29G1	GS	12-11-59	O. S. Purdy			12	C	G	Un	Tc	-7.46	1,850	10.66	W,Wp
29P1	GS	12-11-59	Hugh Crowder	1953	12	10	S	3/4	Dm	Tc	.5	1,845	10.42	
29P2	GS	12-11-59	Hugh Crowder	1956	60	8	J	E	Dm	Na		1,845		

29P3	GS	12-11-59					6	J	½		Dm	Tc	-1.0	1,850	8.20	
29P4	GS	12-11-59					8	S	½		Dm	Na		1,850		
29P5	GS	12-11-59					36	C	G		Dm	Tc	.5	1,850	9.30	
29P6	GS	12-11-59	Storler	1959	14.3		36	N	N		Un	Tc	0	1,850	9.73	
29R1	GS	12-11-59					6	J	¼		Dm	Tc	2.0	1,840	12.28	
30A1	GS	6-22-61					12	N	N		Un	Tc	1.0	1,860	13.73	
30E1	GS	6-22-61						J	½		Dm	Na		1,865		
30J1	GS	6-22-61	E. C. Brunner				12	T	10	360	Un	Tc	1.0		10.50	C
	L-17	5- 8-30	Hatch								Dm	Tcc	1.6	1,851.6	.3	Wp
	T-87	12-10-19	L. P. Cutler		134	C	12	C		50		Tc	.7		flowing	
32A1	GS	8-10-61	K. L. Morris				9	C	1/3		Un					W
	L-18	2-20-30	Berden								Un	Tc	.5	1,834.9	3.9	Wp
32A2	GS	8-10-61	K. L. Morris		16		12	C	7½		Un	Tcc	0	1,840	10.74	
32A3	GS	8-10-61	AT&SF Ry.	1960	180		8	S	7½		RR	Tcc	2.0	1,835	3.25	
32F1	GS	8-10-61	J&J Auto Salvage			R	10	J	1/3		Dm	Tcc	1.0	1,870	23.52	
32G1	GS	8-10-61	Newberry Farms Co.		46.8	R	6	N	N		Un	Tc	1.0	1,860	10.70	
32K1	GS	8-10-61	Newberry Farms Co.		37			J				Na		1,860		C,W
32K2	GS	8-10-61	Cliff House Grocery	1935	65			J	5		Dm	Na		1,875		
32K3	GS	12-14-61					8	L	W		Dm			1,860		

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			T. 9 N., R. 3 E.--Continued											
9/3-32L1	GS	8-10-61	State of California		87		J 3		Dm	Tap	0	1,860	14.52	
32L2	GS	8-10-61			27.8	8	N N		Un	Tc	.5	1,860	15.98	
32L3	GS	8-10-61				6	J 1/3		Dm	Na		1,860		
32L4	GS	8-11-61	Vatcher			R 6	J ½		Dm	Na		1,860		
32Z1	GS	8-11-61							Ds			1,860		
	T-88	9- 2-17	L. W. Page		14	D 30	C	120		Tc	0		1.75	C,Wp
32Z2	GS	8-11-61							Ds					
	L-18a	2-20-30	Berden			9			Dm	Tc	1.2	1,835.4	4.4	Wp
33E1	GS	8- 8-61	AT&SF Ry.			C 16	T 10		RR			1,830	flowing	
	T-89	1919	AT&SF Ry.	1917	314	C		45	RR				flowing	L
33E2	GS	8-11-61	AT&SF Ry.	1926	452	C 16	A N	275	Un	Tap	3.0	1,830	3.11	L
33M1	GS	8-11-61	AT&SF Ry.			D	N N		Un	Tc	5.0	1,845	6.09	
	T	1919	Newberry Spring		9	32	N N	350	RR					C
34A1	GS	12-17-59				8	J 7½		Dm	Na		1,820		
34A2	GS	12-19-59	Sufall		165	6	S 1½		Dm	Na		1,820		

34B1	GS	12-18-59	Alexander Bowdridge	1936	137.5	C	7	J	E		Dm	Tc	1.7	1,820	36.38	
34B2	GS	12-17-59	Beacham	1933	125	C	8	C	5		Dm			1,825	26	
34C1	GS	1- 6-60							E		Dm	Na		1,825		
34D1	GS	12-17-59			36.0		24	L	W		Ds				dry	
	GS	1- 3-45	Klinkenbeard									Tc	.3		29.52	
	L-19	2-28-30	Klinkenbeard									Tc	.3	1,827.6	27.9	Wp
	T-111	11-18-19	Klinkenbeard		36.2	DC		C				Tcc	-		29.1	
34D2	GS	12-17-59					10	T	20		I	Tc	.8	1,825	35.25	
34D3	GS	12-17-59			45.0	DC	10	L	W		Dm	Tcc	.5	1,830	36.3	
34F1	GS	12-18-59	E. F. Schmitt	1950	77	C	10	J	2		Dm			1,820	30	
34G1	GS	12-18-59	John Mason		125			S	2		Dm			1,820		
34L1	GS	11-21-62	R. M. Armstrong		65	C	6	L	H		Un	Hpb	1.3	1,818	28.40	
34L2	GS	12-17-59	R. M. Armstrong		65	C	6	L	H		Un	Na		1,818		
34M1	GS	1- 6-60	Newberry Community Church			R	6	J	½		Dm	Na		1,818		
34N1	GS	12-17-59	E. F. Schmitt		99	R	8	J	½		Dm	Tcc	.4	1,818	23.10	
34P1	GS	12-17-59	R. M. Armstrong		96			L	1		Dm	Na		1,818		
34Q1	GS	2- 4-60	K. D. Diehl	1949	42			L			Dm			1,817		C,Wp
	DWR	3-12-54										Tcc	.33		26.3	
34Q2	GS	2- 4-60	K. D. Diehl	1959	90.6		8	N	N		Un	Tc	.5	1,817	30.46	
34Q3	GS	2- 4-60	K. D. Diehl					L	W		Dm	Na		1,817		
	T-116	1919	Canfield		70	C									20.5	

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			T. 9 N., R. 3 E.--Continued											
9/3-35B1	GS	12-17-59	Earl Hall		137.2	12	N N		Un	Tc	1.0	1,810	37.80	
	T-112	11-26-19	W. E. Thral		145	C 12	N N		Un	Tc	1.0		21.5	
35B2	GS	12-17-59	Earl Hall	1945	31.2	C 14	N N		Ds			1,810	dry	
35B3	GS	12-17-59		1950	135	14	T 20		I	Tc	1.0	1,810	a55.59	
35C1	GS	12-18-59	Lloyd Webb	1959	80	R 6	S ½		Dm	Tc	.5	1,810	b41.42	
35C2	GS	12-18-59	Lloyd Webb	1953	180	R 13	T 25		I	Na		1,810		C
35D1	GS	12-19-59	J. B. Cutshall	1951	137	C 8	T 5	125	S	Bhc	.5	1,819	34.93	L
35F1	GS	12-19-59	Bloomfield			8	J E		Dm	Tc	.5	1,810	30.42	
35G1	GS	12-19-59	R. S. Goodman	1941	100	8	S E		Dm			1,805	22	
35G2	GS	12-19-59	R. S. Goodman	1930	193	12	T 15	777	I			1,805	22	C
35Z1	GS	12-19-59			0		N N		Ds			1,818		
	T-113	11-26-19	H. L. Mygatt		112	C 12	C	125		Ls	0		25	
35Z2	GS	12-19-59							Ds			1,810		
	T-114	11-26-19	Miss Irwin		94	C	N N		Un	Tc	1.0		21.5	

36F1	GS	12-17-59					6	T	G	Dm	Na		1,800			
36G1	GS	12-17-59	Martin Moore	1956	100	R	8	L	H	Dm	Tc	.5	1,800	18.91		
			T. 9 N., R. 4 E.													
9/4- 6D1	GS	6-17-59			20.0	D	36	N	N	Ds			1,790	dry		
6L1	GS	6-17-59	Robert Vernon			C	12	T	25	I	Tc	0	1,795	23.73		
6L2	GS	6-25-59	Robert Vernon							Dm			1,795			
6N1	GS	6-17-59	Ellsworth Thomas		165	DC	17	N	N	Un				30		
	L-92	5- 8-30	Frank Sherman								Tcc	.6	1,799.5	26.5		Wp
6Z1	GS	6-17-59			0			N	N	Ds			1,795			
	T-120	1919	W. A. Hopper		25	D								24		
6Z2	GS	6-17-59			0			N	N	Ds			1,797			
	T-119	1919	R. L. Riley		158	C								27		
7H1	GS	6-17-59	R. Q. Bradley	1958	125	R	6	J	1	Dm	Na		1,790	28		
7M1	GS	6-17-59	W. A. Lupac	1954	60	C	8	J	G	Dm	Tc	0	1,803	35.00		
7N1	GS	6-17-59	Leonard Gordon		222		12	T	25	Un	Tc	1.0	1,805	33.92		
7N2	GS	6-18-59	Leonard Gordon		20.0		6	N	N	Ds			1,800	dry		
7P1	GS	6-17-59	Leonard Gordon				4	J	3/4	Dm	Na		1,800			
7R1	GS	6-17-59			20	D	48	N	N	Ds			1,800	dry		
7Z1	GS	6-18-59								Ds			1,797			
	T-121	1919	E. C. Rochette		25	D								22		

See footnotes at end of table.

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			T. 9 N., R. 4 E.--Continued											
9/4- 7Z2	GS	6-18-59							Ds					
	L-82a	5-16-30	E. F. Dodson							Tc	0	1,801.6	22.0	Wp
	T-126	11-20-19	E. F. Dodson		226	C	C			Tc	-		22.6	
8B1	GS	6-17-59	Miller		60	6	L H		Dm	Tc	1.0	1,795	21.30	
8D1	GS	6-18-59	H. B. Anderson, Jr.	1957	330	C 14	T 50	1450	I			1,790	21	C,L
8E1	GS	6-18-59	Jack Hubbie									1,795		
8E2	GS	6-18-59	Jack Hubbie		3.0	D 48	N N		Ds			1,795	dry	
	T-125	11-20-19	H. L. Mellon		50	DC 9	L W	180					20	C
8G1	GS	6-17-59	A. Miller		205	8	T G		Dm	Na		1,795		
8G2	GS	6-17-59			10.0	60	N N		Ds				dry	
	L-84	2-28-30							Un	Tcc	.4	1,793.0	21.4	Wp
	T-123	1919	A. E. Erickson		21	DC	C						17	
8K1	GS	6-17-59			15.0	D 60	N N		Ds				dry	
	L-85	2-28-30							Un	Tcc	1.7	1,785.4	15.0	Wp
	T-124	1919	R. W. Holton		16	D							15	
8N1	GS	6-17-59	Thomas Axton	1959	150	R 6	S E		Dm	Tc	1.5	1,800	24.86	
8Z1	GS	6-17-59	H. B. Anderson,Jr.				N N		Ds			1,790		
	T-122	1919	J. B. Neumann		35	DC							22	

16A1	GS	6-16-59			37.0		10	L	W	Un	Tc	2.5	1,790	7.00	
16A2	GS	6-16-59			17.5	D	60	L	W	Un	Tc	1.0	1,790	12.00	
16B1	GS	6-16-59			21.0		8	N	N	Un	Tcc	.2	1,780	2.83	
17B1	GS	6-17-59			77.0	R	10	N	N	Un	Tc	1.5	1,790	14.93	
17N1	GS	6-18-59	F. S. Ussery		105		14	T	7½	Dm	Na		1,795		C
17Q1	GS	6-23-59	George Crest	1955	80	R	10	N	N	Un	Tc	0	1,785	13.80	
17Q2	GS	6-23-59	George Crest	1955	80	R	12	N	N	Un	Tc	0	1,785	12.45	
18A1	GS	6-17-59					12	T	15	Un	Bhc	-.5	1,795		
18C1	GS	6-18-59			0	D	36	N	N	Ds					
	L-82	5-16-30	Major							Un	Tf	.4	1,797.8	24.5	Wp
	T-127	11-20-19	Mager		28			L	W		Ls	0		25.3	
18E1	GS	6-18-59	M. V. Tienken		100		36	L	W	Dm				28	
	L-83a	2-28-30				DC	12	L	W		Tc	0	1,801.5	24.2	Wp
18E2	GS	6-18-59	M. V. Tienken				48	T	3	Dm	Tc	0		28.50	
	L-83	2-28-30	H. G. Tienken							Un	Tcc	0	1,801.4	24.2	Wp
	T-128	11-20-19	H. G. Tienken		196	C		C			Tc	-		24.6	L
18E3	GS	6-18-59	M. V. Tienken				16	T	5	Un	Tc	0	1,801	28.75	
18M1	GS	6-18-59	G. B. Devenish	1957	92	C	12	T	5	Dm	Hpb	1.1	1,801	26.23	L
18M2	GS	6-23-59	J. A. McDonald	1945	147	DC	20	J	1	Dm	Na		1,800		
18N1	GS	6-23-59	I. R. Martin	1953	206	C	14	N	N	Un	Tc	1.0	1,800	27.18	L

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			T. 9 N., R. 4 E.--Continued										
9/4-18R1	GS	6-23-59				14 T 15			S	Na	1,800		
19B1	GS	6-23-59	B. H. Hawkins			6 L N			Un	Tcc .5	1,800	22.60	
19E1	GS	6-23-59	Callahan			8 L H			Un	Na	1,795		
20B1	GS	6-23-59	B. Harrison	1916	0	C 12 N	N		Ds		1,785		
20D1	GS	6-18-59			20.0	D 36 N	N		Ds		1,795	dry	
	T-129	1919	L. S. Brehaut		150	C							
20G1	GS	6-23-59	B. Harrison	1951	122	C 8 L	W	6	Dm	Tc 3.0	1,785	8.20	C
20G2	GS	6-23-59	B. Harrison	1932	8.0	A 10 N	N		Ds		1,785		
20L1	GS	6-23-59	Clayton & Lindquist	1932	75	DC 8 C	G		Dm	Tc .6	1,785	18	C,Wp
20L2	GS	6-23-59	Clayton & Lindquist		200	14 T	D		Un	Tc .5	1,785	12.84	
20L3	GS	6-23-59	Clayton & Lindquist		170	C	N		Un	Na	1,785		
21D1	GS	6-18-59	George Crest	1955	80	R 10 N	N		Un	Tc 0	1,785	12.56	
21M1	GS	6-18-59	William Lavoy		7.0	D 10 N	N		Un	Tc 1.0	1,780	5.70	
28H1	GS	6-16-59				10 L W			Un	Tc 2.0	1,780	5.94	C

30D1	GS	6-23-59	A. Bernard		135.0		12	N	N	135	Un	Tc	-1.0	1,795	24.76	C
30N1	GS	6-25-59	Ellsworth Thomas	1953	200		12	T	15	860	I			1,800	20	C
30N2	GS	6-25-59	Ellsworth Thomas	1953	50	R	12	N	N		Un	Tc	1.0	1,795	19.62	C
31D1	GS	6-25-59					8	T	5		Un			1,795		
31D2	GS	6-25-59	A. Bernard					T	G		Un	Na		1,795		
31K1	GS	6-24-59	C. L. Hines		25		12	N	N		Un	Tc	3.2		15.60	W
	L-31	5- 1-30	Anna Mae Monroe				12				Un	Tc	3.2	1,788.9	12.55	Wp
31K2	GS	6-24-59	C. L. Hines		25		12	L	W		Un	Tc	0	1,790	15.80	C
31K3	GS	6-24-59	C. L. Hines				14	T	G		Un	Bpb	0	1,790	14.31	
31L1	GS	6-24-59	Jaunke					T	15		I	Na		1,790		
31M1	GS	6-24-59	Burkhardt					T	5		Un	Na		1,795		
31M2	GS	6-24-59	Burkhardt				8	T	N		Un			1,795		
31N1	GS	6-24-59	A. Fernandez		200			T	5		Un	Na		1,795	17	
32C1	GS	6-18-59	Walker			D	96				Un	Na		1,780		
			T. 9 N., R. 5 E.													
9/5- 8K1	GS	6-11-59		1953			8	L	G		Ds			2,242	dry	C
32E1	GS	6-11-59					8	L	W		Un	Tc	1.0	1,852	135.90	

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			T. 9 N., R. 6 E.											
9/6-32H1	GS	10-17-62	Pioneer Mining Co.		119.2	8 N	N		Ds	Tc	1.0	2,620	dry	
			T. 10 N., R. 1 E.											
10/1-21K1	GS	11-13-62	R. T. Savage	1934	194	10 L	N		Un	Tc	1.0	2,040	161.93	
	GS	8-26-61								Tc	1.0		163.81	
	GS	6-12-59								Tc	1.0		157.66	
22C1	GS	6-11-59	Calico Ghost Town	1900	500	D 240	L E	10	Ps	Tcc	.5	2,320	a327.0	C
28L1	GS	8-28-61	G. S. Vernon	1958	153	R	S 3/4		Dm	Na		1,960		
28L2	GS	8-28-61	C. Black	1955	108	R	L W		Dm	Na		1,960	90	
28L3	GS	8-28-61	Dail	1957	106	R 8	J 3/4		Dm	Na		1,960	50	
28N1	GS	8-28-61	O. J. Smith		145	8	J 3/4		Dm	Na		1,960		
28N2	GS	8-28-61	J. B. Folk	1959	125	C 10	S 1		Dm	Tap	1.0	1,960	85.35	
28P1	GS	8-29-61	L. W. Johnson		170	8	J 1		Dm	Tc	.5	1,955	84.55	
28R1	GS	10-26-60	T. M. Slusser		930	R 10	N N		Un	Tc	2.0	1,951	65	

28Z1	GS T-3	8-29-61 11- 4-19	R. M. Campbell		69.6	D		L			Ds	Tc	-	2,000	65.6		
28Z2	GS T-2	8-29-61 11- 4-19	J. F. McKinley		70	D					Ds	Tc	-	1,975	65.4		
29D1	GS	6-12-59			214.3		12	N	N		Un	Tc	2.5	2,045	196.07		
32K1	GS	8-28-61				R		T	D		I	Tap	1.0	1,975	102.02		
32K2	GS	8-29-61	John Don	1961	210	R	12	N	N		Un	Tc	.5	1,970	94.39		
32Q1	GS GS	11-14-62 2-20-62				R	12	N	N		Un	Tc Tc	1.4 1.4	1,960	88.47 87.37		
33P1	GS	8-29-61	G. H. Metherly	1961	225	R	12	T	25	500	In	Na		1,950	100		
34K1	GS	2-20-62	Ezerene Noblin	1958	150	C	12	N	N		Un	Tc	-3.0	1,945	84		L
34N1	GS	8-30-61	Ezerene Noblin	1958	300		10	T	G	1058	I	Na		1,950	84		L
34P1	GS	2-20-62	Ezerene Noblin	1958	300	R	14	N	N		Un	Tc	2.1	1,950	85		L
35N1	GS	8-29-61	J. W. Burke	1958	147		12	J	1		Dm	Na		1,945	90		
35N2	GS	2-20-62	L. P. Clinkenbeard	1958	140	C	8	J	2		Dm	Tc	.7	1,945	82.75		L
35P1	GS	8-29-61	Einar Petersen	1960	148		8	S	3/4		Dm	Na		1,945	70		
35P2	GS	8-29-61	J. W. Burke	1961	167	C	12	T	20		Ps			1,945	80		
35P3	GS	8-30-61	Carl Keepper		150			S	E		Dm	Tc	1.0	1,945	85.28		

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			T. 10 N., R. 1 E.--Continued										
10/1-35P4	GS	8-30-61	Carl Keepper		70.0	12	N N		Ds		1,945	dry	
	T-4	1919	J. A. Fults		407	C	T					60	C
35P5	GS	8-30-61	Carl Keepper		82.1	12	N N		Ds		1,945	dry	
	T-5	11- 4-19	J. A. Fults		57.6	D 48	L W			Tc -		56.5	Wp
			T. 10 N., R. 2 E.										
10/2-25K1	GS	6-26-59				10	T N		Un	Na	1,875		
25N1	GS	6-24-59					L W		Un	Hpb 1.5	1,875	73.8	
25P1	GS	6-23-59	V. Hibbetts	1930			L W		Dm	Hpb 2.0	1,875	80.8	
26Q1	GS	6-24-59				12	T G		I	Tc .5	1,875	82.50	
26Z1	GS	6-24-59							Ds		1,890		
	T-10	11-12-19	J. D. Prosser		156	C 12	N N	54	Un	Tc -		61.4	Wp
26Z2	GS	6-24-59							Ds		1,880		
	T-11	11-12-19			57	C 12			Ds			dry	
31H1	GS	6-25-59	Louis Kulp	1958	186	8	L G		Dm	Na	2,010		

31N1	GS	6-25-59	A'Day		216.6		14	T	N		Un	Bpb	.5		59.38	
	L-48	5-24-30	Thomas Williams								Dm	Tc	0	1,924.9	43.7	Wp
31R1	GS	6-26-59	State of California	1930			10	T	2		Dm	Tc	.5	1,920	57.52	C
31R2	GS	6-26-59	Thomas Burt	1956	80	R	6	J	1		Dm	Na		1,915		
32J1	GS	6-25-59	W. L. Hubbell	1959	114	R	8	S	3/4		Dm	Na		1,945	68	
32K1	GS	6-25-59	H. F. Putney	1953	132	C	8	T	2		Dm	Tc	0	1,940	64.3	
32K2	GS	6-25-59	W. D. Putney	1958	116	C	8	N	N		Un	Tc	1.3	1,940	62.53	
32K3	GS	6-25-59	H. F. Putney	1924	117.6		12	N	N		Un	Tc	.9	1,960	107.96	
32N1	GS	6-26-59	Thomas Burt	1919	75.8	C	10	N	N		Un	Tc	0	1,940	60.90	
	T-6	11-11-19	Williams			C	12	L				Tc	-		44.5	
32P1	GS	6-26-59	Yermo Mutual		354.9		16	T	N		Un	Hpb	1.3		42.14	
	L-49	5-23-30	Water Co.								Un	Tc	.2	1,905.5	29.0	Wp
	T-7	1919	Yermo Mutual Water Co.		428	C	16	T		1125						
32P2	GS	6-26-59	Yermo Mutual		358.8		16	N	N		Un	Tc	.5	1,905	41.35	
	T-8	1919	Water Co.		426	C		N	N		Un					
32Q1	GS	6-26-59	Elrod				16	T	5		Dm	Na		1,905		
	T-9	11- 4-19	Yermo Mutual Water Co.		413	C	16	N	N		Un	Tc	0		23.0	Wp
34D1	GS	6-25-59					7	L	W		Un	Tc	1.0	1,895	88.19	
34L1	GS	6- 1-60			56.5		12	N	N		Ds	Tc	-1.0		dry	W
	L-54	5-23-30										Tcc	0	1,876.2	56.1	Wp
	T-142	1919	Yermo Mutual Water Co.		437	C	12								45	

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			T. 10 N., R. 2 E.--Continued											
10/2-35D1	GS	6-24-59	C. E. Gurr			8	L W		Un	Tc	1.5	1,879	78.11	
35K1	GS	9-16-60				5	N W		Un			1,850	39	C
			T. 10 N., R. 3 E.											
10/3- 3G1	GS	6-18-59			164.8	12	N N		Un	Tc	3.7	1,790	59.16	
4E1	GS	6-19-59	Steimle & Bovey			12	T 40		I	Hpb	.5	1,792	62.5	
4F1	GS	6-19-59			168.9	D 48	N N		Un	Tc	0		57.16	
	L-58	5-28-30				D			Un	Tc	0	1,792.4	54.0	Wp
6A1	GS	6-19-59	R. H. Bragdon	1953	337	R 12	T 3/4		Dm	Tc	.6	1,800	86.05	C
	GS	2-16-54	Lorenzen & Bragdon				N N	54	Un	Tc	.6		51.36	
6E1	GS	6- 7-61			93.1	C 12	N N		Un	Tc	.9	1,805	63.25	
6H1	GS	6-19-59	R. H. Bragdon	1954	250	R 12	T 25		I			1,795		C
	GS	2-16-54	Lorenzen & Bragdon				N N		Un	Tc	1.0		45.58	
6J1	GS	6-19-59	R. H. Bragdon	1958	300	C 14	T 20		I			1,795	64	
6R1	GS	6-19-59	R. H. Bragdon	1957	300	C 12	N N		Un	Tc	1.0	1,801	78.46	C

7F1	GS	6-19-59	R. H. Bragdon	1954	297	R	12	T	20		I			1,805		C
	GS	5-24-54	Lorenzen & Bragdon					N	N		Un	Tc	.7		59.03	
	GS	2-16-54	Lorenzen & Bragdon									Tc	.7		59.04	
7H1	GS	6-18-59	Ball		125		20	T	20		I			1,810	67	
7J1	GS	6-26-59	R. H. Bragdon	1959	495		14	T	125	1800	I			1,812		C
7R1	GS	6-19-59	R. H. Bragdon	1954	259	R	12	T	50		I	Tc	1.0	1,819	84.06	C
	GS	2-16-54	Lorenzen & Bragdon		418			N	N	900	Un	Tc	1.0		66.26	
8A1	GS	6-17-59	Wells	1959	180		12	S	E		I			1,805		
8H1	GS	6-18-59	Wells		215		10	S	E		Dm	Na		1,810		
	GS	2-16-54						J	1			Tc	0		73.95	
8H2	GS	6-18-59	Wells	1959	170		14	N	N		Un	Tc	1.0	1,810	77.85	
8Q1	GS	6-18-59			140.6		12	N	N		Un	Tc	2.0	1,820	93.15	
	GS	2-16-54			142							Tc	3.9		86.40	
10C1	GS	12-14-62	W. C. Higdon	1954	322		12	T	20		I	Bhc	1.5	1,800	83.8	
10E1	GS	12-14-62	W. C. Higdon	1953	240		12	T	30		I	Hpb	0	1,802	85.30	
10E2	GS	12-14-62	W. C. Higdon				10	N	N		Un	Tc	2.0	1,802	88.12	
10N1	GS	7-31-62	A. F. Bender		375			T	50	850	I	Tc	0	1,810	70	
10P1	GS	12-14-62	A. F. Bender				12	N	N	620	Un	Tc	0	1,805	92.02	
11J1	GS	6-15-59			108.5	D	48	N	N		Ds				dry	
	L-94	5-24-30	Spencer			D					Un	Tcc	0	1,796.0	114.1	Wp
	T-19	11-12-19	William Spencer		116.5	D	72	L	H			Tc	-		114.5	

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			T. 10 N., R. 3 E.--Continued											
10/3-12F1	GS	6-15-59				N	N		Ds					
	L-95	5-24-30				12			Un	Tc	1.3	1,784.7	107.8	Wp
	T-20	11-13-19			230	C 12	N	N	Un	Tc	1.0		110.0	
12K1	GS	6-10-59	Herschel Myatt		250	12	J	1	Dm	Tc	1.0	1,785	112.9	
12L1	GS	6-10-59							Un	Na		1,790		
14B1	GS	6-11-59	Martha's Cafe			6	L	W	Dm	Tc	1.0	1,795	67.9	
14B2	GS	6-17-59	C. L. Wright		53.7	D 48	N	N	Un	Na		1,795		
	T-18	11-14-19	C. L. Wright		58	D 48	N	N	Un	Tcc	-		56.1	
14J1	GS	6-12-59	L. D. Morris	1957	130	R	T	50 840	I			1,790		
14N1	GS	6-12-59	George Wright	1956	255	C 12	N	N	Un	Tc	1.0	1,797	66.00	L
15E1	GS	6-11-59	A. B. Steimle	1955	240	R 12	S	75 1900	I			1,810	70	
15K1	GS	6-19-59	Union Pacific RR				N	N	Un	Na		1,808		
	T-15	1919	Los Angeles & Salt Lake RR Co.	1912	318	C 12		28					75	C,L
15N1	GS	6-11-59	George Wright			D 12	T	E	Un	Na				
	L-56	5-24-30								Tc	.2	1,816.7	77.4	Wp
	T-13	11-14-19				D	N	N	Un	Tc	3.0		77.8	

15P1	GS	6-11-59	Union Pacific RR	1943	338		16	T	D		RR	Na		1,808		L
15Q1	GS	6-12-59	C. L. Wright	1957	186.4	R	12	N	N		Un	Tc	.3	1,805	78.0	
15Z1	GS	6-12-59						N	N		Ds			1,808		
	T-14	1919			145	C		L		360					68	
16C1	GS	6-17-59	D. Davis	1958			14	T	G		I			1,816		
16F1	GS	6-17-59	B. Morris	1958	71.5	C	14	N	N		Ds	Tc	1.7	1,818	dry	
16F2	GS	6-17-59	D. Davis	1959	d45	C	14							1,818		
18R1	GS	6-17-59			137.7		12	N	N		Un	Tc	1.75	1,818	93.58	
19A1	GS	6-18-59	V. V. Cyr	1957	240	R	14	T	50		I			1,835	70	L
19R1	GS	6-18-59	Rufus Jackson	1958		R	8	T	50	500	I			1,850	106	
20A1	GS	6-17-59	J. R. Byers	1953	91.2	R	12	N	N		Ds			1,838	dry	
20C1	GS	6-17-59	J. R. Byers	1959	240	R	16	N	N		Un	Tc	.83	1,835	82.72	
20E1	GS	6-17-59	J. R. Byers	1952	256	R	12	T	50	950	I			1,840		C
21B1	GS	6-17-59	E. M. Rackliff	1950	223	C	16	T	60	1188	I	Tc	.85	1,830	103.6	C,L
21C1	GS	6-17-59	E. Granville	1955	146	C	8	S	½		Dm	Tc	3.0	1,830	104.8	C,L
22B1	GS	6-12-59	C. L. Wright		71.0		10	N	N		Ds			1,805	dry	
	T-16	11-14-19			91.5	C	10					Tc	3.5		70.5	
22D1	GS	6-12-59	Union Pacific RR		134.3		10	N	N		Un	Tc	.3		93.42	W
	L-97	5-24-30	G. F. Getty									Tc	.3	1,819.9	80.59	Wp
	T-12	11-12-19	G. F. Getty		125	C		L		27		Tcc	-		83.0	

See footnotes at end of table.

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T. 10 N., R. 3 E.--Continued														
10/3-22M1	GS	6-13-59			120.9	10	N N		Un	Tc	1.5	1,830	111.6	
	T-21	11-14-19			127.5	C				Tc	1.0		87.0	
23B1	GS	6-12-59			111.2	9	N N		Un	Tc	2.5	1,790	57.7	
23E1	GS	6-12-59			36.8	10	N N		Un			1,785		
	T-17	1919	F. B. Lewis		134	C 10	L	8					60	
25A1	GS	6-15-59	Sidney Smith		160	10	C G		Dm	Tc	-4.0	1,720	7.7	C
	L-100a	2-15-33				10			Dm	Tc	-		2.7	Wp
25B1	GS	6-15-59	Sidney Smith	1939	10	D 33	N N		S	Tc	0	1,725	4.0	
25C1	GS	6-15-59	Sidney Smith	1939	30	D 12	N N		S	Tc	4.0	1,720	3.0	
27B1	GS	6-13-59				6	L W		Un	Tc	1.5	1,800	46.3	
27L1	GS	6-13-59	C. L. Wright		50	C 12	C N		Un	Na		1,780		
	T-22	11-14-19	C. L. Wright		37	DC 12	C	100		Tf	2.0		7.4	
27Q1	GS	6-13-59	C. L. Wright	1956	100	12	C E		Dm	Na		1,770		C
27Q2	GS	6-13-59	C. L. Wright				L W		Un	Na				
	L-99	5-24-30	C. L. Wright			7	L W		Dm	Tc	1.1	1,761.5	6.0	Wp

28N1	GS	6-20-59	U. S. McElroy	1930	90	C	12	C	15	I	Tc	-9.0	1,800	14.85	
28P1	GS	6-20-59	A. P. Archer					N	N	Un	Tf	-7.5	1,790	13.92	
28P2	GS	6-20-59	A. P. Archer		15.7	A	6	N	N	Un	Tc	2.9	1,795	12.23	
28P3	GS	6-20-59	A. P. Archer	1952	24		6	C	2	Dm	Tc	-4.7	1,795	12.27	
28P4	GS	6-20-59	E. Dailey		100		8	S	E	I	Tf	1.0	1,820	45.83	
28R1	GS	6-13-59	C. L. Wright	1952	110		8	T	10	Un	Na		1,800		C
30J1	GS	6-20-59						L	W	Un	Tcc	1.3	1,830	45.73	
30M1	GS	6-20-59			128.7		10	N	N	Un	Tc	2.0	1,845	60.27	
32Z1	GS	6-20-59						N	N	Ds			1,810		
	T-143	1919	Peter Zeechini		97	C								9	
33H1	GS	6-20-59	W. Mintz	1945	60		8	J	1/3	Dm	Tcc	.3	1,777	12.65	
33H2	GS	6-20-59	W. Mintz	1945	60		10	C	10	I	Tc	-7.0	1,780	12.57	
33J1	GS	6-22-59	G. Wood	1955	50	C	6	C	2	Dm	Na		1,795		
33Z1	GS	6-22-59						N	N	Ds			1,775		
	T-23	11-25-19			97	C	12	N	N	Un	Tc	8.0		+2.6	
33Z2	GS	6-22-59						N	N	Ds					
	L-78a	3- 1-30	Henderson				14				Tc	.5	1,785.8	4.0	Wp
34B1	GS	6-22-59	N. N. Zinc		29		18	C	7½	Dm	Tc	-4.0	1,760	6.2	

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			T. 10 N., R. 3 E.--Continued											
10/3-34E1	GS	6- 2-60	G. M. Bond		11.6		N N		Ds	Tc	0.6		dry	C
	L-78	3- 1-30	Henderson			14				Tc	-	1,774.9	8.2	Wp
	T-24	11-25-19	G. E. Bunnell		21	D 14	L W			Tc	-		12.0	
34E2	GS	6-22-59	G. M. Bond			12	J 1		Dm			1,780		Wp
	F	4-17-56	G. M. Bond		30	16				Tc	.6		9.70	
	F	4-18-55	G. M. Bond							Tc	.6		9.38	
34E3	GS	6-22-59	G. M. Bond		15	18	J 1/3		Un	Bpb	1.5	1,775	11.5	Wp
34F1	GS	6-22-59	George Bond			14	N N		Un			1,780		
34M1	GS	1-16-63				8	L W		Dm	Tc	1.0	1,805	38.55	
34N1	GS	6-22-59				12	J		Un	Tc	.5	1,818	48.25	
	T-115	1919	A. C. Tappe		140	C							56	
34Q1	GS	6-22-59				14	T 25		I	Tc	1.0	1,805	60.82	
34R1	GS	6-16-59				16	T N		Un	Na		1,805		
35H1	GS	6-15-59			64.4	D 60	N N		Un	Tc	0	1,788	36.12	
	L-88	5- 8-30	J. T. Carnall						Un	Tc	0		32.4	Wp
	T-26	11-25-19	J. T. Carnall		200	C 12	C	90		Tc	-		33.0	

35M1	GS	6-15-59			77.1		10	N	N	Un	Tc	.5	1,800	47.83	
35M2	GS	6-16-59			33.7		6	N	N	Ds				dry	
	L-87	5- 8-30	C. F. Slicton				6				Tc	1.2	1,804.8	42.2	Wp
35P1	GS	6-15-59	Nicholas Bruins	1951	135	R	8	J	1	Dm			1,800	45	
35Z1	GS	6-15-59						N	N	Ds			1,805		
	T-25	1919	C. F. Slicton			C		L	H						
			T. 10 N., R. 4 E.												
10/4- 3M1	GS	8-14-62			(e)			N	N	Un			1,740		
4E1	GS	6-10-59			f124.2		12	N	N	Un	Tc	.4	1,740	86.1	
	F	12- 3-58					12				Tc	.4		86.11	
4E2	GS	6-23-59	Western Pacific Oil Co.	1924	g10.3		10	N	N	Ds			1,740	dry	L
5M1	GS	6-10-59	Kenneth Wilhelms		130		10	L	W	Dm	Na		1,757.8		C,W
5N1	GS	8-14-62	Kenneth Wilhelms	1959	(h)	R	10	N	N	Un	Na		1,760		
5N2	GS	1-17-63					7	N	N	Un	Tc	1.0	1,760	98.25	
6F1	GS	6-10-59					10	C	N	Un	Tc	.5	1,764	101.45	
	T-29	11-13-19			237	C	12	N	N	Un	Tc	.5		101.5	
6J1	GS	6-18-59			93.7		10	N	N	Un					
	L-96	5-24-30								Dm	Tc	.2	1,761.3	98.1	Wp
	T-30	11-13-19			195	C	10	N	N	Un	Tc	-		98.0	
6R1	GS	6-17-59	Union Pacific RR				14	N	N	Ds			1,761	dry	
	T-31	11-13-19			56.4	C	14	N	N	Ds	Tc	1.7		dry	

See footnotes at end of table.

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			T. 10 N., R. 4 E.--Continued											
10/4- 7P1	GS	6-10-59	T. B. Morgon	1956	194	C 8	T 10	148	I	Bhc	0.5	1,775	59.0	L
7Q1	GS	6-10-59	T. B. Morgon				C G		I			1,765		
8B1	GS	6-15-59			79.2	12	N N		Un	Tc	1.0	1,745	74.65	
	T-33	1919			81	C 12	N N		Un				77	
8D1	GS	6-15-59				D 48	T N		Un	Na		1,760		
	T-32	11-13-19			88	D 48	N N		Un	Tc	-		60.4	
18E1	GS	6-10-59					L G		Un	Na		1,780		
19J1	GS	6-15-59	Kenneth Wilhelms	1959	d75	C 12	N N		Un	Tc	0	1,695	2.0	C
19J2	GS	6-15-59	Kenneth Wilhelms	1959	56	C 6	N N		Dm			1,695	flowing	
19N1	GS	6-15-59	Sidney Smith		90	DC 12	N N	4½	Un	Tc	7.0		+4.0	C
	L-100	5- 7-30	Cady Ranch				N N		I	Tap	2.6	1,697.4	.4	Wp
20F1	GS	6-15-59	Sidney Smith	1933	12	D 53	N N		Un	Tc	1.5	1,680	0	
20F2	GS	6-15-59	Sidney Smith			D 24	N N		Un	Tc	0	1,680	0	
20L1	GS	6-12-59	Boswell		30	D 6	C N		Un	Tc	.2	1,680	4.3	

29D1	GS	6-12-59	Southern Pacific Co.		1.0	D	96	N	N	Un	Tc	1.6	1,720	0	
	T	1919	Camp Cady Spring							Un					C
30M1	GS	6-15-59			37.5		60	N	N	Un					
	L-91	5- 9-30								Un	Tc	0	1,776.2	36.0	Wp
	T-27	11-21-19			108	DC		N	N	Un	Tc	-		37.1	
30Z1	GS	6-15-59						N	N	Ds					
	L-89	5- 8-30	W. E. Schildt		18.5	D				Ds	Tcc	0	1,739.4	dry	Wp
	T-28	11-21-19	W. F. Schildt		21	D		N	N	Un	Tcc	-		19.5	
31Q1	GS	6-15-59	M. Tienken	1930	90	D	48	L	1½	Dm	Na		1,782		
32Z1	GS	6-15-59						N	N	Ds					
	L-90	5- 8-30	Purcell								Tcc	0	1,778.8	30.4	Wp
			T. 10 N., R. 6 E.												
10/6-32D1	GS	6-11-59		1954	1000		8	L	N	Ds			2,655	dry	
			T. 11 N., R. 2 E.												
11/2- 7A1	GS	12- 9-59	Johnson	1933		C	8	N	N	Un	Tc	1.2	1,790	52.52	
	GS	2-15-54	Johnson		62.4						Tc	1.2		52.45	
	GS	6-16-43	Johnson								Tc	1.2		52.3	L
	GS	7-20-41	Johnson		64.8						Tc	1.2		50.3	
8F1	GS	12- 9-59				C	10	N	N	Ds			1,735		
	T	2-26-18			17.5	D								7.8	

See footnotes at end of table.

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			T. 11 N., R. 2 E.--Continued											
11/2- 8K1	GS	12- 9-59	Johnson			C 10	N	N	Un	Bhc	0.2	1,720	flowing	Wp
	GS	3- 1-55	Johnson							Bhc	.2		flowing	
	GS	2-15-54	Johnson		45.1			5		Bhc	.2		flowing	
	T	2----18	E. E. Barr	1918						Bhc	.2		3.5	
8K2	GS	12- 9-59	Johnson			C 6	N	N	Dm	Bhc	.8	1,720	flowing	
	GS	2-15-54	Johnson		21.0			1		Bhc	.8		flowing	C
8K3	GS	12- 9-59	Johnson			C 6	N	N	Un	Bhc	.3	1,730	flowing	
	GS	2-15-54	Johnson		23.0					Bhc	.3		flowing	
22N1	GS	12- 9-59				D 30	N	N	Un	Tc	.8	1,740	10.78	C,Wp
	GS	10-25-54			19.0					Tc	.8		12.0	
	GS	2-16-54								Tc	.8		11.08	
	T	2-26-18								Tc	.8		12.6	
	T	9- 6-17								Tc	.8		14.9	
22Q1	GS	12- 9-59		1918	1.4	C 6	N	N	Ds			1,740		
	T	2----18			18				Un				17.8	
26R1	GS	12-10-59			117	C 12	N	N	Un	Tc	1.2	1,780	41.91	
	GS	3- 1-55								Tc	1.2		40.95	
	GS	10-25-54								Tc	1.2		40.82	
	GS	2-16-54								Tc	1.2		40.78	

27D1	GS	12- 9-59				C	6	N	N	Un	Tc	-2.0	1,740	6.29	
	GS	10-25-54			13						Tc	-2.0		2.2	C
	T	2----18			50									flowing	
35G1	GS	12-10-59			93.5	DC	12	N	N	Un	Tc	0	1,780	56.72	
	GS	2-16-54									Tc	0		42.35	
			T. 11 N., R. 3 E.												
11/3- 8N1	GS	12-10-59			19.0	D	48	N	N	Un	Tc	-1.5	1,725	3.86	Wp
	GS	10-25-54	R. A. Edwards								Tc	-1.5		3.41	
	GS	2-16-54	R. A. Edwards								Tc	-1.5		3.7	
	GS	7-21-41			16.5						Tc	0		3.8	
11R1	GS	12- 4-58	Alvord Well				8	L	G	S	Tc	.5	2,054	385.60	C
	GS	11-18-54									Tc	.5		377.4	
19J1	GS	12-10-59		1959	443.0	R	12	N	N	Un	Tc	1.0	1,760	20.82	
20H1	GS	10-18-61					12	N	N	Un	Tc	2.0	1,780	52.0	
20R1	GS	12-10-59			92.0		10	L	H	Un	Tc	1.0	1,780	42.87	C,W,Wp
30A1	GS	12-10-59						N	N	Ds			1,765		
	GS	3- 1-55			60.8	C	10	N	N	Un	Tc	1.0		28.69	
30A2	GS	12-10-59				R	12	S	E	I	Tcc	1.5	1,765	35.82	
30J1	GS	12-10-59				C	10	N	N	Un	Tc	.5		47.48	
	GS	2-16-54	C. E. Curtis								Tc	.5		45.20	
	GS	7-21-41			54.1						Tc	1.9		45.82	
	L-60	5-28-30					10			Un	Tc	1.9	1,780.6	45.3	Wp

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			T. 11 N., R. 3 E.--Continued											
11/3-30J2	GS	12-10-59				R 12	N N		Un	Tc	0.03	1,775	48.16	
	GS	10-25-54	C. E. Curtis	1952	130.0		T G			Hpb	.7		45.45	L
	GS	2-16-54	C. E. Curtis		141	12		120		Hpb	.7		45.40	
30J3	GS	12-10-59				R 12	T 40		I	Tc	0	1,775	43.01	
32C1	GS	6- 1-60					N N		Un	Tc	1.0		52.60	
	L-59	5-28-30				10	N N		Un	Tc	1.0	1,785.2	47.2	Wp
34K1	GS	6-11-59	Payhan Pump Co.		(d)	C 14	N N					1,780		
34K2	GS	6-11-59	Payhan Pump Co.			14	N N		Un	Tcc	1.5	1,780	45.5	
35F1	GS	12-10-59				C 10	N N		Un	Tc	2.6	1,778	65.77	
	GS	10-25-54	Los Angeles Power & Light		88.2					Tc	2.6		65.23	
			T. 11 N., R. 5 E.											
11/5-11N1	GS	6- 9-59	Western Talc Co.			8	L W		Dm	Tcc	1.0	1,600	172.7	C
14A1	GS	6- 9-59			73.2	D 8	N N		Un	Tc	0	1,540	67.6	
15G1	GS	6- 9-59	Western Talc Co.	1947	220	12	S 3		Dm			1,620		C

16J1	GS	6- 9-59	Southern California Mineral Co.	1942	219		8	L	G		Dm	Tc	1.08	1,638.8		C,W,Wp
20G1	GS	6- 9-59	T. D. Prinz	1952	286	R	6	S	1½	600	Dm			1,760		
			T. 11 N., R. 6 E.													
11/6-18R1	GS	6- 9-59	Union Pacific RR					L	G		Dm	Na		1,408		C
18Z1	GS	6- 9-59	Afton Well					N	N		Ds			1,410		
	T-46[i/]	1919	Los Angeles & Salt Lake RR Co.	1904	429	C	13			50	RR				17	C,L
			T. 12 N., R. 2 E.													
12/2-27J1	GS	12- 9-59	Jack Rabbit Spring					N	N		Un	Ls	0	1,720	flowing	
	GS	2-16-54			3.5	D	72			10		Ls	0		flowing	
28D1	GS	12- 9-59				C	12	N	N		Un	Tc	.5	1,775	35.95	Wp
	GS	11-19-54			49.2							Tc	.5		35.90	
28P1	GS	12- 9-59				C	6	N	N		Un	Tc	.8	1,715	flowing	
	GS	10-25-54			42.5							Tc	.8		flowing	
31A1	GS	12- 9-59	U.S. Army	1954	584	C	14	N	N		Un	Tcc	1.88	1,789.5	55.93	C,L,Wp
32C1	GS	12- 9-59						N	N		Ds			1,745		Wp
	GS	10-25-54	L. C. Flint			C	8	L	H		Dm	Tc	1.9		12.19	
	GS	2-16-54	L. C. Flint									Tc	1.9		12.87	
	GS	2-11-51										Tc	.2		11.8	
	GS	7-19-41										Tc	.2		11.65	

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			T. 12 N., R. 2 E.--Continued													
12/2-32G1	GS	12- 9-59		1918		A	6	N	N		Un	Tc	0.3	1,735	0.38	
	GS	2-16-54	Dolan		33							Tc	.3		1.0	
	GS	6-15-43	W. B. Davis							5		Tc	.3		flowing	
32K1	GS	12- 9-59				C	5	N	N	2	Dm	Tc	1.5	1,730	flowing	C
	GS	2-16-54	Riblet & Alexander									Tc	1.5		flowing	
	GS	7-19-41	Max Hering	1923	74		5					Tc	1.5		flowing	L
33D1	GS	12- 9-59						N	N		Un			1,720	flowing	
	GS	2-16-54	William Marquis			C	6				S	Tc	3.0		flowing	
	GS	7-19-41	L. S. Jones		37.2					15		Tc	3.0		flowing	
	T	2----18	L. S. Jones		90					10		Tc	2.5		flowing	
33D2	GS	12- 9-59				C	9	N	N		S	Tc	1.0	1,720	flowing	C
	GS	2-16-54	William Marquis									Tc	1.0		flowing	
			T. 7 N., R. 1 W.													
7/1- 9F1	GS	2-21-62	A. Verine	1961	350	C	6	L	G		Dm			3,160	308	
11B1	GS	12-13-61	Foster Well		18.2	D	48	L	W		Un			3,400		
24G1	GS	12-12-61			18.6	D	60	N	N		Ds	Tc	0	3,960	dry	

36R1	GS	12-12-61			68.8	D	48	N	N		Un	Tc	0	4,030	28.96	
36Rs	GS	12-12-61	Taylor Spring			D		N	N					4,030	dry	
			T. 8 N., R. 1 W.													
8/1-21G1	GS	2-21-62				A	20	S	E		Un	Tcc	1.0	2,920	131.15	
28E1	GS	2-21-62		1958	211	R	8	N	N		Un	Tc	.5	2,930	144.39	
			T. 9 N., R. 1 W.													
9/1- 3M1	GS	6-10-58	J. Hudson			D	84	J	¼		Dm	Bpb	16.0	2,060	28.52	C
3M2	GS	6-10-58	J. Hudson		18.9	C	8	N	N		Un	Tc	1.0	2,050	13.63	
3N1	GS	6-11-58	Enos Nelson		25	C	5	C	¼		Dm	Tc	3.0	2,045	8.01	C
3N2	GS	9-20-60	Enos Nelson	1948	92	D	36	C	E	810	I	Tcc	0	2,045	8.92	
	GS	6-11-58										Tcc	0		8.26	
3N3	GS	6-11-58				D		N	N		Ds			2,045		
	T-148	10-22-19	I. B. Howard									Ls	0		13	
3N4	GS	6-11-58	George McGinnis		48	C	9	C	½		Dm	Na		2,045	13	
3N5	GS	9-22-60	George McGinnis		19.2	C	8	N	N		Un	Tc	0	2,065	18.54	
	GS	6-11-58										Tc	0		12.53	
3P1	GS	9-22-60	Paul Pennington	1956	40	C	10	C	3		Dm	Tc	2.0	2,040	15.00	C
	GS	6-11-58										Tc	2.0		8.95	

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			T. 9 N., R. 1 W.--Continued										
9/1- 3P2	GS	6-10-58	Wardell			D	N N		Ds		2,040		
4B1	GS	9-22-60	Alma Haney		45	C	J 1		Dm	Bpb -3.5	2,065	15.38	
	GS	6-10-58								Bpb -3.5		11.72	
	M-90	5-30-30	L. P. Haney			7				Tc 1.3		5.2	Wp
4C1	GS	9-21-60	Polich Brothers	1946	90	DC 12	C E		I	Tc -12.3	2,065	15.29	C
	GS	6-10-58								Tc -12.3		12.67	
4C2	GS	9-22-60	Polich Brothers	1929	26.9	DC 8	N N		Un	Tc -8.7	2,065	15.38	
	GS	6-10-58								Tc -8.7		12.42	
4C3	GS	6-10-58	Polich Brothers	1953	100	DC 10	C 10	1200	I		2,065		C
4C4	GS	6-10-58	Polich Brothers	1953	28.5	DC 10	C N	495	Un	Tc 0	2,065	9.42	
4C5	GS	8-11-61	Polich Brothers				N N		Un	Na	2,065		
4G1	GS	6-10-58	V. Roos		115	DC 12	C 5		I	Tc -5.4	2,060	8.55	C
4G2	GS	6-10-58	V. Roos	1954	80	C 8	C 7		Dm		2,060		C
4G3	GS	1-26-62							Dm		2,060		C
4G4	GS	9-26-60	Saunders	1958					Dm	Na	2,060		

4J1	GS	9-22-60	T. N. Colbaugh	1948	81	C	12	C	G	I	Tc	0	2,060	18.0	C
	GS	6-12-58									Tc	0		9.55	
4J2	GS	6-12-58	T. N. Colbaugh	1946	24	D	8	N	N	Ds			2,060		
4J3	GS	6-12-58	R. L. Smith		50	C	10	C	G	S	Tc	0	2,060	12.52	
4J4	GS	9-22-60	George Blackwell	1953	63	D	10	J	1	Dm	Ls	0	2,060	17.0	
4J5	GS	9-22-60	A. E. Blackwell	1941	40	DC	10	J	1	Dm	Tc	-5.0	2,060	24.35	
	GS	6-10-58									Tc	-5.0		14.50	
4Z1	GS	6-10-58			0			N	N	Ds			2,065		
	M-89	5-30-30					8				Tc	-4.7		9.9	Wp
5J1	GS	6-11-58	John Sturnacle	1951	107	C	12	N	N	Un	Tc	1.7	2,080	29.17	C,L
5J2	GS	6-11-58	Southern Calif-ornia Water Co.	1952	208	C	8	T	10	Ps			2,080		C,L
5J3	GS	9-23-60	Southern Calif-	1955	222	C	8	S	E	Ps	Tap	1.7	2,060	11.86	C,L
	GS	6-11-58	ornia Water Co.					T	10		Tap	1.7		a26.42	
5J4	GS	6-11-58	John Sturnacle	1952	102		12	N	N	Un	Tc	3.6	2,065	8.45	C,L
5R1	GS	10- 5-60	W. W. Divine		82		12	T	E	Un	Tc	2.7	2,080	33.10	C
8A1	GS	6-11-58	Leak	1943	168	C	12	T	5	Dm	Na		2,120	140	C
8A2	GS	11-20-62	Jack Belsher	1954	145	C	10	S	E	Dm	Tcc	2.0	2,110	75.04	C,L
8A3	GS	6-11-58	F. J. Moore				10	T	5	Dm	Tc	.3	2,120	79.91	
	M-96	9-19-30	C. A. Leak							Dm	Tc	.5		93.1	Wp
	T-149	10-22-19	C. A. Leak		125	C	10				Ls	0		98	C

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			T. 9 N., R. 1 W.--Continued											
9/1- 8R1	GS T-150	10- 5-60 10-22-19	Miles Cook		0 154	C	N N		Ds	Tc	-	2,220	146.6	
9A1	GS	6-12-58	C. Redman	1946	18.3	C 8	N N		Un	Tc	0	2,045	8.48	C
9A2	GS	6-12-58	C. Redman	1953	92	C 12	J 1		Dm	Bpb	0	2,045	9.99	
9D1	GS	10-17-60	Thomas Evans	1951	76	10	J 1		Dm	Na		2,090		C
9D2	GS	10-17-60	Bruce Wilks	1952	129	C 12	T 15	450	I	Bpb	.5	2,090	53.16	C,L
9E1	GS	10- 5-60	P. K. Lyons		106	10	T 5		Dm	Na		2,100		C
9F1	GS	10- 5-60	Joyce Youngblood		117	C 8	J 2		Dm	Na		2,075	40	C
9F2	GS	10- 3-60	C. H. Middaugh	1957	106	10	N N		Ds			2,090	47	L
9F3	GS	10- 5-60	C. H. Middaugh	1947	150	10			Dm			2,100		C
9G1	GS	9-23-60	Price	1948	62	8	J 1		Un	Bpb	1.2	2,070	36.0	C
9G2	GS	10- 5-60	Stuart Slack			R	J E		Dm	Tc	.6	2,075	47.79	C
9G3	GS	10- 5-60	J. M. Buckner	1951	72	8	T 5		Dm			2,060		C
9G4	GS	10- 5-60	William Hill		52	8	S E		Dm	Na		2,080		C

9G5	GS	10- 5-60	C. Schell	1947	41		5	L	N	Un	Tc	1.0	2,070	dry	C
9H1	GS	9-23-60	D. A. Lipscomb	1958		D		C	E	I			2,045		C
9J1	GS	10- 3-60	L. H. Baker					S	E	Dm	Tc	1.0	2,075	46.08	
	GS	8-25-58						L	3/4		Tc	1.0		41.90	
9J2	GS	8-27-58	C. O. Witt	1947	63	C	10	L	½	Dm	Tc	0	2,075	40	
9J3	GS	10- 5-60	Ephraim Harris		70		10	J	1	Dm	Tc	-7.0	2,080	55.61	
	GS	8-27-58									Tc	-7.0		50.32	
9J4	GS	10- 6-60	Kim Roberts			C	8	J	1	Dm	Tc	1.0	2,080	64.42	
	GS	8-27-58									Tc	1.0		50.43	
9J5	GS	8-27-58	V. J. A'Day	1949	84	C	8	J	3	Dm	Na		2,080	49	
9J6	GS	10- 6-60	F. H. Canaday	1956	81	C	8	J	E	Dm			2,080	50	L
9L1	GS	10- 5-60	Harold Slack	1947	127	C	6	L	N	Un	Na		2,100		C
9R1	GS	8-25-58	Karl Miller			C	8	J	½	Dm	Tc	1.0	2,105	102.05	
10A1	GS	6-10-58	W. H. Wasserman			D		N	N	Ds					W
	M-92	5-30-30	Gibbs							I	Tc	-7.3	2,036.5	17.2	Wp
10A2	GS	9-21-60	F. Wasserman		30	DC	12	C	10	Un	Tc	-8.4	2,035	19.06	C
	M-92a	5-30-30					12				Tc	-4.6		14.8	Wp
10A3	GS	6-10-58	F. Wasserman			DC	12	C	N	Un	Tc	0	2,035	12.53	
10B1	GS	6-12-58	M. Hering	1949	85	DC		C	5	Dm	Ls	0	2,035	10	
10B2	GS	11-19-62	Arvilla Webster		83	DC	6	S	1	Dm	Tc	0	2,035	19.24	

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			T. 9 N., R. 1 W.--Continued											
9/1-10C1	GS	6-11-58	E. A. Hall		100	DC 12	C D		I	Tcc	0	2,035	9.62	
10C2	GS	6-11-58	E. A. Hall	1955	100	DC 12	C D		I	Tc	0	2,035	12.44	
10D1	GS	6-11-58			0		N N		Ds			2,045		
	M-91	5-30-30	R. Harlan			DC				Tc	1.4		a26.6	Wp
10D2	GS	6-11-58	Pyle & Tyndall	1944	132	C 10	T 15		I	Bhc	.84	2,045	10.09	C,W,Wp
10D3	GS	10-11-60	Consumers Oil Co.			5	S E		Dm	Na		2,045		
10E1	GS	10- 8-60	D. A. Lipscomb	1916	28	10	C 5		I			2,060	18	C
10G1	GS	7-16-58	Lee Tippett	1949	30	DC 10	J 1		Dm	Tc	-6.0	2,035	13.76	C
10G2	GS	6-11-58	J. R. Bishop	1937	100	DC 12	C 7½		I	Tc	2.0	2,040	11.84	
10G3	GS	6-11-58	J. R. Bishop	1955	111	C 12	T 10		I	Tap	1.0	2,040	11.98	L
10G4	GS	2-20-62	Lee Tippett	1961	70	C 8	J 1		Dm	Tc	1.0	2,035	33	L
10H1	GS	10- 5-60	James Ramsey		56	DC 10	C 5		Dm	Tcc	1.5	2,035	18.20	C
10H2	GS	10- 5-60	Ethel Davis	1948	60	8	L W		Un	Tcc	1.0	2,035	18.40	
	GS	6-11-58					J ½		Dm	Tcc	1.0		12.54	

10L1	GS	8-12-58			0	D	36	N	N		Ds			2,040			
	T-151	10-22-19				C	56				Ds	Ls	0		dry		
10M1	GS	8-25-58	Greystone Auto Court	1930	108	C	10	J	1	20	Dm	Bpb	.8	2,097.4	73.83	C,W	
	M-97	9-19-30	Greystone Auto Camp									Tcc	.8		58.6	Wp	
10M2	GS	3-25-58	Ralph Hagar	1929	88.3	C	8	N	N		Un	Tc	.8	2,098.1	78.97	C,W,Wp	
10Q1	GS	8-11-58	Holliday Rock & Gravel Co.		175	R	10	T	20	330	In	Bhc	1.0	2,075	59.18		
10Q2	GS	10- 7-60	R. M. Stapp		48	DC	8	J	2		Dm	Bpb	1.0	2,050	40.5	C	
	GS	8-12-58										Bpb	1.0		40.92		
10Q3	GS	8-12-58	Herman Hamm	1956		C	8	J	1½		Dm	Na		2,070			
10Q4	GS	8-12-58	S. Teplow		95	C	8	N	N		Un	Tc	1.0	2,070	54.63		
10Q5	GS	8-12-58	R. M. Stapp	1951	58	C	8	J	1½		Dm	Bpb	1.0	2,050	37.42	C	
10R1	GS	8-11-58	Walter White					T	3		Dm	Na		2,080			
11H1	GS	9-21-60			12	D	3	N	N		Un	Tc	.5	2,020	2.90		
11J1	GS	8- 2-62	California Electric Power Co.	1950	210	C	12				I			2,010	9	L	
11K1	GS	8- 2-62	California Electric Power Co.	1950	250		12							2,009			
11K2	GS	8- 2-62	California Electric Power Co.	1950	204		12				I	Tc	0	2,009.6	9	L	
11Z1	GS	9-22-60						N	N		Ds			2,040			
	M-93	5-30-30				D		N	N		Dm				8.7	Wp	

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (feet)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 9 N., R. 1 W.--Continued										
9/1-11Z2	GS	9-22-60					N N		Ds		2,020		
	M-94	5-30-30	Stone		17.0		L W		Ds	Tcc .5		dry	Wp
11Z3	GS	9-22-60					N N				2,020		
	T-144	10-27-19	B. E. Funk		100	C	N N						C
11Z4	GS	9-22-60					N N				2,020		
	T-145	10-27-19			9	D						8	
11Z5	GS	8- 7-61	U.S. Marine Corps						Ds		2,066		
	0	1942			74	C 12	L G	50					
12J1	GS	12-14-61			3.0	D 48	N N		Ds		2,020		
13B1	GS	9-23-60			43.9	DC 12	N N		Un	Tc -8.87		43.6	
	GS	8-12-58								Tc -8.87		26.78	
	F	11-22-48								Tc -8.87		25.57	
	M-100	1-20-30	F. Byerse			12	G			Tc -8.87	2,001.8	27.4	Wp
13E1	GS	10- 3-60	U.S. Marine Corps	1954	348	R 16	T 50		Ps	Tap .35	2,070.8	a74.5	C,L
	GS	7-29-58								Tap .35		64.93	
13E2	GS	10- 7-60	U.S. Marine Corps	1960	450	R 16	N N		Un	Tc 3.0	2,060	59.67	L
13H1	GS	8-12-58	D. Van Dyke	1948	90	18	T 50	1200	I	Na	1,990		C
	M-98	2-21-30				12				Tc -		12.0	Wp

13H2	GS	9-23-60	C. D. Davis	1954	185	C	8	T	5		Dm	Tc	.5	2,000	57.39	C,L
	GS	8-12-58										Tc	.5		33.80	
13M1	GS	8-11-58	A. J. Johnston	1955				T	30		In	Na		2,100		
13M2	GS	10-18-60	Barstow Rock & Gravel	1930			12	S	E		Dm	Tcc	1.0	2,100	117.53	
13Z1	GS	10-18-60			0			N	N		Ds					
	M-99	2-27-30	Mamantain			DC					Un	Tc	0	1,993.0	22.8	Wp
14A1	GS	7-29-58	U.S. Marine Corps	1942	0		12	N	N		Ds			2,060		C,L,W
14A2	GS	7-29-58	U.S. Marine Corps	1958	407	R	12	T	30	1500	Ps	Tap	1.0	2,058.2	64.45	C,L
14B1	GS	7-29-58	U.S. Marine Corps	1942	192	C	16	T	30	1107	Ps	Hpb	1.0	2,064.3	56.55	C,L,W
14B2	GS	10- 7-60	U.S. Marine Corps	1947	280	C	16			420	Un	Hpb	1.0	2,068.3	67.90	C,L,W
15A1	GS	8-11-58	Mojave Rock Materials Co.	1951	132	C	12	T	15	330	In	Na		2,100	77	C,L

T. 10 N., R. 1 W.

10/1-32A4	GS	12-14-61	Reed Texaco Station	1952	85	C		J	1½		Dm			2,100	42	
32A5	GS	12-14-61	John Ford	1961	80		8	J	1		Dm			2,090	30	
32A6	GS	12-14-61	Gordon Wood			C		J	1		Dm			2,110		
32J1	GS	8-31-61	Steen		57	C	8	C	1		S	Tc	-7.0	2,080	17.25	C
32J2	GS	12-14-61	Steen	1951	150	C	12	N	N		Un	Tc	0	2,080	17.45	C,L

See footnotes at end of table.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (feet)	Well data: Type, diameter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 10 N., R. 1 W.--Continued										
10/1-32Z1	GS T-146	12-14-61 1919	G. C. Compton						Ds		2,075	22	
32Z2	GS T-147	12-14-61 1919	G. C. Compton		14				Ds		2,075		
33D1	GS M-88	11-14-62 5-30-30	C. M. Whitney Sandoz		0		N L N W		Ds Un	Tf 1.6	2,095	28.7	Wp
33D2	GS	8-31-61	C. M. Whitney		87	R 6	T 5		Dm	Tc 1.0	2,120	31.00	
33E1	GS	8-31-61	C. B. Taylor	1956			C 1		Dm		2,080	17	C
33E2	GS	8-31-61	Charles Maykew	1955	28.3	C 8	C 1		Dm	Tc 1.5	2,080	17.35	C
33E3	GS	8-31-61	H. Vice		150		E		Un	Tc 1.0	2,080		
33E4	GS	8-31-61	S. Hodge	1948	74		C 5		I	Na	2,085	10	
33E5	GS	8-31-61	D. V. Jackson	1954	30	C 6	C 1	20	Dm	Tc -6.3	2,080	18.50	
33F1	GS	8-30-61	Harold Thomas	1961	80	R 8	S 3/4		Dm	Na	2,100	37	L
33F2	GS	12-14-61	Myron Myers	1951	187	DC 10	S ½		Dm		2,100	35	

33F3	GS	12-14-61	J. A. Peterson	1952	130	R	10	J	3		Dm	Tc	1.0	2,100	25.56	L
33F4	GS	2-20-62	C. T. Williams	1961	50	C	8	J	½		Dm	Na		2,100	24	L
33F5	GS	12-14-61	C. T. Williams	1945	100	C	8	J	E		Dm	Na		2,090		
33J1	GS	12-15-61	Southern California Water Co.				12	N	N		Un	Tcc	.6	2,130	60.31	
33K1	GS	12-14-61	Reed Texaco Station	1953	102	C	10	J	1½		Dm	Na		2,100	33	L
33K2	GS	12-14-61	W. D. Means	1957	86		8	L	W		Dm			2,095	40	
33K3	GS	12-14-61	Gerald Ross	1959	65		8	J	1		Dm	Na		2,100		
33K4	GS	12-14-61	Clara Low Culp		84		8	J	1		Dm	Na		2,100		
33K5	GS	12-14-61	R. Schlegel		65	C	8	J	1		Dm	Tcc	2.6	2,100	38.6	
33L1	GS	11-15-62	C. D. Means	1958	80		8	J	2		Dm	Tcc	.4	2,085	38.20	
33L2	GS	11-15-62	C. B. Taylor	1958	100		8	J	1		Dm	Tc	.45	2,085	41.99	
33M1	GS	11-15-62	C. B. Taylor		165		12	J	1	800	Dm	Tf	-7.0	2,080	19.76	
33P1	GS	12-14-61	C. Holmes				8	L	W		Dm	Tc	1.0	2,080	31.57	
33P2	GS	12-15-61	C. C. Cooley	1952	94	C	10				Un			2,070	10	C,L
33Q1	GS	11-15-62	F. L. Cunningham	1957	102	C	8	S	½		Dm	Tcc	1.35	2,085	40.59	L
33Q2	GS	11-15-62	F. L. Cunningham	1961	107	R	8	S	1		Dm	Tcc	-6.95	2,085	40.12	
	GS	12-14-61						N	N		Un	Tc	1.5		37.88	L

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (feet)	Well data: Type, diameter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Well data: Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 11 N., R. 1 W.										
11/1-35M1	GS	8-11-61			2.0	C	N	N	Ds		2,670		
	T-1	1919	Abandoned oil well	2000						Ls 0		280	

a. Well being pumped.

b. Well pumped recently.

c. Nearby well being pumped.

d. Well being drilled.

e. Oil-test well reportedly drilled to 3,370 ft.

f. Oil-test well reportedly drilled to 2,510 ft.

g. Oil-test well reportedly drilled to 3,497 ft.

h. Oil-test well reportedly drilled to 5,234 ft and reached bedrock.

i. See Thompson, 1929, p. 526.

APPENDIX B

TABLE 2. CROSS INDEX OF WELL NUMBERS

3. REFERENCES THAT CONTAIN WATER-LEVEL MEASUREMENTS IN WELLS IN THE LOWER MOJAVE VALLEY AREA, CALIFORNIA

4. WELLS FOR WHICH PERIODIC WATER-LEVEL RECORDS ARE AVAILABLE

5. RECORDS OF WATER LEVEL IN WELLS

Table 2.--Cross index of well numbers

Part 1 lists the well numbers used by Thompson (1929, p. 464-471, 526, pl. 24, 28) and the well numbers used for those wells in this report.

Part 2 lists L- and M-numbers and the well numbers used for those wells in this report. The L- and M-numbers were published in the "Mojave River Investigation" (California Department of Public Works, Division of Water Resources, 1934, p. 202-248). These numbers were assigned by all agencies doing ground-water work in the lower Mojave River area prior to July 1, 1943, when the Geological Survey numbering system was adopted (U.S. Geological Survey, 1945, p. 126-130).

Part 1

T number	USGS number	T number	USGS number	T number	USGS number
1	11N/1W-35M1	19	10N/3E-11J1	37	9N/1E- 1L3
2	10N/1E-28Z2	20	10N/3E-12F1	38	9N/1E-12D1
3	10N/1E-28Z1	21	10N/3E-22M1	39	9N/1E-11B1
4	10N/1E-35P4	22	10N/3E-27L1	40	9N/1E-10Z1
5	10N/1E-35P5	23	10N/3E-33Z1	41	9N/1E-10Z2
6	10N/2E-32N1	24	10N/3E-34E1	42	9N/1E-18P1
7	10N/2E-32P1	25	10N/3E-35Z1	43	9N/1E-18Z1
8	10N/2E-32P2	26	10N/3E-35H1	44	9N/1E-18L1
9	10N/2E-32Q1	27	10N/4E-30M1	45	9N/1E-16Z1
10	10N/2E-26Z1	28	10N/4E-30Z1	46	9N/1E-21C1
11	10N/2E-26Z2	29	10N/4E- 6F1	46	11N/6E-18Z1[1/]
12	10N/3E-22D1	30	10N/4E- 6J1	47	9N/1E-22D1
13	10N/3E-15N1	31	10N/4E- 6R1	48	9N/1E-24H1
14	10N/3E-15Z1	32	10N/4E- 8D1	49	9N/2E- 6N1
15	10N/3E-15K1	33	10N/4E- 8B1	50	9N/2E- 4D1
16	10N/3E-22B1	34	9N/1E- 4Z1	51	9N/2E- 4Z1
17	10N/3E-23E1	35	9N/1E- 3E1	52	9N/2E- 3Z2
18	10N/3E-14B2	36	9N/1E- 1L2	53	9N/2E- 3Z1

See footnotes at end of table.

T number	USGS number	T number	USGS number	T number	USGS number
54	9N/2E- 3K1	93	9N/3E- 2N2	136	8N/4E- 7A1
55	9N/2E- 3G2	93A	9N/3E- 2N3	137	8N/4E- 7N1
55A	9N/2E- 3A1	94	9N/3E-10D2	138	8N/4E- 7Z1
56	9N/2E- 2Z1	95	9N/3E-11E1	139	8N/4E-18E1
57	9N/2E- 7Z1	96	9N/3E-10N1	140	8N/4E-18G1
58	9N/2E-18G1	97	9N/3E-10Z1	141	8N/5E- 8Z1
59	9N/2E-19E2	98	9N/3E-10Q2	142	10N/2E-34L1
60	9N/2E-20M1	99	9N/3E-11Q2	143	10N/3E-32Z1
61	9N/2E-20M2	100	9N/3E-12Z1	144	9N/1W-11Z3
62	9N/2E-20G2	101	9N/3E-15C3	145	9N/1W-11Z4
63	9N/2E- 8N1	102	9N/3E-14Z1	146	10N/1W-32Z1
64	9N/2E- 8K1	103	9N/3E-15M2	147	10N/1W-32Z2
64A	9N/2E- 8J1	104	9N/3E-15N1	148	9N/1W- 3N3
65	9N/2E-10N1	105	9N/3E-22Z1	149	9N/1W- 8A3
66	9N/2E-15Z1	106	9N/3E-27Z2	150	9N/1W- 8R1
67	9N/2E-22Z1	107	9N/3E-26D1	151	9N/1W-10L1
68	9N/2E-22N1	108	9N/3E-28R1		
69	9N/2E-27D1	109	9N/3E-27Z1		
70	9N/2E-28K1	110	9N/3E-26L1		
71	9N/2E-27Z1	111	9N/3E-34D1		
72	9N/2E-14N3	112	9N/3E-35B1		
73	9N/2E-14N1	113	9N/3E-35Z1		
74	9N/2E-14Q1	114	9N/3E-35Z2		
75	9N/2E-26D1	115	10N/3E-34N1		
76	9N/2E-26Z1	116	9N/3E-34Q3		
77	9N/2E-23R1	117	8N/3E- 3E2		
78	9N/2E-11H1	118	9N/3E-24D1		
79	9N/2E-12N1	119	9N/4E- 6Z2		
79A	9N/2E-12Z1	120	9N/4E- 6Z1		
80	9N/3E- 7N1	121	9N/4E- 7Z1		
81	9N/3E-18D1	122	9N/4E- 8Z1		
82	9N/3E-19Z1	123	9N/4E- 8G2		
83	9N/3E-19E1	124	9N/4E- 8K1		
84	9N/3E-20D2	125	9N/4E- 8E2		
85	9N/3E-19P1	126	9N/4E- 7Z2		
86	9N/3E-20M1	127	9N/4E-18C1		
87	9N/3E-30J1	128	9N/4E-18E2		
88	9N/3E-32Z1	129	9N/4E-20D1		
89	9N/3E-33E1	130	8N/3E-12D2		
90	9N/3E- 3D1	131	8N/3E- 1Q1		
91	9N/3E- 3N1	132	8N/4E- 6Z1		
92	9N/3E- 3R1	133	8N/4E- 6H1		
		134	8N/4E- 5Z1		
		135	8N/4E- 7E1		

L number	USGS number	L number	USGS number	L number	USGS number
1	9N/1E-18E1	30	8N/4E- 6M1	69	9N/2E-14Q1
2	9N/1E-18P1	30a	8N/4E- 6Q2	70	9N/2E-11H1
3	9N/1E-18L1	31	9N/4E-31K1	70a	9N/2E-11G1
4	9N/1E-16Z1	32	8N/4E- 4N1	71	9N/2E-11C2
5	9N/1E-21C1	34	8N/4E-10N1	72	9N/3E- 7N1
6	9N/1E-22D1	35	8N/4E-10R1	73	9N/3E-28A2
7	9N/1E-16Z2	36	8N/4E-11P1	74	9N/3E-15N1
8	9N/1E-24D1	36a	8N/4E-14C1	75	9N/3E-10N1
9	9N/1E-24H1	37	8N/4E-12L1	76	9N/3E-10D1
9a	9N/1E-24Z1	42	9N/1E-15L1	76a	9N/3E-10D2
10	9N/2E-20M2	43	9N/1E-13E1	77	9N/3E- 3D1
10a	9N/2E-20M1	43a	9N/1E-13E2	78	10N/3E-34E1
11	9N/2E-28K1	45	9N/1E- 3E1	78a	10N/3E-33Z2
12	9N/2E-27D1	47	9N/1E-12D1	79	9N/3E- 4E1
13	9N/2E-27Z1	48	10N/2E-31N1	80	9N/3E-10Q2
14	9N/2E-26D1	49	10N/2E-32P1	81	9N/3E-14Z1
15	9N/2E-24K2	50	9N/2E- 4D1	82	9N/4E-18C1
15a	9N/2E-24K1	51	9N/2E- 3A1	82a	9N/4E- 7Z2
16	9N/3E-19P1	51a	9N/2E- 3A2	83	9N/4E-18E2
16a	9N/3E-19E1	52	9N/2E- 3K1	83a	9N/4E-18E1
17	9N/3E-30J1	53	9N/2E- 2N1	84	9N/4E- 8G2
18	9N/3E-32A1	54	10N/2E-34L1	85	9N/4E- 8K1
18a	9N/3E-32Z2	56	10N/3E-15N1	87	10N/3E-35M2
19	9N/3E-34D1	58	10N/3E- 4F1	88	10N/3E-35H1
20	8N/3E- 4B4	59	11N/3E-32C1	89	10N/4E-30Z1
21	8N/3E- 4B1	60	11N/3E-30J1	90	10N/4E-32Z1
22	8N/3E- 4B2	62	9N/2E- 7Z1	91	10N/4E-30M1
23	8N/3E- 3E1	63	9N/2E-18F1	92	9N/4E- 6N1
24	8N/3E- 3F1	64	9N/2E- 8J1	93	9N/3E-12G1
25	8N/3E- 2P1	65	9N/2E-10N1	94	10N/3E-11J1
26	8N/3E- 2C3	66	9N/2E-12Z1	95	10N/3E-12F1
27	8N/3E-12D2	67	9N/2E-12N1	96	10N/4E- 6J1
28	8N/4E- 7N1	68	9N/2E-14N1	97	10N/3E-22D1
28a	8N/4E- 7E1	68a	9N/2E-14N2	99	10N/3E-27Q2
29	8N/4E-18F3	68b	9N/2E-14N4	100	10N/4E-19N1
29a	8N/4E-18E1	68c	9N/2E-14N3	100a	10N/3E-25A1

M number	USGS number	M number	USGS number	M number	USGS number
88	10N/1W-33D1	92a	9N/1W-10A2	98	9N/1W-13H1
89	9N/1W- 4Z1	93	9N/1W-11Z1	99	9N/1W-13Z1
90	9N/1W- 4B1	94	9N/1W-11Z2	100	9N/1W-13B1
91	9N/1W-10D1	96	9N/1W- 8A3		
92	9N/1W-10A1	97	9N/1W-10M1		

1. The area boundary used in this report is not the same as that used in Thompson (1909, pl. 24) but includes Afton, which is part of his Cave Canyon area. Thompson numbered wells in each of his areas serially, beginning with No. 1, and the Afton well is listed as No. 46 in his Silver Lake, Soda Lake, Crucero, and Cronise Valleys (p. 526, pl. 28).

Table 3.--References that contain water-level measurements in wells in the lower Mojave Valley area, California

U.S. Geological Survey Water-Supply Papers [1/]

Years for which measurements are available	Water-Supply Paper No.	Year of publication
1904, 1917, 1919	578	1929, p. 464-490, 512, 526
1917-39	886	1940, p. 42-51
1940	911	1941, p. 128-130
1941	941	1943, p. 98-99
1942	949	1944, p. 68-70
1943	991	1945, p. 126-130
1944	1021	1947, p. 110-113
1945	1028	1949, p. 133-136
1946	1076	1949, p. 149-152
1947	1101	1951, p. 120-124
1948	1131	1951, p. 110-113
1949	1161	1952, p. 110-112
1950	1170	1953, p. 70-71
1951	1196	1954, p. 66-67
1952	1226	1955, p. 77-78
1953	1270	1956, p. 77-79
1954	1326	1957, p. 78-79
1955	1409	1957, p. 88-90
1955	1460-F	1959, p. 257

Publications of other agencies

Years for which measurements are available	Reference [1/]	Year of publication
1917-34	California Department of Public Works	1934, p. 202-248
1946-50	San Bernardino County Flood Control District	1951, p. 175-176
1950-52	San Bernardino County Flood Control District	1954, p. 134, 139-140
1952-54	San Bernardino County Flood Control District	1958, p. 161-163,167-169
1954-58	San Bernardino County Flood Control District	1960, p. 194-200,209-213

See footnote at end of table.

Years for which measurements are available	Reference 1/	Year of publication
1956-57	California Department of Water Resources	1958, p. E17-E22
1957-58	California Department of Water Resources	1960, p. E7-E9
1958-59	California Department of Water Resources	1961, p. C6-C8
1959-60	California Department of Water Resources	1961, p. C5-C8

1. For complete titles, see references.

Table 4.--Wells for which periodic water-level records are available

(listing numbers used by other agencies)

USGS number	DWR number [1]	F number [2]	L or M number [3]	T number [4]	Years of record available [5]
8N/3E- 1Q1				131	1919
2C3			L-26		1930-32
2P1			L-25		1922, 1930-32
3E1			L-23		1930-32, 1935-60
3E2				117	1919
3F1			L-24		1930-32, 1935-54, 1960
4B1			L-21		1930-32, 1935-58
4B2			L-22		1922, 1930-32, 1935-36, 1938-41, 1943-51, 1953-58
4B3		L-22a			1947-61
4B4			L-20		1930-33, 1947-57
12D2			L-27	130	1919, 1930-32
12J1					1956
8N/4E- 4N1			L-32		1930-32, 1935-43
5Z1				134	1919
6E1					1956
6H1				133	1919
6M1			L-30		1930-32, 1959
6Q2			L-30a		1930-32
6Z1				132	1919
7A1				136	1919
7E1			L-28a	135	1919, 1922, 1930-32, 1938-48, 1950, 1952-53, 1956-60
7N1			L-28	137	1930-32, 1935-43
7Z1				138	1919
10N1			L-34		1930, 1932
10R1			L-35		1930, 1947-50, 1953-55
11P1			L-36		1922, 1930, 1932
12L1	12N1	12N1	L-37		1930, 1932, 1935-60
14C1			L-36a		1930, 1932, 1962
18E1			L-29a	139	1919, 1930-32
18F1					1959-61
18F3			L-29		1930
18G1				140	1919
18R1					1960-61
8N/5E- 8Z1				141	1919

See footnotes at end of table.

USGS number	DWR number[1]	F number[2]	L or M number[3]	T number[4]	Years of record available[5]
9N/1E- 1L2				36	1919
1L3				37	1919
2E1					1945
3E1			L-45	35	1919, 1930, 1932, 1934
3H1		L-45a			1946-62
4Z1				34	1919
9D1					1957-58
10Z1				40	1919
10Z2				41	1919
11B1				39	1919
12D1			L-47	38	1919, 1930, 1932, 1934-35, 1937-45, 1947-62
13E1			L-43		1925-58, 1930-60
13E2			L-43a		1925-27, 1930-33, 1935-61
15L1			L-42		1925-28, 1930-32, 1934-47
16Z1			L-4	45	1917-20, 1927, 1930
16Z2			L-7		1930-31
18E1			L-1		1925-28, 1930-32, 1934-55, 1962
18L1			L-3	44	1919, 1924-25, 1927-28, 1930-31, 1947-49, 1952-53
18P1			L-2	42	1919-20, 1924
18Z1				43	1917, 1919
21C1			L-5	46	1919, 1920, 1922, 1927, 1930-31, 1947-61
22D1			L-6	47	1919, 1922, 1925, 1930-31, 1960
24D1			L-8		1930, 1932-52, 1960
24H1			L-9	48	1919-20, 1922, 1924-25, 1930
24Z1			L-9a		1930-31
9N/2E- 2N1			L-53		1925-28, 1930-34, 1960
2Z1				56	1919
3A1			L-51	55A	1919, 1922, 1930-35, 1937-52
3A2			L-51a		1931-35, 1937-60
3G2				55	1919
3K1			L-52	54	1919, 1930-33, 1946-60
3Z1				53	1919-20
3Z2				52	1919
4D1			L-50	50	1919, 1930-32, 1934-35, 1937-60

See footnotes at end of table.

USGS number	DWR number[1]	F number[2]	L or M number[3]	T number[4]	Years of record available[5]
9N/2E- 4Z1				51	1919-20
6D1					1950-53, 1955, 1957-62
6N1				49	1919
7Z1			L-62	57	1919-20, 1925-26, 1928, 1930, 1932
8J1			L-64	64A	1919, 1925, 1928, 1930-33, 1935-53, 1960
8K1				64	1919
8N1				63	1919
10N1			L-65	65	1919, 1930-31, 1955-60
11C2			L-71		1922, 1924-25, 1927-28, 1930-32, 1960
11G1			L-70a		1930
11H1			L-70	78	1919, 1922, 1925, 1927, 1930-32, 1960
12N1			L-67	79	1919, 1924-27, 1930-35, 1937-53, 1960
12Z1			L-66	79A	1919, 1922, 1924, 1930-35, 1937-38
14N1			L-68	73	1919, 1922, 1930, 1932-33, 1935, 1938-48, 1956
14N2			L-68a		1925, 1927-28, 1931-35, 1937-58, 1960-61
14N3			L-68c	72	1924-28, 1930-33, 1935, 1937-61
14N4			L-68b		1930, 1961
14Q1			L-69	74	1919, 1922, 1930-32
15Z1				66	1919
18F1	18P1		L-63		1924-28, 1930-60
18G1				58	1919-20
19E2				59	1919
20G2				62	1919
20M1			L-10a	60	1919, 1931-32, 1934-43
20M2			L-10	61	1919, 1925-28, 1930-32, 1934-41
20Q1		L-10b			1932, 1941-49, 1952-61
22N1				68	1919
22Z1				67	1919
23R1				77	1919
24K1			L-15a		1930-32
24K2			L-15		1930-32
26D1			L-14	75	1919, 1930-31, 1962
26E2					1948-58
26Z1				76	1919

See footnotes at end of table.

USGS number	DWR number [1]	F number [2]	L or M number [3]	T number [4]	Years of record available [5]
9N/2E-27D1			L-12	69	1922, 1930-32, 1961
27Z1			L-13	71	1917, 1919, 1922, 1926, 1929-30, 1932, 1935-40
28K1			L-11	70	1919, 1930-32, 1961
9N/3E- 2N2				93	1919
2N3				93a	1919
3D1			L-77	90	1919, 1926, 1930-35, 1937-55, 1959
3D2					1956-60
3N1				91	1919, 1960
3R1				92	1919, 1959
4E1			L-79		1925-26, 1930-32, 1959
7N1			L-72	80	1919, 1922, 1925, 1930-34, 1959
10D1			L-76		1922, 1930-35, 1937-49, 1952, 1954-55, 1961
10D2			L-76a	94	1919, 1930-33
10N1			L-75	96	1919, 1922, 1930-31, 1960
10Q2			L-80	98	1919, 1930-32, 1960
10Z1				97	1919
11E1				95	1919
11Q2				99	1919
12G1			L-93		1922, 1930-33, 1935, 1937-60
12Z1				100	1919
14Z1			L-81	102	1919, 1930-32
15C3				101	1919
15M1					1952-60
15M2				103	1919
15N1			L-74	104	1917, 1930-32, 1946-49, 1959
18D1				81	1919
19E1			L-16a	83	1919, 1922, 1930-32, 1935, 1938-48, 1950-60
19P1			L-16	85	1919, 1922, 1930-35, 1938-48, 1951-60
19Z1				82	1919
20D2				84	1919
20M1				86	1919
22Z1				105	1917, 1919
24D1				118	1919, 1960

See footnotes at end of table.

USGS number	DWR number[1]	F number[2]	L or M number[3]	T number[4]	Years of record available[5]
9N/3E-26D1				107	1919, 1959
26L1				110	1919, 1959
27Z1				109	1919
27Z2				106	1917
28A2			L-73		1930-32, 1959
28R1				108	1917, 1959
29A1					1951-60
29G1					1952-54, 1957-60
30J1			L-17	87	1919, 1922, 1930-32, 1961
32A1			L-18		1922, 1930, 1932, 1947-48, 1950-56, 1961
32K1					1953-55, 1957-61
32Z1				88	1917-19
32Z2			L-18a		1930-33
33E1				89	1919, 1961
34D1			L-19	111	1919, 1922, 1930-32, 1934-59
34Q1					1954, 1956, 1960
34Q3				116	1919, 1960
35B1				112	1919, 1959
35Z1				113	1919
35Z2				114	1919
9N/4E- 6N1			L-92		1930-32, 1959
6Z1				120	1919
6Z2				119	1919
7Z1				121	1919
7Z2			L-82a	126	1919, 1930, 1932
8E2				125	1919, 1959
8G2			L-84	123	1919, 1930-33, 1959
8K1			L-85	124	1919, 1930-32, 1959
8Z1				122	1919
18C1			L-82	127	1919, 1930-32
18E1			L-83a		1930-32, 1959
18E2			L-83	128	1919, 1922, 1930-32, 1935, 1937-41, 1959
20D1				129	1919, 1959
20L1					1952-59
31K1			L-31		1930-32, 1935-60
10N/1E-28Z1				3	1919
28Z2				2	1919
35P4				4	1919, 1961
35P5				5	1917, 1919, 1961

See footnotes at end of table.

USGS number	DWR number[1]	F number[2]	L or M number[3]	T number[4]	Years of record available[5]
10N/2E-26Z1				10	1918-19
26Z2				11	1919
31N1			L-48		1930, 1959
32N1				6	1919
32P1			L-49	7	1919-20, 1922, 1924, 1929-60
32P2				8	1919
32Q1				9	1919-20, 1959
34L1			L-54	142	1919, 1922, 1930-32, 1934-35, 1937-50, 1956-58, 1960
10N/3E- 4F1			L-58		1930, 1932, 1934, 1959
11J1			L-94	19	1919, 1922, 1930, 1959
12F1			L-95	20	1919, 1922, 1930
14B2				18	1919, 1959
15K1				15	1919, 1959
15N1			L-56	13	1919, 1930, 1932, 1959
15Z1				14	1919
22B1				16	1919, 1959
22D1			L-97	12	1919, 1922, 1930, 1933-35, 1938-40, 1950, 1952-60
22M1				21	1919, 1959
23E1				17	1919, 1959
25A1			L-100a		1933, 1959
27L1				22	1919, 1959
27Q2			L-99		1930, 1932, 1959
32Z1				143	1919
33Z1				23	1919
33Z2			L-78a		1930, 1932
34E1			L-78	24	1919, 1930-35, 1937-47, 1960
34E2					1947-59
34E3					1956-60
34N1				115	1919, 1959
35H1			L-88	26	1919, 1922, 1930-32, 1959
35M2			L-87		1922, 1930-32, 1959
35Z1				25	1919
10N/4E- 5M1					1950, 1953-56
6F1				29	1919, 1959
6J1			L-96	30	1919, 1930, 1932, 1934, 1959

See footnotes at end of table.

USGS number	DWR number[1]	F number[2]	L or M number[3]	T number[4]	Years of record available[5]
10N/4E- 6R1				31	1919, 1959
8B1				33	1919, 1959
8D1				32	1919, 1959
19N1			L-100		1930-33, 1959
30M1			L-91	27	1919, 1930, 1932, 1959
30Z1			L-89	28	1919, 1922, 1930, 1932
32Z1			L-90		1930, 1932
11N/2E- 8K1					1954-60
22N1					1917-18, 1954-60
11N/3E- 8N1					1941, 1954-60
20R1	11R1	11R1			1954, 1956, 1958-60
30J1			L-60		1930, 1932, 1941, 1954, 1959
32C1			L-59		1930, 1932, 1934, 1960
11N/5E-16J1	15G1	15G1			1950, 1954-60
11N/6E-18Z1				46[6]	1919
12N/2E-28D1					1954-60
31A1					1955-60
32C1					1918, 1941, 1951, 1954-59
9N/1W- 3N3				148	1919
4B1			M-90		1927-28, 1930-31, 1958, 1960
4Z1			M-89		1930-31
8A3			M-96	149	1919, 1922, 1930-32, 1934, 1958
8R1				150	1919
10A1			M-92		1925, 1927-28, 1930-32, 1935, 1937-48
10A2			M-92a		1928, 1930-32, 1960
10D1			M-91		1924-25, 1927-28, 1930-32, 1935, 1937-46
10D2		M-91a			1945-59
10L1				151	1919
10M1			M-97		1930, 1932, 1935, 1938-58
10M2		M-97a			1946-60
11Z1			M-93		1930-31
11Z2			M-94		1925, 1927, 1930
11Z3				144	1919

See footnotes at end of table.

USGS number	DWR number[1]	F number[2]	L or M number[3]	T number[4]	Years of record available[5]
9N/1W-11Z4				145	1919
13B1			M-100		1925-28, 1930-32, 1935, 1938-60
13H1			M-98		1930-32, 1958
13Z1			M-99		1925, 1927-28, 1930-31
14A1					1943, 1946-47, 1949-51
14B1					1943, 1946-47, 1949-51, 1958
14B2					1947, 1949-51, 1958, 1960
10N/1W-32Z1				146	1919
32Z2				147	1919
33D1			M-88		1930-32, 1935, 1937-46
11N/1W-35M1				1	1919

1. California Department of Water Resources numbers.
2. San Bernardino County Flood Control District numbers.
3. California Department of Public Works, Division of Water Resources (1934) numbers.
4. Numbers used by Thompson (1929, pl. 24).
5. See table 3 for references to published water-level measurements; see table 1 or table 5 for unpublished water-level measurements.
6. See Thompson, 1929, p. 526.

Table 5.--Records of water level in wells

Table 5 includes unpublished records for wells having more than five water-level measurements; wells having five measurements or less are shown in table 1. Also included in this table are the complete published and unpublished records for wells 8N/4E-7E1, 8N/4E-12L1, 9N/1E-3H1, 9N/1E-13E2, 9N/2E-20Q1, 9N/3E-3D2, 9N/3E-29A1, 9N/4E-31K1, 10N/3E-22D1, 11N/3E-20R1, and 11N/5E-16J1, which have been selected as representative to show the range of water-level fluctuations in different parts of the area throughout the entire period of record.

The numbers in parentheses following the Geological Survey number were the numbers assigned to that well by other agencies and appear in publications listed in table 3. T Thompson, Water-Supply Paper 578; L or M California Department of Public Works or San Bernardino County Flood Control District; DWR California Department of Water Resources.

Altitudes given are in feet above mean sea level for the land-surface datum at the well. Land-surface datum is a plane of reference which approximates land surface. Altitudes given in whole feet were interpolated from topographic maps. Altitudes given in feet and tenths were determined by spirit leveling by C. F. Hostrup and Associates, Southern California Gas Co., U.S. Bureau of Reclamation, or the California Department of Public Works, Division of Water Resources (1934, p. 202-237).

Water-level measurements were made by the following agencies: BR U.S. Bureau of Reclamation, F San Bernardino County Flood Control District, GS U.S. Geological Survey.

All measurements of water level have been adjusted to depth below land-surface datum. That is, the distances of the measuring points above or below land-surface datum have been subtracted from or added to the measured water levels.

8N/3E-3E1 (L-23). Owner formerly C. W. Beaverstock. Altitude 1,819.6 ft. Records furnished by BR and F.

Date	Water level	Date	Water level	Date	Water level
July 22, 1946	7.8	Dec. 10, 1948	6.3	May 10, 1951	5.93
Aug. 27	7.5	Feb. 18, 1949	5.3	June 15	6.6
Sept. 17	7.6	Mar. 17	5.3	July 19	7.9
Oct. 14	7.8	Apr. 15	5.0	Aug. 16	8.11
Nov. 12	7.1	May 17	5.25	Sept. 14	8.14
Dec. 4	6.8	June 17	6.0	Oct. 17	8.00
Jan. 1, 1947	6.3	July 15	6.7	Dec. 14	7.23
Feb. 5	5.8	Aug. 19	7.6	Jan. 23, 1952	6.46
Mar. 4	5.7	Sept. 16	7.9	Feb. 15	6.00
Apr. 10	5.2	Oct. 20	7.8	Mar. 14	5.39
May 16	5.6	Nov. 18	7.4	Apr. 11	5.62
June 10	6.2	Dec. 15	8.0	June 18	6.91
July 9	6.8	Jan. 25, 1950	6.7	July 17	7.42
Aug. 8	7.3	Feb. 16	6.3	Sept. 19	8.59
Sept. 8	7.5	Mar. 16	5.9	Oct. 17	8.12
Oct. 10	7.9	Apr. 20	5.6	Dec. 17	8.00
Nov. 18	7.0	May 2	5.67	Jan. 23, 1953	7.80
Dec. 10	6.7	June 16	6.7	Feb. 18	6.73
Feb. 18, 1948	5.6	July 13	7.1	Mar. 19	6.12
Mar. 12	5.5	Aug. 16	7.7	Apr. 17	6.13
Apr. 16	5.3	Sept. 15	8.0	Nov. 16	8.18
June 15	6.3	Oct. 18	8.8	May 18, 1954	7.00
July 14	6.7	Dec. 14	7.1	Nov. 23	7.80
Aug. 11	7.2	Jan. 17, 1951	6.7	Apr. 15, 1955	6.63
Sept. 15	7.8	Feb. 15	6.3	Dec. 14	7.90
Oct. 14	7.6	Mar. 21	5.9	Apr. 17, 1956	6.75
Nov. 23	6.7	Apr. 19	5.71	Jan. 13, 1960	dry

8N/3E-4B3 (L-22a). Porter McCollogh, formerly Lyle Graham. Altitude 1,819.6 ft. Records furnished by BR and F.

Date	Water level	Date	Water level	Date	Water level
Jan. 9, 1947	4.14	May 17, 1949	4.35	Nov. 29, 1951	5.54
May 22	4.78	Nov. 18	5.36	June 4, 1952	6.12
Nov. 18	5.05	May 2, 1950	4.28	Nov. 21	6.35
May 19, 1948	4.67	Nov. 10	6.30	Aug. 10, 1961	10.16
Nov. 23	4.89	May 19, 1951	5.09		

8N/3E-4B4 (L-20). Porter McCollogh, formerly Lyle Graham. Altitude about 1,819 ft. Records furnished by F.

Jan. 9, 1947	flowing	Nov. 10, 1950	flowing	Nov. 23, 1954	flowing
Nov. 18	flowing	May 10, 1951	flowing	Apr. 15, 1955	flowing
May 19, 1948	flowing	Nov. 29	flowing	Dec. 14	not flowing
Nov. 23	flowing	June 4, 1952	flowing	Apr. 17, 1956	not flowing
May 17, 1949	flowing	Nov. 21	flowing	Dec. 26	flowing
Nov. 18	flowing	May 20, 1953	flowing	May 3, 1957	flowing
May 2, 1950	flowing	Nov. 16	flowing		
		May 18, 1954	flowing		

8N/4E-7E1 (T-135, L-28a). KEY WELL. Lawrence Bodine, formerly G. C. Schafer. Altitude 1,803.0 ft. Records furnished by BR, F, and GS.

Dec. 11, 1919	25.1	Nov. 28, 1940	23.00	Nov. 23, 1948	23.51
May 22, 1922	23.15	June 11, 1941	23.22	Nov. 9, 1950	25.34
May 29, 1930	23.2	Nov. 26	22.95	June 2, 1952	23.33
Apr. 23, 1931	23.17	May 13, 1942	a31.40	Nov. 21	23.89
Jan. 28, 1932	21.49	Nov. 24	23.02	Nov. 17, 1953	25.26
Apr. 28	22.95	May 19, 1943	a23.19	Apr. 17, 1956	27.40
June 23	21.97	Dec. 30	23.12	Dec. 26	24.5
Dec. 8	21.67	Apr. 25, 1944	a23.17	Dec. 4, 1957	24.58
Nov. 26, 1938	23.93	Jan. 3, 1945	23.10	Mar. 27, 1958	a44.04
May 15, 1939	23.31	May 11	23.42	June 19, 1959	a54.93
Nov. 30	23.31	May 2, 1946	23.30	Nov. 15, 1960	26.49
May 9, 1940	23.14	Nov. 18, 1947	23.4		

8N/4E-10R1 (L-35). V. L. Barnes, formerly G. E. Ladd. Altitude 1,831.4 ft. Records furnished by BR and F.

Jan. 9, 1947	50.77	May 17, 1949	51.06	May 18, 1954	50.90
May 22	50.44	Nov. 7, 1950	50.8	Nov. 23	50.60
Nov. 23, 1948	51.84	Nov. 17, 1953	49.50		

See footnotes at end of table.

8N/4E-12L1 (L-37). KEY WELL. L. A. Shepherd. Altitude 1,810.1 ft. Records furnished by BR, F, and GS.

Date	Water level	Date	Water level	Date	Water level
Feb. 20, 1930	32.6	June 10, 1947	30.4	Dec. 14, 1950	30.7
Jan. 28, 1932	32.74	26	30.4	Jan. 17, 1951	30.4
Apr. 28	32.32	July 9	30.4	Feb. 15	30.1
Dec. 9	32.55	23	30.5	Mar. 21	30.7
Mar. 14, 1935a	32.70	Aug. 8	30.5	May 9	31.02
Jan. 10, 1936	33.00	Sept. 8	30.5	July 19	30.9
Jan. 21, 1937	32.83	Nov. 18	30.4	Aug. 15	31.0
May 26, 1938	33.15	Feb. 18, 1948	30.5	Oct. 12	31.0
Nov. 26	33.71	Mar. 12	30.5	Nov. 29	30.75
Nov. 30, 1939	33.01	Apr. 16	30.5	Dec. 14	31.0
May 9, 1940	33.14	May 19	30.24	Jan. 23, 1952	30.5
Nov. 28	33.11	June 15	30.5	Feb. 15	30.9
June 11, 1941	33.42	July 14	30.6	Mar. 14	30.9
Nov. 26	33.17	Aug. 11	30.5	Apr. 11	30.8
May 13, 1942	33.10	Oct. 14	30.6	June 4	30.83
Nov. 24	33.58	Nov. 23	30.51	18	32.6
May 19, 1943	33.29	Dec. 10	30.5	July 17	31.8
Apr. 25, 1944	33.09	Jan. 18, 1949	30.6	Sept. 19	31.6
May 11, 1945a	38.78	Feb. 18	30.6	Oct. 17	31.0
Nov. 15	30.84	Mar. 17	30.6	Nov. 21	30.63
Aug. 12, 1946	30.4	Apr. 15	30.9	Jan. 23, 1953	31.15
27	30.3	May 17	30.55	Feb. 19	30.90
Sept. 4	30.3	June 17	31.1	Mar. 19	30.79
25	30.4	July 15	31.0	Apr. 13	30.79
Oct. 1	30.4	Aug. 19	30.7	May 20	30.79
30	30.4	Sept. 16	30.4	Nov. 23, 1954	31.60
Nov. 4	30.4	Nov. 18	30.60	Apr. 18, 1955	31.45
27	30.4	Dec. 15	30.6	Dec. 14	30.59
Dec. 4	30.4	Jan. 25, 1950	30.7	Apr. 17, 1956	31.20
19	30.4	Feb. 16	30.9	Dec. 26	31.40
Jan. 2, 1947	30.4	Mar. 16	30.9	May 3, 1957	30.70
Feb. 5	30.3	Apr. 20	30.6	Dec. 4	31.26
20	30.4	May 2	30.58	Apr. 27, 1958	30.39
Mar. 4	30.4	June 16	30.7	Dec. 3	31.17
27	30.6	July 13	30.9	May 5, 1959	31.63
Apr. 10	30.3	Aug. 16	30.7	June 17	31.21
23	30.4	Sept. 15	31.0	Nov. 12	31.20
May 16	30.4	Oct. 18	31.2	Mar. 24, 1960	31.56
22	30.4	Nov. 7	30.7		

See footnotes at end of table.

8N/4E-18F1. W. L. Howard. Altitude about 1,830 ft. Records furnished by GS and Southern California Gas Co.

Date	Water level	Date	Water level	Date	Water level
June 22, 1959	44.54	Dec. 11, 1960	47.3	June 2, 1961	47.3
Dec. 7, 1960	47.4	14	47.3		
8	47.3	June 1, 1961	47.4		

8N/4E-18R1. Southern California Gas Co. Altitude 1,872.8 ft. Records furnished by owner.

Apr. 8, 1960	101.0	Dec. 10, 1960	c101.7	June 1, 1961	101.0
Dec. 7	101.3	11	c101.8	2	c101.7
8	c101.7	12	c101.7		
9	c101.7	14	c101.5		

9N/1E-3H1 (L-45a). KEY WELL. H. A. Gores. Altitude 1,948.0 ft. Records furnished by BR and F.

July 22, 1946	55.0	June 26, 1947	57.6	Aug. 16, 1951	67.93
30	55.1	July 9	57.8	Sept. 14	68.20
Aug. 5	55.1	23	58.0	Dec. --	68.75
12	55.3	Aug. 8	58.1	Jan. 23, 1952	68.88
28	55.4	Sept. 9	58.3	Feb. 15	68.99
Sept. 4	55.5	Feb. 18, 1948	59.3	Mar. 14	69.19
11	55.5	July 14	60.6	Apr. 11	69.45
17	55.6	Aug. 11	61.0	June 27	69.00
25	55.3	Sept. 15	61.1	July 17	75.44
Oct. 1	55.7	Dec. 10	61.6	Sept. 19	73.1
7	55.6	Jan. 18, 1949	61.9	Oct. 17	69.91
14	55.6	Feb. 18	62.1	Jan. 23, 1953	70.40
23	55.8	Mar. 17	62.4	Feb. 19	69.85
30	55.9	Apr. 15	62.6	Mar. 19	70.40
Nov. 4	55.9	July 15	63.3	Nov. 17	72.50
12	56.0	Dec. 15	64.1	May 19, 1954	72.70
20	56.0	Jan. 25, 1950	64.5	Nov. 26	73.85
27	56.2	Feb. 16	64.6	Apr. 18, 1955	77.34
Dec. 4	56.1	Mar. 16	64.8	Dec. 15	75.90
19	56.3	Apr. 20	64.9	Apr. 17, 1956	76.27
Jan. 2, 1947	56.5	June 16	65.5	Dec. 27	77.52
22	56.4	July 13	65.7	May 3, 1957	77.89
Feb. 6	56.6	Aug. 16	65.9	Dec. 5	79.15
20	56.5	Sept. 15	66.1	Mar. 27, 1958	79.51
Mar. 4	56.6	Oct. 18	66.2	Dec. 4	79.38
27	56.9	Dec. 14	66.5	May 6, 1959	82.10
Apr. 10	57.0	Jan. 17, 1951	66.6	Nov. 13	87.59
23	57.2	Feb. 15	66.8	Mar. 25, 1960	87.83
May 16	57.4	Mar. 21	67.0	Oct. 20	82.63
27	57.4	Apr. 19	67.2	Oct. 16, 1962a	86.93
June 10	57.4	July 19	67.8		

See footnotes at end of table.

9N/1E-12D1 (T-38, L-47). D. W. Hallman, formerly Aaron Kimble, formerly W. S. Wilhelm. Altitude 1,928.0 ft. Records furnished by BR, F, and GS.

Date	Water level	Date	Water level	Date	Water level
Jan. 2, 1945	36.83	Nov. 13, 1959	67.18	Nov. 4, 1960	73.51
May 6, 1959	60.33	Mar. 25, 1960	66.52	Nov. 18, 1962	67.87

9N/1E-13E1 (L-43). California Electric Power Co. Altitude 1,947.7 ft. Records furnished by BR and F.

July	22, 1946	58.3	May	27, 1947	60.7	Mar.	16, 1950	68.3
	30	58.3	June	10	60.8	Apr.	20	68.2
Aug.	5	58.3		26	60.9	June	16	69.5
	12	58.4	July	9	61.1	July	13	68.9
	27	58.5		23	61.3	Aug.	16	69.1
Sept.	4	58.7	Aug.	8	61.4	Sept.	15	69.2
	9	58.7	Sept.	8	61.6	Oct.	18	69.5
	17	58.9	Oct.	10	61.9	Nov.	6	69.5
	25	58.9	Dec.	10	62.7	Dec.	14	69.7
Oct.	1	58.9	Feb.	18, 1948	63.2	Jan.	17, 1951	69.9
	7	59.1	Mar.	12	63.1	Feb.	15	70.1
	14	59.1	Apr.	16	63.4	Mar.	21	70.2
	23	59.2	June	15	64.0	Apr.	19	70.3
	30	59.4	July	14	64.1	June	15	70.7
Nov.	4	59.5	Aug.	11	64.7	July	19	70.9
	12	59.5	Sept.	15	64.6	Sept.	14	71.8
	20	59.5	Oct.	14	64.9	Oct.	17	71.9
	27	59.7	Dec.	10	65.2	Dec.	14	72.0
Dec.	4	59.7	Feb.	18, 1949	66.4	Jan.	23, 1952	72.0
	19	59.8	Apr.	15	66.5	Feb.	15	72.2
Jan.	22, 1947	59.8	June	17	66.5	Mar.	14	72.4
Feb.	5	59.8	July	15	66.7	Apr.	11	72.6
	20	59.9	Aug.	19	66.8	June	16	72.4
Mar.	4	60.0	Sept.	11	67.0	Dec.	17	78.1
	27	60.2	Oct.	20	67.8	Apr.	17, 1953	76.0
Apr.	10	60.4	Dec.	15	67.6	Apr.	6, 1955	77.2
	30	60.5	Jan.	25, 1950	67.9	Oct.	27, 1960	85.29
May	16	60.6	Feb.	16	67.9			

See footnotes at end of table.

9N/1E-13E2 (L-43a). KEY WELL. California Electric Power Co. Altitude 1,949.6 ft. Records furnished by BR and F.

Date	Water level	Date	Water level	Date	Water level
Sept. 14, 1925	62.88	May 22, 1947	61.57	Feb. 15, 1951	71.1
Mar. 7, 1926	63.47	June 10	61.7	Mar. 21	71.1
Oct. 10, 1927	60.55	July 9	62.0	Apr. 19	71.2
May 22, 1930	68.0	Aug. 8	62.3	May 10	71.28
Jan. 22, 1931	69.38	Sept. 8	62.5	June 15	71.5
Dec. 7	70.97	Oct. 10	62.8	July 19	74.8
Mar. 17, 1932	69.00	Nov. 17	63.13	Sept. 14	72.5
24	68.52	Dec. 10	63.3	Oct. 17	73.0
Apr. 21	66.81	Feb. 18, 1948	63.8	Nov. 29	73.02
Jan. 11, 1933	67.70	Mar. 12	64.0	Dec. 14	72.9
Jan. 22, 1935	71.90	Apr. 16	64.4	Jan. 23, 1952	73.0
Dec. 20	73.40	May 19	64.57	Feb. 15	73.1
Apr. 23, 1936	73.82	June 15	65.0	Mar. 14	73.3
Jan. 16, 1937	74.95	July 14	65.7	Apr. 10	73.4
June 2	62.78	Aug. 11	65.7	June 5	73.00
May 26, 1938	56.40	Sept. 15	65.9	16	73.1
Nov. 26	60.07	Oct. 14	65.8	Nov. 26	73.70
May 22, 1939	62.49	Nov. 23	66.08	Dec. 17	77.6
Nov. 30	64.78	Dec. 23	65.6	Jan. 23, 1953	74.10
May 9, 1940	66.05	Feb. 18, 1949	66.7	Feb. 19	73.98
Nov. 27	67.87	Apr. 15	67.1	Mar. 19	71.12
June 11, 1941	56.30	May 16	67.19	May 21	74.78
Nov. 26	59.63	June 17	67.4	Mar. 29, 1954	75.2
May 14, 1942	61.91	July 15	68.0	May 18	71.5
Nov. 25	64.62	Aug. 19	68.2	Apr. 15, 1955	78.22
May 19, 1943	55.46	Sept. 16	67.9	Dec. 14	79.30
Dec. 30	59.48	Oct. 20	68.6	Mar. 29, 1956	79.90
Apr. 26, 1944	54.46	Nov. 17	68.36	Nov. 5	81.69
Jan. 2, 1945	57.85	Dec. 15	68.4	Dec. 5	81.23
May 10	55.70	Jan. 25, 1950	68.8	Jan. 2, 1957	81.32
Nov. 15	58.04	Feb. 16	68.7	Feb. 6	81.31
May 2, 1946	58.40	Mar. 16	69.1	Mar. 6	81.43
July 22	59.3	Apr. 20	69.3	Apr. 3	81.68
Aug. 12	59.4	May 3	69.33	May 3	82.04
Sept. 9	59.6	June 16	69.6	June 3	82.36
Oct. 7	60.0	July 13	69.8	July 2	82.64
Nov. 12	60.4	Aug. 16	70.0	Aug. 1	82.89
Dec. 4	60.6	Sept. 15	70.2	29	83.10
Jan. 2, 1947	60.9	Oct. 18	70.2	Oct. 2	83.39
Feb. 5	60.7	Nov. 6	71.0	Jan. 8, 1958	83.33
Mar. 4, 1947	60.9	Nov. 26	70.70	Feb. 7	83.10
Apr. 10	61.3	Dec. 14	70.6	Mar. 5	83.15
May 16	61.5	Jan. 17, 1951	70.8	26	83.24

9N/1E-13E2.--Continued.

Date	Water level	Date	Water level	Date	Water level
May 1, 1958	83.81	Apr. 2, 1959	82.58	May 2, 1960	84.02
June 4	82.80	June 4	81.81	31	85.35
July 2	82.52	July 1	83.16	July 6	85.73
Aug. 6	82.69	Aug. 3	83.37	Aug. 3	86.00
Sept. 5	82.77	Sept. 1	83.66	31	86.20
Oct. 1	82.68	Oct. 1	83.84	Oct. 6	85.90
Nov. 5	82.71	Nov. 3	83.90	27	85.74
Dec. 3	82.12	Dec. 1	82.93	Nov. 3	85.37
Jan. 1, 1959	82.00	Jan. 4, 1960	83.80	Dec. 1	85.50
Feb. 5	82.08	Feb. 1	83.88	Jan. 13, 1961	85.50
Mar. 5	82.33	Mar. 2	84.66	Feb. 2	85.60

9N/1E-15L1 (L-42). Formerly G. Liquenfelder. Altitude 1,963.7 ft. Records furnished by BR and F.

Aug. 12, 1946	67.0	Oct. 7, 1946	71.4	Nov. 27, 1946	69.3
27	66.0	14	70.5	Dec. 4	65.5
Sept. 4	69.7	23	67.8	17	65.5
9	71.9	30	66.8	Jan. 2, 1947	71.4
17	67.6	Nov. 4	67.3	22	65.6
25	68.4	12	79.2	Feb 6	58.7
Oct. 1	73.2	20	65.4		

9N/1E-18E1 (L-1). California Electric Power Co., formerly B. A. Funk. Altitude 1,996.8 ft. Records furnished by BR and F.

Jan. 2, 1945	6.76	Nov. 12, 1946	12.8	July 23, 1947	21.3
July 22, 1946	9.8	20	13.6	Aug. 8	16.0
30	10.6	27	5.3	Sept. 8	23.8
Aug. 5	10.8	Dec. 4	8.5	Oct. 10	17.1
12	11.0	19	12.2	Nov. 14	17.6
27	11.4	Feb. 6, 1947	11.2	Dec. 10	17.89
Sept. 4	11.6	20	11.0	Feb. 18, 1948	19.0
9	11.8	Mar. 4	11.4	Mar. 12	35.2
17	12.0	27	11.8	Apr. 16	30.2
25	12.2	Apr. 10	12.4	May 17	32.8
Oct. 1	12.3	30	13.1	June 15	21.8
7	12.5	May 16	a24.0	July 14	23.3
14	12.6	27	14.0	Aug. 11	37.2
23	12.9	June 10	17.6	Sept. 15	34.8
30	13.0	26	19.5	Oct. 14	25.4
Nov. 4	13.2	July 9	a24.6	Nov. 22	25.0

See footnotes at end of table.

9N/1E-18E1.--Continued.

Date	Water level	Date	Water level	Date	Water level
Dec. 10, 1948	16.9	Nov. 16, 1949	38.1	Mar. 21, 1951	51.8
Feb. 18, 1949	24.4	Dec. 15	39.9	Apr. 19	69.1
Mar. 17	27.4	Jan. 25, 1950	37.3	Dec. 14	54.8
Apr. 15	27.2	Feb. 16	37.2	Jan. 23, 1952	53.23
June 17	39.0	Mar. 16	37.9	June 16	18.18
Aug. 19	36.2	Apr. 20	42.8	July 17	18.98
Sept. 16	40.2	May 2	43.5	Nov. 18, 1962	62.24
Oct. 20	42.2	Jan. 17, 1951	49.6		

9N/1E-18L1 (T-44, L-3). Formerly R. H. Greer. Altitude 1,986.8 ft. Records furnished by GS.

Feb. 13, 1947	8.2	May 17, 1948	20.0	June 3, 1952	15.1
May 21	11.5	Nov. 22	23.1	May 21, 1953	filled in
Nov. 14	15.6	May 16, 1949	24.2		

9N/2E-3A2 (L-51a). Sjolin. Altitude 1,845.4 ft. Records furnished by F and GS.

May 19, 1953	27.85	Nov. 26, 1954	29.95	Apr. 17, 1956	34.70
May 19, 1954	30.57	Dec. 14, 1955	32.80	Jan. 13, 1960	39.77

9N/2E-3K1 (T-54, L-52). Mitchell, formerly Jack Fisher. Altitude 1,858.1 ft. Records furnished by BR, F, and GS.

July 22, 1946	4.1	Nov. 17, 1947	3.6	Mar. 17, 1949	3.0
Aug. 12	4.8	Dec. 10	3.1	Apr. 15	3.1
Sept. 4	4.5	Feb. 18, 1948	2.8	May 16	3.7
Oct. 7	4.0	Mar. 12	2.8	June 17	4.4
Nov. 4	3.4	Apr. 16	2.9	July 15	4.8
Dec. 4	3.3	May 18	3.4	Aug. 19	5.2
Jan. 2, 1947	2.9	June 15	4.0	Sept. 16	5.5
Feb. 6	2.6	July 14	5.1	Oct. 20	5.0
Mar. 4	2.6	Aug. 11	4.9	Nov. 16	4.7
Apr. 10	3.1	Sept. 15	5.4	Dec. 15	4.1
May 16	3.4	Oct. 14	4.5	Jan. 25, 1950	3.1
June 10	4.3	Nov. 22	3.9	Feb. 16	3.4
July 9	4.7	Dec. 10	3.5	Mar. 16	3.4
Aug. 8	5.0	Jan. 18, 1949	3.1	Apr. 20	3.9
Sept. 9	4.6	Feb. 18	3.0	May 3	3.8

9N/2E-3K1.--Continued.

Date	Water level	Date	Water level	Date	Water level
June 16, 1950	4.8	Aug. 16, 1951	6.2	Jan. 23, 1953	5.2
Aug. 16	5.6	Sept. 14	6.8	Feb. 19	5.0
Sept. 15	5.7	Oct. 17	5.8	Mar. 19	5.0
Oct. 18	5.6	Dec. 14	5.1	Apr. 17	5.2
Nov. 1	5.5	Jan. 23, 1952	4.2	Nov. 17	8.41
Dec. 14	4.6	Feb. 15	4.2	May 19, 1954	6.4
Jan. 17, 1951	4.2	Mar. 14	3.0	Nov. 26	7.55
Feb. 15	4.0	June 18	6.8	Apr. 18, 1955	6.65
Mar. 21	3.9	July 17	6.4	Dec. 14	7.90
Apr. 19	4.1	Sept. 19	6.8	Apr. 17, 1956	7.19
May 9	4.4	Oct. 17	6.6	Jan. 13, 1960	9.84
July 19	5.8	Dec. 17	6.0		

9N/2E-4D1 (T-50, L-50). Formerly Yermo Mutual Water Co. Altitude about 1,895 ft. Records furnished by BR, F, and GS.

Aug. 12, 1946	16.2	Dec. 10, 1948	20.1	Feb. 15, 1951	23.1
Sept. 4	16.4	Feb. 18, 1949	20.1	Mar. 21	23.3
Oct. 1	16.4	Apr. 15	20.3	Apr. 19	23.4
Nov. 4	16.6	June 17	20.6	June 15	25.8
Dec. 4	16.7	July 15	20.8	July 19	26.0
Feb. 6, 1947	16.8	Aug. 19	20.9	Aug. 16	25.7
Mar. 4	16.9	Dec. 15	21.4	Sept. 14	26.6
Apr. 10	16.3	Jan. 25, 1950	21.7	Oct. 17	24.9
May 16	17.4	Feb. 16	21.7	Dec. 14	25.1
June 10	17.5	Mar. 16	21.8	Jan. 23, 1952	25.2
July 9	17.7	Apr. 20	21.9	Feb. 15	25.2
Aug. 8	17.8	June 16	22.2	Mar. 14	25.3
Sept. 9	18.0	July 13	22.3	Apr. 11	25.5
Dec. 10	18.3	Aug. 16	22.7	June 18	25.3
Feb. 18, 1948	18.5	Sept. 14	22.7	July 17	25.5
Mar. 12	18.5	Oct. 18	22.8	Sept. 16	25.9
Apr. 16	18.7	Nov. 9	22.9	Dec. 17	26.3
June 15	19.6	Dec. 14	23.0	Dec. 1, 1960	36.15
Aug. 11	19.4	Jan. 17, 1951	23.1		

9N/2E-6D1. James Shope. Altitude about 1,925 ft. Records furnished by owner.

Date	Water level	Date	Water level	Date	Water level
Oct. 11, 1950	47.2	Apr. 22, 1952	49.8	Oct. 8, 1957	58.8
Mar. 25, 1951	47.9	Oct. 13	50.2	Apr. 12, 1958	59.5
Apr. 25	47.8	July 1, 1953	51.5	Oct. 25, 1959	61.1
Sept. 28	49.0	May 4, 1955	54.9	Oct. 14, 1960	62.2
Feb. 26, 1952	49.6	Aug. 28	55.7	Oct. 17, 1962	66.98

9N/2E-8J1 (T-64a, L-64). Moller, formerly Annie Elsholz. Altitude 1,915.4 ft. Records furnished by BR, F, and GS.

Aug. 12, 1946	36.4	Dec. 10, 1948	39.9	Dec. 14, 1950	45.0
Sept. 4	38.0	Jan. 18, 1949	40.2	Jan. 17, 1951	44.3
Oct. 14	36.9	Feb. 18	40.3	Feb. 15	43.5
Nov. 12	38.4	Mar. 17	40.3	Mar. 21	43.6
Dec. 4	37.1	Apr. 15	40.5	Apr. 19	43.6
Jan. 2, 1947	37.2	June 17	40.6	May 10	44.6
Feb. 6	37.2	July 15	40.9	July 19	44.15
Mar. 27	48.3	Sept. 16	41.4	Aug. 16	44.42
Apr. 10	37.4	Oct. 20	41.5	Dec. 14	45.01
May 16	38.8	Dec. 15	41.8	Jan. 23, 1952	44.93
June 10	37.6	Jan. 25, 1950	42.0	Mar. 14	45.05
July 9	43.7	Feb. 16	41.4	June 16	45.05
Aug. 8	41.6	Mar. 16	41.9	Sept. 19	46.30
Sept. 8	37.3	Apr. 20	42.1	Oct. 17	46.62
Nov. 17	39.0	June 16	42.4	Dec. 17	46.71
Dec. 10	38.7	July 13	42.6	Jan. 23, 1953	44.10
Mar. 12, 1948	38.8	Sept. 15	42.8	Mar. 19	52.10
May 19	38.6	Oct. 18	43.2	Apr. 17	47.45
Nov. 23	39.9	Nov. 6	43.1	Dec. 7, 1960	56.52

9N/2E-14N1 (T-73, L-68). L & M Fairbanks, formerly Scobel & Haimut, formerly L. N. Skobel. Altitude 1,888.5 ft. Records furnished by BR and F.

July 22, 1946	21.8	Mar. 4, 1947a	23.6	Feb. 18, 1948	22.3
Aug. 5	23.0	Apr. 10	21.9	Mar. 12	22.35
Sept. 4	22.0	May 16	21.9	May 19	22.8
Oct. 14	23.0	June 10	22.0	Nov. 5, 1956	31.40
Nov. 4	22.6	Aug. 8	22.2		
Dec. 4	21.9	Sept. 8	22.2		
Jan. 1, 1947	22.0	Oct. 10	23.0		
Feb. 6	21.8	Dec. 10	22.6		

See footnotes at end of table.

9N/2E-14N2 (L-68a). L & M Fairbanks, formerly Scobel & Haimut. Altitude 1,886.0 ft. Records furnished by F and GS.

Date	Water level	Date	Water level	Date	Water level
Mar. 29, 1956	26.72	Jan. 13, 1961	32.80	May 1, 1961	34.20
Oct. 6, 1960	35.52	Feb. 2	34.30	June 22	36.63
Nov. 3	32.85	Mar. 2	33.30		
Dec. 1	32.65	Apr. 5	35.40		

9N/2E-20Q1 (L-10b). KEY WELL. San Bernardino County. Altitude 1,921.4 ft. Records furnished by BR and F.

Oct.	5, 1932	47.98	Dec.	19, 1946	43.70	July	14, 1947	45.20
June	11, 1941	45.26	Jan.	2, 1947	43.80	Aug.	11	45.40
May	14, 1942	44.44		22	a48.90	Sept.	15	a50.90
Nov.	25	48.67	Feb.	5	42.80	Oct.	14	a50.90
May	18, 1943	44.13		20	41.90	Nov.	23	45.70
Dec.	30	43.31	Mar.	4	42.80	Dec.	10	45.80
Apr.	25, 1944	42.67		27	43.00	June	18, 1952	52.14
Jan.	3, 1945	41.81	Apr.	10	43.20	July	17	52.99
May	10	41.89		23	43.20	Dec.	17	51.70
Nov.	15	41.81	May	16	44.70	Feb.	19, 1953	a54.05
May	2, 1946	42.01		27	43.40	May	18, 1954	a59.00
Aug.	12	42.20	June	10	48.80	Nov.	23	58.80
Sept.	4	42.30		26	44.00	Apr.	15, 1955	56.22
	9	42.30	July	9	a49.00	Dec.	14	57.30
	17	42.40		23	49.10	Apr.	13, 1956	57.62
	25	42.40	Aug.	8	43.70	Dec.	21	58.64
Oct.	1	42.40	Sept.	8	43.80	May	2, 1957	59.07
	7	42.40	Oct.	10	43.90	Dec.	4	60.08
	14	42.40	Nov.	17	44.05	Mar.	26, 1958	60.13
	23	42.40	Dec.	10	a49.60	Dec.	3	60.68
	30	42.40	Feb.	18, 1948	44.30	May	5, 1959	61.13
Nov.	4, 1946	42.40	Mar.	12	a50.20	Nov.	12	60.72
	12	42.40	Apr.	16	a44.60	Mar.	24, 1960	a66.40
	20	42.40	May	20	44.80	Mar.	7, 1961	63.31
	27	42.70	June	15	47.40	June	21	a70.4
Dec.	4	43.60						

See footnotes at end of table.

9N/2E-26E2. A. D. Ciranna. Altitude about 1,890 ft. Records furnished by F.

Date	Water level	Date	Water level	Date	Water level
Apr. 16, 1948	21.6	July 15, 1949	23.6	Apr. 19, 1951	27.4
June 15	21.8	Aug. 19	23.7	July 19	28.1
July 14	21.8	Sept. 16	23.6	Aug. 16	28.4
Aug. 11	21.9	Oct. 20	23.1	Oct. 17	31.1
Sept. 15	22.6	Dec. 14	23.1	Jan. 23, 1952	25.4
Oct. 14	21.9	Jan. 25, 1950	23.4	Apr. 11	28.6
Dec. 10	22.1	June 16	24.5	June 18	30.8
Feb. 18, 1949	22.2	Sept. 15	26.6	Dec. 17	26.7
Mar. 17	22.8	Oct. 18	25.3	Jan. 22, 1953	26.5
Apr. 15	22.3	Jan. 17, 1951	25.3	Nov. 16	34.5
June 17	23.4	Mar. 21	26.1	Nov. 23, 1954	33.90

9N/3E-3D1 (T-90, L-77). Ernest Bailey. Altitude 1,823.2 ft. Records furnished by BR, F, and GS.

Jan. 3, 1945	42.89	Oct. 14, 1946	50.3	April 18, 1955	47.10
July 22, 1946	50.3	Nov. 20	47.2	Dec. 14	dry
Aug. 12	50.3	Feb. 6, 1947	43.0		
Sept. 4	46.2	Mar. 4	56.3		

9N/3E-3D2. KEY WELL. Ernest Bailey. Altitude about 1,818 ft. Records furnished by F and GS.

Dec. 5, 1956	45.76	Mar. 27, 1958	46.69	Dec. 4, 1959	48.09
May 3, 1957	46.30	Dec. 3	47.27	12	48.21
Dec. 4	46.73	May 5, 1959	47.47	Mar. 24, 1960	49.55
		Nov. 12	48.21	Nov. 15	47.83

9N/3E-15M1. Louis Uhl. Altitude about 1,830 ft. Records furnished by F.

June 18, 1952	40.5	Jan. 23, 1953	41.0	May 19, 1954	43.4
July 17	41.0	Feb. 19	41.2	Nov. 23	42.25
Sept. 19	41.4	Mar. 19	41.4	Apr. 15, 1955	44.95
Oct. 17	41.6	Apr. 17	42.0	18	44.78
Dec. 17	41.2	Nov. 17	39.8	Dec. 14	44.95

9N/3E-15N1 (T-104, L-74). Newberry School. Altitude 1,832.2 ft. Records furnished by BR and F.

Date	Water level	Date	Water level	Date	Water level
July 30, 1946	38.9	Jan. 2, 1947	a48.8	Feb. 18, 1948	39.2
Aug. 5	38.8	22	39.1	Mar. 12	39.2
12	38.7	Feb. 6	a46.4	Apr. 16	39.3
28	39.1	20	39.2	May 20	39.3
Sept. 4	40.7	Mar. 4	a43.3	June 15	39.4
9	39.5	27	a42.9	July 14	39.6
17	39.2	Apr. 10	39.4	Aug. 11	39.5
25	39.1	30	39.2	Sept. 15	39.9
Oct. 1	a48.2	May 16	39.4	Oct. 14	40.3
7	a42.6	27	42.6	Nov. 23	40.3
14	39.1	June 10	39.1	Dec. 10	40.4
23	39.2	26	39.1	Jan. 18, 1949	40.0
30	a41.0	July 9	39.1	Apr. 15	45.1
Nov. 4	a41.5	23	39.1	May 17	41.59
12	a48.5	Aug. 8	39.3	June 17	48.9
20	a49.6	Sept. 8	39.9	July 15	49.6
27	39.2	Oct. 10	39.3	Aug. 19	41.5
Dec. 4	39.1	Nov. 18	39.2		
19	39.2	Dec. 10	39.2		

9N/3E-29A1. KEY WELL. O.S. Purdy. Altitude 1,846.0 ft. Records furnished by F and GS.

Dec. 14, 1951	55.6	May 18, 1954	59.80	Mar. 26, 1958	63.19
Jan. 22, 1952	55.52	Nov. 23	59.70	Dec. 3	65.76
Dec. 17	56.5	Apr. 15, 1955	60.83	Mar. 5, 1959	64.54
Jan. 23, 1953	56.59	Dec. 14	62.15	Nov. 12	64.42
Feb. 19	56.48	Apr. 13, 1956	62.58	Dec. 11	64.35
Mar. 19	56.74	Dec. 26	63.10	Mar. 24, 1960	68.23
Apr. 17	56.97	May 3, 1957	63.75	Nov. 14	63.69
Nov. 16	59.20	Dec. 4	63.82		

9N/3E-29G1. O. S. Purdy. Altitude about 1,850 ft. Records furnished by F.

July 17, 1952	5.42	Jan. 23, 1953	5.30	Nov. 16, 1953	6.30
Sept. 19	a11.91	Feb. 17	5.36	May 18, 1954	5.95
Oct. 17	a19.7	Mar. 19	5.28	Dec. 11, 1959	10.66
Dec. 17	5.37	Apr. 17	5.76		

See footnotes at end of table.

9N/3E-32A1 (L-18). K. L. Morris, formerly Berden. Altitude 1,834.9 ft. Records furnished by F.

Date	Water level	Date	Water level	Date	Water level
May 23, 1947	5.0	Nov. 9, 1950	5.5	Apr. 13, 1956	6.9
Nov. 23, 1948	4.9	May 10, 1951	5.4		
May 2, 1950	5.3	Nov. 28	5.2		

9N/3E-32K1. Newberry Farms Co. Altitude about 1,860 ft. Records furnished by F.

Jan. 23, 1953	4.95	Apr. 15, 1955	flowing	Mar. 5, 1959	notflowing
Mar. 19	4.48	Dec. 14	flowing	Mar. 24, 1960	not flowing
May 18, 1954	flowing	Dec. 4, 1957	flowing	May 2, 1961	8.97
Nov. 23	flowing	Mar. 26, 1958	flowing		

9N/4E-31K1 (L-31). KEY WELL. C. L. Hines, formerly Anna Mae Monroe. Altitude 1,788.9 ft. Records furnished by BR, F, and GS.

May 1, 1930	12.55	Aug. 12, 1946	12.9	May 22, 1947	13.4
Oct. 9	12.97	27	13.5	27	13.7
Apr. 23, 1931	12.97	Sept. 4	13.6	June 10	13.7
Jan. 28, 1932	12.41	9	13.5	26	13.8
Apr. 28	12.20	17	13.7	July 9	14.0
June 23	12.40	25	13.8	23	13.8
Dec. 9	12.38	Oct. 1	13.5	Aug. 8	13.7
Jan. 30, 1935	12.35	7	13.5	Sept. 8	13.6
Jan. 10, 1936	12.39	14	13.5	Nov. 18	13.4
Jan. 21, 1937	12.25	23	13.6	Dec. 10	13.3
May 26, 1938	12.55	30	13.3	Feb. 18, 1948	13.1
Nov. 26	12.71	Nov. 4	13.3	Mar. 12	13.0
May 15, 1939	12.60	12	13.3	Apr. 16	13.1
Nov. 30	12.92	20	13.4	May 19	13.23
May 9, 1940	12.70	27	13.2	June 15	13.4
Nov. 28	13.12	Dec. 4	13.2	July 14	13.6
June 11, 1941	12.91	19	13.2	Aug. 11	13.7
Nov. 26	13.06	Jan. 2, 1947	13.1	Sept. 15	13.7
May 13, 1942	12.80	22	13.0	Oct. 14	13.7
Nov. 24	13.26	Feb. 5	13.1	Nov. 23	13.44
May 19, 1943	13.08	20	13.3	Dec. 10	13.3
Dec. 30	13.14	Mar. 4	13.3	Jan. 18, 1949	13.2
Apr. 25, 1944	12.86	27	13.1	Feb. 18	13.1
May 11, 1945	13.02	Apr. 10	13.1	Mar. 17	13.0
Nov. 15	13.10	30	13.1	Apr. 15	13.0
May 2, 1946	13.02	May 16	13.4	May 17	13.02

9N/4E-31K1.--Continued.

Date	Water level	Date	Water level	Date	Water level
June 17, 1949	13.3	Feb. 15, 1951	13.4	Dec. 17, 1952	15.10
July 15	13.5	Mar. 21	13.4	Jan. 23, 1953	15.04
Aug. 19	13.6	Apr. 19	13.23	Mar. 19	14.17
Sept. 16	13.7	May 10	13.13	Apr. 17	14.29
Oct. 20	13.7	June 15	13.5	May 20	14.22
Nov. 18	13.57	July 19	13.7	Nov. 17	14.43
Dec. 15	13.5	Aug. 16	13.84	May 19, 1954	14.80
Jan. 25, 1950	13.3	Sept. 14	13.8	Nov. 23	14.40
Feb. 16	13.3	Oct. 17	13.8	Apr. 18, 1955	14.18
Mar. 16	13.1	Nov. 29	13.65	Dec. 14	14.50
Apr. 20	13.2	Dec. 14	13.59	Apr. 17, 1956	14.30
May 2	13.31	Jan. 23, 1952	13.39	Dec. 26	14.63
June 16	13.5	Feb. 15	13.40	May 3, 1957	14.90
July 13	13.6	Mar. 14	13.25	Dec. 4	15.17
Aug. 16	13.8	Apr. 11	13.40	Mar. 26, 1958	14.88
Sept. 15	13.5	June 4	13.75	Dec. 3	15.28
Oct. 18	13.7	18	13.82	May 5, 1959	15.35
Nov. 7	13.6	July 17	14.02	June 24	15.60
Dec. 14	13.5	Oct. 17	14.09	Nov. 12	15.48
Jan. 17, 1951	13.0	Nov. 21	13.99	Mar. 24, 1960	15.57

10N/2E-34L1 (T-142, L-54). Formerly Yermo Mutual Water Co. Altitude 1,876.2 ft. Records furnished by BR and F.

Aug. 12, 1946	52.7	May 27, 1947	54.5	Apr. 15, 1949	57.8
Sept. 4	52.8	June 10	54.6	May 16	57.9
25	53.5	26	54.8	June 17	58.2
Oct. 1	53.0	July 9	55.0	July 15	58.2
30	53.8	23	55.1	Aug. 19	58.5
Nov. 4	53.8	Aug. 8	55.3	Sept. 16	59.3
27	53.7	Feb. 18, 1948	56.1	Oct. 20	59.1
Dec. 4	53.9	Mar. 12	56.0	Dec. 15	59.3
19	53.3	Apr. 16	56.0	Jan. 25, 1950	59.4
Jan. 2, 1947	53.8	June 15	56.3	Feb. 16	59.6
22	54.5	July 14	56.5	Mar. 16	59.5
Feb. 6	54.4	Aug. 11	56.7	Apr. 20	59.6
20	53.1	Sept. 15	56.9	June 16	59.9
Mar. 4	53.2	Oct. 14	57.4	July 13	59.8
27	54.2	Dec. 10	55.8	Aug. 16	60.3
Apr. 10	54.5	Jan. 18, 1949	57.9	Sept. 15	60.6
30	54.4	Feb. 18	57.7	Oct. 18	60.9
May 16	54.5	Mar. 17	57.8	June 1, 1960	dry

10N/3E-22D1 (T-12, L-97). KEY WELL. Union Pacific Railroad Co., formerly G. F. Getty. Altitude 1,819.9 ft. Records furnished by BR, F, and GS.

Date	Water level	Date	Water level	Date	Water level
Nov. 12, 1919	83.0	Dec. 6, 1940	80.95	Apr. 17, 1956	86.19
May 17, 1922	80.59	Nov. 10, 1950	80.5	Dec. 5	87.6
Dec. 15	80.48	June 3, 1952	80.7	May 3, 1957	88.7
May 24, 1930	80.59	Nov. 20	80.9	Mar. 27, 1958	89.29
Feb. 23, 1933	80.50	May 19, 1953	81.3	Dec. 3	90.43
Mar. 30, 1934	80.70	Nov. 17	81.70	May 6, 1959	94.19
Jan. 29, 1935	80.70	May 19, 1954	89.30	June 12	93.42
Dec. 27	80.70	Nov. 26	83.60	Nov. 13	93.42
May 25, 1938	80.85	Apr. 18, 1955	84.47	Mar. 24, 1960	93.45
May 22, 1939	80.83	Dec. 14	84.90	Nov. 15	97.14

10N/4E-5M1. Kenneth Wilhelms. Altitude 1,757.8 ft. Records furnished by BR and F.

Nov. 1, 1950	96.85	May 19, 1954	a104.80	Apr. 17, 1956	a104.20
15	96.85	Nov. 26	95.5		
Nov. 7, 1953	96.4	Dec. 15, 1955	91.20		

11N/3E-20R1 (DWR-11R1, F-11R1). KEY WELL. Altitude about 1,780 ft. Records furnished by F and GS.

Feb. 16, 1954	43.88	Dec. 4, 1958	45.73	Mar. 25, 1960	46.03
Dec. 26, 1956	45.15	Nov. 13, 1959	45.60	Nov. 14	45.46
Mar. 27, 1958	45.29	Dec. 10	42.87		

11N/5E-16J1 (DWR-15G1, F-15G1). KEY WELL. Southern California Mineral Co. Altitude 1,638.8 ft. Records furnished by F.

Nov. 1, 1950	178.0	Apr. 17, 1956	184.27	Mar. 27, 1958	193.55
Nov. 26, 1954	186.82	Dec. 5	180.22	May 5, 1959	190.15
Apr. 18, 1955	170.6	May 3, 1957	182.88	Nov. 13	184.92
Dec. 15	188.37	Dec. 4	187.35	Mar. 24, 1960	187.48

See footnotes at end of table.

9N/1W-10A1 (M-92). W. H. Wasserman, formerly Gibbs. Altitude 2,036.5 ft. Records furnished by BR and F.

Date	Water level	Date	Water level	Date	Water level
July 24, 1946	9.7	Nov. 12, 1946	10.8	May 27, 1947	11.3
30	9.9	20	10.7	June 12	a16.1
Aug. 5	10.1	27	10.8	26	11.8
28	a10.4	Dec. 4	10.5	July 9	12.0
Sept. 4	10.2	19	10.6	23	12.2
11	10.4	Jan. 2, 1947	10.4	Aug. 7	12.4
17	10.5	22	9.8	Sept. 5	13.3
25	10.5	Feb. 6	9.5	Nov. 13	13.0
Oct. 1	10.5	20	9.7	Dec. 11	13.6
7	10.8	Mar. 4	9.8	Feb. 18, 1948	13.3
14	10.6	27	9.7	Mar. 12	13.9
23	a17.9	Apr. 10	9.8	Apr. 16	14.2
30	10.7	28	11.1	June 14	14.5
Nov. 4	10.7	May 16	11.1	July 14	14.8

9N/1W-10D2 (M-91a). Pyle and Tyndall. Altitude about 2,045 ft. Records furnished by F.

July 15, 1949	12.4	Jan. 17, 1951	14.6	Feb. 15, 1952	14.85
Sept. 16	12.9	Feb. 15	14.7	Mar. 14	14.69
Jan. 25, 1950	13.0	Mar. 21	14.6	Apr. 11	9.50
Feb. 16	13.0	Apr. 19	15.3	June 27	8.30
Mar. 16	12.9	Aug. 16	16.40	July 17	9.29
Sept. 15	14.4	Oct. 11	15.85	Sept. 19	9.90
Oct. 18	14.8	Dec. 14	11.60	Oct. 17	10.06
Dec. 14	14.7	Jan. 23, 1952	11.37	June 11, 1958	10.09

9N/1W-10M1 (M-97). Greystone Auto Court. Altitude 2,097.4 ft. Records furnished by F.

Mar. 12, 1948	54.4	Oct. 14, 1948	58.3	Aug. 16, 1950	69.2
Apr. 16	53.8	Feb. 18, 1949	62.6	Dec. 14	54.4
June 15	54.7	Mar. 17	62.4	Apr. 19, 1951	64.5
July 14	59.0	Apr. 15	60.5	Aug. 25, 1958	73.83
Aug. 11	57.0	May 16	57.98		
Sept. 15	59.0	June 17	66.1		

See footnotes at end of table.

9N/1W-10M2 (M-97a). Ralph Hagar. Altitude 2,098.1 ft. Records furnished by BR and F.

Date	Water level	Date	Water level	Date	Water level
July 22, 1946	69.6	Jan. 2, 1947	70.3	Oct. 14, 1948	74.7
30	69.4	22	68.9	Apr. 15, 1949	68.5
Aug. 5	68.0	Feb. 6	68.4	Feb. 16, 1950	69.2
12	68.2	20	68.8	June 16	69.3
27	68.6	Mar. 4	68.7	June 15, 1951	79.0
Sept. 4	68.8	27	68.9	July 19	79.0
9	68.9	Apr. 10	69.1	Sept. 14	79.33
17	69.1	30	69.4	Oct. 17	79.79
25	69.2	May 16	70.4	Dec. 14	79.65
Oct. 1	69.5	27	70.3	Feb. 15, 1952	79.48
7	69.5	June 10	70.3	Mar. 14	79.33
14	69.5	26	70.6	Apr. 11	78.82
23	69.7	July 9	70.8	June 16	72.22
30	69.9	23	71.2	July 17	76.94
Nov. 4	69.9	Aug. 8	71.4	Sept. 19	74.08
12	70.0	Mar. 12, 1948	74.0	Mar. 25, 1958	78.97
Dec. 4	70.2	June 15	74.0		
19	70.2	Aug. 11	74.0		

9N/1W-14A1. U.S. Marine Corps. Altitude about 2,060 ft. Records furnished by owner.

1943 52.8	1947 59	1950 64.4
1946 54.4	1949 62	1951 65

9N/1W-14B1. U.S. Marine Corps. Altitude 2,064.3 ft. Records furnished by owner and GS.

1943 45.3	1949 56	July 29, 1958 56.55
Jan. 28, 1946 47.1	1950 56.6	
1947 54	1951 62	

9N/1W-14B2. U.S. Marine Corps. Altitude 2,068.3 ft. Records furnished by owner and GS.

1947 59	1950 69.6	July 29, 1958 61.84
1949 60	1951 70	Oct. 7, 1960 67.90

a. Well being pumped.
c. Nearby well being pumped.

APPENDIX C

TABLE 6. DRILLERS' LOGS OF WELLS

Table 6.--Drillers' logs of wells

The terms adobe, caliche, hardpan, and lime are used by some drillers in the lower Mojave Valley area to describe a hard white calcareous clay and by others to describe the surface soil. The term hilldrift is used to describe material that appears similar to the alluvial-fan material on nearby slopes. Quicksand is a term often applied by drillers to sand that caved or "heaved" into the well during drilling. Many drillers use the term water sand, which means that the sand is permeable, but does not necessarily mean that the sand contains water.

9N/1E-1A1. Yermo Water Co. Well deepened by Ephraim Harris in 1961. 12-inch casing to 126 ft, 10-inch to 250 ft, and 8-inch to 250 ft. Altitude about 1,930 ft.

	Thickness (feet)	Depth (feet)
No record	126	126
Clay and sand; alternating fine sand and gravel	24	150
No record	80	230
Sand, clean	20	250

9N/1E-1L2. Los Angeles & Salt Lake Railroad Co. Drilled in 1905. 13-inch casing perforated 100-140 and 280-306 ft. Altitude about 1,930 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Gravel	50	50	Sand	32	178
Clay, brown	50	100	Clay, brown	82	260
Sand	8	108	Sand	26	286
Gravel	38	146	Gravel	20	306

9N/1E-1L3. Los Angeles & Salt Lake Railroad Co. Drilled in 1905. 13-inch casing perforated 70-130 and 160-270 ft. Altitude about 1,930 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand and gravel -----	35	35	Clay, brown -------	10	190
Sand ----------	49	84	Gravel ----------	85	275
Gravel ----------	96	180			

9N/1E-1N1. Drilled by Reeves in 1948. 10-inch casing. Altitude about 1,940 ft.

Clay, sandy ---------	15	15	Water sand, fine --	49	152
Sand & clay ---------	40	55	Water sand, coarse	19	171
Water sand, coarse --	38	93	No record ---------	31	202
Shale, sandy --------	10	103			

9N/1E-1Q2. E. F. Rayburg. Drilled by Ephraim Harris in 1951. 8-inch casing perforated 85-95 ft. Altitude about 1,925 ft.

Topsoil ----------	6	6	Sand, dirty -------	10	80
Sand & gravel -------	10	16	Sand & gravel -----	18	98
Clay & little sand --	54	70	Silt & sand -------	1	99

9N/1E-2E2. C. F. Wicks. Drilled by Byers in 1958. 12-inch casing. Altitude about 1,945 ft.

Sand ----------	90	90	"Iron deposit" ----	5	160
Water sand, coarse --	40	130	Sand ----------	4	164
Sand, fine ----------	23	153	"Iron" and rock ---	6	170
No record ----------	2	155	Rock, gravel & fine sand -------	20	190

9N/1E-2E3. George Culver. Drilled by Ephraim Harris in 1954. 8-inch casing perforated 100-112 ft. Altitude about 1,945 ft.

Soil, sandy ---------	1	1	Silt & sand -------	5	91
Silt, fine, sandy ---	15	16	Clay, hard, tight	9	100
Sand & small gravel, clean ----------	3	19	Sand & gravel to $1\frac{1}{2}$ inches, clean	12	112
Silt, sandy ---------	58	77	Clay, hard, tight	4	116
Sand & gravel to 4 inches, clean -----	9	86			

9N/1E-2F1. Frank Palmer. Drilled by Ephraim Harris in 1954. 8-inch casing perforated 92-108 ft. Altitude about 1,945 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Soil, sandy	2	2	Sand & small gravel	11	65
Sand, clean & coarse	10	12	Clay & silt	21	86
Soil, sandy	22	34	Sand & gravel to 4 inches, clean	14	100
Sand, clean & coarse	5	39	Sand, small gravel, clean	7	107
Sand & silt	15	54	Clay, tight	1	108

9N/1E-2H3. Jake Stauter. Drilled by Charles A Mitchell in 1954. 10-inch casing perforated 154-164 ft. Altitude about 1,935 ft.

Clay	62	62	Quicksand; soft brown clay	2	95
Quicksand	4	66	Quicksand	53	148
Clay	6	72	Gravel up to 1 inch	14	162
Sand, coarse	5	77	Clay, soft, blue, coarse	1	163
Quicksand	14	91	Gravel up to 1 inch, coarse	3	166
Clay, hard, brown; clay balls; fine sand; green clay	2	93	Clay, brown	1	167

9N/1E-3G1. G. H. Matherly. Drilled in 1960. 12-inch casing. Altitude about 1,950 ft.

Sand	12	12	Sand	3	96
Clay	5	17	Clay	16	112
Sand	3	20	Sand	17	129
Clay	2	22	Clay	6	135
Sand	3	25	Sand	6	141
Clay	24	49	Clay	12	153
Sand	6	55	Sand	1	154
Clay	5	60	Clay	9	163
Sand	5	65	Sand	14	177
Clay	28	93	Clay	3	180

9N/1E-4F1. O. A. Russell. Drilled by Ephraim Harris in 1947. 8-inch casing perforated 82-100 ft. Altitude about 1,965 ft.

Surface soil	10	10	Sand & small gravel, clean	29	99
Sand	6	16	Clay, soft, & sand	1	100
Silt & sand	54	70			

9N/1E-4J1. U.S. Marine Corps. Drilled in 1942. 12-inch casing to 278 ft perforated 142-260 ft. Altitude about 1,965 ft.

	Thickness (feet)	Depth (feet)
Sand, yellow, & silt	10	10
Sand, gravel to 2 inches	10	20
Sand, yellow, and pebbles	10	30
Sand, coarse, yellow	20	50
Clay, yellow; sand; silt & gravel	20	70
Sand & gravel to 1½ inches, with a thin layer of yellow clay	20	90
Sand & gravel to 2 inches with 1 ft of yellow clay	10	100
Sand and pebbles	10	110
Clay, yellow; sand and pebbles	10	120
Clay, yellow, with sand and gravel to 1½ inches	10	130
Sand, yellow, and pebbles, clean	10	140
Sand, coarse, and gravel	20	160
Gravel, large, angular; sand and clay	10	170
Clay, silty	10	180
Sand and gravel to 1 inch	10	190
Sand and gravel to ¼ inch	10	200
Clay, silty; sand and gravel to ½ inch	10	210
Sand and gravel to ½ inch	20	230
Gravel, silty, to 2 inches	10	240
Sand, dirty, and gravel to 1 inch	10	250
Sand and gravel to ½ inch	10	260
Sand; gravel and "rock" to 10 inches	10	270
Sand and gravel to 2 inches	10	280
Clay, sandy, tough	10	290
No record	6	296

9N/1E-4J2. U.S. Marine Corps. Drilled by Beylik Drilling Co. 14-inch casing perforated 60-350 ft. Well backfilled to 350 ft. Altitude about 1,965 ft.

	Thickness (feet)	Depth (feet)
Sand & gravel ------	72	72
Clay, brown --------	3	75
Sand, coarse, gravel	9	84
Sand, fine ---------	2	86
Clay, brown --------	6	92
Sand & gravel ------	3	95
Gravel, coarse -----	7	102
Clay, brown, & sand	10	112
Sand, coarse, with streaks of brown clay ----------	10	122
Sand, coarse, and brown clay -------	10	132
Sand, coarse, & clay	10	142
Sand & gravel ------	10	152
Sand, fine, & gravel	5	157
Gravel, coarse -----	6	163
Sand, coarse -------	9	172
Sand, coarse, & sandy clay ----------	5	177
Sand, coarse, & gravel	8	185
Clay, sandy, and sand	7	192
Clay, sandy --------	20	212
Clay, sandy, & gravel	10	222
Sand & gravel ------	10	232
Sand, coarse -------	10	242
Clay, brown, with streaks of sand --	4	246
Sand & gravel ------	16	262
Clay & gravel ------	7	269
Sand & cobbles -----	13	282
Clay with sandy streak	13	295
Sand & cobbles -----	3	298
Sand & clay --------	4	302
Clay, brown --------	10	312
Gravel, coarse -----	4	316
Gravel, coarse, & sand ----------	6	322
Sand & gravel ------	20	342
Rock, loose, & cobbles --------	3	345
Clay, yellowish-brown ----------	9	354
Clay, hard, brown	3	357
Clay, yellowish-brown ----------	15	372
Clay, gray -------	28	400
Clay, brown, & rock	10	410
Shale, gray & brown	10	420
Clay, grayish-brown, with streaks of gravel -------	6	426
Clay, gray, & sand	6	432
Clay, hard, & sand	10	442
Clay, yellow, with streaks of sand -	10	452
Rock, broken, with streaks of clay -	13	465
Bedrock ----------	10	475

9N/1E-4R1. U.S. Marine Corps. Drilled in 1942. 12-inch casing. Altitude about 1,963 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand, yellow; silt	10	10	Clay & smooth rock	10	100
Sand & gravel -----	10	20	"Compact" --------	10	110
Sand & clay -------	10	30	Clay, silty ------	10	120
Sand & gravel -----	10	40	Sand -------------	10	130
Sand & clay -------	10	50	Clay, silty, compact	10	140
Sand & pebbles ----	10	60	Sand; gravel to		
Sand & gravel -----	10	70	$\frac{1}{2}$ inch ---------	10	150
Clay, silty, yellow;			Clay -------------	10	160
sand ------------	10	80	Sand; large angular		
Sand -------------	10	90	rock -----------	14	174

9N/1E-5B1. J. R. Smith. Drilled by Clarence Johnson in 1960. 10-inch casing perforated 130-145 ft. Altitude about 1,960 ft.

Clay & sand -------	45	45	Clay, red ---------	2	140
Clay, red ---------	71	116	Sand, clay --------	5	145
Gravel, pea-size --	22	138			

9N/1E-5B2. Volney Womack. Drilled by Clarence Johnson in 1961. 8-inch casing perforated 116-147 ft. Altitude about 1,960 ft.

Clay & sand ---------	51	51	Clay, red, hard ---	1	125
Clay, red ----------	65	116	Gravel; clay ------	22	147
Sand, pea-size gravel	8	124			

9N/1E-5H1. R. M. Smith. Drilled by Ephraim Harris in 1955. 8-inch casing perforated 115-134 ft. Altitude about 1,980 ft.

Soil, sandy ---------	5	5	Clay & gravel -----	4	104
Sand ----------	11	16	Sand & gravel to		
Silt ----------	22	38	3/4 inch --------	4	108
Sand, coarse, clean -	6	44	Sand, fine to coarse;		
Clay & sandy silt ---	46	90	gravel up to 5 inches,		
Clay, sandy ---------	6	96	over 50 percent gravel		
Sand, fine to coarse	4	100	over $\frac{1}{4}$ inch------	22	130
			Shale, limy, buff-		
			colored ---------	7	137

9N/1E-5H2. R. M. Smith. Drilled by Clarence Johnson in 1960. 8-inch casing perforated 114-132 ft. Altitude about 1,980 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand	14	14	Clay, hard, gray	19	95
Clay & sand	18	32	Sand and clay	15	110
Gravel	4	36	Gravel, red	2	112
Clay	7	43	Clay, red	2	114
Sand & gravel	4	47	Sand & pea-size gravel	9	123
Sand & clay	13	60	Clay, hard, brown	2	125
Sand & gravel to 1 inch	10	70	Gravel to 1 inch	7	132
Clay, soft, red	6	76			

9N/1E-9E1. O. L. Johnson. Drilled by Ephraim Harris in 1949. 8-inch casing perforated 103-115 ft. Altitude about 1,980 ft.

Surface soil	2	2	Sand, dirty	14	105
Sand & gravel	48	50	Sand, fine to coarse, clean	7	112
Silt	1	51	"Hilldrift" (some water)	3	115
Sand	22	73			
Clay	18	91			

9N/1E-9E2. Oliver Johnson. Drilled by Ephraim Harris in 1956. 8-inch unperforated casing to 87 ft. Altitude about 1,980 ft.

Sand & gravel	80	80	Shale or rock, blue-gray, water at 130 ft	181	261

9N/1E-9E3. J. W. Greenlee. Drilled by Ephraim Harris in 1954. 8-inch casing perforated 108-130 ft. Altitude about 1,980 ft.

Sand & gravel	28	28	Sand & gravel	19	97
Silt	1	29	Stone, soft, gray	11	108
"Hilldrift"	26	55	Rock, broken, dark-gray	24	132
Sand & gravel	11	66			
Silt	12	78			

9N/1E-10L1. U.S. Marine Corps. Drilled in 1942. Altitude about 1,950 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand & clay -------	265	265	Clay, hard; sand; gravel --------	16	346
Clay, hard --------	9	274	Sand, gravel, clay, water ---	11	357
Sand & gravel -----	26	300	Clay, hard ------	3	360
Sand, gravel, & clay ----------	15	315	Sand, gravel, some clay -----	42	402
Sand & gravel -----	6	321	Clay & gravel ---	26	428
Sand, gravel, and clay ----------	9	330			

9N/1E-15P1. M. B. Phelps. Drilled by Ephraim Harris in 1960. 16-inch casing perforated 150-225 ft. Altitude about 1,965 ft.

Soil, sandy; gravel	1	1	Clay, hard-packed, red ----------	4	200
Sand & gravel, clean	18	19	Sand & gravel, black ---------	25	225
Clay ----------	5	24	Clay, hard-packed, red ----------	5	230
Sand & gravel ------	6	30	Conglomerate, hard, black ---	5	235
Clay, sandy --------	11	41	Clay, hard-packed, red; angular black gravel --	24	259
Sand & gravel ------	2	43	Gravel, cemented	3	262
Clay ----------	4	47	Clay, hard, red; angular black gravel --------	3	265
Sand & gravel ------	41	88			
Clay ----------	2	90			
Sand & gravel ------	12	102			
Clay ----------	3	105			
Sand & gravel ------	58	163			
Sand & silt --------	11	174			
Sand & gravel, coarse ----------	22	196			

9N/1E-16C1. Calnev Pipeline Co. Drilled in 1961. 8-inch casing to 197 ft perforated 125-197 ft. Altitude about 1,960 ft.

Alluvial till ------	35	35	Solid rock ------	10	150
Rock, hard ---------	6	41	Sand & gravel ---	20	170
Gravel, pea-size ---	12	53	Water gravel ----	15	185
Rock and sand ------	20	73	Rock & gravel ---	10	195
Water sand ----------	52	125	Rock ----------	9	204
Very rocky ---------	15	140			

9N/1E-17H1. Daggett Mutual Water Co. Drilled in 1957. 12-inch casing perforated 70-135 ft. Altitude about 1,980 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand, coarse -------	25	25	Gravel, pea-size -	38	113
Gravel, pea-size ---	45	70	Sand, coarse, red	22	135
Sand and clay ------	5	75			

9N/1E-20B2. Chester Siembab. Drilled by Ephraim Harris in 1950. 8-inch casing perforated 130-160 ft. Deepened to 282 ft in 1954 (no log). Altitude about 2,040 ft.

Surface soil and stones ----------	143	143	Conglomerate, medium-hard, red, with gray, hard gravel to 8 inches ----------40		183

9N/1E-20C1. Mooney. Drilled by Ephraim Harris in 1954. 8-inch casing perforated 92-132 ft. Altitude about 2,030 ft.

Soil, gravel, & boulders ---------	36	36	"Hilldrift," hard, burned-brick color ----------	30	162
Sand & gravel ------	62	98			
"Hilldrift," rust-colored ---------	34	132			

9N/1E-21F1. Daggett Mutual Water Co. Drilled by Ephraim Harris in 1931. 12-inch casing perforated 270-? ft. Altitude about 2,065 ft.

"Hilldrift," surface-type, hard-pack, & tight ----------	270	270	Same, loose & coarser, water-bearing ----------	30	300

9N/1E-21H1. J. E. Kelley. Drilled by Barber-Bridge Drilling Corp. in 1957. 16-inch casing perforated 148-398 ft. Altitude about 2,000 ft.

	Thickness (feet)	Depth (feet)
Sand; pea-size & larger gravel	22	22
Clay, solid, yellow	2	24
Gravel, 3/4-inch; some clay & sand	2	26
Conglomerate, hard clay & pea-size gravel (hardpan)	26	52
Gravel, clean, to 1½ inches	14	66
Clay, solid, yellow	6	72
Clay, yellow, with large boulders	6	78
Clay, very hard, yellow	7	85
Clay, very hard, reddish-brown	63	148
Clay, hard, reddish-brown, with small amount embedded gravel	42	190
Clay, hard, reddish-brown; some gravel; very tight	42	232
Clay, very hard, reddish-brown	11	243
Clay, hard, reddish-brown; some gravel; very tight	3	246
Clay, hard, coarse-grained, yellowish-brown; some broken gravel; very tight	2	248
Clay, hard, reddish-brown	4	252
Conglomerate, hard, cemented	22	274
Clay, hard, yellowish-brown, with some embedded gravel	9	283
Conglomerate, hard, cemented	11	294
Clay, yellowish-brown, with some embedded gravel	4	298
Clay, reddish-brown, with some embedded gravel	22	320
Clay & gravel conglomerate	5	325
Conglomerate, very hard, larger percentage gravel and large hard boulders	5	330
Conglomerate, very hard, fairly fine-grained, cemented	30	360
Clay & gravel	6	366
Clay, hard, brown	13	379
Conglomerate, very hard, brown	5	384
Clay, brown; large gravel and boulders, tight	5	389
Clay, medium hard, brown	1	390
Clay, brown; pea-size gravel	9	399
Conglomerate, medium hard coarse sand & pea-size gravel	2	401
Conglomerate, very hard, highly calcited, possibly fractured	6	407
Same as above, but interbedded with brown mudstone	3	410

9N/1E-21L1. Daggett Mutual Water Co. Drilled by Ephraim Harris in 1948. 12-inch casing 0-360, 10-inch casing 320-420 ft; perforated 225-? ft. Altitude about 2,075 ft.

	Thickness (feet)	Depth (feet)
Sand, gravel, & cement	185	185
Gravel, water	1	186
Clay, hard-packed, sandy	39	225
Sand & clay; water at 185 ft	40	265
Clay, hard	9	274
Sand, free, & gravel	26	300
Sand, gravel, & clay	12	312
Sand, gravel, rock, & clay	3	315
Sand & gravel	6	321
Sand; gravel & clay; water level 170 ft	9	330
Clay, hard; sand & gravel	10	340
Sand & gravel	2	342
Sand, gravel, & clay	6	348
Sand & gravel; water level 182 ft	2	350
Sand, gravel, & clay	4	354
Sand & gravel	3	357
Clay, hard, & sand	1	358
Gravel	1	359
Clay, hard, & sand	1	360
Sand, gravel, & clay	21	381
Sand & gravel	3	384
Sand, gravel, & clay	14	398
Sand & gravel	4	402
Clay & gravel	24	426

9N/1E-22B2. F. M. Molby. Drilled by Ephraim Harris in 1955. 12-inch casing perforated 120-150 and 168-253 ft. Altitude about 1,965 ft.

Surface soil	4	4
Sand, coarse, clean; gravel to 4 inches	38	42
Clay	3	45
Sand & gravel	6	51
Clay & silt	33	84
Sand & gravel	2	86
Clay	3	89
Sand & gravel; small layers of clay	28	117
Clay, sandy	4	121
Sand & gravel	29	150
Clay, sandy, tight & hard	18	168
Sand & gravel; clay & cement	32	200
Clay, sandy	9	209
Gravel & clay	6	215
Gravel, clay, cement	1	216
Sand & gravel	2	218
Sand; clay; gravel to 5 inches	17	235
Sand & gravel, clean	8	243
Clay	2	245
Sand & gravel	2	247
Sand, small gravel & clay	13	260
Sand, hard-packed; gravel & clay	35	295

9N/2E-3C1. Hammond. Drilled by Ephraim Harris in 1950. 10-inch casing perforated 29-60 ft. Altitude about 1,870 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Soil	3	3	Sand, clean, & gravel	11	36
Sand & gravel to 2 inches	14	17	Clay, sandy, buff	8	44
Clay, tough, brown	3	20	Sand & gravel to $2\frac{1}{2}$ inches	16	60
Clay, sandy	5	25	Clay, sandy, buff	3	63

9N/2E-6D1. James Shope. Drilled by Ephraim Harris in 1938. 10-inch casing perforated 108-125, 132-142, 144-147, and 148-150 ft. Altitude about 1,925 ft.

Soil	3	3	Clay	1	108
Sand	1	4	Sand & gravel to 1 inch	17	125
Soil	1	5	Clay	7	132
Sand	1	6	Sand, clean, & gravel to 3/4 inch	10	142
Soil, sandy	3	9	Silt & clay	2	144
Sand	18	27	Sand & gravel to 1/2 inch	3	147
Sand & silt, interbedded	61	88	Clay	1	148
Sand, clean, & gravel to 1/4 inch	4	92	Sand & gravel to 1/2 inch	2	150
Sand & gravel to 2 inches	5	97	Clay, tough	7	157
Clay	1	98			
Sand, clean, & gravel to 3/8 inch	9	107			

9N/2E-8K1. Maller. Drilled by F. A. Canfield in 1918. 12-inch casing. Altitude about 1,915 ft.

Surface soil	9	9	Clay	1	97
Clay	2	11	Gravel	13	110
Sand	7	18	Clay	1	111
Clay	3	21	Gravel	11	122
Gravel	11	32	Clay	2	124
Clay	3	35	Gravel	20	144
Gravel	20	55	Clay	5	149
Clay	27	82	Gravel	6	155
Sand & gravel	14	96	Clay	16	171

9N/2E-8N2. E. Childers, formerly S. C. Slack. Drilled by Ephraim Harris in 1948. 14-inch casing perforated 72-295 ft. Altitude about 1,920 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
No record	59	59	Sand	9	186
Sand	13	72	Clay	6	192
Clay	17	89	Sand	18	210
Sand	12	101	Clay, hard	1	211
Clay	3	104	Sand	9	220
Sand	7	111	Clay	17	237
Clay	3	114	Sand	7	244
Sand	5	119	Clay	36	280
Clay	27	146	Sand	13	293
Sand	24	170	Clay	2	295
Clay	7	177			

9N/2E-10G2. George Miller. Drilled by Clarence Johnson in 1961. 8-inch casing perforated 0-80 ft. Altitude about 1,880 ft.

Sand & gravel	20	20	Sand, fine, clean	1	63
Clay & sand	34	54	Clay & sand	12	75
Sand, fine, clean	2	56	Sand, coarse, clean, & pea-size gravel; clay	5	80
Clay & silt	6	62			

9N/2E-15Z1. E. Wooldridge. Drilled in 1918. 12-inch casing perforated 74-76, 91-94, 95-101, 102-103, 106-108, 169-170, 175-177, 192-198, 210-217, 222-234, 235-238, 241-243, 262-274, 275-282, 284-292 ft. Altitude about 1,890 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay	6	6	Clay & sand	5	120
Gravel	14	20	Clay	25	145
Clay	6	26	Sand	1	146
No record	4	30	Clay	23	169
Sand, fine; water	1	31	Gravel	1	170
Clay	10	41	Clay	5	175
Sand clay	2	43	Gravel	2	177
Clay	3	46	Clay	8	185
Sand	1	47	Sand	2	187
Clay, soft	3	50	Clay	3	190
Sand & clay	10	60	Sand	2	192
Clay	10	70	Gravel	6	198
Sand & clay	4	74	Clay	3	201
Gravel	2	76	Clay, sandy	2	203
Clay	1	77	Clay	7	210
Sand	1	78	Gravel	7	217
Clay	1	79	Clay	5	222
Sand, coarse	3	82	Gravel	12	234
Clay & sand	3	85	Clay	1	235
Quicksand	5	90	Gravel	3	238
Clay	1	91	Clay & gravel	3	241
Sand & gravel	3	94	Gravel	2	243
Clay	1	95	Clay & fine sand	8	251
Gravel	6	101	Clay	11	262
Clay	1	102	Gravel	12	274
Gravel	1	103	Clay	1	275
Sand & clay	3	106	Gravel	7	282
Gravel	2	108	Clay	2	284
Sand & clay	2	110	Gravel	8	292
Clay	3	113	Clay	1½	293½
Quicksand	2	115			

9N/2E-18H1. H. H. Hill. Drilled by J. M. Scoggin in 1954. 16-inch casing 0-150 ft, 12-inch casing 150-302 ft; perforated 80-302 ft Altitude about 1,925 ft.

Topsoil	7	7	Water sand with small shale breaks	22	248
Clay, sandy, brown	3	10	Clay, red	12	260
Gravel, pea-size	10	20	Water gravel	20	280
Clay boulders, red	40	60	Shale, red	12	292
Clay, gray	12	72	Water gravel; shale	10	302
Water gravel	72	144			
Shale, brown	20	164			
Water sand, coarse	62	226			

9N/2E-19K1. C. A. Barry. Well deepened by Ephraim Harris in 1961. 10-inch casing perforated 95-110 ft. Altitude about 1,935 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
No record	83	83	Sand & gravel	40	146
Sand & gravel	17	100	Clay, hard	3	149
Clay	6	106	Sand	1	150

9N/2E-20G1. San Bernardino County, formerly U.S. Marine Corps. Drilled in 1942. 16-inch casing perforated 330-488 ft. Well backfilled to 488 ft. Altitude about 1,915 ft.

Clay, hard	5	5
Clay, silty	22	27
Clay, silty, brown	58	85
Clay, brown	36	121
Water sand, gravel to 1/2 inch	3	124
Clay, sandy, brown	8	132
Clay; rounded and angular gravel	2	134
Clay, sandy	6	140
Sand, muddy; gravel to 3/8 inch	7	147
Clay, silty	2	149
Clay, brown	1	150
Water sand; gravel to 1/2 inch	12	162
Clay, sandy, brown	24	186
Clay and sand layers; gravel to 1/2 inch	7	193
Clay, brown	17	210
Clay and fine to coarse sand layers	6	216
Water sand; gravel to 1-1/2 inches	10	226
Clay	4	230
Water sand, some gravel to 1/2 inch	10	240
Water sand, gravel to 2 inches	6	246
Clay, brown	10	256
Water sand, gravel to 1 inch	6	262
Sand, fine; gravel to 3/4 inch; clay; in layers	12	274
Clay	15	289
Gravel to 6 inches; clay, cemented	7	296
Clay and gravel	14	310
Clay	6	316
Clay, silty	3	319
Clay, sandy	11	330
Water sand; gravel to 1 inch	7	337
Clay	2	339
Clay, sand, gravel to 1-1/2 inches, in layers	4	343
Gravel to 2 inches; cemented clay	15	358
Water sand; gravel to 6 inches	31	389
Sand; gravel to 3 inches	21	410
Sand & gravel, cemented	20	430
Gravel, cemented & loose layers	6	436
Clay & cemented gravel	2	438
Gravel, cemented	36	474
Sand & gravel, tight	26	500

9N/2E-20K1. San Bernardino County, formerly U.S. Marine Corps. Drilled in 1942. 16-inch casing perforated 242-388 ft. Altitude about 1,918 ft.

	Thickness (feet)	Depth (feet)
Clay	22	22
Sand, coarse; some small gravel	22	44
Clay, sandy	24	68
Clay; streaks fine sand and rock	17	85
Water sand; gravel to 3/4 inch	4	89
Clay, sandy	25	114
Clay, sand, and small gravel	2	116
Water sand; gravel to 3/4 inch	19	135
Clay, sandy	9	144
Water sand; gravel to 1/2 inch, round	2	146
Clay, brown	3	149
Clay, sand, gravel to 1/2 inch, in layers	11	160
Clay, brown	12	172
Clay, sand, gravel to 3/8 inch	2	174
Clay, brown	19	193
Clay, sand, and small gravel	4	197
Water sand, gravel to 1/2 inch	9	206
Water sand, gravel 1/4 to 1/2 inch	4	210
Water sand, gravel to 3 inches	3	213
Clay	30	243
Water gravel, rock to 4 inches	3	246
Clay	2	248
Water gravel to 3/4 inch, some clay	6	254
Gravel, boulders, clay, cemented	39	293
Gravel to 4 inches, some clay	7	300
Clay with embedded rock	18	318
Gravel and boulders, clay	6	324
Water sand, gravel to 2 inches	4	328
Clay with embedded gravel	3	331
Water sand; gravel to 6 inches	23	354
Gravel and boulders, cemented	12	366
Water gravel to 3/4 inch	3	369
Gravel, cemented	3	372
Gravel, cemented & loose, in layers	10	382
Gravel, cemented	18	400

9N/2E-20K2. San Bernardino County, formerly U.S. Marine Corps. Drilled in 1947. 16-inch casing. Altitude about 1,915 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay & sand	5	5	Sand	12	217
Sand	2	7	Gravel	3	220
Clay	35	42	Clay	27	247
Sand	4	46	Gravel	6	253
Clay	45	91	Clay	9	262
Clay & gravel	5	96	Clay, sand, gravel	22	284
Clay	13	109	Clay, sand	36	320
Clay & gravel	6	115	Sand, clay, gravel, cemented	37	357
Clay	18	133			
Clay & gravel	30	163			
Sand	18	181			
Clay	24	205			

9N/2E-29C1. State of California. Drilled by Ephraim Harris in 1952. 12-inch casing perforated 90-115 ft. Altitude about 1,935 ft.

Surface soil; sand; gravel; boulders to 9 inches	5	5
Silt; fine sand; small gravel	15	20
Silt; fine sand; gravel to 1/4 inch; boulders to 5 inches. Gravel & silt decreasing with depth	41	61
Silt & boulders	11	72
Sand, fine to coarse, clean; gravel to 1/4 inch; boulders to 8 inches	32	104
Sand, fine to coarse, clean; gravel to 1/4 inch; boulders to 4 inches	11	115
Silt; sand, fine to coarse; gravel, fine; boulders to 6 inches. Packed tight	5	120

9N/3E-10Z1. J. W. Burden & R. D. Lippincott. 12-inch casing. Altitude about 1,822 ft.

Clay & streaks of sand	75	75	Clay & sand	20	155
Sand, coarse	28	103	Gravel, "fair"	5	160
Clay & sand	27	130	Clay with chunks of cemented sand	10	170
Gravel, fine	5	135			

9N/3E-18Q1. K. L. Morris. Drilled by Ephraim Harris in 1944. 12-inch casing. Altitude about 1,856 ft.

	Thickness (feet)	Depth (feet)
Sand & soil --------	51	51
Sand, muddy, & clay	22	73
Sand, clean --------	1	74
Sand & clay --------	11	85
Sand, clean; & gravel to 1/2 inch ------	3	88
Clay, soft ---------	10	98
Sand, fine, & gravel to 1/2 inch ------	9	107
Clay ---------------	5	112
Sand & gravel to 1/4 inch ---------	2	114
Clay ---------------	1	115
Sand & gravel to 3/4 inch ---------	4	119
Sand, fine, dirty --	4	123
Sand, clean; gravel to 1/2 inch ------	2	125
Clay, soft ---------	4	129
Sand & gravel to 1/2 inch ---------	2	131
Clay ---------------	12	143
Sand & gravel to 1/2 inch ---------	4	147
Clay ----------	4	151
Sand ----------	1	152
Clay ----------	4	156
Gravel to 1/2 inch	10	166
Clay ----------	9	175
Sand ----------	5	180
Sand, some gravel--	24	204
Clay, hard --------	6	210
Sand & gravel to 1 inch ----------	8	218
Clay ----------	5	223
Sand & gravel to 1 inch ----------	4	227
Clay, hard --------	31	258
Sand & gravel to 1 inch ----------	7	265
Clay ----------	5	270
Sand ----------	2	272
Clay ----------	2	274

9N/3E-19E1. M. J. Edwards. 12-inch casing. Altitude 1,860.1 ft.

Drift sand; water at 12 ft ----------	12	12
Quicksand ----------	2	14
Clay ---------------	3	17
Sand ---------------	2	19
Clay ---------------	2	21
Sand, coarse --------	2	23
Clay ---------------	5	28
Clay, sandy ---------	3	31
Clay ---------------	10	41
Sand, coarse --------	4	45
Clay ---------------	4	49
Sand, coarse --------	8	57
Clay ---------------	3	60
Sand, coarse --------	6	66
Clay ---------------	2	68
Sand, coarse --------	6	74
Clay ---------------	5	79
Sand, coarse --------	9	88
Clay ----------	5	93
Sand, coarse ------	3	96
Clay ----------	2	98
Sand, coarse ------	4	102
Clay ----------	10	112
Sand & gravel; flowing water ---	22	134
Clay ----------	5	139
Sand & coarse gravel; water ---	10	149
Clay ----------	11	160
Sand, coarse ------	2	162
Clay ----------	10	172
Sand, coarse ------	3	175
Clay ----------	4	179
Sand, coarse ------	4	183
Clay ----------	3	186
Sand, coarse ------	10	196
Clay ----------	4	200

9N/3E-20J1. G. B. Devenish. Drilled by H. H. Ley in 1952. 10-inch casing perforated 50-56 and 73-96 ft. Altitude about 1,845 ft.

	Thickness (feet)	Depth (feet)
Caliche	2	2
Sand & gravel	6	8
Clay, sandy	22	30
Clay, tough, yellow	6	36
Sand, clean, & gravel	5	41
Clay, yellow	3	44
Sand, coarse, clean; gravel to 1/4 inch	10	54
Clay, yellow	1	55
Sand, coarse	1	56
Clay, sandy, yellow	4	60
Clay, tough, yellow	14	74
Sand, coarse; some gravel to 1/4 inch	8	82
Sand, coarse; some gravel to 1/4 inch; few thin clay ribs	8	90
Sand, coarse, clean; small amount gravel to 3/4 inch	6	96
Clay, tough, yellow	4	100

9N/3E-20J2. G. B. Devenish. Drilled by H. H. Ley in 1951. 10-inch casing perforated 45-48, 82-87, and 105-140 ft. Altitude about 1,845 ft.

Soil, sand, & clay	45	45
Sand, coarse, & gravel--water	2	47
Clay, sandy	15	62
Clay, tough, yellow	21	83
Sand, dirty--water	3	86
Clay, sandy, & adobe ribs	21	107
Sand & gravel, dirty	2	109
Clay, yellow	9	118
Sand, coarse; gravel to 3/4 inch; water condition, good	23	141

9N/3E-20K1. John Devenish. Drilled by H. H. Ley in 1955. 12-inch casing to 292 ft perforated 56-62, 84-88, 111-116, 157-162, 188-224, 247-252, 261-265, and 276-286 ft. Altitude about 1,850 ft.

Hardpan	1	1
Sand, coarse, & gravel	14	15
Clay, sandy	17	32
Sand & gravel to 3/4 inch	5	37
Clay, sandy, yellow	10	47
Clay, hard, yellow	2	49
Sand, coarse; gravel; clay	8	57
Sand, coarse; some gravel	4	61

9N/3E-20K1.--Continued.

	Thickness (feet)	Depth (feet)
Clay, tough, brown	24	85
Sand, fine	2	87
Caliche, tough	26	113
Sand, coarse, & gravel	1	114
Clay, tough, yellow	44	158
Sand, coarse; gravel to 1/4 inch	3	161
Clay, yellow	29	190
Sand, coarse; some water	3	193
Clay, yellow; sand & gravel, interbedded	10	203
Sand, coarse; some gravel to 3/4 inch	11	214
Clay, tough, brown	5	219
Sand, silty, brown, & clay	4	223
Sand, coarse; some water	1	224
Clay, tough, blue	3	227
Conglomerate	21	248
Sand, silty, dark	3	251
Caliche, tough	11	262
Sand; gravel to 3/4 inch	2	264
Clay, sandy; caliche	13	277
Sand, coarse; gravel, loose	3	280
Clay, green & brown	2	282
Sand, coarse; gravel	2	284
Clay, tough, brown	1	285
Clay, blue	6	291
Clay, tough, brown; caliche	1	292
Clay, sandy, fine	16	308

9N/3E-20R1. John Devenish. Drilled by H. H. Ley in 1955. Altitude about 1,845 ft.

Soil, sandy; some gravel to 1/4 inch	18	18
Clay, sandy, yellow	6	24
Sand, coarse; gravel to 1/4 inch; some clay	2	26
Clay, sandy, yellow	8	34
Sand, coarse; gravel to 1/2 inch; some clay	4	38
Clay, sandy, yellow	7	45
Sand, coarse; gravel to 3/4 inch; dry	6	51
Clay, yellow	3	54
Sand, coarse	1	55
Clay, yellow	37	92

9N/3E-20R2. John Devenish. Drilled by H. H. Ley in 1955. Well abandoned and casing pulled. Altitude about 1,845 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Soil, yellow -------	28	28	Sand, coarse; gravel to 1/4 inch; embedded in clay -	40	86
Sand & gravel to 1/2 inch ---------	10	38	Sand, clay ribs ---	5	91
Sand rib, hard, cemented ---------	1	39	Clay, yellow ------	35	126
Sand, coarse; gravel to 3/4 inch-------	6	45			
Sand, tight; gravel; some clay, yellow	1	46			

9N/3E-24D1. H. Johnson, formerly J. J. Cornwall. Drilled by F. A. Canfield prior to 1919. 36- and 10-inch casing. Altitude about 1,810 ft.

No record ---------	125	125	Sand, coarse ------	1	182
Clay --------------	12	137	Clay --------------	2	184
Sand, coarse ------	7	144	Sand, coarse ------	2	186
Gravel ------------	9	153	Clay --------------	6	192
Clay --------------	3	156	Sand --------------	3	195
Sand, coarse ------	3	159	Clay --------------	6	201
Clay --------------	8	167	Sand --------------	2	203
Sand --------------	5	172	Clay --------------	14	217
Clay & sandstone, shelly ----------	2	174	Gravel ------------	6	223
Sand --------------	2	176	Clay --------------	2	225
Clay --------------	2	178	Gravel ------------	3	228
Sand, fine --------	2	180	Clay --------------	21	249
Clay --------------	1	181	Gravel, coarse ----	5	254
			Clay --------------	6	260

9N/3E-33E1. The Atchison, Topeka, and Santa Fe Railway System. Drilled by F. A. Canfield in 1917. 16-inch casing. Altitude about 1,830 ft.

Clay --------------	8	8	Clay, tough; streaks of gray shale with imprints of "tule leaves" on lumps of clay ----------	34	134
Sand; water -------	15	23	Sand, coarse; gravel	6	140
Sand, coarse, & gravel; water not flowing ----------	2	25	Clay, hard, brown --	4	144
Clay, sandy, blue --	27	52	Gravel; water ------	3	147
Clay, tough, blue --	12	64			
Sand, coarse -------	36	100			

9N/3E-33E1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay, hard, brown -	37	184	Sand, dark-blue -	8	260
Clay, sandy -------	9	193	Clay, hard, chalky, white ---------	7	267
Sand, coarse; gravel; water ----------	6	199	Gravel; water ---	5	272
Clay, very hard ----	2	201	Clay, hard, gray	14	286
Gravel; water ------	7	208	Sand ----------	26	312
Clay, hard, blue ---	39	247	Clay, tough -----	2	314
Clay, sandy, brown -	5	252			

9N/3E-33E2. The Atchison, Topeka, and Santa Fe Railway System. Drilled in 1926. 16-inch casing perforated 9-32, 200-235, 370-380, 390-395, and 415-417 ft. Altitude about 1,830 ft.

Clay, sandy --------	3	3	Sand, streaks of clay ----------	15	310
Clay, blue ---------	2	5	Quicksand -------	5	315
Sand, coarse -------	17	22	Clay, blue ------	20	335
Clay, blue ---------	46	68	Sand ----------	5	340
Sand ---------------	2	70	Clay, hard, blue	30	370
Clay, yellow -------	18	88	Sand & gravel ---	10	380
Clay, blue ---------	22	110	Clay, blue ------	10	390
Sand, blue ---------	9	119	Sand, coarse ----	5	395
Clay, blue ---------	81	200	Clay, hard, blue	20	415
Gravel, fine -------	5	205	Sand, coarse ----	2	417
Clay & gravel ------	30	235	Clay, hard, blue	35	452
Clay; streaks of gravel----------	35	270			
Clay, blue ---------	25	295			

9N/3E-35D1. J. B. Cutshall. Drilled by H. H.Ley in 1951. 8-inch casing perforated 70-137 ft. Altitude about 1,819 ft.

Clay, sandy, yellow	39	39	Clay, green & yellow ---------	27	118
Sand, fine; some water	1	40	Sand, coarse; water	7	125
Silt; clay ----------	32	72	Sand, coarse; clay ribs ----------	5	130
Sand, very fine -----	4	76	Sand, coarse, clean; water ----------	6	136
Clay, sandy ---------	9	85	Clay, yellow ------	1	137
Sand, fine; narrow clay streaks ------	6	91			

9N/4E-8D1. H. B. Anderson, Jr. Drilled by Ephraim Harris in 1957. 14-inch casing perforated 60-200 and 275-300 ft. Altitude about 1,790 ft.

	Thickness (feet)	Depth (feet)
Soil	3	3
Sand, soil, silt	26	29
Sand, coarse, clean	4	33
Clay, blue-green, gray; layers of fine sand	205	238
Clay, sandy	2	240
Lava	2	242
"Hilldrift"; rock, volcanic; gravel & clay, sandy	58	300
"Hilldrift"; rock, volcanic; gravel to 5 inches	30	330

9N/4E-18E2. M. V. Tienken, formerly H. G. Tienken. 48-inch casing. Altitude 1,801.4 ft.

No record	25	25	Clay	15	108
Clay	10	35	Quicksand	2	110
Sand, coarse	2	37	Sand & clay	38	148
Clay & sand	30	67	Clay	4	152
Sand, coarse	15	82	Clay, blue	39	191
Clay	3	85	Clay, blue, & sand	4	195
Sand, fine	2	87	Clay	1	196
Clay & sand	6	93			

9N/4E-18M1. G. B. Devenish. Drilled by H. H. Ley in 1957. 12-inch casing perforated 40-85 ft. Altitude about 1,801 ft.

Soil	26	26
Clay, sandy, yellow	15	41
Sand, fine to coarse	1	42
Clay, brown; sand, fine to coarse; water	13	55
Clay, tough, brown	5	60
Sand, coarse; gravel to 1/4 inch	3	63
Caliche	2	65
Sand, fine; clay	10	75
Clay, yellow	5	80
Sand, coarse; some silt	2	82
Clay, tough, yellow	10	92

9N/4E-18N1. I.R. Martin. Drilled by H. H. Ley in 1953. 14-inch casing perforated 22-36, 50-62, and 82-148 ft. Altitude about 1,800 ft.

	Thickness (feet)	Depth (feet)
Caliche	10	10
Clay, sandy	10	20
Caliche	3	23
Sand, coarse; water	2	25
Clay, sandy, yellow	5	30
Sand, coarse; 25 percent silt; water	5	35
Clay, tough, yellow	15	50
Sand, coarse; gravel to 1/4 inch; water	3	53
Clay, brown; sand	8	61
Clay, brown; caliche	11	72
Clay, sandy, brown	11	83
Sand, coarse; water	7	90
Clay, brown	8	98
Sand, coarse	1	99
Clay, brown	13	112
Sand, fine to coarse; water	13	125
Clay, tough, gray	2	127
Clay, sandy, yellow; sand, fine, silty	13	140
Sand, coarse, dirty	7	147
Clay, yellow; caliche	10	157
Clay, blue	49	206

10N/1E-34K1. Ezerene Noblin. Drilled by R. L. Noblin in 1958. 12-inch casing perforated 100-150 ft. Altitude about 1,945 ft.

Surface soil	20	20	Silt, red	8	96
Sand	2	22	Sand, fine, muddy	24	120
Silt	62	84	Silt, red, with small rocks	30	150
Sand, coarse, red	4	88			

10N/1E-34N1. Ezerene Noblin. Deepened by R. L. Noblin in 1958. 10-inch casing to 200 ft; 8-inch casing 200-300 ft perforated 200-300 ft. Altitude about 1,950 ft.

No record	200	200
Silt, soft, red, with small layers of fine red sand	60	260
Clay, hard, or soft rock strata	2	262
Sand, muddy	38	300

10N/1E-34P1. Ezerene Noblin. Drilled by R. L. Noblin in 1958. 14-inch casing perforated 100-300 ft. Altitude about 1,950 ft.

	Thickness (feet)	Depth (feet)
Topsoil	10	10
Sand	5	15
Silt, soft	70	85
Sand, coarse, red	10	95
Silt & sand, thin layers; thin layer shale or rock	70	165
Sand, in thin layers, alternating with hard formation	100	265
Hard formation; no identifiable samples	35	300

10N/1E-35N2. L. P. Clinkenbeard. Drilled by R. L. Noblin in 1958. 8-inch casing perforated 96-136 ft. Altitude about 1,945 ft.

Sand, coarse	20	20	Sand, coarse, & some gravel	6	136
Silt	64	84	Silt, red	4	140
Sand, fine, red	6	90			
Silt, red	6	96			
Sand, red, & silt, in layers	34	130			

10N/3E-14N1. George Wright. Drilled by Ephraim Harris in 1956. 12-inch casing perforated 110-245 ft. Altitude about 1,797 ft.

Soil, sandy	3	3
Sand & silt	82	85
Sand, coarse, clean; and small gravel	10	95
Silt, sandy, fine	5	100
Sand, coarse, clean; gravel, small	15	115
Silt, small layer of clay, small layer of sand	30	145
Clay	10	155
Sand, clean; gravel, small; layers of clay	35	190
Clay, light-blue	13	203
Sand, coarse, clean	2	205
Clay, sandy, gray	8	213
Sand, coarse, clean	2	215
Sand, clean, layers of 1 to 3 ft; equal layers of clay	20	235
Sand, fine; and blue clay	5	240
Sand, coarse, blue	5	245
Clay, blue; sand, coarse, in layers	5	250
Clay, blue	5	255

10N/3E-15K1. Union Pacific Railroad Co., formerly Los Angeles & Salt Lake Railroad Co. Drilled in 1912. 12-inch casing perforated 75-80 and 275-285 ft. Altitude about 1,808 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand	65	65	Sand	5	170
Clay, brown	10	75	Clay, brown	20	190
Gravel; water	5	80	Sand	20	210
Clay, brown	20	100	Clay, blue	65	275
Sand	60	160	Gravel; water	10	285
Clay, brown	5	165	Clay, blue	33	318

10N/3E-15P1. Union Pacific Railroad Co. Drilled by Barber-Bridge Drilling Corp. in 1943. 16-inch casing perforated 112-275 ft. Altitude about 1,808 ft.

Sand	35	35	Sand & gravel to 1/2 inch, clean	15	185
Gravel, cemented	5	40	Sand & silt	18	203
Silt, sandy, hard	60	100	Clay, tough, blue	57	260
Clay, sandy, hard	12	112	Rock, hard, white	63	323
Sand & gravel to 1/2 inch, clean	5	117	Rock, hard, blue	9	332
Sand, dirty	43	160	Clay, sandy, soft	6	338
Sand, fine, clean	10	170			

10N/3E-19A1. V. V. Cyr, formerly R. B. Lamborn. Drilled by John R. Byers in 1957. 14-inch casing perforated 80-240 ft. Altitude about 1,835 ft.

Sand, fine	80	80	Rock	3	193
Gravel, medium to coarse; water	110	190	Sand; water	47	240

10N/3E-21B1. E. M. & C. L. Rackliff. Drilled by Ephraim Harris in 1950. 16-inch casing perforated 110-185 and 208-213 ft. Altitude about 1,830 ft.

Soil, sandy	24	24	Sand & silt layers; about 33 percent clean sand	37	136
Sand, clean	9	33	Clay, light-green	8	144
Silt	17	50	Sand, fine	2	146
Silt, sandy	3	53	Clay, light-blue	9	155
Clay, hard, gray	7	60			
Clay, gray, silt	39	99			

10N/3E-21B1.--Continued.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay, light-blue; sand, coarse -----	5	160	Rock & clay, volcanic; some water -----	16	212
Sand, fine; gravel to 1/2 inch ------	8	168	Clay, dark-blue --	1	213
Clay, light-blue ---	3	171	Sand, coarse -----	1	214
Sand, coarse, clean	14	185	Lava, broken; some water; clay ----	9	223
Clay, tough, dark-blue ----------	11	196			

10N/3E-21C1. E. Granville. Drilled by Ephraim Harris in 1955. 8-inch casing perforated 120-140 ft. Altitude about 1,830 ft.

Clay & silt, sandy--	67	67	Clay, light-green-	1	129
Sand, fine to coarse; gravel to 1/2 inch	11	78	Sand; gravel to 3/4 inch -------	6	135
Sand, clay, & silt--	20	98	Clay, sticky, light-green ----	2	137
Sand, coarse; gravel to 3/4 inch ------	1	99	Sand & gravel ----	3	140
Clay & silt --------	5	104	Silt & clay ------	6	146
Sand ----------	10	114			
Clay, sandy, light-green ----------	5	119			
Sand; gravel to 3/4 inch; small layers of clay, light green	9	128			

10N/4E-4E2. Western Pacific Oil Co. Drilled by Richardson in 1924. 10-inch casing. Altitude about 1,740 ft.

Shale, gray --------	92	92	Lime, white ------	40	2,420
Water sand ---------	198	290	Shale & lime -----	48	2,468
Shale or clay, brown	670	960	Sand & hard shells	125	2,593
Conglomerate -------	50	1,010	Shale, sandy & hard	607	3,200
Shale or clay, brown	630	1,640	Conglomerate, some andesite -------	297	3,497
Conglomerate & shale	740	2,380			

10N/4E-7P1. T. B. Morgon. Drilled by Ephraim Harris in 1956. 8-inch casing perforated 80-180 ft. Altitude about 1,775 ft.

	Thickness (feet)	Depth (feet)
Surface soil	24	24
Clay, sandy	33	57
Sand, clean	1	58
Clay, soft, gray; sand in small layers, water-bearing	12	70
Clay, soft, blue; sand in small layers, water-bearing	70	140
Clay, blue to gray, hard	5	145
Clay, hard, blue to gray; sand in small layers, water-bearing	5	150
Clay, hard, blue to gray	14	164
Sand; some water	6	170
Clay, hard, blue & green	4	174
Sand, fine to coarse	5	179
Clay, blue & green	15	194

11N/2E-7A1. Johnson. Drilled by Max Hering in 1933. 8-inch casing perforated 45-60 ft. Altitude about 1,790 ft.

	Thickness (feet)	Depth (feet)
Rock & sand	86	86

11N/3E-30J2. C. E. Curtis. Drilled in 1952. 12-inch casing perforated 47-141 ft. Altitude about 1,775 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay & sand	50	50	Clay & sand	26	93
Clay, blue, in streaks	10	60	Gravel	14	107
Gravel	3	63	Clay & streaks of sand	23	130
Clay, in streaks	4	67	Clay, blue	11	141

11N/6E-18Z1. Union Pacific Railroad Co., Afton well, formerly Los Angeles & Salt Lake Railroad Co. Drilled in 1904. 13-inch casing perforated 383-423 ft. Altitude about 1,410 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand & boulders	63	63	Gravel	14	399
Gravel, cemented	305	368	Sand	24	423
Sand	17	385	Rock	6	429

12N/2E-31A1. U.S. Army. Drilled by Roscoe Moss in 1954. 14-inch casing perforated 180-552 ft. Altitude 1,789.5 ft.

	Thickness (feet)	Depth (feet)
Sand, granitic; and fine gravel	2	2
Caliche	.5	2.5
Sand, granitic, and gravel as much as 1/4 inch	37.5	40
Sand, granitic, and gravel as much as 1/4 inch; occasional metamorphic fragments; some clay	40	80
Sand, very coarse; and gravel as much as 3/4 inch; some clay	14	94
Sand and pebble gravel, mostly granitic but with some epidote and metasediments	4	98
Sand and gravel, as much as 1/4 inch	7	105
Sand, very coarse; and gravel, as much as 1 inch; some clay	110	215
Sand and gravel, as much as 1/2 inch	45	260
Sand and gravel, as much as 1½ inches	2	262
Sand and gravel, one 4-inch cobble, some clay	8	270
Sand and pebble gravel	2	272
Sand, tight, with clay; some gravel, as much as 1/4 inch	8	280
Sand, fine, with some pebble gravel and clay, tight	10	290
Sand, fine, and gravel, as much as 1/2 inch; some clay, tight	10	300
Sand, fine, tight, with some silt	20	320
Sand, fine, tight, some gravel, as much as 1/4 inch	3	323
Gravel, as much as 1½ inches; no clay; very little sand	1	324
Sand, coarse, and pebble gravel; some clay	6	330
Sand, fine; some coarse sand and gravel, as much as 3/4 inch; no clay	5	335
Sand, fine to coarse; some gravel, as much as 1/2 inch	12	347
Sand, fine, brown, silty, tight	105	452
Clay, sandy, with gravel as much as 1/2 inch	100	552
Clay and sand, with gravel as much as 1½ inches	3	555
Clay and sand, with gravel as much as 1/2 inch	29	584

12N/2E-32K1. Riblet & Alexander, formerly Max Hering. Drilled by Max Hering in 1923. 5-inch casing perforated 64-74 ft. Altitude about 1,730 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand	7	7	Gravel, fine	5	51
Clay, yellow	10	17	Clay, brown; gravel up to 2 inches	23	74
Clay, blue	11	28			
Gravel, fine; water	.3	28.3			
Clay, tough, hard, blue	17.7	46			

9N/1W-5J1. John Sturnacle. Drilled by Ephraim Harris in 1951. 12-inch casing perforated 32-37, 49-57, 72-75, 79-81, 84-86, 89-92 ft. Altitude about 2,080 ft.

Clay, buff	3	3	Clay, buff	4	79
Gravel & sand	9	12	Cobbles & gravel	2	81
Clay & gravel	20	32	Clay	3	84
Sand & gravel	5	37	Cobbles & gravel	2	86
Clay, buff	12	49	Clay, buff	3	89
Gravel & sand	8	57	Cobbles & gravel	3	92
Clay, buff	15	72	Clay; fine sand; very little gravel	15	107
Gravel & sand	3	75			

9N/1W-5J2. Southern California Water Co., formerly John Sturnacle. Drilled by Ephraim Harris in 1952. 8-inch casing perforated 50-208 ft. Altitude about 2,080 ft.

Surface soil & sand	12	12	Clay, sandy, tight, buff	16	126
Sand & gravel	18	30	Sand, gravel & clay	9	135
Clay, buff	20	50	Sand, hard-packed	11	146
Sand, small gravel	1	51	Sand, cobbles, & clay	3	149
Clay, buff, with thin layers sand	24	75	Silt, fine, sandy, hard	51	200
Clay, tight, buff	29	104	Sand, gravel, & clay, hard-packed	6	206
Sand & gravel; enough clay to keep from caving	6	110	Clay, hard	2	208

9N/1W-5J3. Southern California Water Co., formerly John Sturnacle. Drilled by Ephraim Harris in 1955. 8-inch casing perforated 40-222 ft. Altitude about 2,060 ft.

Sand & gravel	26	26	Sand, gravel, & clay, tight, water-bearing	163	208
Sand & clay	3	29	Gravel in tight clay	14	222
Sand & gravel	3	32			
Sand & clay	13	45			

9N/1W-5J4. John Sturnacle. Drilled by Ephraim Harris in 1952. 12-inch casing to 45 ft, perforated 18-40 ft. Altitude about 2,065 ft.

	Thickness (feet)	Depth (feet)
Sand & gravel	22	22
Clay & gravel; very little water	18	40
Clay, hard, tight, buff	11	51
Sand & clay	1	52
"Mesa" formation, hard & tight	50	102

9N/1W-8A2. Jack Belsher. Drilled by C. A. Mitchell in 1954. 10-inch casing to 137 ft, perforated 95-97, 115-116, and 130-131 ft. Altitude about 2,110 ft.

Soil	32	32	Gravel	1	116
Clay, brown	6	38	Clay, gray	14	130
Clay; 1 to 3-inch gravel	12	50	Gravel, coarse	1	131
Clay, hard, brown	45	95	Clay, gray	6	137
Gravel, coarse	2	97	Gravel, coarse	2	139
Clay	17	114	Clay, hard, brown	3	142
Sand	1	115	Gravel	3	145

9N/1W-9D2. Bruce Wilks. Drilled by Ephraim Harris in 1952. 12-inch casing perforated 60-106 ft. Altitude about 2,090 ft.

Surface sand & soil	10	10	Sand, clean, & gravel	19	106
Clay & silt	44	54	Silt, sandy, hard	19	125
Sand, clean; gravel to 4 inches	33	87	Gravel & clay	4	129

9N/1W-9F2. C. H. Middaugh. Drilled by C. A. Mitchell in 1957. 10-inch casing perforated 65-86 and 90-91 ft. Altitude about 2,090 ft.

Silt, sand, & gravel	15	15	Sand, coarse, cemented in fine streaks	10	86
Clay	5	20	Clay, very hard	4	90
Sand & gravel	38	58	Gravel, coarse	1	91
Clay	7	65	Clay, hard	15	106
Sand	3	68			
Clay	8	76			

9N/1W-9J6. F. H. Canaday. Drilled by Ephraim Harris in 1956. 8-inch casing perforated 73-79 ft. Altitude about 2,080 ft.

	Thickness (feet)	Depth (feet)
"Hilldrift" soil; sand & gravel	24	24
Sand & small gravel	32	56
Clay, tough, gray	1	57
Sand & small gravel	6	63
"Hilldrift" sand; sand & gravel	10	73
Sand & gravel to 4 inches, clean	6	79
Clay, sandy, hard	2	81

9N/1W-10G3. J. R. Bishop. Drilled by Ephraim Harris in 1955. 12-inch casing perforated 45-109 ft. Altitude about 2,040 ft.

Soil	8	8
Sand & gravel, with small amount of clay	92	100
Sand, dirty, & gravel	8	108
Sand, clean, coarse, & gravel	3	111

9N/1W-10G4. Lee Tippett. Drilled by Clarence Johnson in 1961. 8-inch casing perforated 34-70 ft. Altitude about 2,035 ft.

Silt	8	8	Clay	4	33
Gravel to 2 inches	4	12	Sand & gravel	17	50
Clay	2	14	Clay, brown	1	51
Sand & gravel	15	29	Sand & gravel	19	70

9N/1W-11J1. California Electric Power Co., formerly Cool Water Ranch. Drilled by Ephraim Harris in 1950. 12-inch casing perforated 30-200 ft. Altitude about 2,010 ft.

Soil	12	12	Sand & gravel to 4 inches	10	130
Mud & rock	6	18	Sand, clean; gravel to 4 inches	24	154
Sand, clean; gravel to 1/4 inch	35	53	Sand, coarse, clean; gravel to 6 inches	39	193
Clay, soft, brown	2	55	Clay, tough, hard, gray	4	197
Sand & gravel	15	70	Sand, coarse	3	200
Clay, soft, brown	1	71	Clay, tough, hard, gray	10	210
Sand & coarse gravel to 6 inches	29	100			
Clay, brown	4	104			
Sand, coarse, clean	13	117			
Clay, soft, gray	3	120			

9N/1W-11K2. California Electric Power Co., formerly Cool Water Ranch. Drilled by Ephraim Harris in 1950. 12-inch casing perforated 30-195 and 200-202 ft. Altitude 2,009.6 ft.

	Thickness (feet)	Depth (feet)
Soil	11	11
Sand, clean; gravel to 5 inches	39	50
Clay, soft, brown	3	53
Sand, clean; gravel to 6 inches	48	101
Clay, soft, brown	2	103
Sand, clean; gravel to 8 inches	92	195
Clay, hard, tough, gray	5	200
Sand, coarse	2	202
Clay, hard, gray	2	204

9N/1W-13E1. U.S. Marine Corps. Drilled in 1954. 16-inch casing. Altitude 2,070.8 ft.

Gravel, clay	20	20	Sand, gravel, & clay	25	110
Gravel, clay, & sand	35	55	Clay, gravel	30	140
Clay, sandy	5	60	Gravel, sand, clay	155	295
Sand, gravel, & clay	10	70	Gravel, sand, little clay	53	348
Sand, fine	10	80			
Sand, gravel	5	85			

9N/1W-13E2. U.S. Marine Corps. Drilled in 1960. 16-inch casing. Altitude about 2,060 ft.

Rock, gravel, sand	55	55	Gravel & sand	10	205
Clay, tan, & sand	10	65	Sand	30	235
Gravel & sand	15	80	Gravel & sand	40	275
Clay, tan, & sand	40	120	Sand	15	290
Gravel & sand with rocks	25	145	Clay, sandy	30	320
Clay, tan	15	160	Gravel & sand	55	375
Gravel & sand	10	170	Sand with some clay	10	385
Clay, tan; sand; gravel	25	195	Sand with some gravel	65	450

9N/1W-13H2. C. D. Davis, formerly Rau. Drilled by Ephraim Harris in 1954. 8-inch casing perforated 65-108 ft. Altitude about 2,000 ft.

Surface soil	4	4
Sand & gravel	51	55
Silt, rust-colored, sand, & gravel	25	80
Sand, cemented; rocks, burnt-brick colored; little water	105	185

9N/1W-14A1. U.S. Marine Corps. Drilled in 1942. 12-inch casing. Altitude about 2,060 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Rock, gravel -------	10	10	Clay -----------	43	204
Rock, heavy ---------	10	20	Gravel ----------	3	207
Rock, gravel -------	18	38	Clay -----------	43	250
Gravel -------------	5	43	Gravel ----------	2	252
Sand, rock ---------	22	65	Clay -----------	9	261
Gravel, coarse -----	31	96	Gravel,cemented	2	263
Sand, fine, & gravel	4	100	Clay, gravel ----	50	313
Gravel -------------	11	111	Sand & clay, cemented ------	4	317
Clay ---------------	2	113	Clay, red -------	16	333
Sand, fine ---------	10	123	Clay, cemented; sand & gravel -	40	373
Sand, gravel -------	12	135	Clay, red, & gravel --------	128	501
Clay ---------------	2	137			
Clay, gravel -------	6	143			
Clay ---------------	6	149			
Gravel -------------	12	161			

9N/1W-14A2. U.S. Marine Corps. Drilled in 1958. 12-inch casing perforated 107-407 ft. Altitude 2,058.2 ft.

Sand, coarse, & boulders --------	40	40	Sand, with streaks of clay & gravel	12	256
Sand & gravel, coarse, with boulders --------	15	55	Sand & gravel ----	3	259
Sand & gravel -----	10	65	Sand -------------	3	262
Boulders with gravel	25	90	Sand, gravel, boulders -------	6	268
Sand, coarse, & gravel ----------	10	100	Sand & gravel, in clay ----------	5	273
Sand & gravel -----	16	116	Sand & large gravel	3	276
Clay, brown -------	3	119	Sand & gravel, in streaks of clay	2	278
Sand ---------------	8	127	Clay & sand ------	5	283
Gravel ------------	3	130	Clay & sand, with boulders -------	20	303
Clay, brown -------	1	131	Boulders ---------	3	306
Sand & clay, with streaks of gravel	15	146	Sand with clay ---	10	316
Sand & gravel -----	7	153	Clay, sandy, with streaks of gravel & boulders -----	5	321
Clay ---------------	2	155	Clay, sandy ------	9	330
Sand & gravel -------	16	171	Boulders, with sandy clay -----	4	334
Clay ---------------	1	172	Sand & red clay --	5	339
Sand, clay, with streaks of gravel	25	197	Clay & coarse sand	27	366
Gravel ------------	2	199	Boulders & gravel	1	367
Sand, clay, with streaks of gravel	11	210	Clay, sandy,brown	3	370
Clay ---------------	2	212	Sand, clay, cemented, red --	8	378
Sand, clay, with streaks of gravel	21	233	Clay, sandy, red	29	407
Clay & sand -------	4	237			
Boulders ----------	2	239			
Sand & clay -------	5	244			

9N/1W-14B1. U.S. Marine Corps. Drilled by Coe Machine Works in 1942. 16-inch casing. Altitude 2,064.3 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Topsoil, rock ------	7	7	Gravel, coarse ---	11	112
Gravel, clay -------	29	36	Clay, gravel -----	17	129
Sand & gravel ------	9	45	Sand -------------	11	140
Sand, rock, clay ---	18	63	Gravel -----------	15	155
Sand, yellow -------	4	67	Clay, gravel -----	8	163
Sand, coarse -------	25	92	Sand, fine -------	8	171
Clay, gravel -------	9	101	Clay, sand, gravel	21	192

9N/1W-14B2. U.S. Marine Corps. Drilled in 1947. 16-inch casing. Altitude 2,068.3 ft.

Gravel -------------	33	33	Clay, brown ------	35	130
Quartz, coarse sand	4	37	Gravel, medium & coarse ---------	100	230
Gravel, fine & medium	20	57	Sand, cemented with 70 percent clay ----------	50	280
Sand, fine ---------	3	60			
Sand, medium & coarse	35	95			

9N/1W-15A1. Mojave Rock Materials Co. Drilled by Ephraim Harris in 1951. 12-inch casing perforated 110-129 ft. Well backfilled to 129 ft. Altitude about 2,100 ft.

Sand, gravel, & rocks	50	50	Sand, fine; silt & gravel ---------	17	87
Clay & rocks --------	10	60	Sand, clean, & gravel ---------	45	132
Clay ----------------	10	70			

10N/1W-32J2. Steen, formerly Dickerson. Drilled by C. A. Mitchell in 1951. 12-inch casing perforated 15-27, 55-102, & 112-148 ft. Altitude about 2,080 ft.

Topsoil ------------	2	2	Sand, medium -----	11	102
Sand, white --------	12	14	Sand, fine -------	10	112
Clay, black --------	1	15	Rock, black, from 1 to 6 inches, 75 percent of 2-inch ---------	17	129
Sand, coarse, white	12	27			
Clay, black --------	5	32			
Sand, fine, white --	18	50			
Clay, white --------	5	55	Rock, white, from 1 to 4 inches, 75 percent of 2-inch ---------	11	140
Rock up to 6 inches	7	62			
Gravel, coarse -----	10	72			
Clay, very hard, black ------------	5	77	Clay -------------	1	141
Clay, gray, in balls; silt -------------	14	91	Sand, medium -----	9	150

10N/1W-33F1. Harold Thomas. Drilled by Clarence Johnson in 1961. 8-inch casing perforated 55-80 ft. Altitude about 2,100 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sand & gravel ------	17	17	Sand, gravel, & clay	10	70
Boulders, or solid decomposed granite	31	48	Gravel, clean ----	3	73
Sand & gravel to 2 inches ---------	12	60	Silt, fine, & clay	7	80

10N/1W-33F3. J. A. Peterson. Drilled by C. A. Mitchell in 1952. 10-inch casing perforated 93-123 ft. Altitude about 2,100 ft.

Topsoil ----------	4	4	Clay ----------	63	93
Gravel ----------	5	9	Clay & rock, mixed	10	103
Clay ----------	5	14	Silt, very fine, & rock, mixed -----	27	130
Gravel ----------	16	30			

10N/1W-33F4. C. T. Williams, formerly V. B. Morgan Co. Well deepened by Clarence Johnson in 1961. 8-inch casing perforated 27-50 ft. Altitude about 2,100 ft.

No record ---------	30	30	Sand & gravel ----	1	49
Clay ----------	1	31	Clay, hard -------	1	50
Sand ----------	3	34			
Clay, brown, & silt, very hard -------	14	48			

10N/1W-33K1. Reed Texaco Station, formerly D. D. Quisenbery. Drilled by C. A. Mitchell in 1953. 10-inch casing perforated 65-99 ft. Altitude about 2,100 ft.

Gravel ----------	8	8	Gravel, coarse ----	12	46
Clay ----------	2	10	Muck, very fine, mushy ----------	17	63
Gravel ----------	5	15	Gravel, coarse ----	39	102
Clay ----------	2	17			
Gravel ----------	8	25			
Clay, hard --------	1	26			
Gravel ----------	8	34			

10N/1W-33P2. C. C. Cooley, formerly G. H. Griffith. Drilled by Ephraim Harris in 1952. 10-inch casing perforated 50-87 ft. Altitude about 2,070 ft.

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Topsoil ----------	11	11	Sand, coarse; gravel to 4 inches------	2	87
Sand & small gravel	29	40	Sand, clean; gravel, small; silt --	7	94
Sand, clean; gravel, small ----------	45	85			

10N/1W-33Q1. F. L. Cunningham. Drilled by Ephraim Harris in 1957. 8-inch casing. Altitude about 2,085 ft.

Surface sand -------	24	24	Sand, fine, packed	18	78
Sand & gravel ------	10	34	Sandstone, hard --	2	80
Clay, sandy --------	24	58	Sandstone, soft --	22	102
Sand, very dirty; gravel ----------	2	60			

10N/1W-33Q2. F. L. Cunningham. Drilled in 1961. 8-inch casing. Altitude about 2,085 ft.

Sand ----------	35	35	Sand ----------	30	78
Clay ----------	13	48	Clay ----------	29	107

APPENDIX D

TABLE 7. CHEMICAL ANALYSES OF WATER FROM WELLS AND SPRINGS

Table 7.--Chemical analyses of water from wells and springs

Values for sodium preceded by the letter a indicate a combination of sodium and potassium. Laboratory name abbreviated as follows: B Edward S. Babcock & Sons, Riverside, Calif.; DA U.S. Department of Agriculture; DWR California Department of Water Resources; F San Bernardino County Flood Control District; GS U.S. Geological Survey; N Eleventh Naval District, San Diego, Calif.; O analysis furnished by owner; SE Smith-Emery Co., Los Angeles, Calif.

Table 7.--Chemical analyses of water from wells and springs

Well number	Date of collection	Depth of well (feet)	Temperature (°F)	Constituents in parts per million (ppm): 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: Residue at 180°C	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Specific conductance (micromhos at 25°C)	pH	Laboratory and laboratory number
7N/3E-1cE	3-[illegible]-1[illegible]	13.3	--	33	0.04	41	21	a56	--	172	0	58	59	--	6.2	--	360	189	--	--	--	--	GS
8N/3E- 1K1	1-24-58	66	--	--	--	61	10	488	1.0	268	7	432	400	4.0	9.5	5.6	1,630	196	0	84	2,560	8.1	F - 4366
8N/3E- 1P1	1- 1-54	195	--	--	--	17	6	86	5.9	171	--	44	35	1.4	1.7	.92	432	66	0	74	471	8.0	DWR - 3773
8N/3E- 2R1	[illegible]- 3-5[illegible]	80	--	--	--	366	73	230	6.2	168	0	544	705	1.6	17	9.5	2,620	1,220	1,080	29	3,170	7.8	F - 4750
8N/3E- 2R2	10- [illegible]-5[illegible]	104	--	--	--	91	20	160	3.4	188	0	232	189	2.2	3.0	3.0	880	310	156	53	1,340	8.0	F - 4752
8N/3E- 4B1	12-10-51	16	--	--	--	29	5	a56	--	170	0	44	28	.6	1.5	.28	283	93	--	56	413	7.7	DWR - 1322
	2-14-56	--	--	--	--	32	6	63	2.3	195	5	33	30	.8	.5	.34	326	104	--	56	--	--	F - 3793
8N/3E- 4B2	1-21-32	20	--	--	--	46	8.9	a69	--	216	--	53	46	--	1.2	.62	--	152	--	50	378	8.3	DA - 5565
8N/3E- 4B4	1-21-32	190	--	--	--	31	6.8	a66	--	192	--	26	25	--	--	.37	--	107	--	58	405	8.2	DA - 5566
8N/3E-12J4	8-17-54	40.8	--	--	--	18	11	90	6.3	183	0	85	43	1.6	4.5	.84	421	91	0	66	555	8.0	F - 3224
8N/4E- 6Q1	6- -53	158	--	--	--	11	4.9	115	3.0	227	0	52	45	2.4	1.0	.84	367	48	138	82	582	7.7	F - 2708
8N/4E- 7B1	1-21-55	135	--	--	--	17	6	105	3.7	194	0	72	42	1.2	1.5	.82	381	65	0	76	598	8.0	F - 3415
	5- 6-56	--	--	--	--	131	34	240	1.8	163	9	454	274	1.6	8.5	4.2	--	467	318	53	1,940	8.2	F - 4562
8N/4E- 7E1	4-24-52	300	--	--	--	34	11	a146	--	217	0	127	115	1.1	2.5	1.1	630	129	49	71	851	8.3	F - 2150
8N/4E- 8C1	7-20-54	[illegible]	--	--	--	21	5	128	17	203	12	93	51	2.4	1.0	.94	441	73	0	--	664	8.6	F - 3212
8N/4E-12L1	3-12-54	260	--	--	--	30	8.0	455	7.4	148	0	537	279	--	13	4.4	1,470	109	--	89	2,330	7.8	DWR - P480
	5-29-56	--	6[illegible]	--	--	23	2.8	334	2.4	139	0	364	210	7.6	5.6	3.4	1,120	70	0	91	1,720	7.6	DWR - V441
	10-16-56	--	--	6[illegible]	--	23	3	315	6.3	149	0	343	209	4.0	3.5	4.4	1,100	70	0	90	1,680	8.1	DWR - 7302
	5-24-58	--	72	6[illegible]	--	22	4	336	5.5	140	0	350	216	8.0	2.5	3.2	1,100	72	0	90	1,700	7.3	DWR - 9114
	9-15-60	--	--	61	--	25	4	341	4.7	149	0	369	289	8.0	.9	3.2	1,200	82	0	90	1,740	8.1	DWR - L335
8N/4E-1[illegible]F.	7-2[illegible]-54	54	--	--	--	40	10	160	2.7	144	7	164	138	1.2	.5	1.1	612	140	10	71	970	8.3	F - 3214
8N/4E-1[illegible]P2	6- 6-57	85	--	--	--	12	6.0	126	2.5	184	0	99	56	1.4	0	1.0	426	53	--	83	653	7.0	F - 4141
8N/4E-1[illegible]G1	11-20-17	204	--	56	.03	26	1.1	a96	--	184	0	76	45	--	1.5	--	391	70	--	--	--	--	GS
8N/5E- 1P1	7-10-58	350	--	--	--	38	13	a450	--	476	--	646	71	--	2.9	4.0	1,720	148	--	87	2,290	7.5	DWR - 2392
9N/1E- 1E1	4-11-5[illegible]	[illegible]	--	--	--	34	6	41	1.8	183	0	23	21	.5	1.0	.10	241	--	--	44	357	7.9	DWR - 1733
9N/1E- 1L1	12- 5-57	[illegible]25	--	--	--	45	9	54	1.5	201	5	47	34	.3	2.0	.10	325	151	0	44	520	8.1	F - 4364
	12-28-61	--	--	23	--	43	7	54	1.6	212	0	36	28	.5	1.5	.20	295	135	0	46	483	8.1	DWR - 13357

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1E- 1L4	4-22-52	625	70	--	--	38	6.8	a48	--	187	0	36	28	0.6	3.7	0.1	255	--	--	46	421	7.9	DWR - M294
	7-22-54	--	59	--	--	34	6	45	1.4	181	0	27	16	.6	3.5	.08	253	--	--	--	377	7.7	DWR - 4501
	5-19-55	--	--	--	--	39	4.8	50	1.7	181	0	35	30	.5	3.7	.10	275	--	--	--	430	8.0	DWR - P115
	9-14-55	--	--	--	--	41	6	50	1.5	181	0	36	29	.6	6.5	.10	288	--	--	--	417	7.6	DWR - 6325
	12- 5-57	--	--	--	--	38	7	47	1.3	180	2	33	24	.5	2.0	.12	278	123	0	45	454	8.1	F - 4384
	10-15-58	--	77	22	--	42	4	46	2.2	165	5	39	21	.3	4.2	.28	270	123	--	44	452	8.4	DWR - R2280
	3-24-59	--	71	21	--	37	6	48	1.5	182	0	31	28	.8	2	.53	326	119	--	46	455	7.6	DWR - T3140
	5-27-59	--	--	--	--	39	6	50	1.7	188	0	33	29	.6	2.7	.13	259	123	0	47	444	7.5	F - 5011
	3- 3-60	--	--	--	--	38	6	50	1.2	190	0	30	34	.6	.1	.07	247	118	0	47	438	7.7	F - 5462
	8-25-60	--	--	24	--	59	6	58	3.1	189	0	41	13	.5	3	.10	266	120	0	50	462	7.4	DWR - L227
9N/1E- 1F	4-23-58	113.8	--	--	--	36	6	a47	--	165	0	32	32	.4	--	--	--	115	--	47	443	7.6	B - 5 0416D
9N/1E- 3H3	4-11-52	109	--	--	--	38	7	52	2.2	171	0	44	39	.6	2.9	.23	298	--	--	47	437	7.9	DWR - 1734
9N/1E- 4F1	5-1 -52	100	--	--	--	37	9	84	2.3	181	0	45	73	.6	1.2	.52	365	--	--	58	555	8.0	DWR - 1814
9N/1E- 4J.	3-10-52	296	--	24	--	31	6	a64	--	178	3	46	28	.5	--	.04	270	102	--	--	--	8.2	N - 1477
	4-18-56	--	--	--	--	31	4	67	1.9	180	0	46	30	.7	5.3	.35	287	--	--	60	467	7.4	DWR - R1071
9N 1E- 4R.	-10-52	174	--	24	.1	23	6	a39	--	122	2	41	14	.5	--	.13	190	82	--	--	--	8.2	N - 1477
	4-16-56	--	--	--	--	29	4	107	2.8	165	0	49	23	.9	1.3	.19	260	--	--	57	165	2.7	DWR - R1129
9N/1E- 5G.	5-20-55	125	--	--	--	43	4	80	6.2	129	0	92	75	.4	0	2.2	439	124	18	57	656	7.7	F - 3568
9N/1E- 6H1	4-23-52	152	77	--	--	46	38	a349	--	199	0	486	258	1.8	3.0	3.9	1,290	--	--	73	2,380	7.6	DWR - M293
	11-12-54	--	--	--	--	28	17	380	7.8	232	0	424	238	3.5	10	6.6	1,230	140	0	85	2,010	8.0	F - 3352
9N/1E- 9E1	4-10-52	115	--	--	--	46	1	100	3.9	193	0	72	68	.6	1.8	.40	432	--	--	64	589	7.8	DWR - 1812
9N/1E-10L1	-10-52	428	--	--	.1	20	6	a37	--	129	2	32	12	.5	--	.24	160	84	--	--	--	.2	N - 1[illegible]
	4-14-56	--	--	--	--	25	4	35	1.8	131	0	31	16	.6	2.4	.20	196	--	--	48	310	7.[illegible]	DWR - R1070
9N/1E-13E.	12- 3-57	114.4	--	--	--	22	11	68	3	191	7	11	55	--	0	.62	276	99	0	59	516	[illegible].4	F - 43[illegible]
9N/1E-14[illegible]	[illegible]-15-57	17[illegible]	63	9	--	119	32	97	4.7	156	0	155	243	.7	13	.4	1,020	428	--	[illegible]3	1,300	7.8	DWR - [illegible]57[illegible]6
	[illegible]- [illegible]-57	--	--	--	--	50	8	135	2.2	210	5	149	70	.7	17	.94	556	159	--	64	922	[illegible].2	F - 4348
	-- 8-5[illegible]	--	--	--	--	--	--	--	--	195	0	--	113	--	--	--	--	249	89	--	1,020	[illegible].9	F - 45[illegible]
	4- 6-59	--	69	20	--	65	14	143	1.8	256	0	158	106	.5	17	.58	659	221	--	5[illegible]	1,050	7.7	DWR - 10159
	[illegible]- 7-59	--	--	--	--	48	5	143	1.2	239	0	132	73	.6	10	.88	544	140	0	69	882	7.5	DWR - 5002
	[illegible]- [illegible]-6[illegible]	--	--	--	--	34	5	14[illegible]	2.2	220	0	96	76	.7	13	.82	506	104	0	74	855	[illegible].[illegible]	F - 5461

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hard-ness	Noncar-bonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1E-14G1	5-27-57	478	--	30	--	40	10	55	2.3	183	0	71	30	0.3	2.3	0.43	356	142	--	45	555	7.2	DWR - T608
	4- 6-59	--	69	10	--	53	16	134	3.4	239	0	138	105	.3	.4	.74	585	197	--	59	967	7.2	DWR - 10157
9N/1E-14M1	3-27-52	385	--	19	--	38	11	a48	--	173	0	56	31	.8	1.5	.84	291	142	--	42	420	7.9	F - 2066
	5-27-57	--	--	20	--	62	18	87	3.1	250	0	112	63	0	9	.30	566	--	--	--	855	7.3	DWR - T573
	4-15-58	--	68	24	--	72	15	84	2.7	247	0	117	67	.6	19	.66	419	240	--	43	835	7.3	DWR - R1966
	4- 6-59	--	68	25	--	85	18	94	3.5	298	0	140	77	.5	14	.58	620	288	--	41	958	7.3	DWR - 10158
9N/1E-15K1	5- 9-56	390	--	21	--	56	10	a77	--	238	0	90	48	--	7	--	362	182	0	48	716	7.5	B - 560512E
	5-28-57	--	--	20	--	55	13	82	3.1	232	0	91	55	.7	7.5	.12	520	191	1	48	755	7.4	DWR - T572
	4-15-58	--	68	25	--	61	13	82	2.7	235	0	97	59	.7	19	.75	456	208	15	46	737	7.2	DWR - R1965
9N/1E-15N1	8- 1-51		--	--	--	27	2.9	a90	--	264	--	97	53	.9	9.9	.5	529	--	--	50	870	8.1	DWR - N48
	7-22-54	--	57	--	--	69	13	95	2.3	278	0	110	57	.6	12	.26	514	225	0	48	787	7.3	DWR - 4499
	5-14-55	--	--	15	0	67	14	89	2.8	268	0	105	64	.4	6.8	.47	504	--	--	--	820	8.4	DWR - P1178
	4-18-56	--	--	--	--	84	13	111	2.4	299	0	133	83	.3	12	.32	606	--	--	48	950	7.8	DWR - R1052
	7- 9-57	--	--	20	--	32	5	68	1.2	168	0	55	39	.3	7.5	.38	312	100	0	59	505	7.5	DWR - R1656
	8-25-60	--	--	20	--	59	42	99	3.9	291	0	146	99	.3	14	.33	654	321	82	38	1,070	7.3	DWR - L218
9N/1E-15N2	5- 9-56	504	--	23	--	70	12	a99	--	290	0	115	60	--	6	--	455	225	--	49	884	7.3	B
	12- 3-57	--	--	--	--	88	16	98	2.7	289	0	126	89	.4	6.5	.36	625	286	49	42	978	7.6	F - 4387
	4-13-58	--	--	27	--	77	15	103	2.4	284	0	124	80	.6	10	.50	581	255	22	46	904	7.2	DWR - R1968
	10-15-58	--	--	22	--	75	13	85	2.4	229	15	118	71	.2	7.3	.22	534	240	--	63	850	8.7	DWR - R2269
	3-24-59	--	68	27	--	78	13	93	3.1	273	0	118	81	.4	.3	.62	648	250	--	44	890	7.0	DWR - T3142
	5- 7-59	--	--	--	.12	70	15	90	2.6	270	0	115	72	.7	3.2	--	545	238	--	--	--	7.7	DWR - 14425
	5-27-59	--	--	--	--	80	14	94	2.9	278	0	117	78	.5	3.8	.33	541	254	26	44	886	7.4	DWR - 5009
	3- 2-60	--	--	--	--	78	13	97	2.8	276	0	119	78	.6	.3	.38	544	246	20	46	908	7.6	F - 5434
	8-25-60	--	--	20	--	57	43	104	2.0	291	0	151	99	.4	.1	.37	646	320	81	41	1,070	7.6	DWR - L217
	1-20-61	--	--	20	--	90	16	111	3.6	317	0	134	91	.3	5.5	.51	696	289	29	45	990	7.5	DWR - L748
	8- 9-61	--	--	34	--	107	23	114	3.3	361	0	155	106	.4	12	.48	719	360	64	41	1,190	7.1	DWR - 12945
9N/1E-16Z1	9-13-17	100	--	79	.04	28	9.5	a108	--	132	39	86	46	--	1.1	--	450	109	--	--	--	--	GS
9N/1E-18E1	8- 1-51	92	--	--	--	44	146	a52	--	199	--	66	40	--	1.5	.1	306	--	--	40	887	8.4	DWR - N22
9N/1E-20A1	4-10-52	311	--	--	--	45	4	295	4.5	100	0	548	89	2.2	4.3	8.1	1,150	--	--	83	1,500	7.9	DWR - 1736
9N/1E-20B1	8- 1-51	242	--	--	--	83	8	616	--	128	--	1,250	124	--	2.4	32	2,300	--	--	85	2,860	8.1	DWR - 1809

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hard-ness	Noncar-bonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1E-21F1	7-21-32	300	--	--	--	25	4	a128	--	146	--	144	46	--	27	0.61	446	--	--	78	732	8.1	DA - 6521
9N/1E-21H1	2-27-57	410	--	--	--	55	5	230	4.2	134	0	452	73	2.0	4.5	7.0	970	157	0	75	1,380	7.5	F - 4056
	9-29-58	--	-	--	--	58	6	258	4.6	107	5	506	79	2.2	3.0	8.0	1,020	170	74	76	1,500	8.1	F - 4747
9N/1E-22B2	4-15-58	295	--	31	--	52	9	117	2	244	0	121	55	.7	25	1.2	507	165	0	60	795	7.5	DWR - R1967
9N/1E-22D1	4-10-52	151.6	--	--	--	49	2	155	2.2	361	0	66	61	.4	28	1.0	615	--	--	72	858	7.4	DWR - 1815
9N/1E-23D1	4-15-58	1,000	72	12	--	46	9	209	2.7	284	0	162	156	1.0	1.6	1.5	843	150	--	75	1,230	7.6	DWR - R1961
9N/2E- 3A2	1-21-32	65	--	--	--	75	15	a93	--	304	0	114	46	--	2	.40	420	249	--	45	797	8.4	DA - 5567
	4- 8-59	--	--	30	--	62	9	78	1.8	188	0	143	36	.7	13	.30	470	189	--	47	693	7.8	DWR - 10219
9N/2E- 3C1	4- 7-59	63	73	30	--	30	6	84	1.4	173	0	72	47	.8	.5	.84	355	100	--	64	567	7.3	DWR - 10212
9N/2E- 3G1	5- 1-58	43.3	70	25	--	56	12	53	1.5	189	0	101	40	.4	0	0	382	190	--	37	566	7.8	DWR - T1873
9N/2E- 3K1	1-23-53	19	--	--	--	40	10	53	1.1	205	0	36	28	.8	.5	.20	297	142	26	45	485	7.9	F - 2485
	4- 7-59	--	--	28	--	60	8	52	1.3	195	0	73	34	.5	2.4	.06	370	183	--	38	528	7.7	DWR - R2508
	5- 7-59	--	--	--	.22	49	8.7	50	1.0	195	0	74	22	.6	.7	--	365	158	--	--	--	7.8	DWR - 14429
	11- 2-59	--	--	24	--	40	7	48	1.6	193	0	41	30	.6	0	.20	345	132	--	44	466	7.2	DWR - T4252
	3-30-60	--	--	--	--	--	--	--	--	190	0	--	25	--	--	--	--	136	--	--	476	7.7	DWR - 11356
	8-29-61	--	--	--	--	--	--	--	--	198	0	--	22	--	--	--	--	151	--	--	505	7.4	DWR - 12949
9N/2E- 3K2	4- 7-59	108	70	20	--	34	6.5	43	1.3	193	0	22	20	.4	1.0	0	253	112	--	45	389	7.4	DWR - 10161
9N/2E- 3Z1	11- 5-19	--	--	32	.72	43	7.4	a68	--	246	0	38	32	--	--	--	353	138	--	--	--	--	GS
9N/2E- 6D1	10-20-48	157	--	20	.6	51	12	a52	--	207	0	37	32	.4	1.4	0	284	176	6	39	481	7.6	F - 936
	4-22-52	--	72	--	--	45	11	a46	--	208	0	35	30	.4	4.3	.1	272	--	--	39	462	8.0	DWR - N291
	1-12-59	--	--	--	--	43	6	51	1.2	198	0	31	28	.7	1.0	.06	297	132	0	45	461	7.8	F - 4864
9N/2E- 6D2	1-12-59	94	--	--	--	39	5	59	.8	195	0	36	30	.8	1.0	.12	301	119	0	52	467	7.6	F - 4861
9N/2E- 6D3	1-12-59	93	--	--	--	41	5	53	1.0	193	0	33	27	.6	1.0	.06	291	123	0	48	449	7.5	F - 4867
9N/2E- 8K1	10-28-19	171	--	26	.17	30	7.1	a40	--	177	0	24	14	--	1.0	--	238	104	--	--	--	--	GS
9N/2E- 8N2	4-11-52	295	--	--	--	33	5	42	1.4	163	0	33	21	.5	3.4	.11	240	--	--	47	350	7.7	DWR - 1735
	7-22-54	--	55	--	--	32	7	43	.3	171	0	32	16	.7	7.5	.10	246	109	0	46	362	7.6	DWR - 4500
	5-19-55	--	71	13	0	29	6.1	39	1.4	154	0	20	20	.5	5.0	.12	228	--	--	--	273	8.1	DWR - P1180
	12- 4-57	--	--	--	--	29	5	39	.8	148	0	26	17	.6	2.0	.10	230	95	0	47	343	7.4	F - 4383
	10-15-58	--	--	25	--	32	5	38	5.8	134	6	31	14	.4	3.8	.22	228	100	--	45	356	8.6	DWR - R2279
	4- 8-59	--	69	25	--	49	9	52	1.2	205	0	48	35	.6	4.0	.14	320	156	0	41	525	7.6	DWR - 10217

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hard-ness	Noncar-bonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/2E- 8N2 (Continued)	5-27-59	--	--	--	--	45	6	53	1.1	195	0	42	30	0.5	2.7	0.13	272	138	0	45	468	7.4	F - 5006
	11- 2-59	--	66	23	--	43	7	49	1.6	197	0	41	30	.7	1	.08	350	138	0	44	468	7.1	DWR - T4250
	3- 2-60	--	--	--	--	34	7	45	1.0	181	0	33	22	.7	.2	.08	234	114	0	46	411	7.6	F - 5458
	3-30-60	--	--	23	--	31	7	44	1.6	168	0	33	21	.6	3.5	.06	225	108	--	47	394	7.9	DWR - 11357
	8-25-60	--	68	14	--	28	11	46	1.6	167	0	36	34	.6	1	.05	266	113	0	46	415	6.8	DWR - I220
	12-16-60	--	68	18	--	24	6	37	1.3	147	0	14	24	.6	1.4	.17	190	88	0	47	329	7.6	DWR - L735
	8- 9-61	--	--	26	--	29	6.7	39	1.3	159	0	27	19	.6	2.6	.10	217	100	--	46	374	7.5	DWR - 12947
9N/2E-10D2	4- 8-59	110	70	30	--	31	8	41	1.2	181	0	24	16	.6	1.5	.08	230	109	--	44	379	7.7	DWR - 10218
9N/2E-10G1	4- 7-59	23.0	71	25	--	33	7	42	1.0	188	0	21	18	.6	1.5	.08	230	109	--	45	380	7.5	DWR - 10213
9N/2E-11H1	4- 7-59	--	--	25	--	22	5	58	1.6	168	0	28	24	.4	.5	.20	240	74	--	62	389	7.6	DWR - 10214
9N/2E-11R1	4- 7-59	50	--	30	--	38	7	44	.8	207	0	20	18	.6	1.0	.08	250	122	--	43	408	7.7	DWR - 10215
9N/2E-13Q1	8-27-54	230	--	--	--	28	2	54	1.4	176	5	21	17	.4	4.5	.14	250	79	0	59	386	8.4	F - 3351
9N/2E-14N1	11- 5-56	95.5	--	--	--	39	6.0	43	.6	190	5	24	23	.7	1.0	.10	270	121	0	43	407	8.3	F - 3988
9N/2E-18B1	4- 8-59	150	--	20	--	39	8.1	44	1.9	156	0	43	36	.4	5.7	.10	290	131	--	42	449	7.4	DWR - 10163
9N/2E-18E1	4-11-52	159	--	--	--	23	5	38	1.8	105	10	41	24	.6	.5	.05	216	--	--	51	317	8.4	DWR - 1731
	5-19-55	--	72	12	0	58	12	50	2.4	170	3	76	53	.5	12	.12	388	--	--	--	604	8.3	DWR - P1181
	9-14-55	--	--	25	0	64	12	55	2.5	193	0	84	58	.5	9.4	.10	430	--	--	--	614	7.8	DWR - 6324
	12-18-56	--	64	21	--	113	25	97	3.5	250	0	178	124	.3	29	.10	816	365	--	--	1,140	8.0	DWR - T5489
	10-15-58	--	--	25	--	45	8	49	3.2	143	3	64	35	.4	8.4	.37	319	145	--	42	508	8.4	DWR - R2278
	3-24-59	--	68	23	--	44	9	50	2.4	151	0	62	42	.8	4	.71	358	145	--	42	496	7.3	DWR - T3129
	5- 7-59	--	--	--	1.0	44	8.6	45	2.0	160	0	58	34	.6	3.1	--	285	142	--	--	--	7.9	DWR - 14426
	5-27-59	--	--	--	--	41	10	52	2.4	164	0	58	38	.5	4.2	.08	290	140	6	44	492	7.7	F - 5012
	3-30-60	--	--	23	--	38	9	46	2.0	154	0	57	31	.6	7.0	.06	280	130	--	43	462	8.0	DWR - 11359
	12-28-61	--	--	24	--	43	10	55	2.2	181	0	62	34	.7	7.0	.16	320	151	3	44	525	7.7	DWR - 13356
9N/2E-18H1	4- 8-59	302	67	24	--	52	8	52	2.4	156	0	59	52	.6	9	.44	384	163	--	40	543	7.4	DWR - T3149
9N/2E-18L1	4- 8-59	246.5	70	0	--	7	2.5	64	6.9	110	0	1.6	59	0	2.3	.04	205	28	--	79	360	8.0	DWR - 10162
9N/2E-19E1	4- 8-59	400	70	25	--	60	10	64	2.6	212	0	69	48	.6	16	.20	400	189	--	42	637	7.9	DWR - 10216
9N/2E-20G1	3-10-52	488	--	30	.1	34	6	a59	--	190	7	37	22	.5	--	.18	240	112	--	--	--	8.5	N - 1474
	4-18-56	--	--	--	--	33	5	107	1.7	189	0	40	25	.6	3.0	.21	279	--	--	54	453	7.4	DWR - R1128

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/2E-20K1	3-10-52	400	--	30	0.1	34	6	a63	--	188	7	43	24	0.5	--	0.16	--	110	--	--	--	8.5	N - 1473
	4-18-56	--	--	--	--	33	4	57	1.7	186	0	33	25	.6	3.0	.13	262	--	--	55	444	7.1	DWR - R1134
9N/2E-20K2	3-10-52	357	--	24	.1	34	6	a61	--	188	7	42	22	.5	--	.18	--	110	--	--	--	8.5	N - 1475
	4-18-56	--	--	--	--	34	4	62	1.6	183	0	47	28	.7	2.9	.15	293	--	--	54	467	7.4	DWR - R1135
9N/2E-20M1	9- 1-17	500	--	94	.05	14	7.5	a86	--	153	17	53	30	--	.8	--	379	66	--	--	--	--	GS
9N/2E-20Q1	10- 5-32	120	--	15	--	41	6.8	69	2.3	195	--	70	37	--	.6	.40	--	130	--	53	554	8.0	DA - 6759
9N/2E-22N1	4-11-52	132.8	--	--	--	61	14	112	.8	215	0	122	104	.6	6.1	.52	582	--	--	55	838	7.6	DWR - 1816
9N/2E-24D1	4-11-52	200	--	--	--	32	5	46	2.6	193	0	20	21	.5	1.0	.09	262	--	--	--	362	7.8	DWR - 1732
9N/2E-25M1	6- -53	160	--	--	--	22	9.2	64	3.9	159	0	56	33	1.1	2.0	.43	347	92	0	59	495	7.8	F - 2736
	2-10-54	--	--	--	--	50	15	80	4.4	159	7	87	94	.7	6	.93	507	187	51	48	739	8.2	F - 3069
	7- 9-56	--	--	--	--	40	10	90	4.1	100	5	136	82	.6	1.0	.87	466	143	53	57	742	8.1	F - 3907
	2-26-60	--	--	--	--	125	29	208	5.8	200	0	410	178	.8	4.5	.8	1,140	430	266	51	1,680	7.7	F - 5362
9N/2E-25M2	3- 3-60	160	--	--	--	232	43	475	8.4	327	0	936	356	.9	9.2	8.5	2,340	757	489	57	3,220	1.4	F - 5360
	5- 6-60	--	--	--	--	187	50	405	7.0	327	0	840	312	.9	8.6	4.5	2,100	672	404	56	2,890	7.7	F - 5494
9N/2E-26D1	7-15-19	300	--	49	--	26	3.9	a61	--	161	0	38	30	--	--	--	--	81	--	--	--	--	O
	9-28-55	--	--	--	--	25	5	52	2.7	159	0	31	24	.4	1.5	.28	298	84	0	56	410	7.8	F - 3698
9N/2E-26E2	3-24-53	165	--	--	--	266	59	300	8.5	246	0	542	490	.6	17	3.7	2,040	894	692	42	2,950	7.5	F - 2574
	9- 1-55	--	--	--	--	233	36	430	6.7	207	0	816	449	.4	10	4.4	2,260	730	560	56	3,160	7.8	F - 3696
	7- 9-56	--	--	--	--	207	40	410	6.1	224	0	822	392	.5	4.5	4.2	2,190	683	499	56	2,820	7.6	F - 3908
9N/2E-26Z1	7-15-19	58	--	--	--	112	17	a177	--	183	0	220	252	--	--	--	--	350	--	--	--	--	O
9N/2E-27D1	8-20-16	174	--	47	--	167	9.0	a370	--	207	0	403	453	--	4.0	--	1,600	454	--	--	--	--	GS
9N/2E-27L3	10- 6-54	85	--	--	--	26	5	57	2.8	166	5	34	21	.6	3.0	.28	283	86	0	58	416	8.2	F - 3315
9N/3E- 2M1	6-26-59	178	73	30	--	26	3.6	51	1.2	166	0	24	24	.6	.6	.03	290	80	--	58	404	7.7	DWR - T3583
9N/3E- 4J1	10-30-52	144	--	--	--	49	9.1	64	.9	195	0	51	68	.6	3.0	.14	360	150	1	46	609	8.1	F - 2443
9N/3E-10K1	8-23-55	--	--	--	--	58	8	72	.8	151	0	84	79	.3	0	.20	430	169	45	48	692	8.0	F - 3694
9N/3E-10Q1	8-23-55	320	--	--	--	47	5	65	.8	151	2	70	54	.4	3.0	.18	384	138	8	51	583	8.1	F - 3691
9N/3E-10Q2	11-22-19	50	--	26	2.9	398	39	a196	--	170	0	389	728	--	2.6	--	1,930	1,150	--	--	--	--	GS
	7-23-54	--	--	--	--	157	14	255	1.2	478	0	372	151	.5	30	1.3	1,240	447	55	55	1,640	7.6	F - 3216
9N/3E-10R1	9- 9-55	--	--	--	--	62	8	78	1.0	132	2	96	100	.3	2.5	.20	481	187	75	47	764	8.1	F - 3692
9N/3E-12G1	11- 5-56	--	--	--	--	29	3.0	60	.6	171	2	32	29	.6	.5	.12	280	85	0	60	374	8.2	F - 3989

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab number
9N/3E-13B1	3-26-53	255	--	--	--	59	6.1	108	1.9	168	0	99	109	0.5	1.5	0.41	536	172	34	57	792	8.0	F - 2617
	10- 7-59	--	73	30	--	50	4	98	1.4	166	0	89	85	.2	2.0	.34	430	142	--	60	719	7.4	DWR - 10756
9N/3E-13P1	11- 1-54	140	--	--	--	154	14	156	1.4	165	--	224	289	.8	4.9	.94	1,030	--	--	47	1,300	8.0	DWR - 3775
9N/3E-14G1	8-19-54	307	--	--	--	41	4	84	1.6	163	5	70	62	.4	4.0	--	380	121	--	60	--	8.2	F - 3310
9N/3E-15N1	9- 4-17	75	--	50	0.54	17	4.4	a95	--	181	25	34	28	--	.4	--	340	60	--	--	--	--	GS
9N/3E-16D1	5-24-55	83	--	--	--	106	10	84	.8	183	5	138	130	.5	4.0	.22	625	306	148	37	991	8.2	F - 3573
9N/3E-16D2	5-24-55	325	--	--	--	31	4	50	.6	168	5	22	23	.5	2.0	0	256	93	0	54	394	8.2	F - 3574
9N/3E-18H1	9-13-54	307	--	--	--	31	5	57	.7	185	7	26	23	.6	2.5	.08	274	98	--	56	--	8.3	F - 3312
9N/3E-18M1	7-15-52	253	--	--	--	30	6.7	62	1	195	0	27	32	.5	17	.19	282	102	58	51	434	7.9	F - 2287
9N/3E-18M2	7-15-52	115	--	--	--	107	84	120	1.3	200	0	339	261	.4	11	.10	1,220	612	448	30	1,620	7.9	F - 2286
9N/3E-18M3	5-24-55	206	--	--	--	53	10	66	.8	198	0	66	60	.8	3.5	.12	396	172	10	45	646	8.1	F - 3575
	5-10-56	--	--	--	--	53	9	68	.6	181	5	73	66	.5	2.5	.12	406	171	15	46	656	8.1	F - 3867
9N/3E-18Q1	4-11-52	274	--	--	--	46	7	95	.9	217	0	68	70	.7	3.4	.23	437	144	--	--	635	7.8	DWR - 1730
9N/3E-19E1	10-30-19	200	--	32	.67	28	3.8	a48	--	178	0	20	16	--	.4	--	240	86	--	--	--	--	GS
9N/3E-19N1	7-24-52	328	--	--	--	26	6.1	50	2	181	0	18	20	.4	8.9	.18	240	89	59	54	357	7.5	F - 2292
9N/3E-20J1	6- 5-53	100	--	--	--	18	7.3	100	1.3	--	--	--	--	--	--	--	--	--	--	74	565	7.8	F - 2699
9N/3E-20J2	6- 5-53	141	--	--	--	23	6.7	88	1.3	--	--	--	--	--	--	--	--	--	--	69	522	8.0	F - 2698
9N/3E-22Q1	8- 7-53	270	--	--	--	24	8.5	84	2	193	0	52	42	1.0	1	.48	336	97	0	65	536	7.8	F - 2785
	8-10-54	--	--	--	--	36	5	93	1.6	178	10	68	56	.6	5.5	.20	370	112	0	64	579	8.5	F - 3245
9N/3E-26D1	10- 5-54	230	--	--	--	41	7	84	1.9	161	5	78	66	.6	3.0	.46	--	--	--	58	646	8.2	F - 3314
9N/3E-26E1	3-26-59	375	--	--	--	11	7	90	1.2	144	5	51	48	1.0	.5	.58	--	--	--	77	509	--	F - 4904
9N/3E-26J1	3-19-56	85	--	--	--	33	5	90	.6	198	5	64	47	.8	0	.64	398	104	0	65	614	8.1	F - 3834
9N/3E-26L1	8- 8-55	100	--	--	--	28	5	89	1.0	163	10	41	29	.7	2.0	.44	328	90	0	62	481	8.5	F - 3687
9N/3E-26L3	12- 3-54	100	--	--	--	33	6	76	2.2	183	0	59	37	.6	3.0	.24	349	101	0	--	534	8.0	F - 3375
	8- 8-55	--	--	--	--	60	10	108	2.0	169	0	123	118	.6	1.0	.92	580	189	59	65	922	7.9	F - 3697
9N/3E-29A1	11- 9-51	90	--	14	--	24	3.2	a74	--	198	0	29	37	.3	0	.24	311	73	89	69	490	7.6	F - 1905
9N/3E-30J1	7-22-53	--	--	--	--	26	4.4	56	2.5	176	0	27	25	1.0	3	.31	273	84	0	58	425	8.0	F - 2779
9N/3E-32K1	11- 9-51	37	--	26	--	28	5.2	a68	--	203	0	33	33	.3	--	.28	334	90	76	62	480	7.7	F - 1906
9N/3E-32Z1	9- 2-17	14	--	101	.04	22	6.9	a72	--	139	26	44	26	--	.2	--	359	83	--	--	--	--	GS
9N/3E-33M1	11-28-17	9	--	54	.05	25	4.9	a62	--	163	0	40	30	--	.4	--	290	83	--	--	--	--	GS

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/3E-34Q1	3-13-54	42	--	--	--	29	4.3	129	2.0	190	0	79	94	1.0	5.6	0.50	496	--	--	--	1,100	7.6	DWR - P478
9N/3E-35C2	9- 8-54	180	--	--	--	46	7	95	2.0	183	5	72	86	.7	5.0	.34	433	144	--	58	679	8.3	F - 3243
9N/3E-35G2	10-13-52	193	--	--	--	76	6.0	125	2.4	210	0	176	94	.7	8.0	1.1	674	214	42	55	965	8.1	F - 2393
9N/4E- 8D1	4-10-57	330	--	--	--	8	.5	396	1.7	456	27	168	197	--	1.0	.80	1,130	22	0	97	1,640	8.5	F - 4084
	3-19-58	--	--	--	--	63	6	210	1.0	172	0	122	254	1.4	1.0	.48	802	181	40	72	1,360	7.9	F - 4446
9N/4E- 8E2	11-20-19	50	--	33	0.21	428	27	a502	--	160	0	713	990	--	68	--	2,790	1,180	--	--	--	--	GS
9N/4E-17N1	--	105	--	--	--	553	10	484	2.5	290	0	1,370	565	.6	18	5.0	3,310	1,420	1,180	42	3,800	7.5	F - 4201
9N/4E-20G1	6-23-59	122	72	36	--	10	2.4	223	2.0	435	0	8	124	1.3	1.2	1.2	781	35	--	92	1,080	7.5	DWR - T3582
9N/4E-20L1	2-27-52	75	--	20	0	16	1.5	95	1.3	190	0	39	48	1.0	.5	.56	330	45	111	82	474	8.2	F - 2011
9N/4E-28H1	5- 6-53	--	--	--	--	2.6	.6	346	2.0	615	40	100	104	11	1.2	3.2	919	--	--	--	1,480	7.9	DWR - 2656
9N/4E-30D1	6-19-52	135.0	--	--	--	20	4.3	135	.5	227	0	70	58	1.0	1.0	.41	429	68	118	81	587	7.8	F - 2197
9N/4E-30N1	6-30-55	200	--	--	--	26	4	100	1.0	151	1	65	67	1.1	0	.82	358	79	0	78	607	8.0	F - 3633
	10-28-57	--	--	--	--	34	6.0	120	1.0	155	7	107	88	2.0	1.0	1.1	498	110	0	70	694	8.0	F - 4279
	10-28-57	--	--	--	--	23	3.0	100	1.2	160	0	70	60	2.0	1.5	.84	390	71	0	75	637	7.9	F - 4280
9N/4E-30N2	4-17-52	50	--	27	--	25	4.6	a195	--	329	0	100	127	1.4	0	1.1	671	82	188	84	970	7.6	F - 2075
9N/4E-31K2	3-19-52	25	--	16	--	20	2.0	a76	--	173	0	30	44	1.5	1.4	.50	311	58	84	74	440	7.9	F - 2043
9N/5E- 8K1	5- 6-53	--	--	--	--	12	3.3	480	18	241	--	405	320	4.2	25	4.5	1,470	--	--	--	2,300	8.2	DWR - 2655
10N/1E-22C1	5-20-53	500	--	--	--	25	34	158	10	507	0	197	83	1.2	1.2	.5	718	202	--	--	1,030	7.9	DWR - P653
10N/1E-35P4	9-17-17	407	--	57	.08	31	7.9	a76	--	206	0	52	36	--	.2	--	358	110	--	--	--	--	GS
10N/2E-31R1	4-23-52	--	72	--	--	42	8.3	a62	--	188	0	74	33	.6	3.7	.2	293	--	--	50	508	8.2	DWR - M292
	5-19-55	--	--	--	0	34	6.7	61	1.0	173	0	54	34	.6	1.9	.12	302	--	--	--	474	8.0	DWR - P1149
	9-14-55	--	--	25	0	37	6	57	.6	183	0	45	32	.6	1.0	.22	284	--	--	--	440	8.1	DWR - 6330
	12- 7-57	--	--	--	--	37	6	62	.6	179	0	49	30	.6	1.0	.28	305	116	0	54	502	7.6	F - 4342
	3-24-59	--	--	27	--	35	5	62	1	187	0	47	35	.8	1	.98	344	108	--	55	457	7.5	DWR - T3128
	5-27-59	--	--	--	--	37	5	64	.9	181	0	47	36	.5	1.1	.31	279	112	0	55	483	7.5	F - 5007
	3- 3-60	--	--	--	--	31	7	60	.6	183	0	43	31	.7	1.8	.22	265	108	0	55	475	7.9	F - 5459
10N/2E-35K1	4- 7-59	--	70	7	--	53	11	76	2.0	295	0	39	41	.6	1	.30	495	175	--	48	673	7.6	DWR - T3292
10N/3E- 6A1	12-16-54	337	--	--	--	10	3	111	2.4	195	0	64	39	3.5	1.0	.32	355	37	0	56	688	8.4	F - 3374
	9- 4-56	--	--	--	--	41	0	282	8.8	417	29	160	33	2.0	0	4.0	814	10	0	97	1,240	--	F - 3944

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
10N/3E- 6H1	3-14-55	250	--	--	--	27	3	78	2.0	144	5	53	41	0.7	3.8	0.72	331	81	0	57	520	8.2	F - 3487
	9- 4-56	--	--	--	--	56	6.0	90	2.0	149	2	108	96	.8	1.5	.92	473	164	38	54	781	7.9	F - 3943
	6-19-59	--	--	41	--	73	12	114	3.1	176	0	146	140	.7	4	1.6	715	233	--	51	1,030	7.3	DWR - T3581
10N/3E- 6R1	9- 4-56	300	--	--	--	26	4.0	72	1.8	149	2	63	39	.7	1.0	.78	338	81	0	65	502	8.0	F - 3942
10N/3E- 7F1	3-10-55	297	--	--	--	32	4	88	2.4	154	2	84	54	.7	2.0	1.2	391	97	0	66	612	8.1	F - 3486
	9- 4-56	--	--	--	--	60	8.0	105	2.4	139	7	28	99	.7	18	1.6	547	184	58	55	879	8.0	F - 3941
10N/3E- 7J1	10-11-59	495	--	--	--	30	6	83	1.8	161	0	63	53	.8	1.8	--	660	97	0	64	757	7.7	F - 5209
10N/3E- 7R1	9- 4-56	259	--	--	--	28	3.0	72	1.6	144	1	57	36	.7	1.0	.68	309	85	0	64	479	8.0	F - 3940
10N/3E-15K1	11-27-15	318	--	16	--	16	1.6	a100	--	164	0	56	51	--	--	--	--	47	--	--	--	--	0
10N/3E-20E1	5- 5-55	256	--	--	--	28	5	74	2.8	148	5	84	40	.6	0	.78	325	91	0	63	514	8.3	F - 3569
10N/3E-21B1	3- 5-53	223	58	--	--	19	5	80	1.9	168	0	48	40	.8	0	.42	289	--	--	--	436	7.8	DWR - 3079
10N/3E-21C1	5- 3-56	146	--	--	--	24	5	69	1.1	151	7	50	32	--	1.0	--	290	79	--	65	--	8.2	F - 3864
10N/3E-25A1	2- 3-52	160	--	--	--	24	3	48	1.3	156	0	21	26	.4	1	.14	239	--	--	59	357	8.0	DWR - 1709
10N/3E-27Q1	5- 7-59	100	--	--	0.06	36	7.1	61	1.0	225	0	30	24	.5	.4	--	305	119	--	52	--	8.1	DWR - 14430
10N/3E-28R1	3-26-53	110	--	--	--	32	9.2	60	1.2	200	14	32	27	.6	.5	.16	286	118	58	52	468	8.3	F - 2618
10N/3E-34E1	5- 1-58	11.6	--	14	--	52	9	87	.7	238	0	91	50	.4	0	0	448	165	--	53	680	8.1	DWR - T1835
10N/4E- 5M1	3-13-54	130	--	--	--	8	.5	290	2.1	710	0	7.2	45	4.4	.6	2.4	808	--	--	--	1,230	8.0	DWR - P490
10N/4E-19J1	10- 8-59	83	71	10	--	0	2	98	.4	105	12	46	45	.5	0	.34	241	8	--	96	475	9.0	DWR - 10767
10N/4E-19N1	3-28-32	90	65	--	--	--	--	--	--	173	--	41	32	--	1.2	.22	--	85	--	--	373	8.1	DA - 5866
	7-28-59	--	67	26	--	22	1	54	1.6	103	0	35	37	.5	0	.65	261	60	--	65	382	8.0	DWR - T3788
	8-25-60	--	68	16	--	20	7	56	.8	114	0	43	43	.4	1	.18	284	87	0	60	400	7.5	DWR - L187
	12-16-60	--	--	21	--	--	5	52	1.6	107	0	48	37	.6	0	.03	198	72	0	61	366	8.0	DWR - L666
	8-10-61	--	68	30	--	23	2.6	55	1.0	139	0	29	28	.4	.9	.14	240	68	0	63	379	7.5	DWR - 12950
10N/4E-29D1	9- 4-17	1.0	--	60	.09	19	3.7	a62	--	117	19	32	25	--	.4	--	274	63	--	--	--	--	GS
11N/2E- 8K2	1-30-53	21.0	72	--	--	52	14	272	2.6	156	0	267	272	--	17	.8	1,040	139	11	74	1,680	7.5	DWR - P492
	7-25-60	--	70	--	--	--	--	--	--	147	1	--	276	--	--	--	--	170	47	--	1,590	8.3	DWR - L135
11N/2E-22N1	9- 6-17	--	71	64	.24	13	7.2	a826	--	462	18	890	367	--	4.0	--	2,480	62	--	97	--	--	GS
	7-14-32	--	--	--	--	113	21	a741	--	915	--	856	257	--	3.7	34	2,480	367	--	81	3,490	8.3	DA - 6464
	1-30-53	19.0	68	--	--	14	3.3	650	6.4	395	0	698	249	7.8	3.1	5.4	1,790	--	--	--	2,880	8.0	DWR - P491
	7-25-60	--	75	--	--	--	--	--	--	970	0	--	266	--	--	--	--	45	0	--	3,110	7.7	DWR - R3438

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
11N/2E-27D1	7-14-32	13	--	--	--	8.4	0.1	a656	--	326	--	662	351	--	--	7.3	1,850	21	--	98	2,960	8.6	DA - 6465
11N/3E-11R1	2-13-53	--	--	--	--	5	1	500	13	517	106	149	267	10	0	2.3	1,350	17	--	97	2,110	8.9	DWR - 2870
11N/3E-20R1	2-17-53	92.0	--	--	--	13	4	105	2.1	173	0	51	44	2.5	3.5	.74	310	49	--	82	454	7.8	DWR - 3080
11N/5E-11N1	10-24-61	--	--	19	--	26	5	391	9.8	229	33	518	113	.6	6.8	.82	1,270	85	0	90	1,900	8.8	DWR - R4163
11N/5E-15G1	3- 5-53	220	--	--	--	4	2	220	6.2	288	12	96	108	2.7	3.0	.66	655	18	--	95	908	8.2	DWR - 3081
	10-24-61	--	--	68	--	5	0	222	4.7	0	27	97	108	.4	6.2	.59	666	13	0	96	1,040	8.8	DWR - R4164
11N/5E-16J1	10- 7-59	219	--	71	--	12	2	200	4.1	253	0	96	108	4.0	3.9	.78	618	38	--	91	916	7.9	DWR - R2851
	10-24-61	--	--	65	--	13	1	194	3.5	256	0	99	110	.4	9.9	.59	622	38	0	91	990	8.2	DWR - R4165
11N/6E-18R1	10-25-61	--	--	19	--	14	0	359	9.8	348	27	168	232	.8	5.6	1.6	1,050	35	0	94	1,730	8.6	DWR - R4162
11N/6E-18Z1	10-28-15	429	--	60	--	14	4.2	a301	--	343	0	126	206	--	--	--	--	52	--	--	--	--	0
12N/2E-31A1	1- 6-55	584	75	14	--	32	13	a177	--	92	0	296	94	3.2	0	1.5	673	--	--	--	1,110	7.1	SE - 396618
12N/2E-32K1	1- 7-60	74	60	25	--	20	6	264	3.2	115	0	310	151	4.5	0	2.1	853	75	--	88	1,380	7.4	DWR - 11163
	7-25-60	--	70	27	--	23	15	219	.7	143	0	211	166	4.0	2.5	.72	691	119	--	80	1,180	8.0	DWR - L150
12N/2E-33D2	2-11-53	--	--	--	--	23	9	210	2.5	100	0	291	116	10	0	2.0	713	94	--	82	1,010	7.8	DWR - 2868
	1- 7-60	--	70	22	--	23	9	217	3.5	149	0	191	160	4.0	1.2	.72	728	95	--	82	1,200	7.2	DWR - 11162
9N/1W- 3M1	11-29-51	--	--	--	--	49	12	a98	--	231	0	81	73	.3	2.5	.19	448	--	--	55	751	7.7	DWR - 1325
9N/1W- 3N1	11-29-51	25	--	--	--	147	29	a170	--	398	0	398	137	.3	3.5	.25	1,040	486	--	43	1,530	7.1	DWR - 1329
	7-31-59	--	--	26	--	174	55	208	5	397	0	444	223	.6	0	.55	1,450	659	--	40	2,000	7.7	DWR - T3789
9N/1W- 3P1	11- 7-56	40	--	--	--	101	19	129	3.5	342	0	191	97	.6	3.5	.28	741	329	49	46	1,140	7.1	F - 5985
9N/1W- 4C1	4- 9-59	90	--	--	.01	46	8.5	60	2.0	200	0	61	32	.4	1.4	--	410	150	--	--	--	7.6	DWR - 14137
9N/1W- 4C3	7-31-59	100	66	25	--	66	11	72	2.7	226	0	104	47	.6	1	.08	520	210	--	43	729	7.5	DWR - T3790
9N/1W- 4G1	8-10-51	115	--	--	--	66	13	a105	--	277	0	107	66	.4	1.9	.19	510	217	0	51	857	7.7	DWR - 1290
	10-23-57	--	70	25	--	243	50	685	6.0	908	0	1,050	336	.7	1.0	1.4	2,840	812	--	65	3,160	7.4	DWR - 8290
	8- 9-61	--	--	25	--	47	13	63	2.3	212	0	75	37	.6	2.0	.11	348	172	0	44	591	7.6	DWR - 12865
	12-21-61	--	--	23	--	58	9.8	65	2.6	234	0	81	38	.5	1.0	.14	370	185	0	43	627	7.6	DWR - 13362
9N/1W- 4G2	7-10-57	80	--	28	--	100	24	106	3.9	290	0	191	114	.7	1.9	.25	810	350	113	39	1,140	7.5	DWR - T679
	10-23-57	--	70	20	--	45	15	95	3.1	270	0	169	84	.4	1.5	.20	615	237	16	41	792	7.7	DWR - 829
9N 1W- 4G3	4- 9-59	--	--	--	.02	46	8.5	58	2.0	202	0	66	32	.4	1.1	--	435	150	--	45	--	7.6	DWR - 14136

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1W- 4J1	11-29-51	81	--	--	--	37	9	a64	--	200	0	46	44	0.3	3.5	0.17	324	--	--	52	523	7.7	DWR - 1324
9N/1W- 5J1	11-30-51	107	--	--	--	13	6	a246	--	226	--	254	85	--	2.9	3.9	708	57	0	90	1,110	8.3	DWR - 1814
	7-22-54	--	64	--	--	37	6	280	3.5	217	0	305	141	4.2	7.5	3.6	950	117	0	83	1,410	8.1	DWR - 4497
	5-19-55	--	--	24	0.05	23	6.1	216	2.8	215	0	240	91	3.5	6.2	3.2	715	83	0	85	1,140	8.1	DWR - P1175
9N/1W- 5J2	4-18-56	208	72	--	--	49	11	230	3.0	217	0	275	141	3.0	13	2.0	850	168	0	74	1,250	7.7	DWR - 6842
	7- 9-57	--	80	20	--	61	12	265	3.9	224	0	316	191	2.7	12	2.9	1,060	199	16	74	1,670	8.2	DWR - T931
	7-26-57	--	--	31	--	42	10	a244	--	234	0	267	140	.7	3.6	3.4	--	146	0	39	--	7.6	SE - 438203
	12- 5-57	--	--	--	--	77	12	300	4.0	249	0	374	204	2.8	10	3.4	1,170	241	37	73	1,860	7.3	F - 4338
	4- 9-59	--	--	--	.02	82	12	96	4.0	212	0	394	228	2.8	14	--	1,240	255	--	71	--	7.7	DWR - 14140
	6-26-59	--	--	--	--	85	11	305	8.5	215	0	379	227	3.0	16	3.6	1,190	254	78	71	1,840	7.5	F - 4994
9N/1W- 5J3	4-18-56	222	70	--	--	23	6	240	8.5	210	10	247	117	4.0	4.3	3.2	855	--	--	--	1,260	8.2	DWR - 6792
	12-18-56	--	67	33	--	44	8	285	3.9	226	0	323	173	1.5	6.3	1.2	996	--	--	--	1,530	8.2	DWR - T5551
	7-26-57	--	--	23	.02	46	9.7	a270	--	249	0	304	152	.7	3.6	3.6	--	156	--	40	--	7.6	SE - 438204
	10-23-57	--	70	35	--	78	9	336	4.4	248	0	403	239	3.0	4.5	4.8	1,250	231	280	75	1,550	7.9	DWR - 8289
	12- 5-57	--	--	--	--	76	12	300	4.0	244	0	375	200	3.2	9.0	3.2	1,180	237	37	73	1,860	7.3	F - 4337
	6- 9-58	--	--	--	--	64	13	330	4.8	306	0	394	206	2.4	.5	4.0	1,200	211	0	77	1,870	7.9	F - 4545
	7-29-58	--	72	32	--	101	14	310	7.6	276	0	423	235	1.5	6.9	1.8	1,370	310	--	68	2,020	7.8	DWR - T2446
	10-14-58	--	73	45	--	96	12	321	3.5	220	0	480	243	1.7	12	2.3	1,360	290	--	68	1,880	8.0	DWR - R2274
	11- 3-59	--	62	12	--	20	44	317	6	173	0	423	261	3.4	0	2.5	1,280	233	81	74	1,890	7.8	DWR - T4236
	3-30-60	--	--	14	--	52	9	69	2.2	176	0	107	44	.9	.5	.42	390	168	--	47	630	7.9	DWR - 11319
	8-25-60	--	--	26	--	51	13	74	2.2	180	0	127	49	.7	0	.40	416	180	32	47	704	7.2	DWR - L435
	12-16-60	--	--	26	--	49	17	61	2.4	155	0	123	46	1.0	0	.19	382	191	63	41	626	7.8	DWR - L747
9N/1W- 5J4	4- 6-59	102	69	20	--	43	13	340	4.4	168	0	518	150	3.6	0	8.4	1,200	163	--	81	1,810	7.7	DWR - 10160
	5- 6-59	--	--	--	.22	52	9.8	340	5.0	206	11	517	157	4.0	.9	--	1,240	175	--	71	--	8.6	DWR - 14418
9N/1W- 5R1	8- 8-51	82	--	--	--	11	3.9	a239	--	173	0	264	90	2.8	6.0	3.5	747	--	--	92	1,170	8.3	DWR - N47
	6-29-61	--	--	23	--	168	30	270	3.0	355	0	520	224	1.5	0	1.7	1,450	546	255	52	2,080	7.7	DWR - L1535
9N/1W- 8A1	5-22-51	168	--	--	--	35	4.2	a336	--	139	12	413	192	.6	--	--	--	104	20	--	1,750	8.4	F - 1689
	8- 8-51	--	--	--	--	35	.5	a343	--	153	--	429	195	--	8.7	4.2	1,140	106	--	88	1,650	8.4	DWR - 1808
	1-12-59	--	--	--	--	30	3	300	2.8	163	0	331	174	3.6	24	3.0	1,010	88	0	88	--	7.7	F - 4868
9N/1W- 8A2	4- 8-59	145	--	--	.16	32	7.3	268	2.0	216	0	229	158	1.6	53	--	965	110	--	84	--	7.6	DWR - 14127

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1W- 8A3	10-23-19	125	--	31	0.96	28	4.8	a303	--	158	3	371	160	--	1.5	--	1,000	90	--	88	--	--	GS
9N/1W- 9A1	12- 5-51	18.3	--	--	--	81	14	a167	--	287	--	283	75	--	2.0	0.24	801	--	--	58	1,120	--	DWR - 1807
9N/1W- 9D1	8- 8-51	76	--	--	--	109	21	a235	--	321	0	326	172	0.8	.5	2.1	1,060	346	--	59	1,680	8.2	DWR - 1291
	3- 1-54	--	--	30	0	94	18	215	3.6	325	17	259	138	2.2	0	1.5	940	309	--	60	1,350	8.4	DWR - 4516
	4- 8-59	--	--	--	.08	66	12	260	2.0	435	0	201	148	2.0	0	--	1,120	215	--	72	--	7.5	DWR - 14132
9N/1W- 9D2	10-14-58	129	--	33	--	152	29	554	16	397	--	921	330	.8	7.5	3.0	2,970	500	--	70	3,000	8.0	DWR - R2275
	4- 8-59	--	--	--	.16	94	20	268	2.0	371	0	344	170	1.0	.6	--	1,270	315	--	65	--	7.4	DWR - 14131
	8- 9-61	--	--	26	--	159	33	240	4.4	387	0	448	199	1.0	2.0	1.2	1,320	532	215	49	1,990	7.3	DWR - 12943
9N/1W- 9E1	10-30-50	106	--	38	--	54	16	a179	--	--	0	--	121	--	--	.1	865	204	--	66	--	8.0	SE
9N/1W- 9F1	7-29-58	117	74	24	--	218	44	308	5.3	307	0	562	378	.8	20	1.1	1,740	725	--	48	2,610	7.4	DWR - T2399
	4- 8-59	--	--	--	.02	164	30	292	4.0	316	0	437	318	1.0	8.8	--	1,570	534	--	54	--	7.6	DWR - 14125
9N/1W- 9F3	4- 8-59	150	--	--	.07	176	40	200	4.0	353	0	380	258	.8	.5	--	1,410	605	--	42	--	7.5	DWR - 14130
9N/1W- 9G1	8- 9-51	62	--	--	--	55	12	a55	--	201	--	74	43	--	3.5	.14	383	--	--	39	550	8.4	DWR - 1805
	3-25-54	--	--	--	0	108	22	89	3	339	0	144	99	.4	.8	--	790	360	--	35	--	7.3	DWR - 4492
	7-22-54	--	59	--	--	105	23	80	2.7	329	0	122	89	.8	0	.68	727	356	87	33	952	7.3	DWR - 4498
	5-19-55	--	--	16	0	99	20	80	2.8	309	0	116	86	.5	.6	1.2	608	--	--	--	975	7.6	DWR - P1176
	12-18-56	--	--	22	--	103	28	138	2.3	336	0	246	106	.5	.6	1.2	884	--	--	--	1,300	7.7	DWR - T5491
	7-10-57	--	--	32	--	74	18	118	3.1	351	0	123	78	.8	0	1.6	710	259	--	49	1,030	7.4	DWR - T876
	10-23-57	--	70	25	--	89	17	132	2.8	379	0	154	80	1.2	1.0	2.1	671	292	0	49	877	7.8	DWR - 8291
	12- 5-57	--	--	--	--	83	18	123	2.7	378	0	121	73	1.2	.5	1.8	652	280	0	49	1,030	7.8	F - 4343
	7-29-58	--	71	19	--	104	27	124	2.8	473	0	118	83	.4	0	.72	763	373	--	42	1,180	7.6	DWR - T2401
	10-14-58	--	--	33	--	35	19	130	4.1	253	0	118	89	.5	1.9	1.8	572	165	--	62	888	8.2	DWR - R2276
	3-24-59	--	--	26	--	107	13	116	3.5	461	0	82	90	.9	1	1.4	841	322	0	43	1,110	7.4	DWR - T3132
	5-26-59	--	--	--	--	112	24	113	3.0	483	0	84	94	.8	0	1.5	722	374	0	39	1,360	7.2	F - 4961
	3- 2-60	--	--	--	--	69	25	118	3.6	342	0	94	96	.7	.7	1.2	655	274	0	48	1,070	7.8	F - 5428
	3-30-60	--	70	23	--	114	25	118	3.6	493	0	98	95	.8	0	1.2	735	388	--	40	1,180	7.3	DWR - 11322
9N/1W- 9G2	3-25-59	--	72	25	--	86	17	129	3.9	278	0	177	123	.1	1	.80	744	286	--	49	991	7.7	DWR - T3125
9N/1W- 9G3	3-25-54	72	--	--	--	69	15	77	3	270	0	90	63	.5	.6	--	--	234	1	41	--	7.4	DWR - 4491
	7-10-57	--	--	32	--	86	19	110	3.5	436	0	78	80	.7	0	1.1	760	298	--	35	1,020	7.6	DWR - 8517
	10-23-57	--	70	30	--	88	14	100	3.6	382	0	78	77	.6	0	1.3	581	227	0	44	771	7.7	DWR - 8288

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1W- 9G3 (Continued)	7-29-58	--	--	22	--	81	17	120	2.8	409	0	78	96	0.4	0	0.50	679	274	0	48	1,030	7.4	DWR - T2400
	4- 8-59	--	--	--	1.8	84	20	110	2.0	394	0	83	80	.4	0	--	770	290	--	45	--	7.4	DWR - 14129
	5- 6-59	--	--	--	3.2	82	18	120	2.6	407	13	76	79	.6	0	--	680	280	--	47	--	8.5	DWR - 14417
	6-29-61	--	--	22	--	74	12	109	2.0	358	0	86	70	.5	0	1.1	492	233	0	50	884	7.8	DWR - L1534
9N/1W- 9G4	7-29-58	52	--	22	--	95	22	83	3.1	366	0	101	78	.4	1.2	1.0	617	325	--	35	978	7.7	DWR - T2415
	10-14-58	--	--	--	--	113	24	129	3.4	--	--	--	--	--	--	--	--	--	--	--	1,220	8.4	DWR - 2270
	4- 8-59	--	--	--	.03	80	20	100	3.0	340	0	112	74	.8	4.2	--	730	280	--	43	--	7.4	DWR - 14124
9N/1W- 9G5	12-14-51	41	--	--	--	64	16	a70	--	214	0	113	65	.4	2.5	.55	450	--	--	40	740	7.5	DWR - 1321
9N/1W- 9H1	5- 6-59	--	--	--	.6	54	16	80	2.6	236	19	78	54	.6	0	--	445	201	--	47	--	9.1	DWR - 14416
9N/1W- 9L1	6-17-55	127	--	--	--	235	16	1,120	4.0	132	0	2,160	425	6.0	222	26	4,400	652	544	79	5,520	7.9	F - 3601
9N/1W-10A2	7-31-59	30	--	--	--	--	--	--	--	206	0	--	122	.9	--	.16	--	242	--	--	918	7.8	DWR - T3783
9N/1W-10D2	8-10-51	132	--	20	--	63	11	a95	--	256	--	120	46	--	2.0	--	495	204	--	50	730	8.4	DWR - 1811
	11-28-51	--	--	--	--	63	13	a92	--	247	0	141	52	.4	.9	--	486	211	--	49	795	7.4	DWR - 1316
	7-22-54	--	59	--	--	58	12	64	2.6	232	0	81	40	.6	3.5	--	466	194	4	41	685	7.5	DWR - 4502
	5-19-55	--	--	14	0	67	13	86	2.4	253	--	132	51	.5	.6	.17	480	220	--	46	806	7.6	DWR - P1174
	4-18-56	--	--	--	--	50	9	72	2.2	220	0	84	39	.4	4.5	.13	278	163	--	49	615	7.8	DWR - R1055
	7- 9-57	--	--	--	--	44	7	65	1.6	204	0	65	34	.5	5.3	.27	335	140	0	50	552	8.0	DWR - R1657
	12- 5-57	--	--	--	--	66	14	88	2.6	263	0	124	55	.5	0	.14	495	224	8	46	801	8.0	F - 4361
	3-24-59	--	--	23	--	48	8	61	2.8	199	0	65	36	.7	1	.18	404	154	--	46	566	7.7	DWR - T1333
	4- 9-59	--	--	--	3.4	54	8.5	68	2.0	208	0	92	41	.4	.7	--	475	170	--	46	--	7.5	DWR - 14135
	5-27-59	--	--	--	--	48	7	58	2.5	198	0	62	34	.5	.4	0	318	148	0	45	535	7.5	F - 5008
	7-31-59	--	--	24	--	50	11	64	2.7	199	0	82	41	.9	1	.20	434	170	--	45	597	7.6	DWR - T3781
	3- 3-60	--	--	--	--	47	9	56	2.6	168	14	62	40	.6	.3	.09	308	154	0	--	533	8.3	F - 5460
	3-29-60	--	--	21	--	59	11	84	2.6	251	0	102	43	.8	0	.16	430	192	--	48	700	7.5	DWR - 11318
	8-24-60	--	68	16	--	49	11	61	1.6	198	0	70	40	.5	1	.10	374	166	3	44	561	7.4	DWR - L195
	8- 9-61	--	68	--	--	--	--	--	--	205	0	--	44	--	--	--	--	191	23	--	636	7.5	DWR - 12866
9N/1W-10E1	7-10-57	28	--	30	--	64	16	66	2.3	288	0	62	51	.7	0	1.2	500	225	--	--	710	7.6	DWR - T881
	4-15-58	--	--	26	--	72	19	66	2.4	308	0	63	53	1.0	6	1.2	455	260	--	35	735	7.2	DWR - R1960
	7-29-58	--	--	19	--	74	15	72	2.4	310	0	71	57	.6	0	.87	501	245	--	39	764	7.7	DWR - T2416
	4- 8-59	--	--	--	.16	98	17	75	2.0	310	0	64	56	.6	0	--	620	245	--	34	--	7.3	DWR - 14128

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hardness	Noncarbonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1W-10G1	4-18-56	30	--	--	--	131	26	180	11	415	0	332	98	1.2	1.0	0.16	1,040	434	--	46	1,560	7.4	DWR - 6795
	7- 9-57	--	--	16	--	109	28	185	4.6	390	0	334	100	2.0	0	.68	1,080	387	--	50	1,500	7.2	DWR - T932
	12- 5-57	--	--	--	--	120	24	172	3.8	404	0	314	91	.5	1.0	.24	978	400	69	48	1,450	7.4	F - 4362
	3-27-58	--	--	--	--	--	--	--	--	415	0	--	88	--	--	--	--	393	53	--	1,430	7.8	F - 4578
	10-15-58	--	--	16	--	117	24	204	5.8	384	9	335	89	.7	12	.24	1,030	393	--	53	1,500	8.5	DWR - R2265
	5-27-59	--	--	--	--	118	21	175	4.1	398	7	293	86	.6	.6	.32	914	378	34	50	409	7.7	F - 5010
	7-31-59	--	--	24	--	104	26	161	3.9	396	0	281	83	.9	0	.38	991	364	39	49	1,330	7.2	DWR - T3782
	3- 3-60	--	--	--	--	102	20	176	3.6	364	0	285	81	.6	.6	.23	861	336	38	53	1,330	7.3	F - 5423
	8- 9-61	--	--	25	--	103	29	139	3.7	322	0	261	99	.9	6.8	.22	837	375	111	44	1,270	7.4	DWR - 12867
9N/1W-10H1	8-10-51	56	--	--	--	122	29	a248	--	349	17	440	131	--	1.5	.7	1,190	424	--	56	1,780	8.5	DWR - N12
	7-31-59	--	--	22	--	95	28	199	4.3	329	0	347	103	.8	1	0	1,090	355	--	55	1,530	7.5	DWR - T3785
9N/1W-10M1	8- 9-51	108	--	--	--	39	7	a220	--	228	0	322	97	1.0	3.9	1.7	756	126	--	79	1,160	8.4	DWR - 1317
	10-15-58	--	78	36	--	62	8	205	3.9	204	12	239	128	1.1	6.9	1.3	797	180	--	70	1,080	8.6	DWR - R2277
	4- 8-59	--	--	--	0.03	72	12	220	4.0	245	0	281	158	1.6	4.9	--	1,000	230	--	67	--	7.9	DWR - 14123
9N/1W-10M2	2- 6-58	88.3	--	--	--	19	4	290	2.8	198	5	386	103	1.5	5.0	2.5	992	62	0	91	1,580	8.2	F - 4376
	1-12-59	--	--	--	--	76	11	22	3.4	49	0	265	143	1.6	7.5	1.4	895	233	29	66	1,340	7.6	F - 4863
9N/1W-10Q2	7-29-58	48	73	21	--	56	10	62	2.8	216	0	70	47	.6	0	1.6	392	180	--	42	--	7.7	DWR - T2414
	4- 8-59	--	--	--	.04	52	11	63	2.0	221	0	69	44	.8	.9	--	460	175	--	44	--	7.7	DWR - 14122
9N/1W-10Q5	7-29-58	58	70	17	--	56	11	55	2.4	215	0	63	47	.6	0	.30	378	184	--	39	604	7.5	DWR - T2417
	4- 8-59	--	--	--	.02	72	1.2	59	2.0	222	0	67	42	.4	.7	--	465	185	--	40	--	7.4	DWR - 14121
9N/1W-11Z3	10-26-19	100	--	29	.08	37	6.8	a50	--	187	0	41	23	--	1.0	--	283	120	--	--	--	--	GS
9N/1W-13E1	4-18-56	348	--	--	--	55	10	133	2.1	201	0	154	96	1.3	6.9	.70	582	128	--	62	933	7.5	DWR - R1132
	5-10-56	--	--	21	--	92	16	a99	--	229	0	154	107	--	--	--	584	297	--	42	1,050	7.4	DWR
9N/1W-13H1	5-19-55	90	74	15	0	70	13	80	2.8	213	0	112	85	.5	4.3	.30	488	--	--	--	806	8.0	DWR - P1177
	9-14-55	--	--	25	[illegible]	74	15	84	2.8	217	0	119	94	.6	2.8	.16	537	--	--	--	778	7.7	DWR - 6[illegible]
	12- 5-57	--	--	--	--	73	13	86	2.4	215	0	122	83	.6	3.0	.40	530	237	--	44	876	7.4	DWR - 4341
	4-15-58	--	--	24	--	54	7	66	1.9	198	0	83	46	.7	6.8	.31	372	165	--	46	6[illegible]	7.2	DWR - R1063
	5- 1-58	--	66	21	--	71	15	79	2.4	245	0	103	75	.4	9.0	.68	507	235	--	42	786	7.5	DWR - T3037
	10-15-58	--	69	22	--	36	12	78	2.8	128	3	102	62	.4	4.8	.27	392	138	--	55	64[illegible]	8.3	DWR - R2266
	3-24-59	--	69	25	--	64	10	85	2.8	209	0	104	70	.2	2	.35	541	200	--	48	765	7.4	DWR - T3[illegible]

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hard-ness	Noncar-bonate	% Na	Spec. cond.	pH	Lab. and lab. number
9N/1W-13H1 (Continued)	4- 9-59	--	--	--	0	58	15	80	2.2	220	0	108	67	1.5	4.0	0.55	488	205	--	46	--	7.5	DWR - 14190
	5- 7-59	--	--	--	0	65	9.4	88	2.6	220	0	103	66	.7	3.4	--	485	200	--	46	--	7.6	DWR - 14423
	5-26-59	--	--	--	--	64	13	85	2.2	220	0	104	71	.8	4.9	.30	465	211	31	47	766	7.3	F - 4978
	7- 9-59	--	68	20	--	62	12	86	2.8	222	0	106	67	.6	0	.34	500	204	--	47	767	7.4	DWR - 10306
	11- 2-59	--	--	22	.1	69	12	89	2.4	--	--	104	73	.3	2	.5	460	226	--	--	--	7.7	DWR - 212839
	3-23-60	--	--	--	0	64	12	88	2.4	185	--	109	75	.6	--	--	513	210	--	--	--	7.8	DWR
	3-30-60	--	69	21	--	68	10	90	2.6	229	0	108	72	.8	3.5	.34	490	212	--	48	805	7.3	DWR - 11321
9N/1W-13H2	11- 2-59	185	--	20	.1	53	12	82	2.2	--	--	94	66	.5	0	.5	410	186	--	--	--	7.7	DWR - 212837
	3-30-60	--	64	21	--	62	10	91	2.4	207	0	112	72	.7	1.0	.36	470	196	--	50	782	7.8	DWR - 11320
	12-16-60	--	67	20	--	69	10	100	3.5	231	0	144	72	.6	.9	.66	618	215	26	50	885	8.0	DWR - L668
9N/1W-14A1	3-10-52		--	24	.1	35	8	a89	--	207	0	76	46	1.2	--	.5	--	122	--	--	--	7.9	N - 1471
	4-18-56	--	--	--	--	42	7	91	1.7	198	0	100	48	1.2	4.6	.47	402	133	--	60	672	7.4	DWR - R1131
9N/1W-14A2	7- 9-59	407	70	30	--	66	12	123	2.6	215	0	159	95	1.0	6.0	.66	600	212	--	55	938	7.5	DWR - 10307
9N/1W-14B1	3-10-52	192	--	24	.1	46	10	a79	--	202	3	80	50	1	--	.34	--	155	--	--	--	8.2	N - 1470
	4-18-56	--	--	--	--	40	6	117	1.4	201	0	114	51	1.3	4.5	.57	440	--	--	67	708	7.3	DWR - R1133
9N/1W-14B2	3-10-52	280	--	24	.1	31	12	a82	--	209	5	73	40	1	--	.3	--	128	--	--	--	8.3	N - 1472
	4-18-56	--	--	--	--	37	6	89	1.7	208	0	84	39	1.2	2.5	.52	374	--	--	62	621	7.5	DWR - R1130
9N/1W-15A1	8- 9-51	132	--	--	--	46	11	a140	--	232	--	165	67	--	3.5	.89	628	--	--	66	850	8.4	DWR - 1810
10N/1W-32J1	11-29-51	57	--	--	--	45	12	a61	--	212	0	79	39	.2	1.9	.12	352	162	--	45	578	7.3	DWR - 1327
	7-22-54	--	64	--	--	45	9	62	3.0	217	0	56	32	.7	2.0	.10	337	149	--	47	515	7.7	DWR - 4496
	5-19-55	--	--	14	0	48	9.1	61	2.4	210	0	66	37	.5	1.2	.15	333	158	--	45	507	7.6	DWR - P1173
	4-18-56	--	69	25	--	65	13	72	3.1	237	0	105	52	.6	.3	.20	445	216	--	42	654	7.6	DWR - 6964
	12-19-56	--	58	20	--	72	14	83	3.5	256	0	133	63	.5	.9	.15	536	238	18	43	795	7.7	DWR - T5463
	12- 5-57	--	--	--	--	79	15	84	3.1	258	0	140	67	.5	.5	.10	545	258	46	41	858	7.5	F - 4365
	10-15-58	--	--	18	--	54	14	66	3.0	201	6	87	46	.2	1.4	.10	407	193	18	42	652	8.4	DWR - R2267
	4- 9-59	--	--	--	3.5	58	8.5	74	2.0	228	0	90	42	.6	.7	--	505	180	0	47	--	7.6	DWR - 14138
	5-26-59	--	--	--	--	64	13	144	2.7	278	0	130	94	.9	15	.35	603	211	0	59	1,000	7.7	F - 4984
	3- 3-60	--	--	--	--	62	13	74	3.0	251	0	69	57	.6	.2	.09	435	206	0	43	724	8.0	F - 5463
	3-29-60	--	69	24	--	62	12	78	3.0	244	0	103	47	.6	1.0	.12	430	202	--	45	710	7.4	DWR - 11358

Table 7.--Chemical analyses of water from wells and springs--Continued

Well no.	Date	Depth	°F	SiO_2	Fe	Ca	Mg	Na	K	HCO_3	CO_3	SO_4	Cl	F	NO_3	B	Residue	Hard-ness	Noncar-bonate	% Na	Spec. cond.	pH	Lab. and lab. number
10N/1W-32J2	12- 6-51	150	--	--	--	104	23	a202	--	470	--	262	82	--	2.1	0.36	922	357	--	55	1,320	8.0	DWR - 1812
10N/1W-33E1	11- 3-59	--	--	23	--	83	16	92	3.9	291	0	152	66	0.5	0	.37	683	273	--	42	944	7.2	DWR - T4234
	4-14-60	--	--	23	--	87	15	100	3.6	300	0	157	60	.6	.5	.22	585	276	--	44	935	7.8	DWR - 11316
	8- 9-61	--	--	24	--	75	14	93	3.2	294	0	134	53	.5	1.5	.21	512	245	4	45	875	8.1	DWR - 12942
10N/1W-33E2	8-18-59	28.3	--	--	--	99	19	217	3.0	432	0	235	137	.7	3.0	.38	946	324	--	52	1,500	7.5	F - 5165
10N/1W-33F2	2- 9-56	94	--	--	--	32	7	43	2.0	166	5	32	21	.6	1.0	.06	247	107	0	46	410	8.0	F - 3795
	7-25-57	--	--	18	0.01	38	11	44	--	183	0	41	30	.2	1.0	--	366	--	--	--	--	7.4	SE - 438202

U. S. GEOLOGICAL SURVEY

EXPLANATION

UNCONSOLIDATED DEPOSITS

Recent

Qyo — Younger alluvium
Unconsolidated gravel, sand, silt, and clay beneath alluvial plain Largely above the regional water table But, where saturated, yields some water to wells

Qyf — Younger fan deposits
Unconsolidated, locally derived, gravel, sand, and silt Largely above the regional water table Yield little water to wells

Qp — Playa deposits
Clay, with some sand and silt beneath the playa areas, yield small amounts of water to wells when saturated Occasionally water is of poor quality

Qs — Sand
Unconsolidated wind-deposited sand, actively drifting except where held by vegetation or shallow ground water Generally above the regional water table

Qrc — River-channel deposits
Unconsolidated stream-deposited sand in Mojave River bed, highly permeable, contain large amounts of ground water near Camp Cady and Afton Canyon where saturated, yield water freely to wells

Pleistocene

Qoa — Older alluvium
Moderately consolidated and moderately eroded gravel, sand, silt, and clay, where saturated, yields water freely to wells

Qof — Older fan deposits
Moderately consolidated and moderately well-bedded gravel, sand, silt, and clay generally tilted gently toward the Mojave River, where saturated, yield water freely to wells

Qol — Older lacustrine deposits
Near the western edge of the mapped area composed of marl, silt, and sand In the eastern and northern parts composed of well-bedded, flat-lying beds predominantly dark green sand, gravel, silt, and clay Manix Lake beds lie within the stratigraphic boundaries of the older fan deposits and the older alluvium and range up to 75 feet thick near the town of Field In general, these beds lie above the regional water table, but if saturated may yield some water to wells

Qos — Old sand dunes
Composed of moderately to well-cemented, cross bedded, wind-eroded sand dunes Deposited near edge of Coyote Lake

Qls — Lakeshore deposits
Bars of sand, silt, clay, and well-rounded water-polished cobbles, deposited on shore of Lake Manix during late Pleistocene time, when high water level was at about 1,795 feet above sea level These deposits are above the regional water table and not a source of ground water

QUATERNARY

CONSOLIDATED ROCKS

Pleistocene and Recent

Qb — Basalt
Flows of olivine basalt with some cinders, unweathered, everywhere above the regional water table and not a source of ground water

QUATERNARY

Miocene and Pliocene(?)

Tc — Continental sedimentary rocks
Conglomerate, sandstone, siltstone, mudstone, shale, limestone, and water-laid volcanic tuff and agglomerate Yield little water to wells Water from parts of this unit may be of poor quality, high in sulfate due to large amount of grosum in rocks

Tv — Volcanic rocks, undifferentiated
Intrusive and extrusive felsite, rhyolite, dacite, latite andesite, basalt, tuff breccia and tuff In part interbedded with Tertiary continental sedimentary rocks Yield little water to wells

TERTIARY

pTu — Basement complex, undifferentiated
Composed of quartz monzonite, granite, granodiorite, gneiss, schist, meta-volcanics, quartzite marble and aegmatite dikes, yields little water from cracks and residuum

PRE-TERTIARY

MAP SYMBOLS

Geologic contact

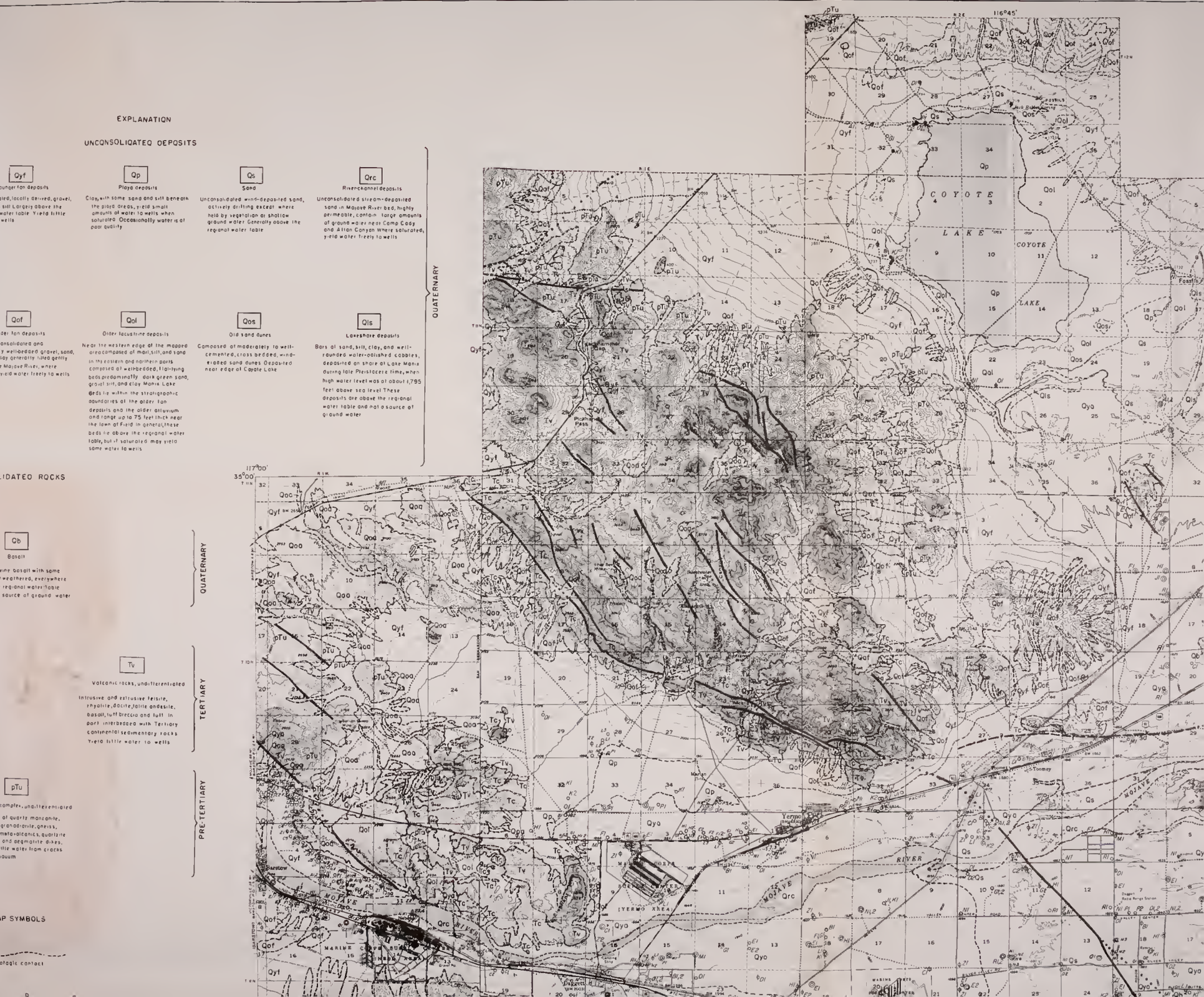

FIGURE 2


116°30'
116°15'
35°00'
MOJAVE RIVER WASH
Afton Canyon
Mojave River
Fossils

Geologic contact

Fault

Dashed where approximately located, dotted where concealed, and queried where doubtful. Arrows indicate direction of lateral movement; U, upthrown side; D, downthrown side

Shoreline or beach bar

Domestic, stock, or unused well

Public-supply, industrial, or irrigation well, with pump of 5 horsepower or more

Flowing well

Destroyed or dry well

Spring

Intermittent spring

Letter after well indicates position in section, thus

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Letter Z indicates the well was plotted from an unverified location description

See text for complete description of well-numbering system

0 1 2 3 4 MILES

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

FIGURE 2

INDEX MAP OF CALIFORNIA
0 100 MILES

Base map compiled from U S Geological Survey maps, scale 1:62,500 (1962)

BULLETIN NO. 91-10

MAP C

SH

FED

INDEX TO TOPOGRAPHIC MAPS AND GEOLOGIC MAPPING

Geology compiled and modified by W. R. Moyle, Jr., from published and unpublished mapping by T. W. Dibblee, Jr., F. M. Byers, Jr., T. H. McCulloh, D. H. Kupfer, A. M. Bassett, and H. B. Dyer
Location of wells by J. R. Hargreaves, R. W. Page, H. B. Dyer, W. R. Moyle, Jr., J. S. Bader, J. E. Weir, F. W. Giessner, P. M. Johnston, W. L. Burnham, and M. A. Pistrang

AP OF THE LOWER MOJAVE VALLEY AREA, CALIFORNIA

SHOWING RECONNAISSANCE GEOLOGY AND LOCATION OF WELLS

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

FEDERAL-STATE COOPERATIVE GROUND WATER INVESTIGATION

PREPARED BY U.S. GEOLOGICAL SURVEY