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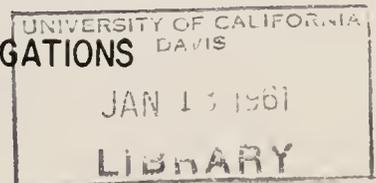
STATE OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES

BULLETIN NO. 91-3

DATA ON WATER WELLS  
IN THE  
EASTERN PART OF THE  
MIDDLE MOJAVE VALLEY AREA,  
SAN BERNARDINO COUNTY, CALIFORNIA

PREPARED BY  
UNITED STATES DEPARTMENT OF INTERIOR  
GEOLOGICAL SURVEY

FEDERAL-STATE  
COOPERATIVE GROUND WATER INVESTIGATIONS  
AUGUST 1960



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 present 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.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Water Resources Division  
Ground Water Branch  
2929 Fulton Avenue  
Sacramento 21, California

August 3, 1960

Mr. Harvey O. Banks, Director  
California Department of Water Resources  
P. O. Box 388  
Sacramento 2, California

Dear Mr. Banks:

We have the pleasure to transmit herewith, for publication by the Department of Water Resources, U. S. Geological Survey report, "Data on Water Wells in the Eastern Part of the Middle Mojave Valley Area, San Bernardino County, California," by R. W. Page and W. R. Moyle, Jr. This investigation was conducted and the report was prepared in accordance with the cooperative agreement between the State of California and the Geological Survey.

This report, one of a series for the Mojave Desert region prepared by the Long Beach subdistrict office, tabulates all available data on wells in the Mojave Valley area from near Helendale to Barstow and shows reconnaissance geology with special reference to the water-yielding deposits.

Sincerely yours,

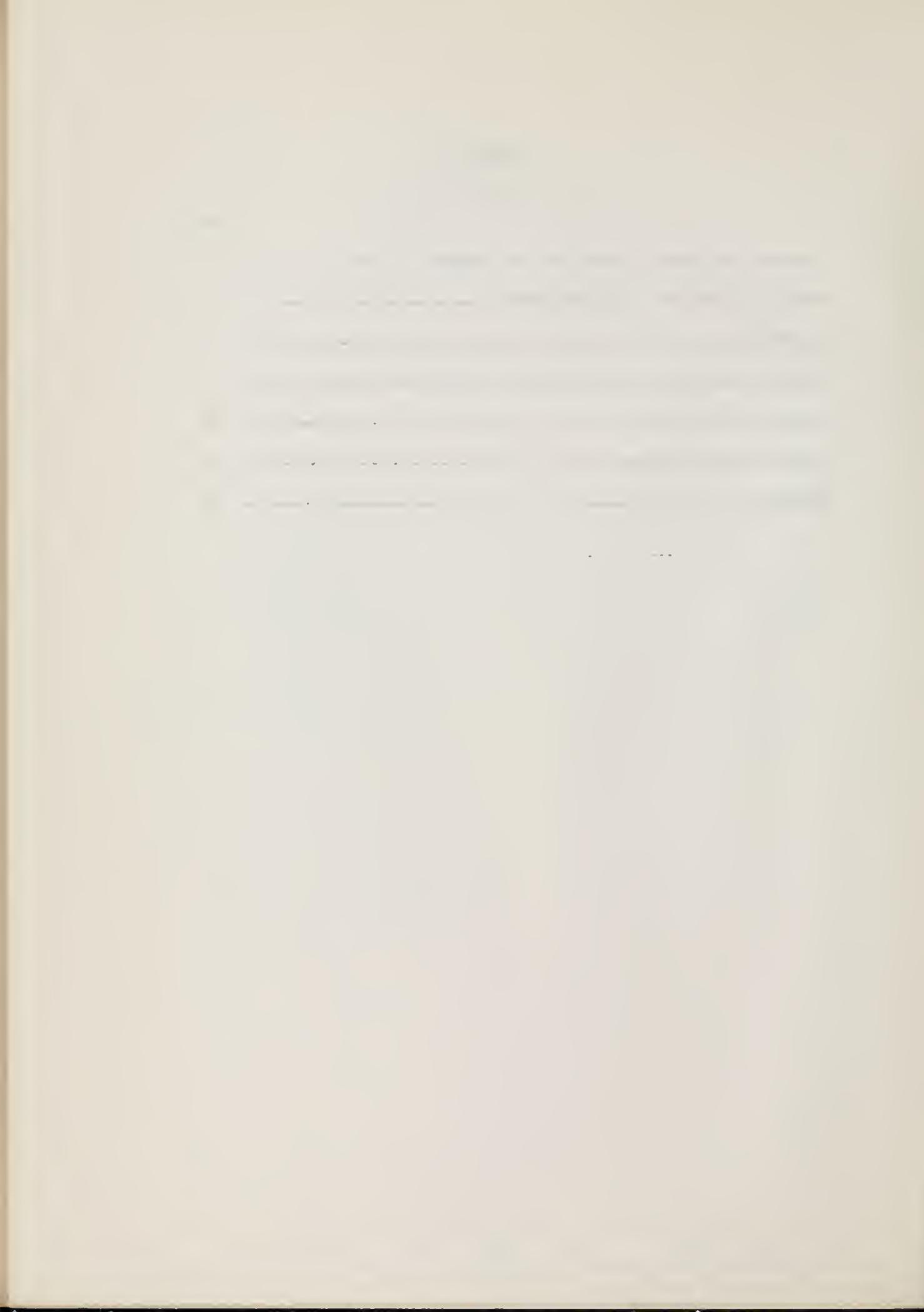
*Harry D. Wilson, Jr.*  
Harry D. Wilson, Jr.  
District Engineer



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DATA ON WATER WELLS IN THE EASTERN PART OF THE  
MIDDLE MOJAVE VALLEY AREA, SAN BERNARDINO COUNTY, CALIFORNIA

---

By R. W. Page and W. R. Moyle, Jr.

---

PURPOSE AND SCOPE OF THE WORK AND REPORT

The data in this report were collected by the U.S. Geological Survey in connection with an 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 barren mountain ranges and isolated hills surrounding broad valleys or basins, which are underlain by alluvial debris derived from the mountains and hills. These basins generally contain ground water having a wide range in chemical quality, which could be and in some areas already has been developed for beneficial use.

The general objectives of the cooperative investigation are the collection and tabulation of 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 possible subsequent ground-water investigations.

Accordingly, the scope of the work carried out by the Geological Survey in each area has included: (1) very brief reconnaissance of major geologic features to map the extent and define the general character of the deposits that contain the ground-water bodies; (2) visiting and examining practically all the water wells in the area; determining the locations of wells in relation to geographic and cultural features and the public-land net, wherever possible; and recording well depths and sizes, types and capacities of installed 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 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 assemblage of well records, including well logs, water-level measurements, and chemical analyses.

The work has been carried on by the U.S. Department of the Interior, Geological Survey, under the general supervision of H. D. Wilson, Jr., district engineer in charge of ground-water investigations in California, and under the immediate supervision of Fred Kunkel, geologist in charge of the Long Beach subdistrict office. The field work was carried on intermittently between June 1958 and July 1959 from the southern California subdistrict office of the Ground Water Branch at Long Beach.

## PREVIOUS WORK AND ACKNOWLEDGMENTS

Data on ground water in the eastern part of the Middle Mojave Valley area are contained in several U.S. Geological Survey water-supply papers, which are listed in table 3, California Department of Engineering Bulletin 5 (1918), California Division of Water Resources Bulletin 47 (1934), San Bernardino County Flood Control District Hydrologic and Climatic Data volumes 2, 3, and 4 (1951, 1954, and 1958), California Department of Water Resources Bulletin 39-57 (1958). The entire eastern part of the Middle Mojave Valley area is shown on a geologic map of the Barstow quadrangle by O. E. Bowen, Jr., (1954).

The writers wish to express their appreciation for the cooperation, assistance, and information given by the many ranchers, well owners, drillers, and several public agencies during the investigation.

## LOCATION AND GENERAL FEATURES OF THE AREA

The eastern part of the Middle Mojave Valley area as described in this report covers about 390 square miles and in general includes the eastern part of the Middle Mojave Valley of Thompson (1929, pl. 17). Barstow, Hinkley, Johnson Corners, Eads, Hawes, and Jimgrey are the principal towns and communities in the area.

The area is in the southwestern part of the Mojave Desert region (fig. 1) between long  $117^{\circ}00'$  and  $117^{\circ}30'$  W. and about lat

---

Figure 1. Map of part of southern California showing area covered by this report.

---

$34^{\circ}38'$  and  $35^{\circ}00'$  N. The eastern boundary corresponds to the eastern edge of the Barstow and Apple Valley topographic quadrangle maps; the western boundary corresponds to the approximate location of the Helendale fault and the eastern boundary of the west part of the Middle Mojave Valley area, after Page, Moyle, and Dutcher (1959); the northern boundary of the area is the lat  $35^{\circ}00'$  N. line which is the northern edge of the Barstow and Hawes quadrangle maps. The southern boundary of the area corresponds to the northern boundary of the Upper Mojave Valley area, after Bader, Page, and Dutcher (1958).

The area is shown on all or parts of the following U.S. Geological Survey topographic quadrangle maps: Barstow, Hawes, and Apple Valley at a scale of 1:62,500; the Helendale quadrangle at a scale of 1:24,000; and the Barstow quadrangle at a scale of 1:125,000.

Access to the area is provided by U.S. Highways 66 and 466, as well as several other paved and numerous unpaved roads.

Geographically the area consists principally of broad alluvial fans and gently sloping alluvial plains built out from the isolated mountains that rise to considerable heights above the valley floor. The area includes all of Hinkley Valley and part of Harper Valley, the remainder of which has been described by Kunkel (1956). The remaining smaller valleys that make up the larger unit called the eastern part of the Middle Mojave Valley area do not appear to have definite geologic or hydrologic boundaries, but correspond rather to cultural units centered about the areas as shown on figure 2.

---

Figure 2. Map of the eastern part of the Middle Mojave Valley area, California, showing reconnaissance geology and locations of wells (includes part of Harper Valley).

## GEOLOGIC AND HYDROLOGIC FEATURES OF THE AREA

The geologic units in the eastern part of the Middle Mojave Valley area can be grouped into two broad categories; consolidated rocks and unconsolidated deposits. The consolidated rocks are for the most part impervious and, except for minor amounts of water in cracks and weathered zones, yield little or no water. The consolidated rocks (fig. 2) comprise the old crystalline, metamorphic, and consolidated sedimentary rocks of pre-tertiary age which collectively form the basement complex and the consolidated sedimentary rocks of Tertiary age.

The consolidated sedimentary and pyroclastic rocks are of Tertiary age. They consist mainly of gray and red conglomerate, arkose, cobble gravel, tuff, sandstone, chert, limestone, gravel, sand, silt, and clay. For the most part these rocks are poorly permeable, but locally they yield sufficient water for domestic use to deep wells. Near the town of Barstow the unit consists of angular fragments of volcanic material having a lime and mud matrix. The hydrologic character of these rocks is not known, but on the basis of their appearance they are probably poorly permeable and virtually not water bearing. Volcanic rocks of acidic composition, mainly andesite, rhyolite, and dacite of Miocene and Pliocene age, also occur in the eastern part of the Middle Mojave Valley area.

The unconsolidated older alluvium of late Pleistocene age consists of compact arkosic gravel, sand, silt, and clay. The deposits are weathered, and locally the feldspars have been altered to clay. Near the hills the unit is predominantly gravel but beneath the valley areas it is finer grained and better sorted. Because the older alluvium overlies the basement complex, older fan deposits, or Tertiary continental rocks on which an erosional surface of considerable local relief is present, the thickness of the older alluvium varies greatly from place to place. Where it is saturated the older alluvium yields moderate quantities of water to wells.

The older fan deposits of Pleistocene age consist of slightly consolidated fanglomerate or unsorted, unbedded boulder gravel occurring as isolated erosional remnants. The materials are mainly from a granitic source but fragments of basalt, andesite, dacite, and metamorphic rocks are common. The unit is nearly everywhere above the water level in wells and is unsaturated. However, the attitude of this unit suggests that locally it may extend beneath the younger or older alluvium in the valley, and possibly below the water table. In such places the material where saturated may yield small quantities of water to deep wells.

Old lacustrine deposits of late Pleistocene age are locally interbedded with the older alluvium or the older fan deposits. These deposits are silt, clay, fresh-water limestone, lime-cemented gravel, and sand. In some localities, these deposits contain numerous fossils.

The river alluvium of Recent age is composed mainly of fine gravel and sand. Where saturated it yields water freely to wells. The river alluvium underlying the flood plain of the Mojave River, where most of the wells are drilled to shallow depths, is the principal water-bearing unit in the area. However, beneath much of the area west of the river where the depth to water is greater and where the younger alluvium is absent and the younger fan deposits are unsaturated, the wells yield water derived from the older alluvium.

The younger alluvium of Recent age beneath the alluvial plains of Hinkley and Harper Valleys is composed mainly of fine sand and gravel. Where saturated these deposits yield water readily to wells.

The younger fan deposits of Recent age are mostly poorly sorted boulders, arkosic gravel, sand, silt, and clay derived from nearby hills or mountains. The materials have been transported only a short distance and mainly represent mudflow or slope-wash debris. Near the hills and mountains the younger fan deposits are coarse grained, but they become finer with increasing distance from the areas of active erosion. These deposits are poorly sorted and poorly permeable, are usually above the water table, and probably would not yield much water to wells.

Playa deposits of Recent age occur principally at the base level of some minor drainage areas. They consist principally of silt and clay and minor amounts of sand, are of low permeability, and where saturated usually contain water having a moderate to very high dissolved-solids content.

The river-channel deposits beneath the active channel of the Mojave River consist mainly of highly permeable sand which permits large seepage losses to the ground-water body whenever runoff occurs.

Unconsolidated coarse to fine dune sand occurs along the river near Hinkley Valley. The dunes are, in part at least, actively drifting; locally some small interdune playas are included in the area shown as dune sand on figure 2.

In 1958 the water levels in wells ranged from near land surface beneath much of the land near the river to more than 200 feet below the surface of the higher parts of the alluvial fans and plains. The movement of ground water through the older alluvial deposits is complicated by several ground-water barriers, which are presumed to be major faults. Ground-water recharge to the area is from direct percolation of rain, (seepage loss) from the Mojave River, and subsurface ground-water flow from the west part of the Middle Mojave Valley area of Page, Moyle, and Dutcher (1959).

The Mojave River, which is the principal stream in the area, carries runoff northeastward from the San Bernardino Mountains past the town of Victorville. On the north side of Victorville the stream flows on the surface only if excessive rainfall or melting snow causes the water table to rise above the stream channel. Direct percolation of rain to the water table generally is minor, but in some wet years it may be appreciable.

The eastern part of the Middle Mojave Valley area includes about 390 square miles in nearly half of which consolidated rocks are exposed and in which virtually no wells are drilled. In the remaining half of the area nearly 1,200 wells were canvassed during the investigation. Of these, about 1,120 wells are described in table 1 and their locations are shown on figure 2; the others are destroyed or dry wells for which few or no data are available, and these are not included in table 1.

## DESCRIPTION OF TABLES

The tables in this report contain or refer to all known data, published and unpublished, for wells in the eastern part of the Middle Mojave Valley area.

In table 1 all wells canvassed in the eastern part of the Middle Mojave Valley area for which data are available are listed in numerical order.

In table 2 cross indexes are given for numbers previously assigned to wells by others and well numbers assigned by the Geological Survey.

In table 3 publications or reports which contain water-level measurements made in wells in the eastern part of the Middle Mojave Valley area are listed.

In table 4 the wells are listed for which periodic water-level measurements are available.

In table 5 all available unpublished records of water levels in wells are listed.

In table 6 drillers' logs of wells are listed.

In table 7 chemical analyses of water from wells are listed.

## WELL-NUMBERING SYSTEM

The well-numbering system used in the eastern part of the Middle Mojave Valley area conforms to that used by the Geological Survey in California since 1940. It has been adopted as official 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 9/3-34N4, which is assigned to the irrigation well of George S. Hall, the part of the number preceding the slash indicates the township (T. 9 N.), the part between the slash and the hyphen is the range (R. 3 W.), the number between the hyphen and the letter indicate the section (sec. 34), 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 9/3-34N4 is the fourth well to be listed in the SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 34. Because the entire area lies in the northwest quadrant of the San Bernardino base and meridian lines, the foregoing abbreviations of township and range numbers are sufficient.

For some wells the letter following the section number is designated X in place of one of the 16 letters designating the 40-acre tract. This symbol indicates that the well has been located in the field and is accurately plotted with respect to its position on the map, but that the control for the public-land net is too poor to warrant assigning a more accurate location number.

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

In this report, exceptions to the system of numbering wells according to their position in the 40-acre subdivisions of the section are found. These exceptions are the result of numbers having been assigned to wells prior to the publication of existing base maps. During this investigation, the locations of these mis-numbered wells were plotted more accurately. The originally assigned numbers were retained in this report, however, for continuity with previously published reports and for ease of handling of records by automatic data processing units. Generally, these wells are few in number and were seldom misplaced in the section by more than one adjoining 40-acre subdivision.

## REFERENCES

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- \_\_\_\_\_, 1954, Biennial report on hydrologic and climatic data 1950-51 and 1951-52: v. 3, 163 p.
- \_\_\_\_\_, 1958, Biennial report on hydrologic and climatic data 1952-53 and 1953-54: v. 4, 184 p.
- Thompson, D. G., 1929, The Mohave Desert region, California, a geographic, geologic, and hydrologic reconnaissance: U.S. Geol. Survey Water-Supply Paper 578, 759 p.
- Meinzer, O. E., Wenzel, L. K., and others, 1940, Water levels and artesian pressure in observation wells in the United States in 1939: U.S. Geol. Survey Water-Supply Paper 886.
- U.S. Geological Survey, 1941-57, Water levels and artesian pressures in observation wells in the United States, part 6, Southwestern United States: Water-Supply Papers 911, 941, 949, 991, 1021, 1028, 1076, 1101, 1131, 1161, 1170, 1196, 1226, 1270, 1326, 1409.

Table 1.--Descriptions of wells in the eastern part of the Middle Mojave Valley area, California

USGS number: The number given is the Geological Survey number assigned to the well 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:

CDE California Department of Engineering (1918), also published in Thompson (1929)

DGT Thompson (1929)

DNR California Department of Water Resources

F San Bernardino County Flood Control District

GS observations and measurements made by the Geological Survey on the dates indicated

as well as information reported to the Geological Survey by owners, drillers, or others

M California Department of Public Works (1934), or from Geological Survey water-supply

papers given in table 3

Owner, data from owner

A number following the letter(s) is the well number used in the report or by the agency and is given only where different from Geological Survey numbers.

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 the owner or user of the well on the date indicated. If more than one set of data are given for a well the name is not repeated unless it is known to be different.

Year completed: The completion date was obtained from the driller's log or reported by the owner or others.

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

Type of 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, Dr drilled but method of construction not known, (whether by cable tool, rotary, or auger), 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 as follows: C centrifugal, J jet, L lift, N none, S submersible turbine, 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, W windmill, N none.

Yield: The yield, in general, is the capacity of the pumping equipment, in gallons per minute, as reported by the driller or owner and is not necessarily the maximum capacity of the well.

Specific capacity: The specific capacity of a well is the yield per unit drawdown of the water level in the well. It is determined by dividing the figure in the Yield column by the drawdown resulting from sustained pumping at that rate; the result is expressed in terms of gallons per minute per foot of drawdown. The yield and drawdown data are drawn principally from tests made by the California Electric Power Co. and from reports by well owners and drillers.

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

Measuring point: The point from which the water-level measurement(s) by the Geological Survey or other agencies were made is as follows:

<u>Ah</u> access hole	<u>Hp</u> hole in pipe	<u>Tcon</u> top of concrete
<u>Bah</u> bottom of access hole	<u>Hpb</u> hole in pump base	<u>Tf</u> top of floor
<u>Ebc</u> bottom of board cover	<u>Na</u> no access	<u>Tlb</u> top of metal "I" beam
<u>Bcc</u> bottom of casing cover	<u>Nc</u> notch in casing	<u>Tp</u> top of pit
<u>Bcl</u> bottom of clamp	<u>Nt</u> nail in timber	<u>Tpbb</u> top of pump bowl base
<u>Bf</u> bottom of floor	<u>Tap</u> top of access pipe	<u>Trc</u> top of rock curb
<u>Bpb</u> bottom edge of pump base	<u>Tb</u> top of bearing	<u>Trr</u> top of railroad ties
<u>Bpc</u> bottom of "T" on pump column	<u>Tbc</u> top of board cover	<u>Ts</u> top of bottom step
<u>Bt</u> bottom of timber	<u>Tc</u> top of casing	<u>Tsp</u> top of steel plate
<u>Hc</u> hole in casing	<u>Tcc</u> top of casing cover	<u>Tt</u> top of timber
<u>Hcc</u> hole in casing cover	<u>Tcl</u> top of clamp	<u>Twc</u> top of wood casing

The suffix letters N, S, E, and W (north, south, east, and west) indicate the side from which the measurement was made. The distance of the measuring point above or below (-) land-surface datum is given in feet and tenths and sometimes hundredths of feet. All measurements of water level are from the same measuring point unless otherwise indicated; however, the measuring points used by others usually are not known.

Altitude: The altitude given is that of land-surface datum, the plane of reference approximately at land surface at the well. Altitudes given to the nearest foot were interpolated from Geological Survey topographic maps, those given in feet and tenths are altitudes determined by spirit leveling by the California Department of Public Works, U.S. Bureau of Reclamation, The Atchison, Topeka and Santa Fe Railway System, and the Pacific Gas and Electric Co.

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 water-level measurements given by the Geological Survey (1958-59) and the San Bernardino County Flood Control District, are below land-surface datum (l<sub>sd</sub>). For these measurements the difference in altitude between land-surface datum and the measuring point has been subtracted from or added to the measured water level below the measuring point. The measurement given is the depth to the water level below land-surface datum. The water-level measurements by the California Department of Engineering (1918) and Thompson (1929) are given as tabulated in the references; the depth to water below land surface probably is the same as the depth to water below land-surface datum of this report. However, at a few wells the distance between the measuring point and land surface is not known.

Other data: B well reportedly penetrated bedrock, 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 levels are given in table 5, Wp records of water levels are in the references given in table 3.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Water level	
				Year completed	Type	Diam. (ft.)	Pump type	Depth (ft.)	Yield (gpm)	Use	Altitude of lsd (feet)

T. 7 N., R. 2 W.

7/2-9L1	GS DGT-104	3-13-58 12-30-17	Stoddard well	18.2	D	180	N N		Un	3,435	(a)	C
---------	------------	---------------------	---------------	------	---	-----	-----	--	----	-------	-----	---

14A1	GS	3-13-58		2	L	W			Un	Tc	2.5	3,400	7.41
25N1	GS	3-13-58		302.0	6	N N			Un	Tc	.5	3,525	292.22
29N1	GS	3-13-58		409.8	10	N N			Un	Tpbb	1.0	3,400	236.52
32R1	GS	3-13-58		148.0		N N			Ds			3,510	Dry

T. 7 N., R. 3 W.

7/3-21Q1	GS CDE-335	3-14-58 1917		71.4	48	N N			Ds	3,040		3,040	Dry 50.0
27F1	GS	3-14-58	Lewis Leavett	1940	190	R 6	L W		S	3,095		3,095	120
27Z1	GS CDE-331	3-14-58 1917	W. C. Marston		D	T		90	Ds	3,150		3,150	130
28A1	GS	3-14-58		102.9	D 10	N N			Un	Twc	0	3,075	95.96

T. 8 N., R. 1 W.

8/1-20L1	GS	5-27-58	Lee Berry	1934	400	8	T G	Dm	2,815	175
29F1	GS	5-27-58	Vern Cyr	750	R 8	S 1½	Dm	2,870	80	L
29F2	GS	5-27-58	Vern Cyr	140	C 6	S 1½	Dm	Hc 2.0	2,870	b130.5 L
32F1	GS	5-28-58	Stancil	1958	114.7	R 8	N N	Dm	2,945	(c)

T. 8 N., R. 3 W.

8/3-3A1	GS	6-6-58	Nellie Horton			D	N N	Ds	Tcon 0	2,381.4	Dry	W
	M-41a	3-22-33									126.1	Wp
	DWR-9/3-											
		34R1										
3D1	GS	5-29-58	R. D. Quaney	1956	50	R 6	J ½	Dm	Tc 1.0	2,280	26.32	
3D2	GS	5-29-58	F. P. Jesse	1957	60	C 8	J-1	Dm		2,280		
3D3	GS	5-29-58			32.7	60	N N	Ds	Tbc 0	2,300.9	39.5	Wp
	M-39	5-20-31										
4A1	GS	5-29-58			24.7	12	N N	Un	Tvc .5	2,280	19.38	
4A2	GS	5-29-58	George Richey		60	D 48	C E	Dm		2,280		
4A3	GS	5-29-58	Joseph Irwin			14	J 1	Dm		2,280		
4G1	GS	5-29-58	Morgan	1956	52	C 12	J 1	Dm	Tcs 1.5	2,280	13.06	L

a. Water seeping into well at 18.1 ft.

b. Well being pumped.

c. Well being drilled.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level	Other data
				Year completed	Depth (ft.)	Type, diam., eter. (in.)	Pump type and power				

T. 8 N., R. 3 W.--Continued

9/3-4G2	GS	6-18-58	B. O. Morton	1950	18.7	D 42	C E	Dm	Twc -4.5	2,285	12.76	
4G3	GS	6-18-58	B. O. Morton	1956	60	C 12	J E	Dm	TcN 1.0	2,290	20.11	L
4G4	GS	6-18-58	B. O. Morton	1957	72	C 12	J E	Dm	Tc 1.0	2,295	18.56	
4H1	GS	5-29-58						Dm	Tbc 2.0	2,315	33.10	C
	GS	4-20-54	Hoffman	29					Tbc 2.0		11.00	
4H2	GS	5-29-58	John Pelvalko				L W	Dm		2,280	(d)	
4K1	GS	5-29-58	Teames		57.7	12	L W	Dm	Tc .5	2,315	21.06	
4K2	GS	5-29-58			34.5	D 36	L G	Dm	Tbc 0	2,315	25.81	
4L1	GS	5-29-58			36.7	D 36	N N	Un	Tbc .5	2,315	28.85	
4L2	GS	5-29-58			14.7	D	N N	Ds	Tbc 0	2,287.5	Dry	W
	M-38	3-2-33	Everett Swing								13.4	Wp
4Z1	GS	5-29-58						Ds		2,300	12	
	DGT-80	1919	P. Cannady									
4Z2	GS	5-29-58						Ds		2,285	12	
	DGT-100	1919										

5Q1	GS	6- 4-58	O. Techow			12	T 50	I		2,305	(b)	
6N1	GS	6-10-58		47.8	15	NN		Un	Tc	.5	2,330	18.12
6Z1	GS	6- 4-58	Mrs. Burns					Ds		2,365	16	
	DGT-82	1919			D		450					
7B1	GS	6- 4-58	O. Techow	53.5	12	NN		Un	Tc	.85	2,320	7.25
7G1	GS	6- 4-58	O. Techow		8	J 1		Dm	Na		2,320	C
	M-37	5-18-32							Trc	0		11.2 Wp
7G2	GS	6- 4-58	O Techow		12	T 25		I	Na		2,325	(b) C
7K1	GS	6- 5-58	Albert Wagner		D	L W		Dm	Tc1	3.0	2,340	40.14
7N1	GS	6- 5-58	John Coelhr	85	D 96	T 10		S	Na		2,340	
7N2	GS	6- 5-58	John Coelhr	120	16	T 15		S	Bah	.2	2,340	32.73
7Q1	GS	6- 5-58			12	J 1½		Dm	Na		2,350	
7Q2	GS	6- 5-58			12	L E		Dm	Tc	.9	2,360	60.70
7Q3	GS	6- 5-58	Conroy		12	J 1		Dm	Tc	.5	2,375	63.58
7Q4	GS	6- 5-58	W. E. Smith		D 72	L W		Dm	Tc	.5	2,355	39.90
	DGT-84		Carrie E. Bennett									32
7R1	GS	6- 5-58	Gilbert Hodge	1947	60	R 6	J 3/4	Dm			2,355	e40 L

b. Well being pumped.

d. Tape smeared.

e. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Water level	
				Year completed	Depth (ft.)	Diam. (in.)	Type	Altitude of lsd (feet)	point (feet)	Depth below lsd (feet)	Other data
8/3-7R2	GS DGT-87	6-5-58	Gilbert Hodge G. S. Hodge	1957	0	D 48	N N	Ds	2,355	12	
7R3	GS	6-5-58	B. Ozment	1957	91	C 8	J 1	Dm	2,350	35	
7R4	GS	6-5-58	Robert Brunner	1957	100	C 8	S 3/4	Dm	2,375	48.71	
7Z1	GS DGT-83	6-5-58 1919	Carrie E. Bennett					Ds	2,325	10	
8A1	GS	6-4-58	Henderson	1946		D 48	E	Dm	2,295	e22.5	
8A2	GS	6-4-58	Max Dutt	1953		D 72	C 1	Dm	2,295	20.55	
8B1	GS	6-4-58	Paul H. Webb	1938	50	D 60	J 1 1/2	Dm	2,315	24.18	
8E1	GS	6-4-58	O. Techow				T 40	I	2,325	(b)	
8G1	GS	6-4-58	B. B. Cook	1948	92	D 12	T 10	Dm	2,320	30.06	L
8G2	GS	6-4-58	Jack Clark				J 1	Dm	2,335		
8G3	GS	6-4-58	Jack Clark	1948	39.2	C 10	N N	Un	2,340	39.2	L

T. 8 N., R. 3 W.--Continued

8Z1	GS	6- 4-58	C. C. Hutchins						Ds	2,320		32
	DGT-81	1919										
11Z1	GS	6- 6-58							Ds	2,470		124.05 Wp
	M-41b	3-22-33							Trr	.35		
17C1	GS	6- 6-58	McDougall	79	C 8				Ds	2,420		Dry B
18C1	GS	6- 5-58	W. Wittenburg	1933	D 96	T 15	419		S	2,375		57
18D1	GS	6- 5-58	A. D. Stewart	1954	12	J N			Un	Tc .2	2,375	67.62
18D2	GS	6- 5-58	A. D. Stewart	100	12	J 1			Dm	Na	2,380	65
18Z1	GS	6- 5-58							Ds	2,390		57
	DGT-85	1919	G. S. Hodge									
18Z2	GS	6- 5-58							Ds	2,390		52
	DGT-86	1919	C. J. Hodge									
18Z3	GS	6- 5-58							Ds	2,490		150.5 Wp
	M-35	6-23-32	Miller						Tbc	0		
18Z4	GS	6- 5-58							Ds	2,380		55.8 Wp
	M-36	1-24-30	Arthur Brisbane						Tbc	1.0		
30L1	GS	6- 5-58		33.5	48	N N			Ds	2,575		Dry 160
	DGT-92	1919	L. C. Frost									
30M1	GS	9- 5-58	Gene Vogt	0	D 72	N N			Ds	2,575		204.2 Wp
	M-34	6-23-32	Whestphalea		D 30				Tc	1.0		
31K1	GS	3-27-58		117.7	12	N N			Ds	2,650		Dry

b. Well being pumped.

e. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data			Measuring point (feet)	Altitude of lsd (feet)	Water level
				Year completed	Depth (ft.)	Type, diam., eter, (in.)			

T. 8 N., R. 3 W. --Continued

8/3-31Z1	GS M-33a	3-17-32		10			Ds Tc	0.5	2,635	158.3 Wp
31Z2	GS M-33b	3-17-32		10			Ds Tc	.2	2,640	159.0 Wp

T. 8 N., R. 4 W.

8/4-2Q1	GS M-26	3-20-59 1-10-34		28	36	N N	Ds	Tcon	.5	2,360	Dry W 24.9 Wp
10A1	GS	3-20-59	E. A. Green	1956	132	R 8 J G	Dm	Tcc	1.0	2,400	72.28
10H1	GS	8-29-58	D. K. Henry		30	D 24 J E	Dm	Tbc	0	2,355	14.49 C
10J1	GS	8-29-58	D. K. Henry	1954	27	D 42 C 5	I	Tc		2,350	14
10K1	GS	8-29-58	M. S. Packham		41	D 72 C 5	Dm	Tc	0	2,360	25.26 C
10K2	GS	8-29-58	Albert Seidenkranz		D 72	C 3	Dm	Tc	2.0	2,360	15.59
10L1	GS	9-5-58	C. A. Frisbie	16	T 7½		I	Na		2,375	

10N1	GS	8-27-58	A. C. Frisbie	0				Ds	Tbc	0	2,370	14.2	Wp
	M-25	12-8-32	James Leonard										
10N2	GS	8-27-58	A. C. Frisbie	1957	60	16	J 1	Dm	Ma		2,370		
10N3	GS	8-27-58	R. F. Moore		30	D 72	C 7 1/2	I	Tc	-10.5	2,365	20.25	C
10N4	GS	9 -5-58	C. A. Frisbie			8	J 3/4	Dm	Ma		2,375		C
10N5	GS	9- 5-58	C. A. Frisbie				L 1	Un	Ma		2,375		C
10P1	GS	8-28-58	C. A. Frisbie	1955		C 16	T 7 1/2	I			2,360	(b)	
10P2	GS	8-28-58	A. C. Frisbie		40	72	N N	Un	Tc	0	2,360	f38.21	
10Q1	GS	8-28-58	Ivan Tudor	1957	62	C 16	T 5	I			2,355	b18	
10Q2	GS	8-28-58	Ivan Tudor			D 72	N N	Un	Tbc	.5	2,355	14.82	
10Q3	GS	8-29-58	Ivan Tudor			2	L H	Un	Tc	.2	2,355	13.68	
10Q4	GS	8-29-58	Ivan Tudor	1921	28	D 72	C 5	Dm	Tc	0	2,355	15.35	
10Q5	GS	8-29-58	Ivan Tudor			2	L H	Un	Tc	.2	2,355	13.68	
10R1	GS	8-29-58	D. K. Henry		90	D 72	C 5	Un	Tbc	6.5	2,355	12.72	
10R2	GS	8-29-58	D. K. Henry			D 48	N N	Un			2,355		
11D1	GS	3-20-59	G. M. Underhill	1956	110	C 8	L W	Dm	Na		2,380		C
11D2	GS	3-20-59	Ronald Sherman		78	C 10	J 1	Dm	Tcc	1.0	2,365	31.91	
11F1	GS	3-20-59	Richard Weening, Jr.		40	D 96	C 10	Un	Tc	.5	2,345	14.57	C

b. Well being pumped.

f. Nearby well being pumped.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level
				Year completed	Type	Depth (ft.)	Diam. (in.)			

T. 8 N., R. 4 W.--Continued

8/4-11F2	GS	3-20-59	Richard Weening, Jr.	45	D 72	C E	Dm	Na	2,350		C
11L1	GS	3-20-59	Richard Weening, Sr.		C 8	J 1	Dm	Na	2,345		
11L2	GS	3-20-59	Richard Weening, Sr.	100	C 12	T 10	I		2,345	(b d)	
11Q1	GS	3-26-59		57	C 14	J 1	Dm		2,345	b15	
11Q2	GS	3-26-59		15	D 96	C 5	Un	Tc	0	13.70	
11R1	GS	3-26-59			C 14	C 5	Un	Tc	-5.0	13.15	
12A1	GS	6-10-58		16.1	D 48	T	Un	Tc	-3.0	2,320	15.86 C
12A2	GS	6-10-58			D 60	T 7½	Un	Tc	-6.0	2,320	8.85
12K1	GS	6-10-58	Joseph Taylor	1953	57	T 10	I	Na	2,345	(b)	C
12L1	GS	3-26-59	E. R. Layfield	55	D 72	C 10	I	Tc	0	2,335	14.54
12L2	GS	3-26-59	E. R. Layfield	72	C 16	T 10	I	Nc	0	2,335	14.88
12M1	GS	3-26-59		1959	14.0	D 60	Un		2,335	(c)	

12N1	GS	3-26-59	W. L. Penfold	27.0	D 48	J 1-3/4	Dm	Tc	.5	2,340	12.14
12N2	GS	3-26-59	W. L. Penfold	33	D 36	J 3	I	Tc	2.0	2,340	b21.37
12N3	GS	3-26-59	W. L. Penfold	44.0	D 30	J 3	I	Tc	1.0	2,340	b23.37
12P1	GS	3-26-59	E. R. Layfield	29	C 16	C 5	I	Ts	-5.0	2,335	14.80 C
12P2	GS	3-26-59	E. R. Layfield	48	D 60	C 10	I	Trr		2,335	13.65
12Q1	GS	6-10-58	Joseph Taylor		D 48	T 7½	I	Tc	2.5	2,345	b16.96 W
	M-30	11-15-32	J. A. Decrow								9.9 Wp
12Q2	GS	6-10-58	Joseph Taylor		8	J 1½	Dm	Na		2,345	C
12Q3	GS	6-10-58	Joseph Taylor		6	J 3	Dm			2,345	(b d)
12Q4	GS	6-10-58	Joseph Taylor		8	J 3	I	Na		2,345	
12Q5	GS	6-10-58	Joseph Taylor		D 60	T E	I	Na		2,345	(b) C
12R1	GS	6-10-58	Joseph Taylor		12	T 10	I	Tc	.8	2,345	1.8 C
12R2	GS	6-10-58	Joseph Taylor		12	T 7½	I	Hpb	.8	2,350	b35.33 C
12R3	GS	6-10-58	Joseph Taylor		12	T 7½	I	Na		2,350	(b)
13D1	GS	3-26-59	Rubin Manz	26	D 24	C 5	I	Tcon	0	2,340	b f20.88
13D2	GS	3-26-59	Rubin Manz	24	D 24	C 5	I	Tcon	.6	2,340	b17.27
13D3	GS	3-26-59	Rubin Manz		D 60	N N	Un	Tcon	1.0	2,340	f14.80

b. Well being pumped.

c. Well being drilled.

d. Tape smeared.

f. Nearby well being pumped.

USGS number	Source of data and other numbers		Date of observation	Owner or user	Well data				Measuring point		Altitude of lsd (feet)	Water level		
	Year completed	Depth (ft.)			Type	Diam. (in.)	Pump eter. and power	Yield (gpm)	Sp. cap.	Use		point (feet)	Altitude of lsd (feet)	Depth below lsd (feet)
8/4-13D4	GS		3-26-59	Rubin Manz	30	C 24	J 1							f14.58
13D5	GS		3-26-59	Rubin Manz	1957	39	C 6	J 1						b15.96
13N1	GS		9-3-58	Oscar Meyers	1947	200	R 6	L W						2,480
14A1	GS		3-26-59	Samuel Louis			C 8	J 1						2,355
14A2	GS		3-26-59	Samuel Louis	1943	20	D 24	C 5						2,355 (b)
14A3	GS		3-26-59	Samuel Louis	1945	20	D 72	C						2,355 f14.29
14B1	GS		3-26-59	R. C. Voges	1957	70	C 14	T 30						2,350 (b)
14B2	GS		3-26-59	R. C. Voges		0	D	C N						2,355
M-29			5-18-32	R. Shillinglaw		60								Nc 0 7.6 Wp
14E1	GS		3-25-59	Amelia McIntire	1950	33	C 16	C E						2,360 4.76 L
14F1	GS		3-25-59	Amelia McIntire	1959	37	C 16	N N						2,360 6.76 L
14F2	GS		3-26-59	Leonard Salisbury	1943	26	C 8	J 1						Tcon 0 2,360 14.35
14F3	GS		3-26-59	Leonard Salisbury	1945	26	C 20	C 5						Tc -6.3 2,360 12.40

T. 8 N., R. 4 W.--Continued

14G1	GS	3-26-59	R. C. Voges	1932	32	D 96	C 10	591 131	I	Tcon 1.0	2,360	12.06
14K1	GS	8-26-58	M. Bersano	1950	160	R 6	L W		D <sub>m</sub>		2,405	b84
14K2	GS	8-26-58		1957	125	C 10	J 1		D <sub>m</sub>	Na	2,405	62
14K3	GS	8-26-58		1918	62	D 10	J 1		Un		2,405	e58
14R1	GS	8-26-58	T. E. Link	1934	150	C 8	L 1		D <sub>m</sub>	Tc 0	2,445	129.58
14R2	GS	8-26-58	T. E. Link	1933	150	C 8	N N		Un	Tc 0.2	2,445	121.83
14Z1	GS DGT 88	8-26-58							Ds		2,345	
15A1	GS	8-28-58	L. A. Weilenmen	22	24	C	7½		I	Tcon 1.0	2,355	10.78
15A2	GS	8-28-58	L. A. Weilenmen	20	8	J	1½		D <sub>m</sub>		2,355	
15A3	GS	8-28-58	L. A. Weilenmen	24	16	C	7½		I	Tc 1.0	2,355	13.30
15A4	GS	8-28-58	L. A. Weilenmen	29	D 18	C	7½		I		2,355	b14
15A5	GS	8-28-58	L. A. Weilenmen	1956	61	16	T 10		I		2,360	(b)
15A6	GS	8-28-58	L. A. Weilenmen	30		C	5		Ds		2,360	Dry
15B1	GS	8-28-58	F. D. Tawney	30	D 72	C	3		D <sub>m</sub>		2,355	C
15B2	GS	8-28-58	F. D. Tawney	1947	30	D 72	C 5		I		2,355	(b) C
15D1	GS	8-27-58	A. V. Thomas	1912	0	D	N N		Ds		2,370	Dry
	DGT 89	1919	B. T. Estler			D		1215				' 20

b. Well being pumped.  
e. Well inside locked enclosure.  
f. Nearby well being pumped.

USGS number	Source of data and other numbers		Date of observation	Owner or user	Well data				Measuring point		Water level	
	Year completed	com-pleted			Year com-pleted	Type	diam-	eter	and	Yield	Sp. cap.	Altitude of 1sd (feet)

T. 8 N., R. 4 W.--Continued

8/4-15E1	GS	8-28-58	A. V. Thomas	1958	66	C 16	T 20	720	21	I	2,370	b28	L
15E2	GS	8-27-58	A. V. Thomas	1953	60	C 14	T 20	1500	71	I	2,370	b28	L
15F1	GS	8-27-58	Starbuck	1936	40	D 72	N N			Un Tc 0	2,365	24.28	C
15F2	GS	8-27-58	Starbuck	1957	65	C 16	T 15			I Na	2,365	25	
15G1	GS	8-28-58	F. D. Tawney	1958	72	C 16	T 10			I	2,365	b12	
15G2	GS	8-28-58	F. D. Tawney	1950	30	72	N N			Un Tbc 0	2,365	f28.02	C
15G3	GS	8-28-58	F. D. Tawney	1954	61	C 16	T 7½			I	2,365	b12	
15H1	GS	8-28-58	J. W. Harris	1957	27	12	J ½			Dm Na	2,360		
15H2	GS	8-28-58	J. W. Harris	1958	65	C 16	T 20	1170	25	I	2,360	b19	
15L1	GS	8-29-58								Ds	2,370		
M-27		11-15-32								Tcon 2.0		7.6	Wp

15P1	GS	8-27-58	E. L. Robinson	1948	30	D 12 C 1	Dm	2,365	12
15P2	GS	8-27-58	E. L. Robinson	1948	11.4	D 12 C 3/4	Ds	2,365	Dry
15P3	GS	8-26-58	E. L. Robinson	1948	30	D	Dm	2,365	
15Q1	GS M-28	8-26-58 3-17-32	E. L. Robinson Cornell	1948	40	D 48 N N	Un	Nt 3.5 2,375	19.36 Wp
16A1	GS	8-27-58	J. W. Fifield	1948	20	D 48 C 1	Dm	Tf -5.0 2,375	7.21 C
16A2	GS	8-27-58	J. W. Fifield	1948	10.0	D 48 N N	Ds	2,375	Dry
16D1	GS	8-27-58	C. C. Carmean	1948	96	C 12 J 3/4	Dm	Tc 0 2,430	88.40 L
16E1	GS	8-26-58	C. C. Carmean	1948	40	D 48 N N	Un	Tbc 0.8 2,395	13.96
16E2	GS	8-26-58	Helen Chaffey	1948	75		Dm	N 2 2,410	C, L
16F1	GS	8-26-58	C. C. Carmean	1948	40	D 48 N N	Un	Tc 1.5 2,390	13.77
16F2	GS	8-26-58	J. W. Fifield	1948	30	D 48 N N	Un	Tc 0.4 2,390	15.12 C
16G1	GS	8-26-58	J. W. Fifield	1948	26	D 48 N N	Un	Tbc 1.2 2,375	14.94 C
16H1	GS	8-26-58	J. W. Fifield	1948	26	D 48 N N	Un	Tc .7 2,375	23.28
16H2	GS	8-26-58	J. W. Fifield	1948		T 20	I	Na 2,370	(b)
16H3	GS	8-26-58	J. W. Fifield	1948		T 15	I	Na 2,370	(b)
16H4	GS	8-27-58	J. W. Fifield	1948		T 10	I	Na 2,370	(b)
16K1	GS	9-3-58	C. A. Frisbie	1954	40	D 48 N N	Un	Tc 2.0 2,380	16.36 C

b. Well being pumped

f. Nearby well being pumped.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Altitude of lsd (feet)	Water level
				Year completed	Depth (ft.)	Type	Diam (in.)	eter	Power (in.)		
8/4-16K2	GS	9-3-58	A. C. Frisbie	60	C 12	N N	Un	Tc 1.0	2,380	13.69	
16K3	GS	9-3-58	A. C. Frisbie	60	D 48	C 5	Dm	Tc 1.5	2,380	17.05	
16L1	GS	8-25-58	David Morrill	1957	70	C 8 J 1	Dm	Tc 2.5	2,385	13.75	
16L2	GS	9-3-58	Ralph Gonzales	1953	40	D 48 C E	Dm	Tc 3.3	2,380	10.12	
16M1	GS	8-26-58	F. L. Canova	1957	31	C 8 C 1/3	Dm	Tc .3	2,390	15.13	
16M2	GS	8-26-58	F. L. Canova	61	12	N N	Un		2,390	15	
16M3	GS	8-26-58	F. L. Canova	0		N N	Ds		2,390	C	
16P1	GS	8-29-58			D 36	N N	Un	Hcc 1.0	2,360	9.54	
17H1	GS	8-25-58	J. H. Cole	1947	47	C 12 J 5	Dm	Na	2,395	15	
21E1	GS	8-29-58	John Owens		D 30	N N	Un	Na	2,385	6	
21F1	GS	8-29-58	John Owens	1954	180	14 T 40	I	Nc 1.0	2,385	6.18	
21F2	GS	8-29-58	John Owens	1953	50	14 S E	Un	Tc 1.0	2,385	7.26	

T. 8 N., R. 4 W.---Continued

22A1	GS DGT-90	8-27-58 1919	E. L. Robinson Duncan	1908	7.0 142	D 12 N N	Ds	2,480	127
22D1	GS	8-27-58	E. L. Robinson			D 72 C E	Un Tc	2,370	12.76
23D1	GS	8-29-58			120.5	C 6 N N	Ds	2,455	Dry
23J1	GS	8-26-58	T. E. Link	1955	147	C 8 L 2	Dm Na	2,450	140
23J2	GS	8-26-58	F. E. Snyder	1950	180	C 8 S 3/4	Dm Na	2,475	145
23R1	GS M-31	8-26-58 6-23-32	T. A. Link Conger		145	8 L W	Dm Tc Tc1	2,460	141.10 134.1 Wp
23R2	GS	8-26-58	T. A. Link			8 N N	Un Tc	2,465	142.66
24C1	GS	9-3-58	L. Arviso	1955		8 L G	Dm Na	2,410	90
24D1	GS	9-4-58	Jose Garcia	1955	210	C 8 L W	Dm	2,485	bd170
24D2	GS	9-3-58	Nickels			12 J G	Dm	2,430	e100
24L1	GS	9-3-58	R. J. Shockley	1957	208	C 10 L 1	Dm Na	2,465	145 L
24N1	GS M-32 DGT91	9-4-58 4-2-31 1919	Conard Lizzie M. Conrad		147.5	8 8	Un Twc Tc	2,470	137.51 135.8 Wp 160
26A1	GS	8-26-58	W. L. Husman	1958	190	C 8	Dm	2,475	e154
26N1	GS	8-26-58	Morris Sherman	1954	300	C 8 L G	Dm Na	2,555	225

b. Well being pumped.

d. Tape smeared.

e. Well inside locked enclosure.



T. 9 N., R. 2 W.

9/2- LB1	GS	6-19-58			18 N N	Un Na	2,115	
LC1	GS	6-19-58	D. J. Helmig	14.2 C	6 N N	Ds	2,115	Dry
LC2	Gs	6-19-58	D. J. Helmig	74	D 12 J 1	Dm Bf	2,115	18.34 C
LD1	GS	6-19-58		18.0	12 J N	Ds	2,115	Dry
LE1	GS	6-12-58	Southern California Water Co.	87	D 12 C N	Un Tc	2,115	16.28
LF1	GS	6-12-58	Southern California Water Co., Bradshaw 2	1947 174	14 T E	Ps	2,120	(e) C
LF2	GS	6-12-58	Southern California Water Co., Bradshaw 1	1945 170	14 T E	Ps	2,120	(e) C
LF3	GS	6-12-58	Southern California Water Co., Bradshaw 3	1952 139	14 T E	Ps	2,120	(e) C
LF4	GS	6-12-58	Southern California Water Co., Bradshaw 4	1958 180	16 T G	Ps Tap	2,115	.8 21.91 C
LM1	GS	6-12-58	Clifford Barns	25	D 8 C E	Un	2,125	

b. Well being pumped.

e. Well inside locked enclosure.



3H1	GS	6-20-58	Augustina Ramirez	1948	48	C 12	C	7 $\frac{1}{2}$	637	S	Na	2,125	
3H2	GS	6-20-58	Augustina Ramirez			C 12	C	10	998	I	Na	2,125	
3M1	GS	6-17-58	L. Cornelius	1948	48	C 12	C	7 $\frac{1}{2}$		I	Tc	9.6	25.00
3R1	GS	6-13-58	Elmer Leak	1950	108	C 12	C	10		I		2,155	21
4B1	GS	10-2-58	Roger Hartwick	1915	115	D 12	C	E		I	Tc	2,160	(b)
	F	3-26-58									Tc	-15.13	32.37
4D2	GS	10-2-58	Roger Hartwick	1957	114	C 14	T	15		I	Na	2,160	31
4D1	GS	10-2-58	Melvin Hill	185		D 72	C	E	1620	405	I	Trr	.45
	M-78	3-16-32	S. S. Hill								Tcon	0	34.34
4D2	GS	10-2-58	Melvin Hill	1957	210	C 20	S	E		Dm	Tc	1.8	2,165
4J1	GS	6-13-58	J. R. Collins	1949	65	C 12	J	3/4		Dm	Tc	1.5	2,155
4J2	GS	6-13-58	J. R. Collins	1957	106	C 12	T	5		I	Hc	1.0	2,155
4J3	GS	6-17-58	W. C. Folden	1957	62	C 8	C	1		Dm	Tc	-16.1	2,150
4J4	GS	6-17-58	W. C. Folden	1954	45	C 6	N	N		Un	Trr	0	2,150
4K1	GS	6-18-58	George Ferguson	66		C 14	J	1/4		Dm	Hcc	0	2,160
4K2	GS	6-18-58	George Ferguson	1955	119	C 14	T	10		I	Na	2,160	
4N1	GS	6-17-58				D 8	J	1/2		Dm		2,170	(g)
4Q1	GS	6-17-58				C 6	J	1/2		Dm	Tc	1.3	2,165
													34.10

b. Well being pumped.

f. Nearby well being pumped.

g. Obstruction in well.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Year completed	Diam	Depth (ft.)	Type	Pump	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)	Altitude of 1sd (feet)	Water level Depth below 1sd (feet)	Other data
				Year completed	Diam	Depth (ft.)	Type												
9/2-4Q2	GS	6-17-58		D 6 J	1/2			Dm	Tc	-2.5	2,165						34.64		
4Q3	GS	6-17-58	J. O. Glenn	C 8 J	1	1957	100	Dm	Tc	.5	2,175						36.30		
4Q4	GS	6-17-58						Dm			2,165								
4R1	GS	6-13-58		C 8 J	1/3			Dm	Tc	1.7	2,155						29.24		
4R2	GS	6-13-58		C 6 N	N		19.0	Ds			2,155						Dry		
4R3	GS	6-13-58	D. B. Earp	C 12 J	1	1957	68	Dm	Tc	.55	2,155						28.68	L	
4R4	GS	6-13-58	Glenn Robinson	C 6 N	N	1955	50	Un			2,155						(e)		
4R5	GS	6-13-58	Phillip Nairy	C 12 J	1/2	1954	65	Dm	Tc	1.1	2,155						32.73		
4R6	GS	6-13-58	D. B. Earp	C 10 J	1/2	1955	65	Dm	Tc	.5	2,155						31.39		
5A1	GS	10-2-58	Melvin Hill	E			60	Tc		2.0	2,170						b43.91		
5A2	GS	10-2-58	Melvin Hill	D145 C E				I			2,170						(b)		

T. 9 N., R. 2 W., Continued

5N1	GS	6-18-58	K. J. Conner	1956	55.9	C 8	J 1/2	Dm	Tc	1.0	2,185	34.12
5N2	GS	6-18-58	Claude Ferguson	1957	78	C 12	J 1	Dm	Tc	3.5	2,180	35.80
5N3	GS	6-18-58	C. H. Adams	1957		12	J 1/2	Dm			2,185	
5N4	GS	6-18-58	Glenn Laufenburger	1951	50	C 12	J 1/2	Dm	Tc	0	2,180	(E) 27.25
5N5	GS	6-18-58	Glenn Laufenburger	1958	60	C 12	N N	Un			2,175	(c)
5P1	GS	6-18-58	Faylor Jackson			D 96	J 1	Dm			2,180	(e)
5P2	GS	6-18-58	Billy Joe McCormick	1956		C 12	J 1	Dm	Tc	2.8	2,180	34.88
5P3	GS	6-18-58	Vincent C. Mestas			48	J E	Dm	Na		2,180	
5P4	GS	6-18-58	R. E. Shinn	1955	63.5	C 8	J E	Dm	Tc	2.1	2,180	34.77
5P5	GS	6-18-58	Burrows		90	D	C 7 1/2	Dm			2,180	
5Q1	GS	6-18-58	George Hick		60	C 8	J L	Dm	Na		2,180	
5Q2	GS	6-18-58	Pacific Water Co. Well 4	1957	220	R 14	T 60	Ps	Tap	1.0	2,180	37.97
5Q3	GS	6-18-58	Donald Wright			8	J 1	Dm	Na		2,180	
5R1	GS	6-18-58	C. D. MARRIWEATHERS	1956	105	R 10	J 1/2	Dm	Tc	1.4	2,180	33.02
5R2	GS	6-18-58	C. D. MARRIWEATHERS	1950	44	C 6	N N	Ds			2,180	
6A1	GS	10-1-58	Hazel Depuc	1957	139	D 72	T 5	Ps	Na		2,180	33

- b. Well being pumped.
- c. Well being drilled.
- e. Well in locked enclosure.
- g. Obstruction in well.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Year completed	Depth (ft.)	Type	Diam. (in.)	Pump	Type	Yield (gpm)	Sp. Use	Measuring point (feet)	Altitude of lsd (feet)	Water level Depth below lsd (feet)
				eter	and	power	eter											
9/2-6A2	GS	10-1-58	Hazel Depue	56	D	N	N								Un	2,180		
6B1	GS	10-1-58	H. E. Vice		D	72	T	10							I	2,180		
6C1	GS	10-1-58			D	72	J	1							Dm	2,180		
6E1	GS	10-1-58	Hinkley Valley Grange	100	D	72	S	E							Dm	2,190	36.50	
	GS	12-11-53													Tcon	0	29.23	
6E2	GS	10-1-58	Neils Neilson	1955	136	C	12	T	10						I	2,190	35.23	
6E3	GS	10-1-58	Neils Neilson	1940	104	D	72	N	N						Un	2,190		
6E4	GS	10-1-58	Howard King	30	D			J	3/4						Ds	2,190	Dry	
6F1	GS	10-1-58	Howard King	1953	80	C	12	T	10						I	2,190	33.82	
6F2	GS	10-1-58	W. J. Goodman			C	12	T	10						I	2,190		
6G1	GS	10-1-58	L. V. Marriam	80	C	6	J	1							Dm	2,185		
6G2	GS	10-1-58	L. V. Marriam	98	D	72	T	15							I	2,185	b33	
6L1	GS	10-1-58	Sam Jones	1957	91	C	12	T	N						Un	2,190	31.83	

T. 9 N., R. 2 W., Continued

6L2	GS M-72	10-1-58	Sam Jones G. Podgett	50	D 84	J 1	Dm	Tcon Tbc	-9.0 .5	2,184.0	33.43 10.1	MP
6L3	GS	10-1-58	J. D. Hooper	1957	C		I			2,190	(e)	
6L4	GS	10-1-58	M. E. Archer	1954	D 72	J 1/2	Dm	Tc	1.0	2,190	30.08	
6L5	GS M-72A	10-1-58 5-4-32	Tony Williamson De Wolf		D 72 12	C E	Dm	Na Tbc		2,190	13.2	MP
6M1	GS	10-1-58	V. E. Taylor	1954	C 12	J 1 10	3.3 Dm	Tc	1.8	2,190	36.70	
6M2	GS	10-1-58	V. E. Taylor	35	D 60	N N	Ds			2,190	Dry	
6M3	GS	10-1-58	Svend Bruhn	1950	D 72	L H	Un	Tcon	-3.0	2,190	32.55	
6M4	GS	10-1-58	Svend Bruhn	1939	D 60	J 3/4	Ds			2,190	Dry	
6N1	GS	10-1-58	Jens Hanson				Dm			2,190		
6N2	GS	10-1-58	Jens Hanson		D 72	T 5	I	Na		2,190		
6R1	GS M-48	6-18-58 3-17-32	R. E. Gray		D 60	N N	Ds	Trr	.8	2,183.0	Dry 10.7	MP
6R2	GS	6-18-58	R. E. Gray	1951	C 6	J 1	Dm	Na		2,185		
7A1	GS	2-3-59	L. B. DeWitt	1959	C 8	N N	Un	Tc	2.0	2,190	c34.55	
7A2	GS	2-3-59	L. B. DeWitt	43	C 10	N N	Un	Tcc	1.0	2,190	36.66	

b. Well being pumped.  
c. Well being drilled.  
e. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level Depth below lsd (feet)
				Year completed	Depth (ft.)	Type	Diam. (in.)			

T. 9 N., R. 2 W., Continued

9/2-7B1	GS	9-30-58	Hunt				J	Ds	2,200	(e)
7Q1	GS	9-30-58	Ira Betz	1947	128	C 12	L	Dm Na	2,220	59
7R1	GS	9-30-58	Donald Beck	1943	132	C 8	J 1 1/2	Dm Tc	2,230	61.04
8A1	GS	6-18-58	Pacific Water Co. Well 1		100	12	T 25	197 43 Ps	2,180	C, L
8B1	GS	6-18-58	Pacific Water Co. Well 2		117	12	N N	Un Tap	2,180	41.98 C, L
8C1	GS	9-30-58	Clarence Johnson	1954	87	C 12	T 10	I	2,190	60 C
8C2	GS	9-30-58	Clarence Johnson	1950	100	D 72	N N	Un Na	2,190	60
8D1	GS	9-30-58	Robert Cox	1948		D 60	J 3/4	Dm	2,190	(d)
8J1	GS Owner	9-30-58 1958	L. A. Thompson	1958	0	C	N N	Ds	2,220	Dry
8J2	GS Owner	9-30-58 1956	L. A. Thompson	1956	0	D	N N	Ds	2,220	Dry



USGS number	Source of data and other numbers		Date of observation		Owner or user		Well data				Measuring point		Altitude of 1st (feet)		Water level	
	GS	DWR	10-3-58	1-26-54	J. M. Lawrence	J. M. Lawrence	120	C 12	T 5	Un	Bpb	0.8	2,210	87.98	98.8	C
	GS		10-9-58		C. Krouser		8	J 1	Dm	Na		2,215				
	GS		10-9-58	1-26-54	J. G. Pelvako	1950	C 8	J 1	Dm	Na		2,180	80			
	GS		10-9-58				T 5		Dm	Tc	1.0		98.85			
	GS		10-9-58		Carl Metz			J 1½	Dm	Na		2,200				
	GS		10-9-58		L. G. Hixon		6	S E	Dm	Na		2,200				
	GS		10-9-58		William Martinson	1951	C 6	J 1	Dm	Na		2,210				
	GS		10-9-58		G. L. Connley	1955	C 8	S 3/4	Dm			2,200	(g)			
	GS		10-5-58		G. L. Connley		123.1	C N N	Un	Tcc	.5	2,220	112.54			
	GS		10-9-58		Barstow Auto Wrecking Co.	84	C 6	N N	Un	Tc	.5	2,180	75.02			
	GS		10-5-58		H. R. Johnson	1942	C 12	J 1½	Dm	Tcl	.25	2,180	81.05			
	GS		10-9-58		DeBore		6	J 1	Un			2,180				
	GS		10-9-58		Dana Co., Inc.		8	J 2	Dm	Na		2,180				

T. 9 N., R. 2 W., Continued



USGS number	Source of date and other numbers	Date of observation	Owner or user	Well data				Measuring point	Water level	
				Year completed	Type, diam., eter, (in.)	Pump, type, and (gpm)	Yield, Sp. cap.		Use	Altitude of lsd (feet)

T. 9 N., R. 2 W., Continued

9/2-17E7	GS	10-10-58	L. D. Jones	1941	125	9	J	2	Dm	Tc	1.0	2,240	75.35	
17E8	GS	10-10-58							Dm			2,240		
17E9	GS	10-10-58	C. W. Ayers	120		8	J	1½	Dm	Na		2,240		
17E10	GS	10-10-58	I. Hamms					C	Dm			2,240	(e)	
17F1	GS	10-8-58	Lenwood Inn and Motel	110		12	J	3	Dm	Na		2,250		
18A1	GS	6-19-58	Hunt	5.0		D	40	N	Ds			2,240	Dry	Wp
	M-47A	9-11-30		49									Dry	
	DGT-73	1919	C. Gomes	65		D							60	
18B1	GS	9-30-58	E. W. Mooney	1954	126	C	12	T	S	Na		2,225	51	
18G1	GS	10-7-58	Santa Fe Railway	1951	128	8	N	N	Ds			2,232.2	Dry	L
	Owner	1-?-51											58	
18H1	GS	10-8-58	A. N. Jaramillo			D	60	T	Dm	Tib	1.0	2,240	73.10	
18H2	GS	10-8-58	W. F. Rehbein			10	J	2	Dm	Nc	0	2,240	175.02	
18H3	GS	10-8-58	Smedley and Middleton			D	48	J	Dm	Na		2,245		



USGS number	Source of data and other numbers	Date of servation	Owner or user	Well data				Measuring point (feet)	Altitude of lsd (feet)	Water level Depth below lsd (feet)	Other data
				Year completed	Depth (ft.)	Type	Diam-eter (in.)				
T. 9 N., R. 2 W., Continued											
9/2-19H1	GS	10-3-58	Blanche Jordan	1948	134	C	8 L W	Dm	2,270	170	
19H2	GS	10-3-58	Jack Ripley	1952	132	C	10 S E	Dm	2,270		
19H3	GS	10-3-58	C. L. Good	1954	154	C	8 S L	Dm Tbc	2,280	101.22	
5 19J1	GS	10-3-58	E. Boren	1957	166	C	8 S 3/4	Dm Na	2,285	101	
19M1	GS	10-7-58	Lewis Delaney		128	C	6 N N	Ds	2,300	Dry	
19M2	GS	10-7-58	Wayne Delaney	1955	198	C	6 S E	Dm Tcc	2,300	121.35	
19M3	GS	10-7-58	Olsen	1951	147	R	6 L H	Un Na	2,310		
19N1	GS	10-7-58	E. Kirker and Asso.	1950	180	C	8 J 2	Dm	2,320	dl30	
19R1	GS GS	10-3-58 4-20-54	G. A. Sweeten	1953	156	C	8 L W	Dm Tc Tc	2,320	bl44.35 128.30	C, L
19Z1	GS M-44	10-7-58 1-14-30	J. E. Sickner					Ds Tcon	2,185	103.8	Wp
19Z2	GS DGT-74	10-7-58 1919						Ds	2,315		95

20A1	GS	10-3-58	Cora B. Carter	1955 212	C 10	T N	400	6.1	Un Na	2,300	106	L
20D1	GS	10-3-58	George Singuinta	170	T 20	S	300		S	2,260	d82	C
20D2	GS	10-3-58	George Singuinta		L N	Un Na			Un Na	2,260		
34D1	GS	10-2-58	R. R. Baxter	1930 180	C 14	L W			Dm	2,450	(b) 128	C, Mp C
	DA	3-17-32									127.2	
	M-33	4-9-31	Dr. M. H. Kutch			Tc1			Tc1	.3		
34M1	GS	10-2-58	John Kouche		10 N N	Un Tc			Un Tc	0	159.28	
	GS	1-26-54		226		Tc			Tc	0	159.50	
34M2	GS	10-2-58	John Kouche	192.5	12 N N	Un Tc			Un Tc	0	153.40	
	GS	1-26-54		230		Tc			Tc	0	153.45	
34Q1	GS	5-28-58	G. Franchejos	1957 249	C 6	L G	4		Dm Na	2,525		
9/3- 1C1	GS	6-17-58	Star Valley Ranch	1949 143	14 T 15	I	549		I	2,195		L
1E1	GS	6-17-58	Star Valley Ranch	1948 143	12 J 1½	Dm Hpb			Dm Hpb	1.0	74.22	L
1E2	GS	6-17-58	Star Valley Ranch	1947 167	12 T 10	Dm Hc	289	28	Dm Hc	.5	90.93	C, L
	GS	1-21-54	Gates			Ah			Ah	1.0	55.70	
1J1	GS	6-17-58	Henry Belseiger	1950 149	14 T 15	I Hc	1,250	65	I Hc	.5	647.09	C, L
1R1	GS	6-17-58	Star Valley Ranch	1953 167	C 18	T 30	1,263	112	I TcN	1.0	644.32	
	GS	5-7-54				T 30			Ah	1.5	632.35	
1R2	GS	6-17-58	O. B. Eustice	1958 100	C 8	T 5			Dm Hpb	.5	2,195	30.82

b. Well being pumped.

d. Tape smeared.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level Depth below lsd (feet)	
				Year completed	Type, diam, eter, (in.)	Pump type	Yield, (gpm)				Sp. Use
9/3- 1R3	GS	6-17-58	Mrs. Suzy Barela	1956	8 J E	60	8 J E	Dm TcE	0.5	2,195	30.32
2A1	GS	6-17-58	Howard King	1952	14 J 1	108	14 J 1	Lm Na		2,195	L
2C1	GS	6-19-58	Oscar Dalolian	1944	L 3/4	120	L 3/4	Dm Tcc	1.0	2,220	92.73
2M1	GS	6-19-58	L. J. Johnson	1957	8 S E	50	8 S E	Dm TcS	1.5	2,225	97.37
2E1	GS	6-19-58	A. H. Clark		4 N N	65	4 N N	Un Na		2,225	
2F1	GS	6-18-58	J. C. Dawson	1953	12 J 1	155	12 J 1	Dm Tc	-0.5	2,225	83.33
2F2	GS	6-19-58						Dm		2,235	(e)
2G1	GS	6-18-58	Pacific Gas and Electric Co., Well 2		C 14 T 15	128	C 14 T 15	In Tap	0.5	2,220	68.13
	GS	1-21-54		1952				Tap	0.5		54.10
2G2	GS	6-18-58	Pacific Gas and electric Co., Well 1	1940	12 T 5	110	12 T 5	In HpbW	1.0	2,199.5	70.09
2H1	GS	6-18-58	Pacific Gas and electric Co., Well 3	1951	C 12 T 15	140	C 12 T 15	I Tap	1.0	2,197.4	78.78
2H2	GS	6-18-58	Pacific Gas and electric Co.	1945	12 T 10	120	12 T 10	I Hc	0	2,199.8	83.03

T. 9 N., R. 3 W., Continued

2K1	GS	6-18-58	Pacific Gas and elec- tric Co.	1945?	63.9	12 N N	Un	TccW	0.5	2,201.7	56.56	C
2M1	GS	6-19-58	George Harvey			6 J G	Dm	Tc	1.0	2,235	80.90	
2Q1	GS	6-18-58	M. J. Palmer	1953	170	C 8 J 1	Dm	Tccn	.5	2,220	46.55	L
2Q2	GS	6-18-58	M. J. Palmer	1949	69	C 6 J ½	Dm	Na		2,220		
2Q3	GS	6-18-58	M. J. Palmer F. Walker		47.4 60	12 N N	Un	Tc	1.0	2,200	44.52 18	
	DGT	69				540						
3A1	DWR	5-5-55 10-27-54	John Payer	1935	115	12 S ½	Un	Tc	1.0	2,240	100.4 98.5	C
3A2	GS	6-19-58	John Payer	1956		C 8 S E	Dm	TcS	1.0	2,240	94.69	
3G1	GS	6-19-58	F. E. Bohaty	1958	84.7	C 12 N N	Dm	TcE	3.5	2,235	84.05	
3H1	GS	6-19-58	L. McCormick	1948	125	8 L 3/4	Dm	Na		2,245	(b)	C, L
	GS	7-1-54				L 1/4		Tc	1.0		92.5	
3H2	GS	6-19-58	Mrs. T. R. Lewis		110	67 J 2	Dm			2,235		C
3J1	GS	6-19-58			59.5	12 N N	Ds	Tc	2.4	2,240.5	Dry 65.2	Wp
	M-54	7-26-32										
3Z1	GS	6-19-58			100		Ds			2,245	71	
	DGT	68										
3Z2	GS	6-19-58			60		Ds			2,235		
	DGT	67				540						
			T. B. Walker									

b. Well being pumped.  
e. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data			Measuring point	Altitude of lsd (feet)	Water level
				Year completed	Depth (ft.)	Type, diam., eter (in.)			

T. 9 N., R. 3 W., Continued

9/3-4Z1	GS DGT 99	6-19-58 1919				Ds	2,275	87
4Z2	GS DA	6-19-58 7-22-32		D	L W	Ds	2,250	
5C1	GS	6-19-58		84.5	12 N N	Ds	2,275	Dry
8J1	GS DGT 71 M52E	6-19-58 1919 3-10-32		84.7 135	12 N N	Ds	2,310	Dry 130 117.4
8Z1	GS DGT 70	6-19-58 1919		152		Ds	2,300	108
10A1	GS M-53	6-20-58 12-22-32		56.4	7½ N N	Ds	2,256.0	Dry 77.3
10H1	GS	6-20-58			T G	Dm Na	2,270	
10P1	GS M-52	6-20-58 2-9-34		89.4	12	Ds	2,291.7	90.6
						Hc	.5	W Mp

10P2	GS	6-20-58		45.2	12	Ds		2,260	Dry	
10R1	GS	6-20-58		54.5	7	Un	Tc	0.5	28.80	W
	M-56	7-26-32					Twc	0	13.1	Wp
11D1	GS	6-19-58	Smith	94.7	12	Dm	Tcs	.5	2,240	74.29
11E1	GS	6-20-58				Dm	Tbc	2.0	2,220	(e)
	M-53a	12-22-32							20.0	C, Wp
11N1	GS	6-20-58	Evan Hoskins	50	12	Dm	Tc E	.5	2,210	28.09
12D1	GS	6-18-58			6	Un	Tc	2.0	2,195	21.83
13R1	GS	10-20-58	Ridings Motor Co.	212	12	Dm	Na		2,245	
	GS	4-20-54	C. Jones	1938			Ah	0		60.60
13R2	GS	10-20-58	Ridings Motor Co.			Un	Tcl	2.3		47.97
	M-45	4-6-32			D		Tcon	1.0	2,225.5	37.3
	GS	7-2-54	C. A. Jones				Tf	2.0		44.62
14D1	GS	6-20-58	E. Shalenter	52	12	Dm	Twc	0	2,220	22.78
	M-56a	1-10-34					Tcc	0		19.7
14D2	GS	6-20-58				Un	Hc	0	2,215	26.54
	F	12-20-56					Tc	1.0		39.35
	F	5-2-57					Tc	1.0		40.07
14D3	GS	6-20-58	E. Shalenter	46	8	Dm	Tcon	0	2,215	28.88
	GS	1-21-54	Adley	1948			Tcon	0		28.20

e. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of 1st (feet)	Water level
				Year completed	Type, diam., eter, (in.)	Pump	Yield (gpm)			

T. 9 N., R. 3 W., Continued

9/3-14D4	GS	6-20-58		L W			Dm Na	2,215	
14E1	GS	6-20-58		10 L G			Dm TcS	2,215	b27.62
14E2	GS	6-20-58		39.8 6½ N N			Un TcE	2,215	10.45
14M1	GS M-57	6-20-58 7-26-32		120 E			Dm Tcon Un Tcon	2,215	16.97 12.0 Wp
15J1	GS	10-23-58	Chancey Pearce	60 D 72 L G			Dm Trr	2,220	23.43
15L1	GS	10-22-58	L. K. L. Ranch	12 T 5			Dm Na	2,235	
15P1	GS	10-22-58	L. K. L. Ranch	150 C 14 T 25			I Hc	.75 2,240	20.34 L
15Q1	GS GS	10-22-58 7-2-54	L. K. L. Ranch	134 C 16 T 20 T 25			I Hc Hc	.9 2,235 .9	21.58 C, L 17.71
15Q2	GS GS	10-22-58 7-2-54	L. K. L. Ranch	92 C 16 N N T 20	810	30	Un Hc	1.85 2,235	19.85 C

15Q3	GS	10-22-58	L. K. L. Ranch	1952	55.1	C14	N N N	810	30	Un	Tc	2.0	2,235	20.28	C, L
15Q4	GS	10-22-58	L. K. L. Ranch	1951	2.0	C N N	N N N	100	2	Ds			2,235		L
15R1	GS	10-23-58	Hunt			D 30				Un					
	GS	7-2-54								Un	Tc	-3.0		22.36	Dry
	M-57a	7-26-32								Tc	Tc	-3.0	2,217.9	9.2	Wp
15Z1	GS	10-23-58	L. K. L. Ranch	1951	270	C 12	N N N	270	5	Ds			2,235	23	L
	GS	8-1-51													
16M1	GS	12-1-58	Lewis	1958	156	C 8	N N N			Dm	Tc	.9	2,345	c147.03	
21J1	GS	10-21-58	Mrs. M. Savage	1926	86	C 8	J 1			Dm	Tc	-3.0	2,240	21.85	
22E1	GS	10-22-58	Dr. C. R. Myers		256	12	T 20			I	Na		2,240	20	C
22Z1	GS	10-22-58								Ds	Tc		2,232.6	23.1	Wp
	M-42a	5-20-31													
23M1	GS	10-20-58	Jon Pavelco			D 72	C E			Dm	Na		2,245		
24J1	GS	10-7-58	Walter Drew	1955	186	C 12	S E			Dm	Tcc	1.0	2,310	127.36	C
	GS	4-20-54			143					Dm	Bah	1.0		135.10	
24Q1	GS	10-2-58			280		T 30			Ps	Tap	1.2	2,360	165.14	
24Z1	GS	10-7-58								Ds			2,235	18	
	DGT 72	1919													
25Z1	GS	10-7-58								Ds			2,320	32	
	DGT 75	1919						540							

b. Well being pumped.  
c. Well being drilled.

USGS number	Source of data and other numbers		Date of observation		Owner or user		Well data				Measuring point		Water level	
	GS	GS	Year completed	Type, diam., depth (ft.)	Pump type and eter. (in.)	Yield (gpm)	Sp. cap.	Use	Dm	Na	Altitude of lsd. (feet)	Depth below lsd. (feet)	Other data	

T. 9 N., R. 3 W., Continued

9/3-26H1	GS	GS	1950	C 12	L 3	James Conway	202						2,360	153.70	C, L
	GS	GS		T 3	T 3										
27A1	GS	GS	1958	D 74	J 1	E. L. Bowen							2,234.7	(b)	wp
	M-42	GS			N N	Emile Egraud								27.7	
	GS	GS												19.95	
27A2	GS	GS	1956	D 60	N N	E. L. Bowen	100						2,240	25.50	
	GS	GS												23.50	
27A3	GS	GS	1958	D 60	N N	E. L. Bowen	134						2,240		
27D1	GS	GS	1958	20.0 D 60	N N	H. P. Vordermark	34						2,250	8	
	DGT 76														
27E1	GS	GS	1958	C 8	L H	John Leogoski	29						2,245	18	
27E2	GS	GS	1958	C 8	N N	Douglas Whear							2,250		
27E3	GS	GS	1955	20.0 D 36	N N	John Leogoski	80						2,250	c Dry	
27F1	GS	GS	1955	80 C 12	T 7½	Michael Young							2,245	11.87	

27F2	GS	10-21-58	Michael Young	1953	100	R 12	J 3/4	Dm Na	2,250	
27L1	GS	10-21-58	A. E. Mathews	1956	58	8	J 1	Dm Tcc	1.5	2,255 9.89
27L2	GS	10-21-58	I. F. Mathews			D 14	N N	Un Tc	0	2,250 9.72
27L3	GS	10-21-58	F. A. Mathews		60	D	C E	Dm Na		2,260
27M1	GS	10-21-58	Douglas Whear		50	C 6	C 1/3	Dm Tc	-3.5	2,260 16.02
27M2	GS	10-21-58	Douglas Whear			D 30	C 10	I Tvc	0	2,255 14.02
27M3	GS	10-21-58	Roy Thompson	1945			J 3/4	Dm Na		2,260
27M4	GS	10-21-58	Roy Thompson	1956	65	C 8	S	Dm Na		2,260 17
27N1	GS M-50	10-21-58 2-23-32	Michael Young			D 72	C 10	I Na Tcon		2,270 13.6 Wp
27N2	GS	10-21-58	Michael Young			C 8	J 1	Dm		2,265 (b)
28A1	GS M-51	10-21-58 2-9-34	H. A. Triepke J. Slagill	1915	21	D 72	L H	Un Tbc	0	2,245 17 4.3 W, Wp
28A2	GS GS F	10-21-58 1-21-54 3-25-58	H. A. Triepke Reid		65	D 72	T 10	I		117 412 2,245 b18 27.78 32.52
28A3	GS F F	10-21-58 5-2-57 3-25-58	H. A. Triepke		85	8	T 7 1/2	I		137 2,245 b21 40.38 32.61 C
28L1	GS	10-21-58	Mrs. Lafingwell		48.0	C 12	N N	Ds		2,290 Dry

b. Well being pumped.  
c. Well being drilled.

USGS number	Source of data and other numbers		Date of observation	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level Depth below lsd (feet)
	of data	and other numbers			Year completed	Type, diam., depth (ft.)	Pump type	Yield (gpm)			

T. 9 N., R. 3 W., Continued

9/3-33Z1	GS	10-20-58	ATNSF Railway	16	D	175	450	150	Ds RR	2,275	8	C
	DGT 77	1919										
34C1	GS	10-20-58 4-13-54	H. C. Johnson	100	C	8	J	1	Dm Tc	2,320	(d) 61.4	C
34C2	GS	10-20-58	H. C. Johnson	84	C	6	L	W	Dm Tc1	2,320	62.44	
34D1	GS	10-21-58	Gene Triepke	44		12	J	1	Dm Tc	2,280	19.57	
34D2	GS	10-21-58 4-12-54				6			Ds Dm Tc	2,280	15.20	C
34E1	GS	10-20-58				8	N	N	Ds		Dry	C
	DGT 78	1919	W. Graham					315			65	Cp
	M-41	5-18-32							Tcon	0	44.6	Wp
34N1	GS	10-23-58	ATNSF Railway				T	5	RR	2,280	(e)	
34N2	GS	10-23-58	ATNSF Railway	16	D	16	N	N	Ds Na	2,280	Dry	C
	Owner	12-16-31					C				13.7	
	Owner	5-9-35						50 80				
34N3	GS	10-23-58	G. S. Hall	28.5		8	J	N	Un Tc	-7.0	20.30	



USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of 1st (feet)	Water level Depth below 1st (feet)
				Year completed	Type, diam-eter, (in.)	Pump type and (gpm)	Yield: Sp. cap.			
10/1-31A3	GS	5-20-59	Gallagher	1950	6 J 1		Dm Na	2,120		
31A4	GS	5-20-59	Keats		7 J 1½		Dm Na	2,115		
31A5	GS	5-20-59	N. T. Keating	1950	6 J 1½		Dm Na	2,135		
31A6	GS	5-20-59	P. T. Lorell		8 J 1		Dm Tcc	1.0 2,135	58.00	
31A7	GS	5-20-59	C. McIlroy		6 J 3	90	Dm Tc	2.0 2,130	42.80	
31A8	GS	5-20-59	C. McIlroy		4 N N		Ds	2,130		
31A9	GS	5-20-59	Carl Sellers				Un	2,120		
31A10	GS	5-20-59			14 J 1		Un Na	2,110		
31A11	GS	5-20-59	B. F. Brown		E		Dm	2,110		
31A12	GS	5-20-59	Claude Kelso	1948	6 J 3/4		Dm Na	2,115		
31A13	GS	5-20-59	Claude Kelso		N N		Un	2,125		
31A14	GS	5-20-59	P. DuBay		10 J 3	100	Dm TcN	1.0 2,110		
31B1	GS	5-20-59	W. Gabriel	1950	12 T 10	130	I Hpb	1.0 2,125	46.40	

T. 10 N., R. 1 W., Continued

31C1	GS	5-20-59	Walter Terry	1925	130	A	12	T	5	176	S	HpbE	1.08	51.87
	M-84	11-15-32	Mrs. Gilham								Hpb	1.0	2,130.3	47.67
31C2	GS	5-20-59	J. E. Patton	1946	75			T	5		I		2,130	Wp
31F1	GS	5-20-59	Edwin Hill	1925	85	A	12	T	5	300	I	Bpb	.38	2,120
31F2	GS	5-21-59	Ivesan				4	N	N		Un	TcN	1.5	2,120
31F3	GS	5-21-59	Gabriel					C	E		Un	Bpc	-6.0	2,110
31F4	GS	5-21-59	Ernest Puente				10	N	N		Un	Tc	0	2,105
31G1	GS	5-21-59	W. V. Hollon		102	C	12	C	15	500	I	TcS	-11.0	14.82
31G2	GS	5-26-59	Rufina Martinez								Ds	Na		Wp
	M-85	1-23-34	E. M. Hawes								Dm	Tcl	0	2,094.1
31H1	GS	5-21-59	Charles O'Harra	1950	114	C	16	T	15		I	HpbN	1.0	2,115
31H2	DWR	7-31-51	Charles O'Harra				10	J	3/4		Dm			25
31H3	GS	5-26-59	P. B. Brummett				6	J	1		Dm			2,115
31H4	GS	5-26-59	P. B. Brummett		50.8			C	5		I	Tbc	0	2,115
31H5	GS	5-26-59	Paul Torlen		18.0						Un	Tcon	.5	2,115
31H6	GS	5-26-59	Paul Torlen		60	8	S	2	2		Dm	TcS	.5	2,115
31H7	GS	5-21-59	Arthur Manning			C		J	1		S			2,115

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Year completed	Yield (gpm)	Sp. cap. (in.)	Type	Diam. (in.)	Depth (ft.)	Pump	Measuring point	Altitude of lsd (feet)	Water level Depth below lsd (feet)	Other data
				Power	and	eter	type											
T. 10 N., R. 1 W., Continued																		
10/1-31L1	GS	5-21-59	A. I. Thompson	60						Un					2,105			
31L2	GS	5-21-59	P. C. Dennet	65	DC	8	C	5		I	Tc	8.0			2,105			16.24
31L3	GS	5-21-59	R. Tucker	43.3		6	N	N		Un	Tcn	1.5			2,105			15.07
31L4	GS	5-21-59	B. Sanchez							Un	Tbc	.2			2,105			16.44
31L5	GS	5-21-59	California Water Co., Arrowhead number 1	156		20	N	N		Ds					2,105			
31L6	GS	5-21-59	California Water Co., Arrowhead number 3							Ps	Na				2,105			
31L7	GS	5-21-59	California Water Co., Arrowhead number 2							Ps	Na				2,105			
31L8	GS	5-22-59	C. M. Clellan							Un					2,105			
31L9	GS	5-22-59	A. Caldwell	1932		6	J	1/2		Dm	Tcon	1.5			2,105			17.58
31L10	GS	5-22-59	D. Sprowls	1950		63	R	10	J	Dm	Na				2,105			
31L11	GS	5-22-59	D. Sprowls	1938		16.3	8	N	N	Ds					2,105			

31L12	GS	5-22-59	Mojave Valley Broad-casting Inc.	1947	67	C 10	T 5	I Tc	1.0	2,105	15.91
31L13	GS	5-22-59	Vernon G. Wister	1953	67	C 8	L W	Dm Na		2,105	L
31L14	GS	5-22-59	Vernon G. Wister	1949	30	D 12	N N	Ds		2,105	C
31L15	GS	5-22-59	R. M. Beck	1952	62	C 8	C ½	Dm Tvc	6.5	2,105	16.43
31L16	GS	5-22-59	Christensen			10	C ½	Un TcN	1.0	2,105	17.27
31L17	GS	5-22-59	Christensen			C 2	C 2	Un TcE	-4.0	2,105	16.83
31M1	GS	5-21-59	C. F. Dorland	1955	96	C 8	C 5	Dm Tcc	-5.5	2,105	16.42
31M2	GS	5-22-59	John Knowles			12	C E	Un		2,105	L
31M3	GS	5-22-59	John Knowles			8	J 1	Dm TcS	-5.0	2,105	17.60
31N1	GS	5-22-59	J. Melton	1957		C 10	C 1½	Dm Tc	0	2,110	11.09
31N2	GS	6-12-58	J. Melton	1955		D 48	L W	S Tbc	0	2,110	13.04
31P1	GS	6-12-58	Frank Clark	1941	29.4	D	C G 33	Dm Tc	0	2,110	11.00
31P2	GS	6-12-58	Frank Clark		12	D	1½ L H	Ds		2,110	Dry
31P3	DWR	3-26-52	W. W. Devine		90	D	J E	Dm		2,100.1	8
31Z1	GS	6-12-59						Ds		2,155	
DG 758		1919	Mary E. Richardson								75



32B5	GS	5-27-59	J. C. Sanders	1956	86	14	J	2	Ps	Na	2,120
32B6	GS	5-27-59	J. C. Sanders		46	14	N	N	Un	Na	2,120
32B7	GS	5-27-59	D. Sparks	1959	84	8	S	1	Ps	Tbc	-6.0 49.02
32B8	GS	5-27-59	D. Sparks	1959	118	C	8	T	Ps	EpbN	1.0 43.19
32B9	GS	5-27-59	Welcome Traveler Motel					J	Ps		2,120
32B10	GS	5-27-59	Delfino Varela	1949	86	12	J	$\frac{1}{2}$	Dm	Tc	2.0 45.51
32B11	GS	5-28-58	J. McKay			72	J	$1\frac{1}{2}$	Dm	Tbc	.5 17.50
			F. G. Mitchell								23
32C1	GS	5-27-57	J. A. Mitchell					J	Dm	Na	2,115
32C2	GS	5-28-59	Riley	1957	165	R		J	Dm	Na	2,125
32D1	GS	5-26-59	San Bernardino County Highway Department	1939	75	C	12		Ds	Na	2,115
											C
32D2	GS	5-26-59	R. N. Phillips			10	J	1	Dm	TcS	1.5 28.82
32D3	GS	5-26-59	L. B. Herron	1953	47	C	8	T	Dm	Na	2,115
32D4	GS	5-27-59	Charles Mitchell	1955	92	C	12	N	Un	TcN	2.0 29.47
32D5	GS	5-27-59	Charles Mitchell		150	6	J	1	Un	Na	2,115
32D6	GS	5-26-59	L. B. Herron		37	D	6	J	Un	Na	2,115
32E1	GS	5-26-59	F. Skelton			6	J	$1\frac{1}{2}$	Dm	TcN	-5.0 16.49
32E2	GS	5-26-59	R. F. Hilburn		60	12	C	5	I	TcE	-8.0 15.97

USGS number	Source of data and other numbers		Date of observation		Owner or user		Well data				Measuring point		Water level	
	GS	GS	Year completed	Depth (ft.)	Type	Diam. (in.)	Sp. cap. (gpm)	Yield (gpm)	Type	Altitude of lsd (feet)	Use	point	Altitude of lsd (feet)	Depth below lsd (feet)

T. 10 N., R. 1 W., Continued

0/1-32E3	GS	GS	1954	80	J	7	1		J	1	Dm	TcS	2,110	18.2	
32E4	GS	GS	1954	15.8	N	6	N		N		Ds		2,110		
32E5	GS	GS	1956	63	J	10	J		1		Dm	Na	2,110		L
32E6	GS	GS	1918	100							I		2,115		
32E7	GS	GS	1952	60	J	6	J		1		Dm	TcS	2,115	16.71	
32F1	GS	GS	1918	72	T	10	T		7½		I	TcS	2,120	13.46	
32F2	GS	GS		18	C	1½	C				Dm	Na	2,115		C
32F3	GS	GS		30	C	2	C				Dm	Na	2,115		C
32F4	GS	GS	1956	50	J	8	J		½		Dm	TcSW	2,115	11.19	
32F5	GS	GS			J		J		¼		Dm		2,105		C
32F6	GS	GS	1957	40	J	6	J		½		Dm		2,105		L
32F7	GS	GS	1955	60	J	6	J		1		Dm	TcE	2,105	14.02	
32F8	GS	GS	1952		J	10	J		½		Dm	TcW	2,105	13.75	

32F9	GS	5-27-59	George Baca		8	J	$\frac{1}{2}$	Dm	TcS	-5.0	2,110	11.33
32K1	GS	5-27-59	E. F. Steen		D 14	C	10	I	Tbc	0	2,080	13.05
	M-87	11-15-32	Compton						Tt	0		b13.1
32Q1	GS	6-11-58	John Sturnacle		60	12	N N	Un	Tc	1.8	2,100	6.33
32Q2	GS	6-11-58	John Sturnacle		48	12	N N	Ds			2,110	C
			<u>T. 10 N., R. 2 W.</u>									
10/2- 7X1	GS	10-22-58			0			Ds			2,275	
19P1	GS	2-4-59	M. L. Dott		190	12	S E	Dm	Tbc	.72		83.08
	M-75	1-11-33	Mrs. Loftus Shipley						Tcl	.62	2,216.0	63.3
28N1	GS	5-11-59			34.4	10	N N	Ds			2,180	
30D1	GS	2-4-59	Currier	1956	142	C	8 T 5	Dm	Na		2,180	L
30N1	GS	5-21-59	J. H. Record		35	D	60 N N	Ds				C, Wp
	M-74	1-10-34	J. D. Rich						Tcl	2.0	2,177.0	18.9
30N2	GS	5-21-59	J. H. Record	1955	132	C	12 T 10 300	I			2,180	37
30N3	GS	5-21-59	J. H. Record		115	C	12 J 1	Dm			2,180	C
	DGT 51		J. D. Rich		103							14
30N4	GS	5-21-59	J. H. Record	1946	135	C	12 T 7 $\frac{1}{2}$ 230	I			2,180	54
30P1	GS	5-21-59	D. W. Scotton	1952	135	12	T 7 $\frac{1}{2}$ 135	I	HcN	1.0	2,180	48.80

b. Well being pumped.

1/. Measurements at well 10/2-30N1 for the years 1943-47 are reported in Water-Supply Papers 991, 1021, 1028, 1076, and 1101 but the well is numbered 10/2-30R1.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level Depth below lsd: data (feet)	
				Year completed	Depth: (ft.)	Type: (in.)	Pump: (gpm)				Yield: (gpm)
10/2-30Q1	GS	5-21-59	B. Nava	1956	128	8 J 1	128	Dm Na	2,175		
30Q2	GS	5-21-59	L. Espinar	1953	80	8 J 1	80	Dm	2,175	(e)	
30Q3	GS	5-21-59	Abel Teller	1956		8 J 2		Dm Na	2,175		
30Q4	GS	5-29-59	G. E. Clark	1954	54	D 10 J 3/4		Dm	2,175	35	
30Q5	GS	5-21-59	H. W. Prest	1950	109	C 8 J 1/2		Dm TcS	2,175	38.90 C	
30R1	GS	12-5-58	Knights of Columbus Dixie Crossing School					Dm		(e) C, M, Wp <sup>1/</sup>	
M-76		7-6-32						Tel	2.33	2,175.2	16.57
GS		12-15-53					10 L W	Tc	2.0		25.04
F		4-13-56					Tc	2.0		29.05	
30R2	GS	5-21-59	John Ortiz	1949	110	C 10 T 10	512	Dm HcNW	2,175	37.45 C	
31C1	GS	12-2-58	A. D. Nelson			14 T 2		Dm Na	2,180		
31C2	GS	12-2-58	A. D. Nelson			8 S		Dm Tap	2,180	40.26	

T. 10 N., R. 2 W., Continued

31D1	GS	12-5-58	Dixie Inn		8	J	1	Dm	Tc	0	2,180	51.52
31D2	GS	12-5-58	Texaco Station					Un	Na		2,180	
31E1	GS	12-1-58	Harry Judy	1946	65	J	1/2	Dm	Na		2,180	40
31E2	GS	12-1-58	Harry Judy	1946	165	C	14	I		15	2,180	40
31E3	GS	12-1-58	Harry Judy		72.5	14	N	Un	Tc	0	2,180	40.55
31J1	GS	12-2-58	Jack Hallmark	1954	135		T	I	TapNE	.1	2,175	32.18
31M1	GS	11-21-58	Berry		35.0	8,12	N	Ds			2,180	
31N1	GS	11-21-58				12	T	Un	Na			
	M-73	3-16-32						Tc		.8	2,183.0	16.5
31R1	GS	12-2-58	Ralph Hunt			12	T	I	Hc	3.0	2,180	33.59
	GS	12-16-53						I	Hc	3.0		28.05
32E1	GS	12-2-58	E. M. Sanchez	1918	63	14	L	Dm	Bcl	1.0		31.33
	DGT 52	1919	A. O. Butler									15
	M-77	7-6-32							Twc	0	2,171.1	14.8
	GS	12-15-53							Tc	0		23.78
32C1	GS	12-2-58	Donald Hartman			8	J	Dm	TcS	1.0	2,175	31.85
32E1	GS	12-2-58	John Morrison	1930	106	D	12	S	Tc	-16.0	2,175	35.15
32K1	GS	12-2-58	Ralph Hunt			100	14	S	TcS	0	2,170	35.11

e. Well inside locked enclosure.

1/. Measurements reported for well 10/2-30R1 in Water-Supply Papers 991, 1021, 1028, 1076, and 1101 were made in well 10/2-30W1.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Altitude		Water level	
				Year completed	Type	Diam.	Depth	Yield	Sp. Use	of lsd (feet)	Altitude (feet)	Depth below lsd (feet)	Other data
10/2-32N1	GS	12-2-58	Ralph Hunt	1951	130	16	T 20	I	TapN	1.0	2,175	30.33	C
32N2	GS	12-2-58	Ralph Hunt	1955	72	C 8	J 1	Dm			2,175	(g)	L
32Q1	GS	12-2-58	Ralph Hunt		100	D 16	T 20	I	TcW	1.3	2,172.8	32.13	C, W
32R1	GS	12-2-58	Tip Top Dairy			D	C 10	S	Na		2,170		
33C1	GS	5-11-59					8 J 1	Dm	TcS	1.0	2,175	39.17	
33C2	GS	5-11-59	Antonio Soto	1953	54	8	J 1	Dm	HcE	1.0	2,175	34.26	
33C3	GS	5-11-59	Antonio Soto				8 N N	Un			2,175	32.14	
33D1	GS	5-11-59	Robert Marino	1952	76	C 12	J 1	Dm	Tc	1.0	2,180	b55	
	GS	12-15-53					J 1		Tc	1.0		22.66	
33D2	GS	5-11-59	Earl Cook	1957	110		J 2	Dm	TconE	.5	2,180	54.23	
33D3	GS	5-11-59	Hallman	1959			6 J 1	Dm	TcE	.5	2,180	52.15	
33D4	GS	5-11-59	Jack Clark	1956	120	10	J 1	Dm			2,180	37	
33D5	GS	5-11-59	H. R. Coffman	1958	127	C 8	J 1/4	Dm	Tbc	.5	2,180	50.25	L

T. 10 N., R. 2 W., Continued

33D6	GS	5-18-59	Homer Johnson	1954	57	C	57	J	1	Dm	2,180	(b)
33D7	GS	5-18-59	Hugh Gibbons	1959	100	R	6	S	1½	Dm	TcS 1.0	2,180 37.29
33D8	GS	5-19-59	Kirkpatrick and Johnson	1957	124	C	8	J	1	Dm	Tsp 1.0	2,180 40.08
33D9	GS	5-19-59	Kirkpatrick and V. Brown	1952	51.5	8	N	N		Un	TcN .5	2,180 38.99
33D10	GS	5-19-59	Bill Meyer	1952	70	8	J	1		Dm	TcS 1.5	2,180 38.28
33D11	GS	5-19-59	Paula Stoope	1954.	70	8	J	¼		Dm	TcE .5	2,180 36.72
33F1	GS	5-19-59	Chester Evans	1956	53	12	J	1		Dm		2,175 (g)
33F2	GS	5-19-59	C. R. Sullivan	1953	80	6	J	1		Dm	TcE 1.0	2,170 31.32
33F3	GS	5-19-59	Robert Core	1952				J	1	Dm	TcN 1.5	2,175 34.41
33F4	GS	5-19-59	R. H. Penley	1952		8	J	1		Dm	TcE 1.0	2,170 38
33F5	GS	5-19-59	A. Miller	1951	55	C	8	J	1	Dm		2,170
33F7	GS	5-19-59		1951	51	Dr12	J			Dm	Tp	2,160 22.30
33F2	GS	5-19-59	Thelene Johnson		34.8	8	N	N		Un	TcN .5	2,175 28.32
33F3	GS	5-19-59	B. West	1950			48	J	1	Dm	Na	2,175
33F4	GS	5-19-59	J. P. Bruce	1950	85	C	6	J	½	Dm		2,165

b. Well being pumped.

g. Obstruction in well.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Altitude of 1st (feet)	Depth below 1st (feet)	Water level
				Year completed	Type	Diam-eter (in.)	Power	Yield (gpm)	Sp. cap.			
10/2-33J5	GS	5-15-59	D. L. Thomas	1956	8	J	1	Dm	TcW	1.5	2,165	43.60
33J6	GS	5-15-59				J	1	Dm			2,165	
33J7	GS	5-15-59	J. T. Wilson	1954	72	J		Dm	Tc	1.0	2,165	33.53
33J8	GS	5-15-59				J	1	Dm	TcE	.5	2,165	36.93
33J9	GS	5-15-59	Garret Fugate			J		Dm			2,165	(g)
33J10	GS	5-15-59	L. R. Mounts		38	J	1	Dm			2,165	
33J11	GS	5-15-59	L. R. Mounts	1957	82	N	N	Un	Tc	2.0	2,165	28.33
33J12	GS	5-15-59	L. R. Mounts	1951	45	DC45	J	S			2,165	
33J13	GS	5-18-59	Fay Jones		60	J	1/2	Dm	Ryb	1.0	2,160	30.98
33J14	GS	5-18-59	S. Reid		6	J	1/2	Dm	Tc	1.5	2,160	28.42
33J15	GS	5-15-59	Eugene Johnson	1956	76	J		Dm	TcW	1.0	2,175	42.08

T. 10 N., R. 2 W., Continued

33N1	GS	5-19-59	Melvin Hill	1956	206	C	20	T	1675	112	I	HcN	0.3	2,170	47.43	L
33Q1	GS	10-2-58	Hartwick	1947	115	D	8	T 15			I	Bpb	3.0	2,160	27.02	C
33R1	GS	5-15-59	B. Morino				8	J 1			Dm			2,160		
33R2	GS	5-15-59					8	J 1			Dm			2,155		
33R3	GS	5-15-59	A. F. Arnes	1951	76		8	J 1			Dm	Tc	1.0	2,155	28.33	
33R4	GS	5-18-59	Lafe Coker	1954	63		8				Dm			2,160		L
33R5	GS	5-19-59	Dr. R. H. Chapin	1950	64		12	T 5			I			2,155		L
33R6	GS	5-19-59	H. L. Patterson	1951	49		8	J 1			Dm	Tcon-15		2,155	34.63	L
33R7	GS	5-19-59	W. L. Hunter	1950	30			J 1			Dm	Na		2,155	(b)	
33R8	GS	5-19-59					6	J 1			Dm	TcE	.28	2,155	28.92	
33R9	GS	5-19-59	Herbert Williams	1946	43		12	J 1			Dm	TcW	-3.0	2,155	29.10	
33R10	GS	5-19-59	M. E. Little	1952	83	C	12	J 2			S	TcW	.5	2,155	30.17	L
33R11	GS	5-19-59									Un			2,155		
33Z1	GS	5-19-59									Ps			2,180		
	DGT	53			13	D						Twc			10.6	
34N1	GS	5-19-59	Harold Fagan	1953	65						Dm			2,150	(e)	
	GS	12-16-53					L	W			Dm	Tp	2		19.67	

b. Well being pumped.

e. Well inside locked enclosure.

g. Obstruction in well.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Water level
				Year completed	Depth (ft.)	Type, diam. (in.)	Pump type	Yield (gpm)	Sp. cap.	

T. 10 N., R. 2 W., Continued

10/2-34N2	GS	5-19-59	D. Hanify	63	6	J	1	Dm		2,150			
34N3	GS	5-19-59	L. P. Glenn	1957	47	D	5	C	1	Dm	Tsp -6	28.42	
34R1	GS	5-19-59	J. Wrex	1954	40	8	J	5	Ps	TcS	1.0	26.39	
35P1	GS	5-22-59	C. W. Rucksill	1957	62	C	10	J	1	Dm	Tc	1.5	26.06
35P2	GS	5-22-59	Muriel Massengale	1958	52	C	8	J	1	Dm	TcW	1.0	28.41
35P3	GS	5-22-59	J. Grimm	1957	56	C	8	J	1	Dm	Tc	1.0	28.46
35P4	GS	5-22-59	C. L. Palmer	1918	80					Dm			
35P5	GS	5-22-59	W. F. Garb	1956	58	C	8	J		Dm			
35P6	GS	5-26-59	Alta Fetter	1956	95	C	8	J	1	Dm	Tc	1.63	35.00
35P7	GS	5-26-59	E. K. Fetter	1951	36	C	8	J	1	Un	Tc	1.5	29.65
35P8	GS	5-26-59	J. A. Willis	1955	77					Dm	Bpb	0	31.79
35P9	GS	5-26-59	J. D. Bruant							Dm			2,150

35P10	GS	5-26-59	Clarence C. Cruse	1953	35	12	J	2	Dm	2,145			
35P11	GS	5-26-59	Clarence C. Cruse		26.8	12	N	N	Un	2,150			
35P12	GS	5-26-59				8	J	1	Dm	2,150			
35P13	GS	5-26-59	J. T. Myers	1955	80	8	J		Dm	2,150			
35Q1	GS	6-20-59	P. Chanas	1950	38	D	8	J	1	Dm	Tc	0	16.97
35Q2	GS	6-20-59	A. C. Hughs	1957	71	C	12	L	W	Dm	TcN	1.0	17.20
35Q3	GS	5-22-59	E. W. Rowell		20.6	6	N	N	Ds	2,145			
35Q4	GS	5-22-59	E. W. Rowell				J	1	Dm	Na	2,145		
35Q5	GS	5-22-59	E. J. Wingfield		28.2		N	N	Un	TcS	-2.0	23.51	
35Q6	GS	5-22-59	E. J. Wingfield	1956	90	C	8	J	$\frac{1}{4}$	Dm	TcS	-2.0	23.38
35Q7	GS	5-22-59	L. Cogburn	1955	50	8	J	1	Dm	Tc	.5	22.14	
35Q8	GS	5-22-59	G. D. Armstrong	1959	84	C	8	J	1	Dm	Tc	.5	22.46
35Q9	GS	5-22-59							Ds	2,145		9.2	Wp
	M-80	1-11-33							Tt				
35Q10	GS	5-26-59	R. J. Gaurule	1954	50	6	J	1	Dm	2,150		(g)	
35Q11	GS	5-26-59	Carl Lowe	1957		8	J	1	Dm	TcN	1.0	29.32	
35Q12	GS	5-26-59	C. S. Jarvis		50	8	J	$\frac{1}{2}$	Dm	2,140			

G. Construction in well.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Water level	
				Date completed	Type, diam., depth, (ft.)	Pump type	Yield, (gpm)	Use	Altitude of lsd. (feet)	Depth below lsd. (feet)	Other data

T. 10 N., R. 2 W., Continued

10/2-35R1	GS	6-19-58	Ernest Montanya	1955	55 C 6 J 1	Dm	HcNE 0.3	2,120	14.65	
35R2	CS	6-19-58	F. Montoya	1956	C 6 J 1	Dm	Na	2,120		
35R3	GS	6-19-58	Aurilio Lopez	1956	65 C 8 J 1/2	Dm	Tc 1.2	2,120	13.80	
35R4	GS	6-19-58	Aurilio Lopez	1953	26 D 8 N N	Un	Tc 0	2,120	14.90	
35R5	GS	6-19-58	John Petow	1956	50 C 8 J 1	Dm	NcW -5.5	2,125	15.16	
35R6	GS	6-19-58	Frank Ramos	1955	33 D 6 J 1/2	Dm	Tvc 1.0	2,125	13.98	
35R7	GS	6-19-58	Frank Raymond		17.5 C 6 N N	Un	Tc .7	2,125	13.77	
35R8	GS	6-19-58			6 L H	Ds		2,125		
35R9	GS	6-20-58	J. J. Rameriz	1953	37 D 8 J 1	Dm	TcE -7.0	2,125	.80	
35R10	GS	6-20-58	Calvin Davis	1957	70 C 8 J 1/2	Dm	Tc 1.3	2,125	14.61	
35R11	GS	6-20-58	Calvin Davis		35 C 8 N N	Un	Tc .7	2,125	14.58	
35R12	CS	6-20-58	John Grimm		D 8 J 1	Dm		2,125		

35R13	GS	6-20-58	John Grimm	1959	50	C	12	C	1	Dm	TcN	2.0	2,145	17.32
35R14	GS	6-20-58	Frank Murguia			C	8	J	$\frac{1}{2}$	Dm	Na		2,125	
35R15	GS	5-26-59	Jones	1959	50	C	12	C	1	Dm	TcN	2.0	2,145	17.32
35R16	GS	5-26-59	J. D. Jones		24		6	L	$\frac{1}{4}$	Dm	Tc	-.5	2,145	16.26
35R17	GS	5-26-59	J. E. Rich	1957	65	C	8	J	$\frac{1}{2}$	Dm	Tc	-.5	2,145	18.97
36A1	GS	5-20-59	Daniel Torrez				8	J	1	Dm	TcN	1.0	2,155	62.72
36A2	GS	5-20-59	Guy Fisher				6	N	N	Un	TcE	.5	2,155	60.53
36A3	GS	5-21-59	J. Torrez	1950	90			J	1	Dm	Tc	.5	2,170	75.09
36G1	GS	5-20-59	M. A. Richardson				10	J	1	Dm	TcNW	1.0	2,160	66.78
36G2	GS	5-20-59	O. C. Richardson	1954	149			J	1	Dm	Na		2,145	
36G3	GS	5-20-59	W. T. Blasdell		100		8	J	1	Dm	TcN	.5	2,120	34.92
36G4	GS	5-20-59	J. D. Blasdell		90		8	N	N	Un	Tcc	1.0	2,120	32.46
36G5	GS	5-21-59	R. J. Steck		35		6	J	1	Dm	Tc	-12.0	2,105	22.52
36H1	GS	5-20-59	Lyle Sheldon	1950			8	J	1	Dm	Na		2,150	
36H2	GS	5-20-59	R. W. Littlefield		70			J	1	Dm			2,150	
36H3	GS	5-20-59	C. J. Clenton					J	1	Dm			2,150	

USGS number	Source of data and other numbers		Date of observation		Owner or user		Well data				Measuring point		Altitude of lsd (feet)		Water level	
	GS	GS	Date	of observation	Date completed	Owner or user	Type	diam. (ft.)	Pump	Yield (gpm)	Sp. cap.	Use	point	Altitude of lsd (feet)	Depth below lsd (feet)	Other data

T. 10 N., R. 2 W., Continued

10/2-36H4	GS	GS	5-20-59		1951	T. S. Nappier	J	73	J 1			Dm	Tc	1.0	2,145	49.20	L
36H5	GS	GS	5-20-59		1949	Edward Stafford	8	J 1				Dm	TcS	.5	2,145	47.52	
36H6	GS	GS	5-20-59			P. T. Alderete						Dm			2,145	(e)	
36H7	GS	GS	5-20-59			J. C. Bruce	75	J 1½				Dm	Na		2,135		
36H8	GS	GS	5-20-59			A. A. Kindberg	8	J 2				Dm	Na		2,115		
36H9	GS	GS	5-21-59			R. D. Robbins						Dm			2,135	(e)	
36H10	GS	GS	5-21-59		1950	H. N. Williams	50	10 J 1				Dm	TcS	1.0	2,115	27.49	
36H11	GS	GS	5-21-59				8	J 1				Dm	Tc	1.0	2,125	44.21	
36H12	GS	GS	5-21-59			Joseph Chavez		J 1				Ps			2,125		
36H13	GS	GS	5-21-59		1955	B. Brand	6	J 1				Dm	TcN	1.0	2,110	28.10	
36H14	GS	GS	5-26-59		1956	John Rice	60	6 J 1				Dm			2,115	(e)	

36H15	GS	5-21-59	H. N. Williams	1950	50	6 J 1	In Tc	1.0	2,115	26.15
36H16	GS	5-21-59	J. F. King	1951	36 C 12 J 1	In Tc	-6.0	2,110	24.0	
36J1	GS	5-21-59	Karl Swallow		12 N N	Un TcE	1.0	2,105	16.24	
36J2	GS	5-27-59	Karl Swallow	1952	76 C 12 C 10	I		2,105	11	L
36J3	GS	5-21-59			70 6 J 1	Dm TcE	1.0	2,110	21.82	
36J4	GS	5-21-59	James Hershberger	1953	70 8 J 1	Dm Tc	1.0	2,110	22.11	
36J5	GS	5-21-59	W. J. Cameron	1956	69 R 6 J 1	Dm TcW	1.0	2,110	29.80	
36J6	GS	5-21-59	A. J. Landfair	1958	52 J 1	Dm Bpb	.5	2,110	18.20	
36J7	GS	5-21-59			124 6 J 1	Dm Tc	.5	2,110	21.49	
36K1	GS	5-21-59	E. Noll	1955	70 6 J 1	Dm Tc	2.0	2,110	20.88	
36L1	GS	5-19-59	Waterman	1954	55 8 T 5	Un TcE	0	2,120	17.74	
36L2	GS	5-20-59	Sylvester Sismaros	1957	109 R 6 L W	Dm TcS	.5	2,140	30.55	
36L3	GS	5-20-59		1958	76 C 10 N N	Un Tc	1.5	2,155	36.08	
36L4	GS	5-20-59	J. H. Bradley	1959	80 C 10 J 1	Dm		2,155	40	
36L5	GS	5-20-59		1945	55 C 8 N N	Un TcW	1.0	2,130	30.02	
36N1	GS	6-19-58			C 8 J 1	Dm		2,115		

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Year completed	Depth (ft.)	Type of pump	Diameter (in.)	Capacity (gpm)	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level
				Year completed	Depth (ft.)	Type of pump	Diameter (in.)									

T. 10 N., R. 2 W., Continued

10/2-36N2	GS	6-19-58		C 8 J 1									Dm Tbc	1.4	2,115	16.84
36N3	GS	6-19-58	S. Alveraz										Dm	2,120		(e)
36N4	GS	6-19-58	Maria Hernandez		56	C 8 J 1/2	1956						Dm TcN	2.5	2,120	15.62
36N5	GS	6-19-58	Juan Auiles		82	C 6	1958						Dm Tc	.5	2,120	15.68
36N6	GS	6-19-58	Juan Auiles		50	C 8 N N	1953						Un Tc	-6.0	2,120	8.23
36N7	GS	5-19-58	Barstow Union High School District		91	12 T 7	1955						I 3pb	2.0	2,120	19.13
36P1	GS	5-21-59	Manson										Un Hp	-5.5	2,115	18.22
	DGP 55	10-20-19	A. L. Waterman		82	Dr12				1000			Bt	0		9.3
36P2	GS	6-19-58	S. G. Romero		50	C 6 J 1/2							Dm Tc	.5	2,115	15.21
36P3	GS	6-19-58	Ignatious Romero										Dm		2,115	
36P4	GS	6-19-58	M. G. Garcia		23	D 12 J 1							Dm TcE	1.0	2,115	14.24

36P5	GS DGT 54 M-81	5-19-59 1919 5-13-32	Bradley C. Greenburg	1910	35	D	N	N	Un	Tbc	-7.0	17.02	W, Wp				
										Tbc	.5	2,110.1	7.7				
36Z1	GS DGT 56	5-19-59 1919	Cook						Ds			17					
36Z2	GS DGT 57	5-19-59 1919	Cook						Ds			10					
<u>T. 10 N., R. 3 W.</u>																	
10/3-2J1	GS GS	1-6-59 5-6-54	Jose Castro	1954	115	C	8	L	G	10	0.5	Dm	Tc	.8	2,150	55	C, L
													Tc	.8		56.22	
2Q1	GS GS	1-6-59 12-14-53	A. Thnison	1950	66.0	C	8	L, J	J	W		Un	Tc	1.0	2,140	44.20	C, L
												Dm	Tc	1.0		39.57	
2Q2	GS	1-6-59	G. H. McNeil	1955	112	C	8	L	W			Dm			2,140	38	C, L
2R1	GS	1-6-59	J. M. Valdez	1955	151	C	8	L	G			Dm			2,145	55	C, L
4H1	GS	1-6-59	Dominick Eyherbide		78	10	L	L	W			Dm			2,100	51	
4L1	GS DGT 36 M-67	5-18-59 11-8-19 2-25-31			3.0 56	Dr12		N	N			Ds					Dry 34.6
												Tc			2,099.0	35.2	Wp
												Tc	.2				
5Z1	GS M-59	5-4-32										Ds			2,050		flowing Wp
6B1	GS M-60	5-18-59 5-4-32			2.5	8	N	N				Ds	Tc	.5	2,050		C, W flowing Wp
6Z1	GS DGT 35	5-18-59 11-8-19	P. E. McDonald		43	4				22		Ds			2,060		flowing C

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of 1st (feet)	Water level
				Year completed	Depth (ft.)	Type	Pump			

T. 10 N., R. 3 W., Continued

10/3-6Z2	GS DGT 34	5-18-59	P. E. McDonald	36	12			Ds	2,060	12.7
9J1	GS	1-6-59 5-5-54	A. Morso	110	10	N	N	Un	2,155	78.82
9R1	GS	1-6-59	J. L. Forbes	112.5	8	L	E	Dm	2,155	80
10J1	GS	1-7-59	Vernon Wallace	240	12	T	15	I	2,135	49.34
10J2	GS	1-7-59	Vernon Wallace	200	12	T	20	I	2,135	49.85
10R1	GS	3-12-59	Vernon Wallace	426	14	T	10	I	2,135	75.05
10R2	GS	1-7-59	Vernon Wallace	180	12	T	10	I	2,135	
11M1	GS	1-7-59	Bonnie Wallace	200	10	N	N	Un	2,135	47.78
	GS	12-15-53						Tc		42.50
11M2	GS	1-7-59	Bonnie Wallace	80	8	J	3/4	Dm	2,125	40
11M3	GS	1-7-59	Bonnie Wallace	150	8	N	N	Un	2,130	40



USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data			Year completed	Type	Diam. (ft.)	Pump eter (in.)	Yield (gpm)	Sp. cap. (gpm):	Use	Measuring point	Altitude of lsd (feet)	Water level	Depth below lsd: data (feet)	Other
				Type	Diam.	Pump eter												

T. 10 N., R. 3 W., Continued

10/3-15P2	GS	1-8-59	Donnahugh	8	N	N								Un	Na	2,160		
15Q1	GS	1-8-59	H. D. McIntire	84		T	5							I	3pb	2,155	55.57	C
	GS	12-14-53				J	G							Dm	Tc		46.70	
15Q2	GS	1-8-59	L. McPherson	1953	67	C	6	N	N					Un	Tc	2,160	55.04	
15Z1	GS	1-8-59		95						675				Ds		2,140		
	DCT	37															32	
19E1		12-29-58	Juliart Land Co.			D	60	N	N					Un	Tt	0	47.21	
19N1	GS	12-5-58	Juliart Land Co.				12	N	N					Un	Tc	2,210	57.38	
	GS	4-21-54												Un	Tc	2.0	57.10	
19N2	GS	12-5-58	Juliart Land Co.				12	N	N					Un	Tc	3.0	47.60	
	GS	4-21-54												Un	Tc	3.0	47.25	
21Q1	GS	12-31-58	Wesley Hensley	1949	75	C	8	J	3/4	25	1.5			Dm	Bpb	3.4	35.12	L
21R1	GS	1-9-59	Grant Simmons	1949	41.0	D	72	N	N					Ds		2,160		
	GS	9-3-53												Dm	Tp	3	33.97	

21E2	GS	1-9-59	Grant Simmons		C	8	T	2	Dm	Na	2,160		
21R3	GS	1-9-59	Grant Simmons	1958	C	6	N	N	Un	Tc	1.5	42.42	
22F1	GS	1-9-59	A. Duddle	1952	80	C	8	J	1	Dm	Na	40	
22F2	GS	1-9-59	Dunkin			C	8		Dm			2,155 e40	
22G1	GS	1-9-59	H. E. Sandles	1958	110	C	12	J	$\frac{1}{4}$	Dm	TcNW	1.0	2,155 55.35
22H1	GS	2-3-59	C. W. Baird				6		Dm			2,155 (e)	
22H2	GS	1-9-59	C. M. Trentacoste		120			J	Dm			2,155	
22H3	GS	1-9-59	C. M. Trentacoste	1955	113	C	8	L	W	Dm		2,155	
22H4	GS	1-9-59	C. M. Trentacoste		61			N	N	Ds		2,155	
22J1	GS	2-2-59	E. P. Riep				8	T	5	Dm	Na	2,155	
22L1	GS	2-2-59	E. L. Epps		100	C	8	J	$1\frac{1}{2}$	Dm	Tcc	1.0	2,155 52.08
22L2	GS	2-2-59	E. L. Epps		100	C	8	J	$1\frac{1}{2}$	Dm	Tcc	1.5	2,155 49.80
22L3	GS	2-2-59	E. L. Epps		100	C	8	J	$1\frac{1}{2}$	Lm	Na		2,155
22L4	GS	2-2-59	E. L. Epps		100	C	8	J	$1\frac{1}{2}$	Dm		2,155 (e)	
22M1	GS	2-2-59	E. L. Epps		100	C	8	J	$1\frac{1}{2}$	Dm	Tc	.5	2,155 48.20

e. Well inside locked enclosure.



22P4	GS	2-2-59	E. L. Epps	100	C	8	J	1½	Dm	TccN	0.5	2,165	52.42	
22Q1	GS	2-2-59	Florence Rodrigues	85	D	72	T	N	Un	Na		2,160	C	
23H1	GS	1-9-59					J	½	Ds			2,155		
	GS	12-16-53							Dm					
23H2	GS	1-9-59	Thomas Moffitt	1958	125	C	8	T	2	2		2,155	L	
23H3	GS	1-9-59		1957		12	T	15	I	HcE	.5	2,155	54.02	
23L1	GS	2-4-59	A. Munoz	1953	120	C	6	J	1			2,160		
23M1	GS	2-3-59	A. H. Harris	1950	178	DC60	T	20	612	9	I	Tcon	2.5	
23M2	GS	2-3-59	A. H. Harris	182	14	T	10		I	Tcc	0	2,155	60.16	
23N1	GS	2-3-59	A. H. Harris	1950	178	DC12	T	5	612	9	I	Trr	0	
23N2	GS	2-3-59	A. H. Harris	1910		D	N	N	Ds	Trr	0	2,170	28.5	
	M-71	12-22-32											Wp	
23N3	GS	2-3-59	A. H. Harris	1925	0	DC	N	N	Ds			2,170	B	
23P1	GS	2-4-59	John Fitzgibbons	1953	160	C	8	T	5	Dm	Tc	.2	2,160	
23P2	GS	2-4-59			50		N	N	Ds			2,160	L	
23P3	GS	2-4-59			35		N	N	Ds			2,160	B	
23Q1	GS	2-4-59	P. A. Garrison	1946	130	C	12	T	5	I	hpb	1.0	2,160	74.85

c. Well being drilled.

d. Tape smeared.



24R1	GS	2-4-59	M. Tippett			12	L	W	Dm	Tbc	1.5	2,170	54.91			
24R2	GS	2-4-59	M. Tippett			10	J	3/4	Dm	Tc	1.0	2,170	54.25			
24Z1	GS	2-4-59							Ds			2,165	19			
	DGT	42	12-28-19			43	18			Tcon						
25C1	GS	3-20-59	L. V. Childs	1956	253	R	12	T	15	240	6	I	2,170	66	C	
25E1	GS	3-20-59	Raymond Burrow	1920	156		12	J			Dm	2,170	68			
25F1	GS	3-20-59	L. V. Childs	1947	450	C	14	T	30	600	8	I	2,170	54	C	
25K1	GS	3-20-59	O. C. Nickerson		180		14	T	15		I	Tc	0	2,180	b74.44	
25L1	GS	3-20-59	O. C. Nickerson		180		12	T	10		I	Tc	0	2,180	71.15	C
25M1	GS	3-20-59	E. Jackson	1930	105		12	L	W		Dm	2,175	60	C		
25P1	GS	3-20-59	O. C. Nickerson		180		14	T	20		I	HcS	1.0	2,175	d70	C
25Q1	GS	3-20-59	O. C. Nickerson		180		14	T	15		Un	Na		2,180	C	
25R1	GS	3-20-59	O. C. Nickerson		180		14	T	10		I	TapS	.5	2,180	64.86	C
25R2	GS	3-20-59	O. C. Nickerson						L	E	Un	Na		2,180		
26A1	GS	3-20-59	J. Brooks	1950	120	C	6	S	1/2		Dm	2,170	50			
26B1	GS	2-4-59	P. B. Garrison	1948	180	C	12	N	N		Un	2,165		L		
26B2	GS	2-4-59	P. B. Garrison	1938	130	C	12	J	1		Dm	Tcc	1.0	2,165	66.98	

b. Well being pumped.

d. Tape smeared.

g. Obstruction in well.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude of 1st (feet)	Water level
				Year completed	Type, diam., depth	Yield, Sp. Use	Measuring point (feet)			

T. 10 N., R. 3 W., Continued

10/3-26B3	GS	2-4-59	P. B. Garrison	1930	C 12 N N	Un	Na	2,165	
26B4	GS	2-4-59	P. B. Garrison	1958	C 12 T 7½	I	Hc	2,165	115.60
26F1	GS	2-6-59	Carl Rousseau, Jr.	1951	200 R 16 T 25	I	Hc	2,170	83.95 C
26F2	GS	2-6-59	Carl Rousseau, Jr.	1954	240 R 16 T 25	I	HcSE	2,170	83.93 C
26F3	GS	2-6-59	Carl Rousseau, Jr.	1953	155 C 7 S 3/4	Dm	Na	2,170	L
26G1	GS	2-6-59	R. G. Lemon	1939	155 C 14 T 15	I	HcN	2,170	70.10
26H1	GS	2-6-59	J. D. Hamilton	1947	213 C 16 T 10	I	HcS	2,170	d83 L
26H2	GS	2-6-59	Guy Palson		6 J 1	Dm	Tcc	2,170	67.18
26J1	GS	2-6-59	J. D. Hamilton	1955	196 R 14 T 15	4	Na	2,170	
26K1	GS	2-6-59	J. D. Hamilton	1944	185 16 T 15	I	ISE	2,170	104.20
26L1	GS	2-6-59	R. G. Lemon	1958	165 C 14 T 20	22	HcN	2,175	86.54 L
26L2	GS	2-6-59	R. G. Lemon	1947	162 C 12 T 15	I	HcN	2,170	87.56 L
26M1	GS	3-27-59	Hinkley Bible Church	1959	108 C 6	Un	Tc	2,175	87.00

26N1	GS	3-18-59	William Nelson	1947	142	C 16	J 3	S Na	2,185	L
26N2	GS	3-18-59	William Nelson	1920	100	12	N N	Un Bcc 0	2,185	100.58
26P1	GS	3-18-59	Garrison Grant	1954	136	C 14	J 1	Dm Tcc 1.0	2,185	99.28 L
26P2	GS	3-18-59	Garrison Grant	1936	143	C 16	T 20	I Na	2,185	
26P3	GS	3-18-59	Garrison Grant	1954	145	C 14	T 20	I	2,180	(b)
26P4	GS	3-18-59	Garrison Grant	1957	154	C 14	J 1	Dm	2,180	b102 L
26Q1	GS	3-18-59	Garrison Grant	1957	143	C 14	T 25	I TapS 1.0	2,180	101.60
26Q2	GS	3-18-59	H. L. Deems				J 1	Dm	2,180	D
26Q3	GS	3-18-59	H. L. Deems				T 10	Un Na	2,180	
26R1	GS	3-18-59	Fred Shepard	1952	215	C 14	T 15	I KcW 1.0	2,180	100.05 L
26Z1	M-70	4-21-32						Ds TvcN 0	2,183.0	33.6 Wp
26Z2	M-70A	4-21-32	W. Nelson				N N	Ds Tc1 1.5	2,184.0	Wp
26Z3	M-70B	4-21-32	G. Grant					Ds Tccbb 0	2,177.2	27.6 Wp
27B1	GS	2-2-59	D. M. DeVoe		110	16	N N	Dc	2,170	
27D1	GS	2-3-59	Hinkley Elementary School	1948	120	12	T 10	TapS .25	2,170	51.05 C, L
27D2	GS	2-3-59	Hinkley Elementary School			D 12	N N	Ds	2,164.7	W

b. Well being pumped.  
d. Tape smeared.

USGS number	Source of data and other numbers	Date of observa- tion	Owner or user	Well data				Measuring point	Altitude of lsd (feet)	Water level Depth :below lsd: (feet)
				Year com- pleted	Type :diam- eter :(in.)	Pump :type :and :power	Yield:Sp. :(gpm):cap.			

T. 10 N., R. 3 W., Continued

10/3-27F1	GS	2-5-59	C. C. McDonald	110	8 J		Dm Na	2,170		L
27F2	GS	2-5-59	Lee Fox		12 J		Dm TcNW	0.5	59.32	
27F3	GS	2-5-59			12 J		Dm			
27F4	GS	2-5-59					Dm			(e)
27F5	GS	2-5-59					Dm			
27H1	GS	2-3-59			14 N N		Un Hc	.5	72.06	
27H2	GS	2-3-59			105	16 N N	Ds			Dry
27J1	GS	3-18-59	D. R. Krauss	1953	149 C 16 N N		Un Tc	1.0	2,180	L
	GS	6-30-54	Robert Speth				Tc	1.0	85.23	
27K1	GS	3-17-59	V. Austin	1958	130 C 8 J 2		Dm Tc	.5	2,185	83.66
27K2	GS	3-17-59	V. Austin		87.8	12 N N	Un Tc	1.5	2,185	85.53
27K3	GS	3-17-59			127.5 C 8 N N		Un Tc	1.5	2,185	81.20
27K4	GS	3-17-59	V. Austin	1959	182 C 6 N N		Un Tc	1.0	2,185	85.29

27L1	GS	3-17-59	F. W. Livingston	1946	136	C 12	T	Un	HcW 0	2,185	e85	L
27M1	GS	3-17-59	H. M. Livingston	1950	118	C 8	J 1	Dm		2,185	b70	L
27M2	GS	3-17-59	F. W. Livingston	1953	120	C 8	J 2	Dm		2,190	120	
27N1	GS	3-17-59	Frank Leyerly	1950	116	C 12	T E	I		2,195	b8	
27N2	GS	3-17-59	Hinkley Reality Co.				J 1½	Dm	BpBS .05 Tc 0	2,195	89.67 83.00	
27N3	GS	3-17-59	Hinkley Reality Co.	1958		C 8	S E	Dm	Hc 1.5	2,195	85.96	
27N4	GS	3-17-59	Hinkley Reality Co.		3.0		N N	Ds	Tbc .6	2,196.0	Dry 42.5	C Wp
27N5	GS	3-17-59	Fred Leyerly		0	C 6	N N	Ds	Tc 0	2,190	Dry 69.18	
27N6	GS	3-17-59	Fred Leyerly		70.5	C 12	N N	Ds		2,195	Dry	
27P1	GS	3-17-59	Fred Leyerly	1947	135	C 14	T 7½	I		2,190	(b)	L
27P2	GS	3-17-59	Fred Leyerly	1956	132	C 8	J 2	Dm		2,190	(1)	
27Q1	CS	3-18-59	F. L. Kowalski		120	14	T 5	Dm	Na TapS 0	2,190.2	94 83.00	W
27Q2	CS	3-18-59	F. L. Kowalski			C 14	T 10	Un	Na	2,190		
27Q3	GS	3-18-59	F. L. Kowalski			C 10	N N	Un	Tc 0	2,190	93.32	

b. Well being pumped.

e. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Water level			
				Year completed	Type, diam., depth (ft.)	Pump, type, and eter (in.)	Yield (gpm)	Sp. Use (feet)	Altitude of 1st (feet)	Depth below 1st (feet)	Other data		
T. 10 N., R. 3 W., Continued													
10/3-27Q4	GS	3-18-59	Kent R. Kudubh	1915	116	8 T 5			I		2,190		
27R1	GS	3-18-59	D. R. Krauss		204	C 12 T 10	80	0.8 I			2,185		C, L, W
	DGT 50	1919			70							70	
	GS	3-26-58	R. Speth						Bpb 1.1			91.44	
27R2	GS	3-18-59	D. R. Krauss		175	12 T 15	950	10 I	NcE 1.0		2,185		
	GS	1-12-54	R. Speth						Tap 1.0			100.10	
27Z1	GS	2-3-59							Ds		2,165		
	DGT 48	1919	A. L. Ritchie									12	
28A1	GS	12-31-58	Sublett	1952	75	C T 7½		I	BpbE .5		2,170	47.73	C
	GS	3--53										36	
28A2	GS	12-31-58	ATSF Railway No. 5	1944	82	C 6 T 25		Ps			2,170	(e)	
28A3	GS	12-31-58	Lars Larson		67	8 J 3/4		Dm			2,170		
28B1	GS	12-31-58	J. T. Owen		120	D1½, 48 J 2		Dm	1a		2,170		C
28B2	GS	12-31-58	C. J. Riep			D 48 J		Dm	1a		2,170		

28C1	GS	12-31-58	C. J. Riep	1950	.20	D 14	T 3	N 16	Un	Tt 0	0	38.95	C, W
	DGT 43	1919										11	
	M-52D	2-25-31								Tbc 0	0	2,161.0	Wp
	DWR-21P1											15.7	
28C2	GS	12-30-58	Saulsberry	1950	.20	D 14	T 3	N 16	Un	Bpb 0	0	4	L
	GS	9-3-53	White				T 3		I			42.66	
28C3	GS	12-30-58	F. J. Wood		.60	12	T 5	30	Ps	Hpb 1.0	1.0	45.46	
		9-3-53	White			12	T 5		I	Kc 1.0		41.72	
28C4	GS	12-30-58	ATSF Railway No. 1		0	D 60	N	N 125	Ds			2,165	C
	DGT 44	1918			.29	96						11	
28C5	GS	12-30-58				8	J	$\frac{1}{2}$	Dm	Na		2,165	
28E1	GS	12-30-58	G. F. Whitcon		15.0	72	N	N	Ds			2,175	19
	DGT 45	1919											
28F1	GS	12-30-58	F. J. Wood			14	T	7 $\frac{1}{2}$	Dm	Na		2,175	48.40
	GS	9-3-53					T		I	TapE 0			
28F2	GS	5-27-59	F. J. Wood			6	J	1 $\frac{1}{2}$	Dm	Na		2,175	
28H1	GS	12-31-58	Schleusner	1952	250		T	5	Dm	Na		2,180	
28H2	GS	12-31-58	Roney		5.0	72	N	N	Ds			2,180	61.50
	GS	9-3-53				12							
28H3	GS	12-31-58	William Williams		184	14	J	5	Ps	Tc .3	.3	2,165	L
	GS	4-21-54								Tc 2.0	2.0	45.25	

.. Well inside locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Altitude of lsd (feet)	Depth below lsd (feet)	Water level	Other data
				Year completed	Type	diam-eter (in.)	Pump	Yield (gpm)	Sp. cap.				

T. 10 N., R. 3 W., Continued

10/3-28J1	GS	2-5-59	Pierce	100	C	8	J	1	Dm	Na	2,190		
28J2	GS	2-5-59	Clouch	106		8	J	1/2	Dm	ltpb	2,180	63.28	
28J3	GS	2-5-59	Hinkley Reality Co.	105	C	8	J	1	Dm	TcSW	2,180	63.96	
28J4	GS	2-5-59			C	8	N	N	Un	TcNE	2,180	59.96	
28K1	GS	2-5-59	C. Silvermail	100	C	6	J	1	Dm	Nc	2,180	61.38	
28K2	GS	2-5-59	H. S. Souli	99	C	6	J	1	Dm	Tcc	2,180	62.83	
28K3	GS	2-5-59	Hinkley Reality Co.	125	C	6	J	1	Dm	Na	2,190		
28K4	GS	2-5-59	Otto Zimmerman		C	6	J	1	Dm	Na	2,185		
28L1	GS	12-30-58	Clyde Hayes			14	T	5	I	HcN	2,180	61.15	
	GS	9-3-53							I	Hc		49.32	
28L2	GS	12-30-58	Clyde Hayes			12	N	N	Un	Nc	2,185	57.80	
28L3	GS	12-30-58	Clyde Hayes						Un		2,190		

28L4	GS	12-30-58	Clyde Hayes		8	N	N	Un	Tc	0.5	2,190	57.87
28L5	GS	12-30-58	Clyde Hayes	1957				Dm			2,185	
28N1	GS	12-30-58	Burro Cafe		6	J	1	Dm	HcSE	.5	2,200	62.04
28Q1	GS	12-30-58	E. G. Henderson	1954	104	C	10	S	Tc	.3	2,195	68.90
28Q2	GS	12-30-58	Frantrisca			C	8	J	Na		2,195	
28Q3	GS	2-5-59	C. Taylor	1957	90	C	8	J	Na		2,190	68
28Q4	GS	2-5-59	C. Webser		85		6	J	Na		2,195	
28Q5	GS	2-5-59	W. B. Robinson	1955	105	C	6	S			2,195	65
28Q6	GS	2-5-59	C. R. Bratton		120	C	8	J	Na		2,195	
28Q7	GS	2-5-59	C. R. Bratton	1959	120	R		L	Na		2,195	
28R1	GS	2-5-59	J. F. O'Brien, W. A. Rakow	1949	109	R	12	J	Tcc	1.3	2,195	82.77
	GS	9-3-53							Tc	1.0		75.75
28Z1	GS	12-30-58	H. M. Henning					Ds			2,170	13
	DET 47	1919										
28Z2	GS	12-30-58	H. M. Henning		20			Ds				12
	DET 46	1919										
28Z3	GS	12-30-58		1957	100	C	8	L	Tc	1.0	2,210	48.62

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USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data				Measuring point	Altitude (feet)	Water level		
				Year completed	Depth (ft.)	Diam. (in.)	Use					
10/3-22M	CS	12-5-58	P. Ruiz	1918	96	8 L 3	25	Dm Tc	0.3	2,006.5	54.28	C,W
29M2	CS M-52C	12-31-58 3-10-52	P. Ruiz	1938				Ds	.3	2,109.4	51.4	Wp
29P1	CS	12-30-58	Hammond			10 J 1		Dm Tc	1.0	2,220	64.00	
30P1	CS	12-29-58	P. H. Miller	1955	171	C 6 J 1	2	Dm Tcc	1.0	2,235	85.24	L
30P2	CS	12-29-58 8-27-54	P. H. Miller		108	C 8 L G		Un Ma Ma		2,235	63	
30P3	CS	12-30-58 8-27-53	Edward Friburger	1931	70	A 6, 10 N W L W		Un Tc Tc	0	2,050	65.64 71.33	
30P2	CS	12-30-58 4-23-54	Edward Jackson J. S. Dood	1951	105	C 8 L W		Dm Tcc Tcc	1.5 1.5	2,225	62.63 60.80	C
30P3	CS	12-30-58	Edward Friburger	1954	120	C 6 S E		Dm Tcc	.7	2,035	72.69	
30P1	CS	12-30-58	Paul Haskell	1953	105	C 10 T 3		Dm Tc	.4	2,235	70.70	
30P2	CS	12-30-58 8-27-54	John Jackson	1954	114	C 8 20		Dm Tc	1.0	2,230	64 62.05	L

T. 10 N., R. 3 W., Continued

30R3	GS	12-29-58		55.0	12	N	N		Ds		2,220		Dry
31C1	GS	12-5-58	Bridge	1932	200	C	11	N	Ds		2,245		Dry
31Z1	GS	12-5-58							Ds		2,315		75
	DGT	49	F. M. Leasure										
32A1	GS	10-23-58	John Daggett	1955	87	8	J	2	Dm	HcSW	0.9	2,215	56.08
32A2	GS	10-23-58	O. L. Gordon			8	J	1	Dm			2,215	
32A3	GS	10-23-58				8	J	1	Dm			2,215	
32A4	GS	10-23-58	Calvert Investment Co.	107	8	T	5		Ps			2,210	50
32A5	GS	10-23-58	Orvil Reeves and H. Goodcell			C	8	J	Dm			2,220	
32C1	GS	10-23-58	O'Neal, Bracken, Hooper and Farral	1916	85	DC12	T	5	Dm	Na			W
	M-52B	2-9-34								Tt	0	2,219.2	55.7
	GS	8-27-53				12			Un	Tc	.5		65.74
32G1	GS	10-23-58	Hownera	1957	103	C	8	S	Dm			2,240	59
32G2	GS	10-23-58	W. E. Davis	1958	99	C	8	J	Dm	Tec	.5	2,235	69.41
32G3	GS	10-23-58	Ross Kilpatrick			85	C	8	Dm	TapS	.7	2,230	66.26
32H1	GS	10-23-58	M. V. Scott	1955	98	C	8	S	Dm	TcN	.5	2,230	71.54
32H2	GS	10-23-58	Paul Turley	1955	87	C	8	J	Dm	TcE	.85	2,230	70.17
32H3	GS	10-23-58							Dm			2,230	(e)

e. Well inside locked enclosure.

USGS number : Source : Date : Owner or user : Year completed : Depth : (ft.) : Type : (diam.) : Pump : (type) : Yield : (Sp.) : Use : (cap.) : Measuring point : Altitude : (feet) : Water level : Depth : (feet) : Other : data : (below lsd) : (data) : (feet) : (feet) :

T. 10 N., R. 3 W., Continued

USGS number	Source	Date	Owner or user	Year completed	Depth (ft.)	Type (diam.)	Pump (type)	Yield (Sp.) (cap.)	Use (cap.)	Measuring point	Altitude (feet)	Water level (feet)	Other (below lsd) (data) (feet)
10/3-32Q1	GS M-52A	10-23-58 3-10-32								Tb	2.8	2,256.6	81.4
33A1	GS	10-24-58	Alan Niess	1951	108	C 12	L E			Dm	HcSW 1.5	2,200	83.90
33A2	GS	10-24-58	Alan Niess		115	C 10	T 5			I	Na	2,200	
33A3	GS	10-24-58	Alan Niess		250	C 8	N N			Un	Na	2,200	
33A4	GS	10-24-58	Alan Niess			C 8	N N			Un	Na	2,200	
33A5	GS	11-18-58	C. C. Clevencher		128	C 12	J 2			Dm	Tc1 .6	2,210	85.55
33C1	GS GS	10-24-58 4-22-54	Harvey Trice		94	10	J 2			Dm	Na Tc 1.0	2,205	63.10
33C2	GS	10-24-58	T. R. Elder			8	J 1½			Dm	Tc .5	2,205	64.78
33C3	GS	10-24-58	George Herman							Dm		2,205	(e)
33D1	GS	10-24-58	June Ann Sanger	1955	94	C 6	T 2			Dm	Tc 1.0	2,205	54.36
33D2	GS	10-24-58	J. D. Cavanagh	1955	103	C 6	J ½			Dm	Bpb 1.0	2,210	42.60

33F1	GS	10-24-58				6 L W	Dm Na	2,225	
33H1	GS	11-18-58	H. L. Pearce	1956	138 C 6 L		Dm Tcc	0.3	85.56
33H2	GS	11-18-58	Dr. C. Gren	1947	108 R 10 S 3/4		Dm Tcc	1.0	85.96
33J1	GS	11-18-58	D. A. Hamond	1956	150 C 6 J 1		Un Tc	.6	82.59
34A1	GS	11-19-58	J. Deltha	1954	157 C 12 T 10		I Hpb	.35	104.95
34B1	GS	11-19-58	J. Deltha	1956	155.0 C12		Un Tc	0	99.35
34B2	GS	11-19-58	J. Deltha, U. Johnson	1956	C J 1		Dm Na	2,200	
34B3	GS	11-19-58	J. Deltha		116.5 8 N N		Un Tc	2.0	97.60
34B4	GS	11-19-58	J. Deltha, U. Johnson		52.5 6 N N		Ds	2,200	Dry
34B5	GS	11-19-58	J. Deltha		102.5 12 N N		Ds	2,200	Dry
34C1	GS	11-19-58	Gilbert Hill	1958	100 C 8 J 1		Dm Tc	1.0	95.35
34C2	GS	11-19-58	L. Grant	1955	115 8 J 1/2		Dm	2,190	90
34C3	GS	11-19-58	R. A. Smith	1955	140 8 J 2		Dm Tcc	1.1	92.99
34C4	GS	11-19-58			T 25		Dm	2,200	
34D1	GS	11-19-58	Dr. Galian		8 J 1		Dm Hc	.45	89.92
34D2	GS	11-19-58	C. E. Wheeler		113 C 8 S 3/4		Dm Tc	.5	90.68
34D3	GS	11-19-58	C. E. Wheeler		116 R 6 N N		Un Tc	.9	91.41

e. Well inside locked enclosure.



35F1	GS	11-20-58	J. B. Trobridge	1950	227	14	T 15	630	18	I	Tc	1.0	2,195	103.22	C, L
35G1	GS	11-20-58	Randolph Property Corp.			16	T 20			Un	HcE	0	2,195	100.58	C
35G2	GS	11-20-58	Randolph Property Corp.			D 8	J			Un	Na		2,195		
35G3	GS	11-20-58	Randolph Property Corp.		100	16	N N			Ds			2,195		
35H1	GS	11-20-58	Fred Shepard	1948	154	14	T 15			I	Na		2,195		L
35J1	GS	11-20-58	Len Van Gailer			14	T 15			I	HcS	0	2,195	35.10	
35J2	GS	11-20-58		1958		14	T 10			I	Tc	.6	2,190	86.02	
35N1	GS	11-20-58	Edward Horton		144	DC 8	L W			Dm	Tc	2.5		96.58	
		M-54A	12-22-32								Twc	0	2,212.0	54.4	Wp
35N2	GS	12-20-58	Paul Baudizon			12	T 10			I	Na		2,220		
35P1	GS	11-20-58	E. D. Nickerson			14	T 20			I	HcN	.4	2,205	119.03	
	GS	6-30-54					T 20			I	HcN	.4		84.21	
35Q1	GS	11-20-58	E. D. Nickerson		90	14	J 1½			Dm	Tcc	.47	2,200	109.83	C
35Q2	GS	11-20-58	E. D. Nickerson				T 25			I	Tap	.1	2,200	106.77	
35Q3	GS	11-20-58	E. D. Nickerson		266		T 40	1080	19	I			2,200		L
35R1	GS	11-20-58	George Fellows		180	12	T 15			I	HcS	0	2,195	79.15	C
35R2	GS	11-20-58				8	J ½			Dm	Na		2,195		
36A1	GS	12-1-58	Harry McAdams			14	N			Un	Tcon	1.4	2,180	36.13	

d. Tape smeared.

USGS number	Source of Data and other numbers	Date of observation	Owner or user	Well data				Measuring point		Altitude of 1st (feet)	Depth below 1st (feet)	Other data
				Year completed	Depth (ft.)	Type	Yield (gpm)	Diameter (in.)	Sp. cap.			

T. 10 N., R. 3 W., Continued

10/3-36B1	GS	12-1-58	Carl Lightle	48						2,185.6		C, W
36C1	GS	11-21-58	Hirley Investment Co.	154	C 12	T 15			I	Na	2,180	L
	GS	1-21-53	R. Speth						Hc	0	56.00	
36D1	GS	11-20-58	Fred Shepard	1920 (c)	D 48	N N			Un		2,180	
36D2	GS	11-20-58	Fred Shepard	136	14	T 20			I	TcNW .5	2,180	69.44
36E1	GS	11-21-58	John Speth	1954	C 16	T 25	950		I	Hc 1.0	2,185	73.26
36E1	CS	12-1-53	Farry Madams		8	J 1			Dm	Na	2,180	
36J1	GS	11-21-58	C. H. Costa	150	C 12	T 15	537	60	I	Ipb 2.0	2,185	48.63
36J2	GS	12-1-58	Donald Phelps		8	S E			Dm	Tcc 1.2	2,180	51.73
36L1	GS	11-21-58	John Speth	1941	C 16	T 15			I	WcE .5	2,185	72.80
36M1	GS	11-21-58	E. R. Faber		6	N N			Ds	Tc .4	2,190	88.90
	F	12-13-55										
36N2	GS	11-21-58	B. R. Inton	123	12	T G	369		I	Ipb 1.5	2,190	d82
36P1	GS	11-21-58	Dr. Stewart Clark	1952	C 14	T 15			I	HcE 0	2,190	68.37

36P2	GS	11-21-58	Dr. Stewart Clark	1952	143	C 16	T 20	I HcW	0	2,190	43.58	L
36R1	GS	12-1-58	King			12	T 3	Dm Tap	.4	2,185	37.30	
<u>T. 10 N., R. 4 W.</u>												
10/4-2A1	GS	5-20-59	J. J. Cohn	1957	124	R 8	N	Un	0	2,080	62.0	
2A2	GS	5-20-59	J. J. Cohn	1957	84.0	R 8	N N	Un	0	2,100	78.9	
2C1	GS	5-20-59			57.0	7	N N	Ds		2,075	Dry	
2J1	GS	5-20-59	J. J. Cohn	1957	64.0	8	N N	Ds		2,125	Dry	
3F1	GS	5-18-59				12	T	Dm Na		2,120		W
3N1	GS	5-20-59			14.0		N N	Ds		2,135	80	
	DGT 23	1919			200	Dr	8					
3Q1	GS	5-18-59	Robert Brown	1927	300	L 8	L W	Un Tc	1.0	2,125	158.95	C, W
4C1	GS	5-27-59		1959	415	R 14	T	I		2,100	160	L
6A1	GS	5-19-59	Thomas Wallace	1952	250	R 8	T 2	S Na		2,120	250	
6A2	GS	5-19-59	Thomas Wallace	1935	150	C 8	N N	Ds		2,120	Dry	
6H1	GS	5-19-59	Aken	1951	250	R 6	T 2	Dm Na		2,130		
8P1	GS	1-7-59	J. R. Fitzwater	1887	789	12	L G	Un TcW	0	2,195	187.68	C
10A1	GS	5-20-59	J. J. Cohn	1957	325	R 8	N N	175 Un		2,120	187	





Table 2.--Cross index of other well numbers  
and Geological Survey numbers

The first column shows the number assigned to the well by the other agency indicated and the second column shows the Geological Survey number assigned to the same well. The numbers of the other agencies are listed consecutively. Numbers missing in the consecutive listings are for wells outside the eastern part of the Middle Mojave Valley area, for wells for which no data are available, or for wells for which the other numbers and Geological Survey numbers are the same.

Part 1. Numbers used by Thompson (DGT), 1929, and California  
Department of Engineering (CDE) 1918

DGT number	USGS number	:	DGT number	USGS number	:	DGT number	USGS number
17	10/5-11D2		41	10/3-24E2		55	10/2-36P1
18	10/5-11D1		42	10/3-24Z1		56	10/2-36Z1
19	10/5-21Z1		43	10/3-28C1		57	10/2-36Z2
20	10/5-23N1		44	10/3-28C4		58	10/1-31Z1
21	10/4-18N1		45	10/3-28E1		59	10/1-31Z2
22	11/4-34N1		46	10/3-28Z2		60	10/1-31Z3
23	10/4- 3N1		47	10/3-28Z1		61	10/1-32B11
34	10/3- 6Z2		48	10/3-27Z1		63	9/1- 6B1
35	10/3- 6Z1		49	10/3-31Z1		64	9/1- 6Z2
36	10/3- 4L1		50	10/3-27R1		65	9/1- 6Z1
37	10/3-15Z1		51	10/2-30N3		67	9/3- 3Z2
38	10/3-11M1		52	10/2-32B1		68	9/3- 3Z1
39	10/3-14M1		53	10/2-33Z1		69	9/3- 2Q3
40	10/3-14G2		54	10/2-36P5			

DGT number	USGS number	:	DGT number	USGS number	:	DGT number	USGS number
70	9/3- 8Z1		80	8/3- 4Z1		90	8/4-22A1
71	9/3- 8J1		81	8/3- 8Z1		91	8/4-24N1
72	9/3-24Z1		82	8/3- 6Z1		92	8/3-30L1
73	9/2-18A1		83	8/3- 7Z1		99	9/3- 4Z1
74	9/2-19Z2		84	8/3- 7Q4		100	8/3- 4Z2
75	9/3-25Z1		85	8/3-18Z1		<u>104</u>	<u>7/2- 9L1</u>
76	9/3-27D1		86	8/3-18Z2			
77	9/3-33Z1		87	8/3- 7R2			
78	9/3-34E1		88	8/4-14Z1	CDE-331		7/3-27Z1
79	9/3-34N4		89	8/4-15D1	CDE-335		7/3-21Q1

Part 2. M-numbers assigned by all agencies doing ground-water work prior to July 1, 1943, when the Geological Survey numbering system was adopted

(U. S. Geological Survey 1945).

M number	USGS number	:	M number	USGS number	:	M number	USGS number
25	8/4-10M1		34	8/3-30M1		42a	9/3-22Z1
26	8/4- 2Q1		35	8/3-18Z3		43	9/2-19B1
27	8/4-15L1		36	8/3-18Z4		44	9/2-19Z1
28	8/4-15Q1		37	8/3- 7G1		45	9/3-13R2
29	8/4-14B2		38	8/3- 4L2		46	9/2-18H4
30	8/4-12Q1		39	8/3- 3D3		47	9/2- 8N1
31	8/4-23R1		40	9/3-34N4		47a	9/2-18A1
32	8/4-24M1		41	9/3-34E1		48	9/2- 6R1
33	9/2-34D1		41a	8/3- 3A1		49	9/2- 1Z1
33a	8/3-31Z1		41b	8/3-11Z1		50	9/3-27N1
33b	8/3-31Z2		42	9/3-27A1		51	9/3-28A1

M number	USGS number	:	M number	USGS number	:	M number	USGS number
52	9/3-10P1		57a	9/3-15R1		74	10/2-30N1
52a	10/3-32Q1		58	11/3-33Z1		75	10/2-19P1
52b	10/3-32C1		59	10/3- 5Z1		76	10/2-30R1
52c	10/3-29M2		60	10/3- 6B1		77	10/2-32E1
52d	10/3-28C1		67	10/3- 4L1		78	9/2- 4D1
52e	9/3- 8J1		68	10/3-11N1		79	9/2- 3D2
53	9/3-10A1		69	10/3-24E1		80	10/2-35Q9
53a	9/3-11E1		70	10/3- 26Z1		81	10/2-36P5
54	9/3- 3J1		70a	10/3-26Z2		82	9/1- 6E1
54a	10/3-35N1		70b	10/3-26Z3		83	10/1-30Q1
55	10/3-27N4		71	10/3-23N2		84	10/1-31C1
56	9/3-10R1		72	9/2- 6L2		85	10/1-31G2
56a	9/3-14D1		72a	9/2- 6L5		86	10/1-31Z4
57	9/3-14M1		73	10/2-31N1		87	10/1-32K1

Part 3. California Department of Water Resources (DWR) numbers, given only where different from Geological Survey number.

DWR number	:	USGS number
9/3-34R1		8/3- 3A1
10/3-21P1		10/3-28C1

Table 3.--References to publications that contain water-level measurements in wells in the eastern part of the Middle Mojave Valley area, California

Years for which measurements are available	Reference <sup>1/</sup>	Year of publication
1912, 1917-18	California Department of Engineering	1918
1905-32	California Division of Water Resources	1934
1946-50	San Bernardino County Flood Control District	1951
1951-52	San Bernardino County Flood Control District	1954
1956-57	California Department of Water Resources	1958

U. S. Geological Survey water-supply papers<sup>1/</sup>

Years for which measurements are available	Water-Supply Paper	Year of publication	Years for which measurements are available	Water-Supply Paper	Year of publication
1912, 1917-18					
1928	578	1929	1947	1101	1951
1905-39	886	1940	1948	1131	1951
1940	911	1941	1949	1161	1952
1941	941	1943	1950	1170	1953
1942	949	1944	1951	1196	1954
1943	991	1945	1952	1226	1955
1944	1021	1947	1953	1270	1956
1945	1028	1949	1954	1326	1957
1946	1076	1949	1955	1409	1957

1. For complete titles see references cited at end of text.



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

(Published and unpublished data)								
USGS	:	DGT	:	DR	:	Records available		
No.	:	M No.	:	No. 1/	:	No. 2/	:	(years) 3/
8/3-	3A1	41a		9/3-34R1				1930-33, 1935-42, 1944-54, 1958
	3D3	39						1930-31
	4L2	38						1930-33, 1939-54, 1958
	7G1	37						1930-32, 1939-40
	11Z1	41b						1930-33, 1939-40
	18Z3	35						1930-32, 1939-40
	18Z4	36						1930, 1939-40
	30N1	34						1930-32, 1939-40
	31Z1	33a						1930-32
	31Z2	33b						1930-32
8/4-	2Q1	26						1930-39, 1946-52, 1958
	10N1	25						1930-32
	12Q1	30						1931-32, 1935-37, 1939-41, 1943-58
	14B2	29						1930-32
	15L1	27						1930-32
	15Q1	28						1922, 1930-32
	23R1	31						1930-32
	24N1	32	91					1919, 1929-31
9/1-	6B1	82	63					1919, 1929-32, 1934-43
9/2-	1Z1	49						1923, 1930
	3D2	79						1930-32
	4B1							1946-49, 1952-56, 1958
	4D1	78						1925, 1928, 1932
	6L2	72						1930-32
	6L5	72a						1925, 1929-30, 1932
	6R1	48						1930-32
	8N1	47						1923, 1930
	18A1	47a	73					1919, 1929-30
	18H4	46						1930-32
	19B1	43						1930-32, 1935-58
	19Z1	44						1930
	34D1	33						1930-31
9/3-	3J1	54						1930-32
	8J1	52e	71					1929, 1931-32
	10A1	53						1930-32, 1935-43
	10P1	52						1930-32, 1934-54, 1958
	10R1	56						1930-32, 1935-58
	11E1	53a						1930-32
	13R2	45						1930-32
	14D1	56a						1930-32, 1934-56, 1958
	14M1	57						1930-32

See footnotes at end of table.

USGS No.	:	M No.:	DGT <sub>1</sub> / No. 1/	:	DWR No. 2/	:	Records available (years) 3/
9/3-15R1		57a					1930-32
22Z1		42a					1931
27A1		42					1930-32
27N1		50					1930-32
28A1		51					1930-36, 1938-39, 1946-47, 1952-56, 1958
34E1		41		78			1919, 1929, 1930-32
34N4		40		79			1919, 1923, 1930-33, 1935-40
10/1-30Q1		83					1930-31
31C1		84					1930-32
31F1							1953-59
31G2		85					1930-32, 1934-38
31Z4		86					1928, 1930-32
32K1		87					1927, 1930-32
10/2-19P1		75					1930-33, 1935, 1937-45, 1947-57
30N1		74					a1930-50, 1952
30R1		76					a1947-56
31N1		73					1930-32
32B1		77		52			1919, 1930-32
32Q1							1946-52, 1956, 1958
35Q9		80					1930-33
36P1				55			1919, 1946-53, 1955-59
36P5		81		54			1918, 1930-32, 1952-59
10/3-4L1		67		36			1919, 1930-31
5Z1		59					1930, 1932
6B1		60					1930-32, 1942, 1950-57, 1959
10R1							1953, 1955-59
11N1		68		38			1919, 1930-32, 1934
15H1							1952-56, 1959
15J1							1946-49, 1959
22N1							1952-59
23N2		71					1930-32, 1935-39, 1959
24E1		69					1930-32
26Z1		70					1930-34
26Z2		70a					1930-32
26Z3		70b					1930-32
27D2							1946-52
27N4		55					1930-32
27Q1							1946-49, 1953, 1959
27R1				50			1918, 1950-54, 1956, 1958
28C1		52d		43		10/3-21P1	1919, 1931, 1946-58
29M1							1946-58

See footnotes at end of table.

USGS No.	:	M No.	:	DGT No. <u>1</u>	:	DWR No. <u>2</u>	:	Records available (years) <u>3</u>
10/3-29M2	:	52c	:		:		:	1931-32
32C1	:	52b	:		:		:	1931-32, 1934, 1936-39, 1954-57
32Q1	:	52a	:		:		:	1931-32
35N1	:	54a	:		:		:	1930-32
36B1	:		:		:		:	1946-50, 1952-58
36N2	:		:		:		:	1950-58
36Z1	:		:		:		:	1952-56
10/4- 3F1	:		:		:		:	1953-58
3Q1	:		:		:		:	1953-59
10/5- 3J1	:		:		:		:	1953, 1955-59
11/3-33Z1	:	58	:		:		:	1930-32

1. Given in Water-Supply Paper 578 by Thompson (1929).

2. California Department of Water Resources numbers are the same as U. S. Geological Survey numbers except where a different number is given.

3. See table 3 for references to published water-level measurements; see table 1 or 5 for unpublished water-level measurements.

a. Measurements at well 10/2-30N1 for the years 1943-47 are reported in Water-Supply Papers 991, 1021, 1028, 1076, and 1101; but the well is numbered 10/2-30R1. Well 10/2-30R1 is correctly numbered in U. S. Geological Survey Water-Supply Papers 1226, 1326, and 1409.

Table 5.--Records of water levels in wells

Table 5 includes all unpublished records of water-level measurements at wells where more than five water-level measurements have been made; records for wells at which less than five measurements have been made are shown in table 1.

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 are interpolated from topographic maps. Altitudes given in feet and tenths were determined by spirit leveling (from U. S. Bureau of Reclamation records). A few surveyed altitudes were obtained from water-supply papers of the U. S. Geological Survey and from California Department of Public Works (1934).

Measurements.--Most of the water-level measurements were made by the U. S. Geological Survey (GS) mainly in years prior to 1954; by the U. S. Bureau of Reclamation (BR) mainly in 1946 and 1947; and by the San Bernardino County Flood Control District (F) mainly since 1953. All measurements of water level have been adjusted to depth below land-surface datum. That is, the altitudes of the measuring points as reported above or below land-surface datum have been subtracted from or added to the water-level measurements.

Measurements at seven wells (8/4-1201, 8/4-1501, 9/1-5D1, 9/2-8B1, 9/3-2F1, 9/3-27L2, and 10/3-35N1, are made by the Geological Survey during the spring and autumn each year.

8/3-3A1 (DWR 9/3-34R1, M-41a) Nellie Horton; formerly Storey. Altitude 2,381.4 ft. Records furnished: USBR, 1946-47; F, 1948-49; BR, Nov. 2, 1950; F, 1951-54; GS, June 6, 1958.

Date	Water level	Date	Water level	Date	Water level
July 29, 1946	125.3	Nov. 25, 1946	125.7	June 25, 1947	125.4
Aug. 5	125.3	Dec. 2	125.8	July 10	125.5
Aug. 21	125.3	Dec. 17	125.7	July 24	125.5
Aug. 29	125.4	Jan. 1, 1947	125.6	Aug. 7	125.3
Sep. 6	125.4	Jan. 21	125.8	Sep. 5	125.4
Sep. 16	125.3	Feb. 5	125.8	Oct. 15	125.3
Sep. 23	125.3	Feb. 20	125.5	Dec. 12	125.5
Sep. 30	125.3	Mar. 5	125.3	Feb. 17, 1948	125.6
Oct. 6	125.3	Mar. 18	125.6	Mar. 12	125.6
Oct. 15	125.3	Apr. 9	125.6	Apr. 16	125.6
Oct. 21	125.4	Apr. 30	125.3	May 14	125.6
Oct. 28	126.1	May 15	125.3	June 15	125.5
Nov. 6	125.8	May 29	125.2	July 14	125.9
Nov. 18	125.5	June 12	125.3	Aug. 11	125.4

Continued

## 8/3-3A1.--Continued.

Date	Water level	Date	Water level	Date	Water level
Sep. 15, 1948	125.5	July 12, 1949	126.2	June 14, 1951	127.5
Oct. 14	125.4	Aug. 15	126.6	July 18	131.0
Nov. 18	125.9	Sep. 14	126.7	Aug. 15	136.0
Dec. 9	125.6	Oct. 17	126.9	Nov. 27	127.12
Jan. 17, 1949	125.6	Dec. 13	126.5	Dec. 13	127.5
Feb. 17	125.9	Nov. 2, 1950	127.9	Dec. 16, 1952	128.50
Mar. 15	126.8	Jan. 16, 1951	126.4	Nov. 12, 1953	132.60
Apr. 19	127.9	Feb. 14	126.9	Jan. 17, 1954	Dry
May 1	127.15	Mar. 20	127.4	June 6, 1958	Dry
June 15	126.2	Apr. 18	127.35		

8/3-4L2 (M-38). Formerly Everett Swing. Altitude 2,287.5 ft.  
Records furnished: BR, 1946-1950; F, 1947-1954; GS, May 29, 1958.

July 29, 1946	14.9	Dec. 11, 1947	15.3	Nov. 2, 1950	15.52
Aug. 5	15.0	Jan. 7, 1948	14.6	Dec. 13	15.4
Aug. 21	15.0	Feb. 17	13.8	Jan. 16, 1951	15.4
Aug. 29	15.0	Mar. 12	13.4	Feb. 14	15.1
Sep. 6	15.0	Apr. 16	13.1	Mar. 20	15.0
Sep. 16	14.9	May 14	13.3	Apr. 18	14.3
Sep. 23	15.0	June 15	13.5	May 9	14.50
Sep. 30	15.0	July 14	14.1	June 14	14.85
Oct. 6	15.0	Aug. 11	14.6	July 18	16.00
Oct. 15	15.0	Sep. 15	15.0	Aug. 15	16.35
Oct. 21	15.0	Oct. 14	15.4	Sep. 13	15.78
Oct. 28	15.1	Nov. 18	15.5	Oct. 16	16.16
Nov. 6	15.0	Dec. 9	15.3	Nov. 27	16.14
Nov. 18	15.0	Jan. 17, 1949	14.3	Dec. 13	16.06
Nov. 25	15.0	Feb. 17	14.2	Jan. 22, 1952	15.80
Dec. 2	14.9	Mar. 16	13.7	Feb. 14	15.22
Dec. 17	14.4	Apr. 14	13.3	Mar. 13	14.51
Jan. 1, 1947	14.1	May 9	13.53	Apr. 10	14.00
Jan. 21	13.7	June 16	13.9	May 29	13.67
Feb. 5	13.6	July 14	14.3	June 12	14.21
Feb. 20	13.3	Aug. 18	14.9	July 16	14.33
Mar. 5	13.0	Sep. 15	15.2	Aug. 21	14.6
Mar. 18	12.9	Oct. 19	15.4	Sep. 18	14.29
Apr. 9	12.9	Nov. 15	15.50	Oct. 16	14.90
Apr. 30	13.0	Dec. 14	15.3	Nov. 25	14.61
May 15	13.2	Jan. 24, 1950	12.0	Dec. 16	14.90
May 29	13.4	Feb. 15	14.7	Jan. 16, 1953	14.90
June 12	13.6	Mar. 15	14.3	Feb. 18	14.39
June 25	13.8	Apr. 19	13.8	Mar. 17	14.33
July 10	14.1	May 4	13.92	Apr. 14	14.28
July 24	14.3	June 15	14.1	Nov. 12	15.89
Aug. 7	14.5	July 12	14.5	May 13, 1954	14.46
Sep. 5	15.0	Aug. 15	15.0	Nov. 17	Dry
Oct. 14	15.1	Sep. 14	15.3	May 29, 1958	Dry
Nov. 12	15.3	Oct. 17	15.4		

8/4-2Q1 (M-26). Owner unknown. Altitude about 2,360 ft. Records furnished: BR, 1946-47; F, 1948-52; GS, 1958.

Date	Water level	Date	Water level	Date	Water level
July 29, 1946	25.0	July 10, 1947	24.7	June 16, 1949	24.3
Aug. 5	25.1	July 22	25.2	July 14	25.4
Aug. 21	25.6	Aug. 7	25.6	Aug. 18	25.5
Aug. 29	25.9	Sep. 5	26.3	Sep. 15	26.3
Sep. 5	25.8	Oct. 14	26.7	Oct. 19	Dry
Sep. 16	26.1	Nov. 12	25.9	Jan. 24, 1950	Dry
Sep. 23	25.8	Dec. 11	26.8	Feb. 15	25.7
Dec. 2	26.1	Feb. 16, 1948	24.3	Mar. 15	24.9
Dec. 17	25.5	Mar. 11	24.0	Apr. 19	24.4
Jan. 1, 1947	25.0	Apr. 15	23.8	May 4	24.32
Jan. 21	24.1	May 14	23.8	June 15	25.1
Feb. 4	23.9	June 14	24.5	July 12	25.8
Feb. 20	23.7	July 13	25.7	Aug. 15	Dry
Mar. 5	23.6	Aug. 10	27.4	Jan. 16, 1951	Dry
Mar. 18	23.6	Oct. 13	26.7	Jan. 22, 1952	Dry
Apr. 8	23.5	Nov. 18	Dry	Mar. 13	Dry
Apr. 30	23.6	Dec. 9	Dry	Apr. 10	26.23
May 15	23.7	Feb. 14, 1949	26.0	May 29	24.32
May 29	24.0	Mar. 10	23.8	June 12, 1958	(a)
June 12	24.2	Apr. 29	23.9		
June 24	24.5	May 9	23.92		

8/4-12Q1 (M-30). Joseph Taylor; formerly Holcomb, formerly J. A. Decrow. Altitude about 2,345 ft. Records furnished: BR, 1946-1947; F, 1947-1958; GS, June 10, 1958.

July 29, 1946	10.9	Feb. 20, 1947	8.1	June 15, 1948	9.1
Aug. 5	b20.6	Mar. 5	8.1	Nov. 18	10.8
Aug. 21	12.4	Mar. 18	b21.4	Dec. 9	11.3
Aug. 29	b23.2	Apr. 8	8.6	Jan. 17, 1949	10.8
Sep. 5	10.6	Apr. 30	b21.9	Feb. 17	9.2
Sep. 16	10.6	May 15	9.1	Mar. 16	9.2
Sep. 23	11.5	May 29	b22.9	June 16	11.3
Sep. 30	10.9	June 12	9.5	Aug. 18	12.7
Oct. 6	10.5	June 25	b21.3	Oct. 19	11.8
Oct. 15	10.4	July 10	b22.5	Nov. 15	11.68
Oct. 21	10.4	July 24	b22.5	Dec. 14	11.3
Oct. 28	10.3	Aug. 7	b20.1	Jan. 24, 1950	10.6
Nov. 6	10.2	Sep. 5	b21.5	Feb. 15	10.2
Nov. 18	10.1	Oct. 14	11.0	Apr. 19	b25
Nov. 25	10.0	Nov. 12	10.5	June 15	b24
Dec. 2	9.9	Dec. 11	10.6	July 12	b34
Dec. 17	9.5	Feb. 17, 1948	8.9	Oct. 17	12.0
Jan. 1, 1947	9.1	Mar. 12	8.4	Nov. 6	12.3
Jan. 21	8.6	Apr. 16	8.5	Dec. 13	11.5
Feb. 5	8.3	May 14	8.2	Feb. 16, 1951	11.5

Continued

a. Dry at time of visit.

b. Well being pumped.

## 8/4-12Q1.--Continued.

Date	Water level	Date	Water level	Date	Water level
Apr. 18, 1951	10.5	Sep. 18, 1952	b24.56	Mar. 29, 1956	11.77
June 14	b19.0	Oct. 16	b23.81	Nov. 5	13.12
Aug. 15	b15.18	Nov. 25	b18.26	Dec. 5	12.80
Nov. 27	b18.00	Dec. 16	9.82	Jan. 2, 1957	12.97
Dec. 13	11.69	Jan. 16, 1953	11.21	Feb. 6	12.30
Jan. 22, 1952	10.10	Mar. 17	10.30	Mar. 6	12.54
Feb. 14	10.37	Nov. 12	b13.42	Apr. 3	28.39
Mar. 13	9.65	Mar. 29, 1954	10.14	May 1	15.71
Apr. 10	9.70	May 13	7.16	June 3	b28.88
June 12	b25.61	Nov. 17	12.56	Mar. 25, 1958	12.10
July 16	b26.42	Apr. 13, 1955	16.29	June 10	b16.96
Aug. 21	b25.42	Dec. 9	12.60		

9/2-4B1. Roger Hartwick. Altitude about 2,160 ft. Records furnished: BR, 1946-1947; F, 1947-49, 1952-56.

July 26, 1946	11.5	Dec. 2, 1946	11.3	July 24, 1947	b21.3
July 30	11.4	Dec. 17	11.1	Aug. 11	b21.4
Aug. 8	10.7	Jan. 1, 1947	10.9	Dec. 12	11.9
Aug. 29	11.8	Jan. 23	10.4	Feb. 17, 1948	10.9
Sep. 16	11.9	Feb. 6	10.6	June 16, 1949	14
Sep. 23	12.0	Mar. 5	10.5	July 14	14
Sep. 30	12.1	Mar. 21	10.7	June 1, 1952	15.08
Oct. 10	11.9	Apr. 9	b19.3	Dec. 17	b16.40
Oct. 15	11.9	Apr. 28	10.8	Jan. 16, 1953	b16.40
Oct. 21	b13.8	May 15	b20.3	Nov. 13	17.75
Oct. 28	11.9	May 29	b20.4	Nov. 22, 1954	23.57
Nov. 6	b13.2	June 12	b20.6	Apr. 15, 1955	25.00
Nov. 18	11.7	June 25	b20.9	Apr. 13, 1956	27.32
Nov. 25	11.5	July 10	b21.0	Dec. 21	30.60

9/2-19B1 (M-43). M. C. Sweeten; formerly Shobel. Altitude 2,254.8 ft. Records furnished: BR, 1946-1947; F, 1947-1958, except as indicated.

Sep. 3, 1946	62.8	Nov. 23, 1946	63.0	May 15, 1947	62.5
Sep. 16	62.8	Dec. 2	62.9	May 29	62.4
Sep. 23	62.8	Dec. 17	62.9	June 12	62.4
Sep. 30	62.9	Jan. 1, 1947	62.8	June 25	62.5
Oct. 6	62.9	Jan. 21	62.8	July 10	62.5
Oct. 15	62.9	Feb. 5	62.6	July 24	62.6
Oct. 21	62.9	Feb. 20	62.5	Aug. 7	62.5
Oct. 28	62.9	Mar. 5	62.6	Sep. 8	62.6
Nov. 6	62.9	Mar. 18	62.6	Oct. 10	62.9
Nov. 13	62.9	Apr. 9	62.5	Nov. 12	62.4
Nov. 18	63.0	Apr. 28	62.4	Dec. 10	62.8

Continued

b. Well being pumped.

## 9/2-19B1.--Continued.

Date	Water level	Date	Water level	Date	Water level
Mar. 12, 1948	62.9	Mar. 16, 1950	65.9	Mar. 14, 1952	69.18
Apr. 16	63.3	Apr. 19	66.3	Apr. 11	69.97
May 18	63.2	May 4	66.58	May 3	69.33
June 15	63.6	June 15	66.7	June 18	69.22
Aug. 1	63.8	July 13	67.1	July 18	75.60
Sep. 15	63.9	Aug. 16	67.3	Sep. 19	70.20
Oct. 14	63.9	Oct. 18	67.6	Oct. 17	69.21
Nov. 18	64.0	Nov. 2	67.6	Nov. 25	69.02
Dec. 10	64.0	Dec. 13	67.4	Jan. 23, 1953	69.89
Jan. 17, 1949	64.3	Jan. 17, 1951	67.6	Feb. 18	68.70
Feb. 18	64.2	Feb. 14	67.7	Mar. 18	69.19
Mar. 17	64.6	Mar. 20	67.9	Apr. 17	69.22
Apr. 14	64.6	Apr. 19	75.44	Nov. 16	72.00
May 16	64.6	May 9	68.18	Apr. 20, 1954	c71.84
June 17	64.9	June 5	68.5	May 14	b75.60
July 14	63.9	July 19	68.8	Nov. 26	74.70
Aug. 19	65.6	Aug. 16	69.19	Apr. 18, 1955	77.20
Sep. 16	65.5	Sep. 13	68.98	Dec. 14	77.60
Oct. 19	65.6	Oct. 17	64.11	Apr. 17, 1956	76.92
Nov. 15	65.75	Nov. 30	70.21	Dec. 27	75.57
Dec. 15	65.7	Dec. 14	70.80	May 3, 1957	76.69
Jan. 25, 1950	66.3	Jan. 23, 1952	69.40	Oct. 3, 1958 <sup>b,c</sup>	90.08
Feb. 16	65.9	Feb. 15	69.49	Dec. 4	76.94

9/3-10P1 (M-52). Owner unknown. Altitude 2,291.7 ft. Records furnished: BR, 1946-47; F, 1947-54; GS, Jan. 21, 1954, 1958.

Sep. 3, 1946	88.3	Mar. 21, 1947	88.5	Oct. 21, 1947	88.3
Sep. 16	88.3	Apr. 9	88.4	Oct. 28	88.3
Sep. 23	88.3	Apr. 30	88.3	Nov. 6	88.4
Sep. 30	88.3	May 15	88.3	Nov. 13	88.3
Oct. 6	88.3	May 29	88.2	Nov. 18	88.4
Oct. 15	88.8	June 12	88.2	Nov. 25	88.4
Oct. 21	88.3	June 25	88.1	Dec. 2	88.4
Oct. 28	88.3	July 10	88.0	Dec. 11	88.3
Nov. 6	88.4	July 24	88.0	Dec. 17	88.4
Nov. 18	88.4	Aug. 7	88.0	Feb. 17, 1948	88.5
Nov. 25	88.4	Sep. 3	88.3	Mar. 11	88.6
Dec. 2	88.4	Sep. 5	88.0	Apr. 15	88.9
Dec. 17	88.4	Sep. 16	88.3	May 14	88.9
Jan. 1, 1947	88.4	Sep. 23	88.3	June 14	88.9
Jan. 21	88.5	Sep. 30	88.3	July 14	88.9
Feb. 5	88.5	Oct. 6	88.3	Aug. 10	89.0
Feb. 20	88.5	Oct. 14	88.6	Sep. 14	89.0
Mar. 5	88.5	Oct. 15	88.8	Oct. 13	89.1

Continued

b. Well being pumped.

c. Measurement by U. S. Geological Survey.

## 9/3-10Pl.--Continued.

Date	Water level	Date	Water level	Date	Water level
Nov. 18, 1948	89.2	June 15, 1950	90.3	Jan. 22, 1952	91.34
Dec. 9	89.2	July 12	90.3	Feb. 14	91.39
Jan. 17, 1949	89.0	Aug. 15	90.5	Mar. 13	91.27
Feb. 17	89.3	Sep. 14	90.5	Apr. 10	92.17
Mar. 16	89.4	Oct. 17	90.5	May 30	91.57
Apr. 14	89.4	Nov. 2	90.5	June 12	92.44
May 9	89.52	Dec. 13	91.3	July 16	98.30
June 16	89.6	Jan. 16, 1951	90.7	Aug. 22	91.60
July 14	90.9	Feb. 14	90.7	Sep. 18	92.26
Aug. 18	89.7	Mar. 20	90.7	Oct. 16	91.40
Sep. 15	89.8	Apr. 18	90.9	Nov. 26	91.71
Oct. 19	89.7	May 16	90.90	Dec. 16	92.30
Nov. 16	89.99	June 14	90.95	Jan. 16, 1953	91.95
Dec. 14	89.9	July 18	91.30	Mar. 17	92.15
Jan. 24, 1950	93.5	Aug. 15	91.08	Apr. 14	93.86
Feb. 15	90.1	Sep. 13	91.10	Nov. 12	101.20
Mar. 15	90.1	Oct. 16	91.14	Jan. 21, 1954	102.30
Apr. 19	90.2	Nov. 27	91.36	Mar. 29	Dry
May 1	90.25	Dec. 13	91.27	June 20, 1958	Dry

9/3-10R1 (M-56). Owner unknown. Formerly Osborn. Altitude 2,209.2 ft. Records furnished: BR, 1946-47; F, 1947-58; GS, Jan. 21, 1954 and June 20, 1958.

Sep. 3, 1946	10.7	Nov. ?, 1947	12.26	Oct. 16, 1951	27.54
Sep. 16	10.9	Nov. 13	12.3	Dec. 13	28.13
Sep. 23	11.1	Dec. 11	12.6	Jan. 22, 1952	28.16
Sep. 30	11.3	Jan. 7, 1948	13.2	Feb. 14	27.71
Oct. 6	11.1	Feb. 17	14.1	Mar. 13	27.94
Oct. 15	11.4	Mar. 11	Dry	Apr. 10	22.06
Oct. 21	11.4	Oct. 14, 1949	20.02	June 12	18.19
Oct. 28	11.5	Nov. 16	Dry	July 16	17.91
Nov. 6	11.6	Dec. 14	20.8	Aug. 22	18.0
Nov. 18	11.7	Jan. 24, 1950	21.1	Sep. 18	18.52
Nov. 25	11.8	Feb. 15	21.4	Oct. 16	19.10
Dec. 2	11.8	Mar. 15	21.7	Dec. 16	19.58
Dec. 17	11.3	Apr. 19	22.1	Jan. 16, 1953	20.06
Jan. 1, 1947	11.2	June 15	22.9	Feb. 18	20.83
Feb. 5	9.6	July 12	23.0	Mar. 17	21.20
Feb. 20	9.0	Aug. 15	23.8	Apr. 14	22.86
Mar. 5	8.7	Sep. 14	23.6	Nov. 12	25.95
Mar. 21	8.5	Oct. 17	23.9	Jan. 21, 1954	26.30
Apr. 9	8.4	Dec. 13	24.7	May 13	24.70
Apr. 30	8.6	Jan. 16, 1951	24.7	Nov. 17	26.94
May 15	8.9	Feb. 14	25.0	Apr. 14, 1955	29.11
May 29	9.1	Mar. 20	25.2	Dec. 12	31.60
June 12	9.4	Apr. 18	25.5	Apr. 12, 1956	26.99
June 25	9.7	June 14	26.75	Dec. 20	35.88
July 10	9.9	July 18	26.67	May 2, 1957	38.07
July 24	10.2	Aug. 15	28.85	Mar. 25, 1958	41.05
Aug. 7	10.5	Sep. 13	27.15	June 20	28.80

9/3-14D1 (M-56a). Ernest Shalenter; formerly Adley; formerly Bullock. Altitude about 2,220 ft. Records furnished: GS, 1954, June 20, 1958; F, 1955-56, 1958.

Date	Water level	Date	Water level	Date	Water level
Jan. 21, 1954	29.80	Dec. 12, 1955	35.45	June 20, 1958	22.78
Nov. 17	27.60	Apr. 12, 1956	36.95		
Apr. 14, 1955	34.36	Jan. 7, 1958	23.37		

9/3-28A1 (M-51). H. A. Triepke; formerly Reid; formerly J. Slagill. Altitude about 2,245 ft. Records furnished: BR, 1946-1947; F, 1952-1956, 1958; GS, Jan. 21, 1954 and Oct. 23, 1958.

Sep. 3, 1946	15.4	Mar. 5, 1947	4.9	Oct. 16, 1952	16.77
Sep. 16	15.7	Mar. 21	4.4	Nov. 26	18.17
Sep. 23	16.1	Apr. 9	5.5	Dec. 17	18.70
Sep. 30	16.3	Apr. 30	7.1	Jan. 16, 1953	19.59
Oct. 6	16.5	May 15	8.7	Feb. 18	20.40
Oct. 15	16.8	May 29	10.0	Mar. 17	21.84
Oct. 21	17.0	June 12	11.0	Nov. 12	27.60
Oct. 28	18.1	June 25	11.9	Jan. 21, 1954	27.78
Nov. 6	16.7	July 10	12.9	May 13	11.80
Nov. 25	6.5	July 24	13.8	Nov. 17	29.95
Dec. 2	6.6	Aug. 7	14.5	Apr. 14, 1955	Dry
Dec. 17	6.1	Sep. 5	16.5	Mar. 29, 1956	Dry
Jan. 1, 1947	4.3	Oct. 14	17.4	Mar. 25, 1958	31.02
Jan. 21	3.5	Dec. 11	18.8	Oct. 21	17
Feb. 5	4.4	Aug. 22, 1952	14.3		
Feb. 20	4.4	Sep. 18	15.68		

10/1-31F1. Edwin Hill; formerly Tumblin, formerly Burke. Altitude about 2,120 ft. Records furnished: F, 1953-58; GS, 1959.

Nov. 13, 1953	d44.42	Dec. 13, 1955	d45.60	Mar. 26, 1958	d48.16
May 17, 1954	d44.22	Apr. 12, 1956	d43.34	May 20, 1959	d45.52
Nov. 22	d44.5	Dec. 21	d43.97		
Apr. 15, 1955	d41.88	May 2, 1957	d44.98		

d. Measurements made by the San Bernardino County Flood Control District and published for well 10N/1W-31C1 by the U. S. Geological Survey in Water-Supply Papers 1270, 1326, and 1409 were inadvertently made in well 10/1-31F1. The published measurements are different from those listed above because the correct distance between the measuring point and land surface datum was not subtracted from the original measurements.

10/2-19P1. (M-75). M. L. Bott; formerly Mrs. Loftus Shipley.  
 Altitude 2,216.0 ft. Records furnished: F, 1956-59; GS, Dec. 17, 1953  
 and Feb. 4, 1959.

Date	Water level	Date	Water level	Date	Water level
Dec. 17, 1953	72.96	Apr. 3, 1957	80.20	Dec. 3, 1957	81.69
Apr. 13, 1956	77.60	May 2	80.30	Mar. 26, 1958	82.02
Nov. 5	82.36	June 3	80.77	Aug. 6	83.39
Dec. 5	79.40	July 2	81.00	Sep. 5	83.89
Jan. 2, 1957	79.49	Aug. 1	b83.35	Nov. 6	83.54
Feb. 6	79.56	Aug. 28	81.43	Jan. 8, 1959	83.39
Mar. 6	79.78	Oct. 2	81.94	Feb. 4	83.08

10/2-30R1 (M-76). Knights of Columbus. Altitude 2,175.2 ft.  
 Records furnished: GS, 1947-51, 1953, F, 1956.

Jan. 7, 1947	e15.17	May 9, 1949	17.57	May 16, 1951	21.84
Nov. 13	15.70	Nov. 16	19.04	Nov. 28	23.28
May 7, 1948	13.89	May 1, 1950	19.70	Dec. 15, 1953	25.04
		Nov. 8	20.92	Apr. 13, 1956	29.05

10/2-32Q1. Ralph Hunt (Pioneer Ranch). Altitude 2,172.8 ft.  
 Records furnished: BR, 1946-47; F, Dec. 1947-52, 1956, 1958; GS,  
 Dec. 1958.

July 30, 1946	13.7	Apr. 9, 1947	12.5	Oct. 19, 1949	19.0
Aug. 7	13.2	Apr. 28	12.5	Dec. 14	18.4
Aug. 22	13.5	May 15	12.9	Jan. 24, 1950	18.0
Sep. 6	13.5	May 29	13.1	Feb. 15	18.9
Sep. 16	13.7	June 12	13.3	Mar. 15	19.8
Sep. 23	13.6	June 25	13.3	July 12	20.7
Sep. 30	14.0	July 10	b22.9	Aug. 15	20.9
Oct. 6	13.8	July 24	13.7	Dec. 13	21.1
Oct. 15	13.6	Aug. 11	14.2	Jan. 16, 1951	21.5
Oct. 21	13.5	Sep. 4	14.5	Feb. 24	21.6
Oct. 28	13.6	Oct. 15	14.7	Oct. 16	25.02
Nov. 6	13.5	Dec. 12	13.9	Dec. 13	24.36
Nov. 18	13.5	Mar. 11, 1948	14.6	Jan. 22, 1952	24.12
Nov. 25	13.5	Apr. 15	14.3	Mar. 13	26.31
Dec. 2	13.2	June 15	15.3	Apr. 10	22.72
Dec. 17	13.1	Sep. 14	16.7	Apr. 13, 1956	31.90
Jan. 1, 1947	12.8	Oct. 13	b26.3	Dec. 21	33.88
Jan. 23	12.4	Dec. 9	16.3	Mar. 26, 1958	36.25
Feb. 6	12.1	Jan. 17, 1949	14.6	Dec. 2	b32.13
Mar. 5	11.9	Feb. 17	16.1		
Mar. 21	12.3	Mar. 16	16.3		

b. Well being pumped.

e. Well 10/2-30N1 appears as well 10/2-30R1 in U. S. Geological  
 Survey Water-Supply Papers 991, 1021, 1028, 1076, and 1101  
 (table 3). Well 10/2-30R1 is correctly numbered in U. S.  
 Geological Survey Water-Supply Papers 1226, 1270, 1326, and  
 1409.

10/2-36P1 (DGT 55). Manson, formerly Waterman. Altitude about 2,115 ft. Records furnished: BR, 1946-Aug. 7, 47; F, Sept. 5, 1947-53, 1955-58; GS, 1959.

Date	Water level	Date	Water level	Date	Water level
July 25, 1946	10.6	Sep. 5, 1947	11.0	Jan. 16, 1951	11.8
July 30	10.8	Oct. 15	10.9	Feb. 14	11.6
Aug. 7	10.5	Dec. 11	10.3	Mar. 20	11.5
Aug. 26	10.8	Feb. 17, 1948	9.7	Apr. 18	11.7
Sep. 6	<sup>b</sup> 28.1	Mar. 11	9.6	June 14	12.3
Sep. 7	11.0	Apr. 15	9.5	July 18	12.9
Sep. 16	10.9	June 14	10.3	Aug. 15	13.37
Sep. 23	28.1	July 13	10.8	Sep. 13	13.61
Sep. 30	10.9	Aug. 10	11.2	Oct. 16	13.73
Oct. 10	10.8	Sep. 14	11.4	Dec. 13	12.63
Oct. 15	10.8	Oct. 13	11.4	Jan. 22, 1952	12.72
Oct. 21	10.8	Dec. 9	10.9	Feb. 14	12.37
Oct. 28	10.7	Jan. 17, 1949	10.6	Mar. 13	12.12
Nov. 6	10.6	Feb. 17	10.1	Apr. 10	9.98
Nov. 18	10.5	Mar. 16	9.9	June 16	10.60
Nov. 25	10.1	Apr. 14	9.9	July 16	11.90
Dec. 2	9.9	June 16	10.8	Sep. 18	10.89
Dec. 17	9.8	July 14	11.2	Oct. 16	11.01
Jan. 1, 1947	9.3	Aug. 18	11.7	Dec. 17	10.40
Jan. 23	9.0	Sep. 15	11.9	Jan. 16, 1953	11.10
Feb. 6	8.7	Oct. 19	11.8	Feb. 18	11.90
Mar. 5	8.8	Dec. 14	11.3	Mar. 18	13.25
Mar. 21	8.8	Jan. 24, 1950	10.9	Apr. 17	13.29
Apr. 9	8.9	Feb. 15	10.8	Nov. 13	16.40
Apr. 28	9.1	Mar. 15	10.7	Apr. 15, 1955	18.05
May 15	9.3	Apr. 19	10.7	Apr. 12, 1956	19.04
May 29	9.6	June 15	11.5	Dec. 21	19.86
June 12	9.8	July 12	11.9	May 2, 1957	20.17
June 25	10.1	Aug. 15	12.2	Mar. 26, 1958	21.76
July 10	10.2	Sep. 14	12.5	May 21, 1959	18.22
July 24	10.5	Oct. 17	12.3		
Aug. 7	10.9	Dec. 30	12.1		

b. Well being pumped.

10/2-36P5. (DGT 54 and M 81). Bradley; formerly Waterman; formerly Mrs. C. Greenman. Altitude 2,110.1 ft. Records furnished: 1952-59 by owner except measurement by GS on May 19, 1959

Date	Water level	Date	Water level	Date	Water level
Jan. 1, 1952	18.5	July 1, 1954	20.2	Jan. 1, 1957	25.7
Feb. 1	18.2	Aug. 1	20.8	Feb. 1	25.5
Mar. 1	18.3	Sep. 1	21.4	Mar. 1	25.3
Apr. 1	16.7	Oct. 1	21.7	Apr. 1	25.6
May 1	15.0	Nov. 1	21.8	May 1	25.0
June 1	16.0	Dec. 1	21.7	June 1	26.2
July 1	16.5	Jan. 1, 1955	21.4	July 1	26.8
Aug. 1	17.2	Feb. 1	21.2	Aug. 1	27.6
Sep. 1	18.0	Mar. 1	21.1	Sep. 1	28.2
Oct. 1	18.2	Apr. 1	21.2	Oct. 1	28.4
Nov. 1	18.1	May 1	21.3	Nov. 1	28.2
Dec. 1	17.8	June 1	21.7	Dec. 1	28.1
Jan. 1, 1953	17.7	July 1	22.1	Jan. 1, 1958	27.9
Feb. 1	17.4	Aug. 1	22.6	Feb. 1	27.9
Mar. 1	17.4	Sep. 1	22.9	Mar. 1	27.9
Apr. 1	17.4	Oct. 1	23.2	Apr. 1	27.2
May 1	17.6	Nov. 1	23.2	May 1	19.3
June 1	17.8	Dec. 1	23.0	June 1	19.5
July 1	18.5	Jan. 1, 1956	22.8	July 1	20.4
Aug. 1	19.0	Feb. 1	22.7	Aug. 1	21.4
Sep. 1	19.5	Mar. 1	22.7	Sep. 1	22.2
Oct. 1	19.7	Apr. 1	23.0	Oct. 1	22.8
Nov. 1	19.7	May 1	23.1	Nov. 1	22.9
Dec. 1	19.6	June 1	23.5	Dec. 1	22.9
Jan. 1, 1954	19.4	July 1	24.2	Jan. 1, 1959	22.8
Feb. 1	19.2	Aug. 1	25.2	Feb. 1	22.9
Mar. 1	19.1	Sep. 1	25.6	Mar. 1	23.0
Apr. 1	19.0	Oct. 1	25.9	Apr. 1	23.1
May 1	19.3	Nov. 1	26.1	May 1	23.8
June 1	19.8	Dec. 1	25.9	May 19	17.02

10/3-6B1. (M60). Owner unknown. Altitude about 2,050 ft. Records furnished: F, 1942, 1950-57; GS, 1959.

May 8, 1942	+0.21	Nov. 26, 1952	3.72	Dec. 12, 1955	5.45
Nov. 8, 1950	2.24	Nov. 13, 1953	5.05	Apr. 12, 1956	4.95
May 16, 1951	2.83	May 17, 1954	5.90	Dec. 21	4.50
Nov. 27	3.70	Nov. 22	6.71	May 2, 1957	Dry
May 30, 1952	2.83	Apr. 14, 1955	4.37	May 18, 1959	Dry

10/3-10R1. Vernon Wallace. Altitude about 2,135 ft. Records: GS.

Date	Water level	Date	Water level	Date	Water level
Dec. 15, 1953	45.42	Mar. 23, 1956	49.34	Jan. 7, 1959	50.57
Mar. 4, 1955	45.60	Nov. 8, 1957	50.89	Mar. 12	f75.05
Nov. 18	47.58	Mar. 11, 1958	50.15		

10/3-15H1. Fred Clark; formerly Truman Brown. Altitude about 2,145 ft. Records furnished: F, 1952-56; GS, May 6, 1954 and 1959.

June 16, 1952	46.45	Feb. 18, 1953	45.20	Apr. 15, 1955	60.55
July 16	49.34	Mar. 18	44.75	Dec. 13	58.00
Sep. 18	48.89	Nov. 13	49.25	Apr. 13, 1956	58.60
Oct. 16	30.64	May 6, 1954	52.10	Dec. 21	58.04
Dec. 16	47.85	May 17	56.62	Jan. 8, 1959	b60.99
Jan. 16, 1953	45.56	Nov. 17	54.60		

10/3-15J1. W. L. Cooke; formerly Lathrope Ranch; formerly B and V Ranch. Altitude 2,148.8 ft. Records furnished: BR, 1946-1947; F, Sept. 1947-1949; GS, 1959.

Aug. 26, 1946	39.3	Jan. 23, 1947	37.7	Oct. 15, 1947	41.8
Sep. 6	f41.7	Feb. 6	37.7	Dec. 12	39.0
Sep. 16	39.2	Feb. 20	41.8	Feb. 17, 1948	39.1
Sep. 23	41.8	Mar. 5	41.8	Mar. 11	41.2
Sep. 30	38.7	Mar. 21	38.4	Apr. 15	43.2
Oct. 6	40.3	Apr. 9	42.4	June 14	46.2
Oct. 15	38.7	Apr. 30	43.0	July 13	45.5
Oct. 21	38.1	May 15	42.3	Aug. 10	45.7
Oct. 28	37.9	May 29	42.9	Sep. 14	46.4
Nov. 6	37.9	June 12	42.7	Oct. 13	42.4
Nov. 18	37.8	June 25	42.7	Dec. 9	39.7
Nov. 25	37.8	July 10	42.8	Jan. 17, 1949	39.6
Dec. 2	41.6	July 24	43.0	Apr. 14	44.7
Dec. 17	38.1	Aug. 11	43.3	Jan. 8, 1959	Dry
Jan. 1, 1947	37.7	Sep. 13	42.8		

10/3-22N1. E. L. Epps. Altitude about 2,160 ft. Records furnished: F, 1952-58; GS, 1959.

June 16, 1952	36.21	Feb. 18, 1953	37.22	Dec. 13, 1955	42.42
July 16	37.25	Mar. 17	37.65	Apr. 13, 1956	43.15
Sep. 18	38.50	Nov. 13	40.80	Dec. 21	44.12
Oct. 16	35.75	May 17, 1954	48.26	May 2, 1957	46.15
Dec. 16	35.90	Nov. 22	45.90	Mar. 26, 1958	46.14
Jan. 16, 1953	36.10	Apr. 14, 1955	47.92	Feb. 3, 1959	48.96

f. Nearby well being pumped.

10/3-27D2. Hinkley Elementary School. Altitude about 2,164.7 ft.  
 Records furnished: BR, 1946-47; F, Sept. 1947-52.

Date	Water level	Date	Water level	Date	Water level
July 25, 1946	29.3	Apr. 30, 1947	b38.6	July 14, 1949	32.9
July 31	29.2	May 15	29.8	Aug. 18	36.0
Aug. 8	29.5	May 29	b39.5	Sep. 15	33.6
Sep. 29	29.6	June 12	29.9	Oct. 19	34.8
Sep. 6	b39.5	June 25	30.0	Dec. 14	34.0
Sep. 7	29.6	July 10	b38.8	Feb. 15, 1950	34.4
Sep. 16	29.5	July 24	30.4	Mar. 15	34.2
Sep. 23	29.8	Aug. 11	b38.8	Apr. 19	34.4
Sep. 30	29.5	Sep. 4	30.2	June 15	35.0
Oct. 6	29.6	Oct. 15	30.4	July 12	35.3
Oct. 15	b39.8	Dec. 12	30.4	Aug. 15	35.6
Oct. 21	39.6	Feb. 17, 1948	31.4	Sep. 14	35.7
Oct. 28	29.2	Mar. 11	30.5	Oct. 17	36.0
Nov. 6	29.6	Apr. 15	30.6	Dec. 13	36.3
Nov. 18	29.6	June 14	b39.2	Jan. 16, 1951	36.5
Nov. 25	29.5	July 13	31.2	Feb. 14	36.6
Dec. 2	29.5	Aug. 10	b39.9	Mar. 20	36.5
Dec. 17	29.5	Sep. 14	32.8	Apr. 18	36.6
Jan. 1, 1947	29.5	Oct. 13	32.5	July 18	37.4
Jan. 23	29.7	Dec. 9	31.9	Sep. 13	38.14
Feb. 7	29.5	Jan. 17, 1949	31.3	Oct. 16	38.13
Feb. 20	b39.7	Feb. 17	34.9	Jan. 22, 1952	Dry
Mar. 5	29.5	Mar. 16	31.8	Feb. 3, 1959	(g)
Mar. 21	29.7	Apr. 14	31.4		
Apr. 9	29.7	June 16	32.5		

10/3-27Q1. F. L. Kowalski; formerly Palsen, formerly Livingston.  
 Altitude 2,190.2 ft. Records furnished: BR, 1946-47; F, Oct. 1947-49; GS  
 1953, 1959.

July 25, 1946	53.4	Dec. 17, 1946	55.3	July 24, 1947	b64.0
Aug. 7	49.5	Jan. 1, 1947	44.4	Aug. 11	b63.5
Sep. 6	b59.7	Jan. 23	b54.8	Oct. 15	51.5
Sep. 16	b59.7	Feb. 6	44.4	Dec. 12	46.6
Sep. 23	b59.9	Feb. 20	b51.5	Feb. 17, 1948	41.1
Sep. 30	50.0	Mar. 5	b59.2	Mar. 11	56.3
Oct. 10	b58.8	Mar. 21	b55.4	Sep. 14	63.3
Oct. 15	48.7	Apr. 9	b58.2	Oct. 13	57.8
Oct. 21	b57.6	Apr. 30	b59.7	Dec. 9	51.7
Oct. 28	46.7	May 15	51.2	Jan. 17, 1949	49.8
Nov. 6	46.0	May 29	b59.5	Feb. 17	48.0
Nov. 18	45.4	June 12	b60.9	Dec. 17, 1953	83.00
Nov. 25	44.6	June 25	b61.5	Mar. 13, 1959	94
Dec. 2	44.5	July 10	b67.9		

b. Well being pumped.

g. Well destroyed.

10/3-27R1 (DGT-50). D. R. Krauss and Associates; formerly Robert J. Speth. Altitude about 2,185 ft. Records furnished: F.

Date	Water level	Date	Water level	Date	Water level
June 15, 1950	71.8	Jan. 22, 1952	60.97	Mar. 18, 1953	72.31
Oct. 17	63.9	Feb. 14	61.22	Apr. 14	79.64
Dec. 13	57.1	Mar. 13	59.50	Nov. 13	89.60
Jan. 16, 1951	55.8	Apr. 10	65.08	Nov. 22, 1954	94.40
Feb. 14	54.7	June 10	72.45	Dec. 21, 1956	97.60
Mar. 20	62.3	Dec. 16	68.10	Mar. 26, 1958	91.44
Oct. 16	74.66	Feb. 18, 1953	70.80		

10/3-28C1 (DGT 43, M-52D, 21P1). C. J. Riep; formerly Palmer. Altitude 2,161.0 ft. Records furnished: BR, 1946-47; F, Sept. 1947-58; GS, Dec. 1958.

July 25, 1946	23.5	Feb. 16, 1948	24.4	Aug. 15, 1951	32.28
July 31	23.3	Mar. 11	24.3	Sep. 13	32.55
Aug. 7	23.4	Apr. 15	24.4	Oct. 16	32.68
Aug. 26	23.5	June 14	24.6	Dec. 13	32.11
Sep. 6	23.5	July 13	25.3	Jan. 22, 1952	31.75
Sep. 16	23.4	Aug. 10	25.6	Feb. 14	31.63
Sep. 23	23.7	Sep. 14	26.0	Mar. 13	30.58
Sep. 30	23.8	Oct. 13	25.9	Apr. 10	31.85
Oct. 6	23.6	Dec. 9	26.1	June 12	36.66
Oct. 15	23.0	Jan. 17, 1949	25.7	July 16	28.24
Oct. 21	23.8	Feb. 17	26.8	Sep. 18	31.00
Oct. 28	23.9	Mar. 16	25.4	Oct. 16	33.40
Nov. 6	23.8	Apr. 14	26.1	Dec. 16	34.20
Nov. 18	23.8	June 16	27.4	Jan. 16, 1953	34.20
Nov. 25	23.8	July 14	27.7	Feb. 18	33.46
Dec. 2	23.8	Aug. 18	28.4	Mar. 17	33.72
Dec. 17	23.7	Sep. 15	28.7	Apr. 14	33.58
Jan. 1, 1947	23.8	Oct. 19	28.8	Nov. 13	40.15
Jan. 23	23.8	Dec. 14	28.6	Mar. 29, 1954	36.80
Feb. 7	23.9	Jan. 24, 1950	28.2	May 17	38.20
Feb. 20	24.1	Feb. 15	27.9	Nov. 22	37.70
Mar. 5	24.0	Mar. 15	28.2	Apr. 15, 1955	37.75
Mar. 21	24.2	Apr. 19	29.0	Dec. 12	37.35
Apr. 9	24.2	June 15	29.8	Mar. 29, 1956	37.58
Apr. 30	24.4	July 12	30.1	Nov. 5	37.72
May 15	24.5	Aug. 15	30.7	Dec. 5	37.62
May 29	24.6	Sep. 14	31.0	Jan. 2, 1957	37.91
June 12	24.7	Oct. 17	31.1	Feb. 6	37.12
June 25	24.8	Dec. 13	30.6	Mar. 6	37.80
July 10	24.8	Jan. 16, 1951	30.7	Apr. 3	37.97
July 24	24.9	Feb. 14	30.0	May 2	38.06
Aug. 11	24.7	Mar. 20	30.0	Mar. 26, 1958	39.95
Sep. 4	24.6	Apr. 18	30.2	Dec. 31	38.95
Oct. 15	24.7	June 14	32.5		
Dec. 12	24.5	July 18	33.4		

10/3-29M. Peter Ruiz. Altitude 2,206.5 ft. Records furnished:  
BR, 1946-47; F, Sept. 1947-58; GS, Dec. 1958.

Date	Water level	Date	Water level	Date	Water level
July 25, 1946	50.8	Dec. 12, 1947	51.1	Mar. 20, 1951	51.5
Aug. 1	51.1	Feb. 17, 1948	51.0	Apr. 18	51.6
Aug. 7	50.8	Mar. 11	51.1	June 14	51.78
Aug. 22	51.0	Apr. 15	50.9	July 18	51.38
Sep. 6	52.1	June 14	51.0	Aug. 15	51.74
Sep. 16	51.5	July 13	51.3	Sep. 13	51.51
Sep. 23	51.2	Aug. 10	51.2	Oct. 16	51.84
Sep. 30	b57.0	Sep. 14	b64.1	Dec. 13	51.78
Oct. 6	51.1	Oct. 13	b63.1	Jan. 22, 1952	51.80
Oct. 15	51.1	Dec. 9	51.3	Feb. 14	51.84
Oct. 21	50.9	Jan. 17, 1949	52.0	Mar. 13	51.80
Oct. 28	51.1	Feb. 17	51.3	Apr. 10	51.78
Nov. 6	51.2	Mar. 16	51.3	June 12	53.93
Nov. 18	b62.8	Apr. 14	51.5	July 16	b57.14
Nov. 25	50.9	June 16	51.5	Sep. 18	52.94
Dec. 2	50.9	July 14	51.4	Oct. 16	52.73
Dec. 17	51.0	Aug. 18	51.2	Dec. 16	51.95
Jan. 1, 1947	51.0	Sep. 15	51.5	Jan. 16, 1953	52.25
Jan. 23	50.9	Oct. 19	51.4	Feb. 18	52.85
Feb. 7	b66.3	Dec. 14	51.1	Mar. 17	52.68
Feb. 20	51.7	Jan. 24, 1950	51.6	Apr. 14	52.33
Mar. 5	51.0	Feb. 15	51.3	Nov. 12	53.50
Mar. 21	51.7	Mar. 15	51.9	May 13, 1954	b63.70
Apr. 9	51.6	Apr. 19	51.4	Nov. 17	52.00
Apr. 30	51.7	June 15	51.7	Apr. 14, 1955	53.06
May 15	51.7	July 12	51.3	Dec. 12	52.61
May 29	51.7	Aug. 15	52.2	Dec. 21, 1956	53.40
June 12	51.8	Sep. 14	51.6	May 2, 1957	53.95
July 24	52.2	Oct. 17	51.8	Mar. 25, 1958	b68.94
Aug. 11	51.8	Dec. 13	51.6	Dec. 5	54.28
Sep. 3	51.2	Jan. 16, 1951	51.7		
Oct. 15	51.1	Feb. 14	51.6		

10/3-32C1 (M-52b). O'Neal and others; formerly Calvert Investment Co. Altitude 2,219.2 ft. Records furnished: F.

Nov. 17, 1954	60.05	Apr. 12, 1956	60.07	May 2, 1957	69.01
Apr. 14, 1955	60.45	Dec. 20	64.0		

b. Well being pumped.

10/3-36B1. G. E. Lightle. Altitude 2,185.6 ft. Records furnished:  
BR, 1946-47; F, Sept. 1947-50, 1952-58.

Date	Water level	Date	Water level	Date	Water level
July 30, 1946	35.5	Aug. 7, 1947	35.1	Dec. 13, 1950	27.77
Aug. 7	35.4	Sep. 4	37.7	Jan. 22, 1952	43.13
Aug. 26	36.7	Oct. 15	34.5	Feb. 14	43.07
Sep. 6	33.8	Dec. 12	31.4	Mar. 13	43.75
Sep. 16	35.4	Feb. 17, 1948	30.2	Apr. 10	50.61
Sep. 23	35.4	Mar. 11	33.2	June 16	53.91
Sep. 30	34.3	Apr. 15	35.2	July 16	57.52
Oct. 6	34.5	July 13	40.0	Sep. 18	h58.50
Oct. 15	34.4	Aug. 10	29.8	Oct. 16	52.39
Oct. 21	32.1	Sep. 14	28.8	Dec. 17	43.20
Oct. 28	31.7	Oct. 13	25.6	Jan. 16, 1953	42.00
Nov. 6	32.2	Dec. 9	22.2	Feb. 18	43.16
Nov. 18	31.3	Jan. 17, 1949	21.0	Mar. 18	45.42
Nov. 25	31.3	Feb. 17	22.0	Nov. 13	49.60
Dec. 2	30.3	Mar. 16	25.5	May 16, 1954	54.60
Dec. 17	29.7	Apr. 14	27.2	Nov. 22	52.50
Jan. 1, 1947	29.2	June 16	33.8	Apr. 15, 1955	43.07
Jan. 23	29.6	July 14	32.1	Dec. 3	34.90
Feb. 7	29.8	Aug. 18	32.6	Apr. 13, 1956	h41.48
Mar. 5	29.6	Sep. 15	33.2	Nov. 5	42.85
Mar. 21	30.6	Oct. 19	29.0	Dec. 5	64.16
Apr. 9	32.2	Dec. 14	25.8	Jan. 2, 1957	62.36
Apr. 28	34.1	Jan. 24, 1950	25.7	Feb. 6	56.78
May 15	35.1	Feb. 15	25.6	Mar. 6	64.02
May 28	35.5	Mar. 15	26.7	Apr. 3	63.90
June 12	35.7	July 18	41.29	May 2	71.17
June 25	36.9	Aug. 15	42.37	June 3	75.03
July 10	37.7	Sep. 13	42.50	Mar. 26, 1958	67.48
July 24	37.8	Oct. 16	40.58		

10/3-36N1. B. R. Paton; formerly Martin. Altitude about 2,190 ft.  
Records furnished: F.

June 16, 1952	81.46	Feb. 18, 1953	71.77	Nov. 22, 1954	77.90
Sep. 18	87	Mar. 18	77.34	Apr. 15, 1955	91.60
Oct. 16	87	Apr. 15	76.60	Dec. 13	88.90
Dec. 17	66.20	Nov. 13	71.00	Apr. 13, 1956	i
Jan. 16, 1953	65.40	May 17, 1954	77.3	Nov. 21, 1958	g

- g. Well destroyed.
- h. Well pumped recently.
- i. Tape smeared.

10/3-36N2. B. R. Paton; formerly Martin. Altitude about 2,190 ft.  
 Records furnished: F, 1950-1957; GS, 1958.

Date	Water level	Date	Water level	Date	Water level
June 15, 1950	66.4	Oct. 16, 1951	65.93	Feb. 18, 1953	68.35
Sep. 14	69.0	Dec. 13	62.44	Nov. 13	70.85
Oct. 17	62.7	Jan. 22, 1952	60.15	Nov. 22, 1954	77.60
Dec. 13	60.44	Feb. 14	59.79	Apr. 15, 1955	h78.3
Jan. 16, 1951	55.9	Mar. 13	59.49	Dec. 13	84.52
Feb. 14	54.4	Apr. 10	65.51	Dec. 21, 1956	84.78
Aug. 15	67.0	Dec. 17	72.30	May 2, 1957	91.34
Sep. 13	67.7	Jan. 16, 1953	64.80	Nov. 21, 1958	i82

10/4-3F1. Owner unknown. Altitude about 2,120 ft. Records furnished: GS.

June 24, 1953	147.1	Mar. 4, 1955	147.20	Mar. 6, 1957	152.20
Mar. 17, 1954	144.42	Nov. 17	151.75	Nov. 8	157.19
Dec. 1	148.91	Mar. 22, 1956	151.77	Mar. 11, 1958	155.85

10/4-3Q1. Robert Brown; formerly Bradford. Altitude about 2,125 ft.  
 Records furnished: F, 1953-1958; GS, 1959.

June 24, 1953	149.12	Apr. 14, 1955	153.85	May 2, 1957	155.44
Nov. 13	156.60	Dec. 12	157.05	Mar. 25, 1958	159.19
May 13, 1954	156.25	Apr. 12, 1956	154.35	May 18, 1959	158.95
Nov. 17	156.40	Dec. 21	159.25		

10/5-3J1. Owner unknown. Altitude about 2,245 ft. Records furnished: GS.

June 18, 1953	219.5	Nov. 1, 1956	223.95	Nov. 6, 1958	224.60
Mar. 4, 1955	223.28	Mar. 6, 1957	224.12	May 19, 1959	224.60
Nov. 17	223.60	Nov. 8	224.32		
Mar. 22, 1956	223.53	Mar. 11, 1958	224.12		

h. Well pumped recently.

i. Tape smeared.



Table 6.--Drillers' logs of water wells

Note: The term caliche is used by some drillers in the Middle Mojave Valley area to describe a hard, white, calcareous clay; and by others to describe the surface soil. The terms hardpan and adobe are also used to describe these same materials. Many drillers refer to water sand which means that the sand is permeable, but does not mean necessarily that the sand contains water. Many drillers refer to the blue clay, a term referring to the bluish-gray color of a particular clay or deposit rather than to a continuous stratigraphic unit or to a particular clay or deposit. In many instances a wet clay or deposit changes color when it is dried. The terms rotten granite and decomposed granite generally refer to a granite or biotite gneiss that has been highly weathered. The term hillside is used to describe material that appears similar to the alluvial fan material on nearby slopes. The terms breaks and ribs refer to thin interbedded layers of alternating material. Quicksand is a term often applied by drillers to sand that caved or "heaved" into the well during drilling.

8/1-29F1. Vern Cyr. Altitude about 2,870 ft. Drilled by Howard Pump Co. 8-inch casing, perforated 105-720 ft.

	Thickness (feet)	Depth (feet)
Dirt -----	4	4
Clay -----	41	45
Rock and clay -----	30	75
Rock -----	15	90
Sand -----	15	105
Sand and rock -----	35	140
Clay -----	610	750

8/1-29F2. Vern Cyr. Altitude about 2,870 ft. Drilled by owner. 6-inch casing, perforated 105-140 ft.

Dirt -----	4	4
Clay -----	41	45
Rock and clay -----	30	75
Rock -----	15	90
Sand -----	15	105
Sand and rock -----	35	140

8/3-4G1. Morgan, formerly B. O. Morton. Altitude about 2,280 ft. Drilled by Everett Reed in 1956. 12-inch casing.

	Thickness (feet)	Depth (feet)
Gravel -----	13	13
Conglomerate -----	39	52

8/3-4G3. B. O. Morton. Altitude about 2,290 ft. Drilled by Everett Reed in 1956. 12-inch casing.

Gravel, as on hillside -----	13	13
Sand -----	6	19
Conglomerate -----	41	60

8/3-7R1. Gilbert Hodge. Altitude about 2,355 ft. Drilled by Howard Ley in 1947. 6-inch casing.

Soil and sandy clay -----	42	42
Sand and clay in streaks -----	10	52
Sand, coarse; gravel -----	6	58
Clay, yellow, hard -----	2	60

8/3-8G1. B. B. Cook. Altitude about 2,320 ft. Drilled by Howard Ley in 1948. 12-inch casing, perforated 74-92 ft.

Soil -----	3	3
Shale, clay, and rock -----	32	35
Shale, very hard, imbedded in "hardpan" -----	32	67
Conglomerate, clay lumps, shale, and sand -----	2	69
Rock, hard, in "rib" -----	1	70
Clay, yellow, and sand -----	4	74
Rock, small, loose; shale -----	4	78
Sand, loose; gravel -----	12	90
Clay, sandy -----	2	92

8/3-8G3. Jack Clark, formerly W. M. Noble. Altitude about 2,340 ft. Drilled by Howard Ley in 1948. 10-inch casing, perforated 50-62 ft.

	Thickness (feet)	Depth (feet)
Soil and clay, sandy -----	32	32
Rock and clay -----	1	33
Clay, sandy -----	8	41
Clay and rock -----	1	42
Clay, yellow -----	8	50
Sand, coarse; rock and gravel -----	5	55
Sand, coarse; rock and gravel; clay in "small streaks"-	2	57
Clay, yellow -----	6	63

8/4-14E1. Amelia McIntire. Altitude about 2,360 ft. Drilled by Mr. McIntire in 1950. 16-inch casing.

Sand and gravel -----	33	33
Bedrock -----	--	33

8/4-14F1. Amelia McIntire. Altitude about 2,360 ft. Drilled by Mr. McIntire in 1959. 16-inch casing.

Sand and gravel -----	37	37
Bedrock -----	--	37

8/4-15E1. A. V. Thomas. Altitude about 2,370 ft. Drilled by Howard Ley in 1958. 16-inch casing, perforated 15-63 ft.

Soil -----	5	5
Sand, coarse; some gravel to 3/4 inch -----	8	13
Sand and gravel -----	19	32
Sand, gravel and rock -----	19	51
Sand and gravel -----	10	61
Clay and conglomerate -----	5	66

8/4-15E2. A. V. Thomas. Altitude about 2,370 ft. Drilled by Howard Ley in 1953. 14-inch casing.

	Thickness (feet)	Depth (feet)
Soil -----	8	8
Sand, coarse; gravel and 2-inch rock -----	6	14
Clay, sandy -----	2	16
Sand and 3/4-inch gravel -----	7	23
Sand, gravel, and rock -----	1	24
Sand, coarse; gravel and some 3-inch rock -----	12	36
Sand, bright, coarse; gravel and rock to 8 inches -----	2	38
Sand, bright, coarse; rock to 8 inches -----	19	57
Clay, yellow; sharp rocks -----	3	60

8/4-16D1. C. C. Carmean. Altitude about 2,430 ft. Drilled by Howard Ley in 1948. 12-inch casing, perforated 84-96 ft.

Soil and rock -----	8	8
Sand and gravel -----	26	34
Clay, yellow -----	18	52
Sand and gravel, with clay "ribs" -----	12	64
Clay, yellow -----	20	84
Sand and gravel with clay "ribs" -----	6	90
Clay, yellow -----	6	96

8/4-16E2. Helen Chaffey, formerly Ober. Altitude about 2,410 ft. Drilled by McDougall in 1948.

Soil -----	3	3
Sand, gravel, heavy, and clay "ribs" -----	57	60
"Water" sand and gravel, coarse -----	8	68
Clay "ribs" and boulders -----	5	73
Clay -----	2	75

8/4-17H1. J. H. Cole. Altitude about 2,395 ft. Drilled by Ephraim Harris in 1947. 12-inch casing.

Soil -----	20	20
"River" sand and gravel -----	5	25
"Mesa" sand -----	7	32
"Mesa" sand and gravel -----	15	47

8/4-24L1. R. J. Shockley. Altitude about 2,465 ft. Drilled by Everett Reed in 1957. 10-inch casing to 24 ft and 8-inch casing to 208 ft, perforated 108-208 ft.

	Thickness (feet)	Depth (feet)
Clay and cemented rock -----	49	49
"Decomposed gravel," gray -----	5	54
Clay and cemented rock -----	7	61
Clay and 3-inch gravel -----	7	68
Decomposed granite, gray -----	13	81
Clay, sandy and hard -----	12	93
Clay and cemented rock -----	19	112
Clay and cemented sand -----	17	129
Clay and cemented gravel -----	5	134
Clay and cemented sand -----	22	156
Gravel, loose -----	18	174
Clay and cemented sand -----	18	192
Clay, hard and sandy -----	6	198
Clay and 4-inch gravel -----	10	208

9/1-6B2. Southern California Water Co. Altitude about 2,110 ft. Drilled by Ephraim Harris in 1952. 14-inch casing, perforated 50-102 ft.

Soil -----	3	3
Clay, hard -----	8	11
Sand and gravel -----	35	46
"River" clay -----	2	48
Sand, clean and coarse; 5-inch gravel -----	54	102
"River" clay -----	16	118
Gravel, dirty; sand -----	2	120
Clay, buff; gravel, hard -----	20	140

9/1-32M1. Charles A. Mitchell. Altitude about 3,040 ft. Drilled by owner in 1952. 12-inch casing, perforated 28-52 ft.

Soil -----	18	18
Clay, very hard; limestone and sandstone in streaks ---	34	52
Sandstone and lime rock -----	8	60

9/1-32M2. C. H. Middaugh. Altitude about 3,040 ft. Drilled by Charles Mitchell in 1952. 10-inch casing, perforated 28-52 ft.

	Thickness (feet)	Depth (feet)
Silt, sand and gravel -----	15	15
Clay -----	5	20
"Wash" sand and gravel -----	38	58
Clay -----	7	65
Sand, medium -----	3	63
Clay -----	8	76
Sand, cemented, coarse -----	10	86
Clay, very hard -----	4	90
Gravel, coarse -----	1	91
Clay, hard -----	15	106

9/2-4B2. Roger Hartwick. Altitude about 2,160 ft. Drilled by Ephraim Harris in 1957. 14-inch casing, perforated 40-107 ft.

Topsoil -----	5	5
Soil, sandy -----	2	7
Sand -----	12	19
Clay and silt -----	6	25
Sand and gravel with silt, yellow -----	12	37
Sand, clean; gravel -----	50	87
Clay, sandy, hard -----	8	95
Sand and gravel -----	17	112
Clay -----	2	114
Gravel and sand -----	--	114

9/2-4D2. Melvin Hill. Altitude about 2,165 ft. Drilled by Ephraim Harris in 1957. 20-inch casing, perforated 60-200 ft.

Soil, sandy -----	8	8
Sand, dirty -----	4	12
Sand, coarse; gravel -----	8	20
Sand, gravel, and clay -----	24	44
Clay -----	3	47
Sand, dirty -----	3	50
Sand, coarse; gravel -----	2	52
Clay -----	4	56
Sand and gravel -----	14	70
Clay -----	5	75
Sand and gravel -----	19	94
Clay, sandy -----	3	97
Sand, clean and coarse; gravel -----	34	131
Clay, sandy -----	9	140
Sand, dirty; gravel to 5 inches -----	20	160
Sand, clean, coarse; gravel, coarse -----	10	170
Clay -----	4	174
Sand, clean and coarse; gravel -----	12	186
Clay, hard and tough -----	5	191
Sand, dirty; gravel -----	19	210

9/2-4R3. D. B. Earp. Altitude about 2,155 ft. Drilled by  
 Everett Reed in 1957. 12-inch casing.

	Thickness (feet)	Depth (feet)
Clay, tan -----	19	19
Sand and rock to 4 inches -----	5	24
Clay and cemented sand -----	8	32
Sand and rock to 4 inches -----	12	44
Clay, brown -----	4	48
Gravel -----	3	51
Clay, brown -----	2	53
Gravel to 8 inches -----	11	64
Clay, brown -----	4	68

9/2-5Q2. Pacific Water Co., Westside well 4. Altitude about  
 2,180 ft. Drilled by Jack Myers in 1957. 14-inch casing; perforated  
 55-195 ft.

Sand, fine -----	13	13
Clay, sticky -----	15	28
Clay, sandy -----	11	39
Sand and gravel, coarse -----	7	46
Clay, hard -----	5	51
Sand and gravel -----	9	60
Clay -----	4	64
Sand and gravel, coarse -----	3	67
Gravel with clay streaks -----	16	83
Gravel, coarse and clean -----	12	95
Sand with clay streaks -----	42	137
Sand and gravel -----	6	143
Sand with clay streaks -----	45	188
Sand -----	3	191
Clay -----	4	195
"Packed" sand -----	2	197
Clay, hard -----	4	201
Sand, loose; gravel -----	19	220

9/2-6A1. Hazel Depue. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1957. 72-inch casing to 36 ft, 12-inch casing to 139 ft, perforated 103-138 ft.

	Thickness (feet)	Depth (feet)
Not logged -----	36	36
Sand, coarse and clean; gravel, small -----	10	46
Sand, clean -----	6	52
Sand and gravel, clean and coarse -----	14	66
Clay -----	1	67
Sand and gravel -----	32	99
Clay, sandy -----	2	101
Sand, coarse and clean; gravel to 2½ inches -----	23	124
Clay, sandy -----	2	126
Sand and gravel, small -----	13	139
Gravel, coarse -----	--	139

9/2-8A1. Pacific Water Co., Westside well 1. Altitude about 2,180 ft. Drilled by Anderson and Gower. 12-inch casing, perforated 28-48 and 51-91 ft.

Clay and silt -----	28	28
Sand and gravel -----	20	48
Clay -----	3	51
Sand and gravel -----	40	91
Clay -----	9	100

9/2-8B1. Pacific Water Co., Westside well 2. Altitude about 2,180 ft. Drilled by Cox and Kelley. 12-inch casing to 117 ft, perforated 31-38, 46-60 and 87-99 ft. Well filled to 117 ft.

Clay, hard -----	3	3
Sand -----	15	18
Clay, soft -----	2	20
Clay and sand -----	6	26
Sand and "water" gravel -----	4	30
Clay -----	1	31
Sand and gravel, coarse -----	7	38
Clay, hard -----	4	42
Clay, soft; sand -----	4	46
Sand, coarse -----	5	51
Sand, gravel and rock -----	9	60
Clay, hard -----	7	67
Clay, soft; sand -----	13	80
Sand -----	7	87
Sand and "water" gravel -----	4	91
Sand, gravel and rock -----	8	99
Clay, hard -----	14	113
Clay, fine and sandy -----	9	122
Rock, white and tough -----	2	124
Sand, fine -----	14	138

9/2-10A2. Pacific Water Co., Westside well 5. Altitude about 2,185 ft. Drilled by Jack Myers in 1957. 14-inch casing.

	Thickness (feet)	Depth (feet)
Topsoil, sandy -----	29	29
Clay, coarse and sandy -----	9	38
Sand -----	2	40
Clay, hard -----	6	46
Sand -----	1	47
Clay -----	6	53
Sand and gravel, loose -----	11	64
Clay, sandy -----	6	70
Sand and gravel, loose -----	15	85
Sand and clay "breaks" -----	6	91
Sand, tightly packed -----	11	102
Sand, coarse -----	3	105
Sand and gravel -----	6	111
Sand and clay -----	3	114
Sand, coarse -----	5	119
Sand, coarse, in clay -----	6	125
Clay -----	3	128
Sand, coarse, in clay -----	7	135
Sand and gravel -----	5	140
Clay -----	4	144
Clay, hard -----	6	150
Sand and gravel, loose -----	3	153
Clay, hard; sand -----	6	159
Sand, coarse -----	8	167
Sand, coarse; with clay -----	8	175
Clay with sand and gravel -----	11	186
Sand and clay "breaks" -----	5	191
Clay -----	2	193
Clay and sand -----	13	206
Sand, coarse -----	11	217
Clay -----	6	223

9/2-10A7. Jose Lopez. Altitude about 2,190 ft. Drilled by Ephraim Harris in 1955. 8-inch casing, perforated 71-88 and 100-108 ft.

Surface soil, sand and gravel -----	40	40
"Mojave River" sand, gravel and silt -----	25	65
Clay, blue, tough -----	6	71
"Mojave River" sand and gravel, clean -----	17	88
Clay -----	1	89
Sand, very fine becoming coarse with depth -----	9	98
"Mojave River" sand and gravel, clean -----	10	108
"Hill drift" sand, gravel and clay -----	1	109

9/2-18G1. The Atchison, Topeka and Santa Fe Railway System.  
 Altitude 2,232.2 ft. Drilled in 1951. 8-inch casing.

	Thickness (feet)	Depth (feet)
Dirt and boulders -----	22	22
Clay and sand -----	5	27
Boulders -----	22	49
"Water" sand -----	10	59
Clay, green -----	3	62
Rocks -----	5	67
Clay, brown, hard -----	40	107
Rocks -----	1.5	108.5
Clay, hard -----	1.5	110
Clay, brown -----	2	112
"Water" sand, coarse -----	1	113
Clay, hard -----	15	128

9/2-18J1. Robert Marx (Standard Station). Altitude about 2,250  
 ft. 8-inch casing, perforated 102-129 ft.

Soil -----	12	12
Sand -----	8	20
Silt and clay -----	40	60
Sand and gravel, fine -----	3	63
Clay -----	16	79
Clay with small layers of sand and gravel -----	23	102
Sand, fine to coarse; gravel to $1\frac{1}{2}$ inches -----	27	129
Clay, gray, hard, tight -----	2	131

9/2-18J6. Bar-Len Drive-in Theater, formerly P. K. Lyons. Altitude  
 about 2,250 ft. Drilled in 1953. 12-inch casing, perforated 112-115 ft.

Sand and gravel -----	46	46
Sand and clay -----	44	90
Sand and gravel to $1\frac{1}{2}$ inches -----	14	104
Sand; silt and gravel, hard packed -----	5	109
Sand, clean; gravel, coarse -----	6	115
Sand and gravel, hard packed -----	2	117

9/2-19R1. G. A. Sweeten. Altitude about 2,320 ft. Drilled by Hill in 1953. 8-inch casing, perforated 149-152 ft.

	Thickness (feet)	Depth (feet)
Surface soil -----	3	3
Clay and gravel -----	67	70
Sand and gravel -----	12	82
Sand, silt and clay -----	28	110
Sand and gravel to 4 inches -----	4	114
Sand and silt -----	2	116
Sand and gravel -----	5	121
Clay and silt -----	13	134
Clay, gray, sticky -----	5	139
Clay, sandy, hard -----	1	140
Sand and gravel -----	2	142
Clay -----	4	146
Gravel to 3 inches -----	1	147
Clay -----	2	149
Gravel to 4 inches -----	3	152
Clay -----	3	155
Sand and gravel -----	1	156

9/2-20A1. Cora B. Carter. Altitude about 2,300 ft. Drilled by Ephraim Harris in 1955. 10-inch casing, perforated 150-203 and 208-210 ft.

Surface soil, sandy -----	94	94
Clay, sandy, hard packed -----	28	122
Sand and gravel to 1 inch -----	8	130
Clay, sandy -----	16	146
Sand and gravel to 2 inches -----	7	153
Clay, yellow -----	2	155
Sand and gravel to 5-inches -----	48	203
Clay -----	5	208
Sand, coarse; gravel -----	2	210
Clay -----	2	212

9/3-1C1. Star Valley Ranch, formerly R. F. Lamb. Altitude about 2,195 ft. Drilled by Howard Ley in 1949. 14-inch casing, perforated 25-140 ft.

	Thickness (feet)	Depth (feet)
Not logged -----	36	36
Clay, sandy -----	20	56
Sand -----	2	58
Clay, red and white; silt, brown; sandy streaks -----	22	80
Sand, coarse; gravel, small; few clay "ribs" -----	21	101
Clay, green -----	10	111
Clay, yellow -----	7	118
Clay, yellow; sand streaks, coarse -----	2	120
Sand, bright and coarse; gravel, $\frac{1}{4}$ -inch -----	17	137
Clay, green -----	3	140
Clay, blue, tough -----	3	143

9/3-1E1. Star Valley Ranch. Altitude about 2,190 ft. Drilled by McDougall in 1948. 12-inch casing, perforated 60-70 and 77-138 ft.

Loam, sandy -----	1.5	1.5
Clay, hard -----	3.5	5
Sand -----	9	14
Clay, brown, sandy -----	2	16
Clay -----	7	23
Clay, sandy -----	37	60
Sand -----	10	70
Clay, brown, sandy -----	7	77
"Water" sand, coarse -----	3	80
Sand, very fine -----	60	140
Clay and shale, blue -----	3	143

9/3-1E2. Star Valley Ranch. Altitude about 2,195 ft. Drilled by Howard Ley in 1947. 12-inch casing, perforated 15-137 ft.

Soil -----	8	8
Sand, coarse; gravel and clay streaks -----	25	33
Clay, yellow and sandy -----	12	45
"Rock" sand and gravel, bright and coarse -----	5	50
Clay, sandy and yellow -----	12	62
Sand, coarse; gravel and 3-inch rock -----	30	92
Sand, gravel, and clay -----	3	95
Clay, yellow, sandy; sand, coarse; some gravel -----	5	100
Clay, yellow and tough -----	3	103
Clay, sandy with tough "ribs" -----	13	116
Sand, clean and coarse -----	1	117
Sand and gravel, coarse; some silt -----	3	120
Clay, yellow, tough -----	2	122
Sand, coarse; gravel to $\frac{3}{4}$ inch -----	15	137
Clay, yellow and tough -----	8	145
Clay, yellow and sandy -----	2	147
Clay, yellow and tough -----	20	167

9/3-1J1. Henry Belseiger, formerly R. F. Lamb. Altitude about 2,195 ft. Drilled by Howard Ley in 1950. 14-inch casing, perforated 25-145 ft.

	Thickness (feet)	Depth (feet)
Soil -----	12	12
Sand and gravel, coarse -----	33	45
Clay, yellow -----	19	64
Sand and gravel, coarse; some 3-inch rock -----	40	104
Clay, yellow -----	4	108
Sand, coarse; 3/4-inch gravel -----	5	113
Clay, yellow, sandy -----	10	123
Sand, coarse; 3/8- to 3/4-inch gravel -----	5	128
Clay, brown, sandy -----	7	135
Sand, clean, coarse -----	2	137
Clay, silt, soft -----	10	147
Clay, yellow, tough -----	2	149

9/3-2A1. Howard King. Altitude about 2,195 ft. Drilled by Howard Ley in 1952. 14-inch casing to 16 ft and 8 inch casing to 108 ft, perforated 67-87 ft.

Soil -----	5	5
Sand and gravel, coarse -----	8	13
Clay, yellow -----	4	17
Sand and gravel, coarse -----	3	20
Clay, yellow -----	31	51
Sand, coarse -----	1	52
Clay, yellow, tough -----	11	63
Sand, bright, coarse -----	1	64
Clay, yellow, tough -----	3	67
Sand, coarse -----	2	69
Clay, yellow, tough -----	1	70
Sand and gravel, coarse -----	20	90
Sandy, gray, very fine -----	18	108
Clay, sandy -----	$\frac{1}{2}$	108 $\frac{1}{2}$

9/3-2G1. Pacific Gas and Electric Co., well 2. Altitude about 2,220 ft. 14-inch casing, perforated 45-115 ft.

	Thickness (feet)	Depth (feet)
Clay, yellow, sandy -----	12	12
Sand, coarse; 10 percent 3/4-inch gravel -----	11	23
Clay, yellow, sandy -----	9	32
Sand, coarse; some clay -----	24	56
Clay, yellow -----	1	57
Sand, clean -----	17	74
Clay, green -----	21	95
"Water" sand, clean, 85 percent fine, 15 percent coarse	15	110
Sand, coarse; thin clay "ribs" -----	4	114
Clay, green, dense -----	11	125
Clay, blue, tough -----	3 $\frac{1}{2}$	128 $\frac{1}{2}$

9/3-2G2. Pacific Gas and Electric Co., well 1. Altitude 2,199.5 ft. Drilled by J. W. Burkhardt in 1940. 12-inch casing, perforated 32-98 ft.

Soil -----	35	35
"Water" sand -----	55	90
Clay -----	20	110

9/3-2H1. Pacific Gas and Electric Co., well 3. Altitude 2,197.4 ft. Drilled by Howard Ley in 1951. 12-inch casing, perforated 34-113 ft.

Soil and clay -----	9	9
Sand, coarse; 3/4-inch gravel -----	12	21
Clay, yellow, sandy -----	20	41
Clay, yellow, tough -----	13	54
Sand, coarse -----	2	56
Clay, yellow -----	1	57
Sand, coarse -----	6	63
Sand, fine -----	13	76
Clay, green -----	3	79
Sand, coarse -----	15	94
Clay, brown -----	1	95
Sand, coarse; several thin clay "ribs" -----	18	113
Clay, green, tough -----	20	133
Clay, blue -----	7	140

9/3-2Q1. M. J. Palmer. Altitude about 2,220 ft. Drilled by Ephraim Harris in 1953. 8-inch casing, perforated 141-164 ft.

	Thickness (feet)	Depth (feet)
Clay and soil, hard -----	3	3
Soil, sandy -----	3	6
Sand -----	6	12
Sand with little silt -----	36	48
Sand, clean; gravel to $\frac{1}{4}$ inch -----	50	98
Silt -----	1	99
Sand -----	3	102
Clay -----	1	103
Sand -----	3	106
Clay, light-green to blue -----	35	141
Sand and gravel, blue, small -----	2	143
Clay, light-blue with small traces of blue sand -----	21	164
Clay, light-blue -----	4	168
Clay, buff, sandy -----	2	170

9/3-3H1. L. McCormick. Altitude about 2,245 ft. Drilled in 1948. 8-inch casing, perforated 111-125 ft.

Soil -----	2	2
Sand -----	23	25
Soil -----	13	38
Sand -----	7	45
Soil -----	35	80
Sand, clean, coarse; small amount of gravel to $\frac{3}{4}$ inch -----	45	125

9/3-15P1. L. K. L. Ranch. Altitude about 2,240 ft. Drilled by Howard Ley in 1957. 14-inch casing, perforated 32-146 ft.

Soil -----	7	7
Sand and gravel -----	6	13
Clay, yellow, sandy -----	19	32
Sand and gravel -----	13	45
Sand, gravel, and some clay -----	2	47
Clay, yellow, firm -----	8	55
Sand, coarse; gravel to $\frac{3}{4}$ inch -----	2	57
Clay, sandy, loose and dirty -----	5	62
Clay, sandy, firm to hard -----	13	75
Clay, gray, tough -----	3	78
Sand, coarse; gravel to 4 inches -----	10	88
Clay, gray, tough -----	8	96
Sand, gravel and rock to 6 inches -----	28	124
Clay, yellow, tough, with interbedded rock and gravel -----	6	130
Sand, gravel, and rock -----	5	135
Clay, yellow, tough -----	1	136
Sand and gravel, few 4-inch rocks -----	4	140
Clay, brown, tough -----	1	141
Sand and gravel to $\frac{3}{4}$ inch -----	8	149
Clay, yellow, tough -----	1	150

9/3-15Q1. L. K. L. Ranch. Altitude about 2,235 ft. Drilled by Ephraim Harris in 1951. 16-inch casing, perforated 65-125 ft.

	Thickness (feet)	Depth (feet)
Soil -----	3	3
"Mojave River" sand and gravel -----	43	46
Sand and gravel -----	49	95
Clay, sandy -----	14	109
Sand and gravel, clean -----	3	112
Clay, sandy -----	6	118
Sand and gravel, clean -----	3	121
Clay, sandy -----	8	129
Sand, cemented -----	1	130
Sand and gravel, clean -----	3	133
Clay, sandy, very hard and fine -----	1	134

9/3-15Q3. L. K. L. Ranch. Altitude about 2,235 ft. Drilled by Ephraim Harris in 1952. 14-inch casing, perforated 30-84 ft.

Soil -----	6	6
"Mojave River" sand and gravel -----	16	22
Clay, buff; sand -----	33	55
Sand and gravel -----	2	57
Clay, buff; sand and "cement" -----	4	61
Sand, fine to coarse -----	2	63
Clay, buff; sand, hard and tight -----	17	80
Sand, fine to coarse; gravel to $\frac{1}{2}$ inch, clean -----	4	84
Clay, sandy -----	8	92

9/3-15Q4. L. K. L. Ranch. Altitude about 2,235 ft. Drilled by Ephraim Harris in 1951. 16-inch casing, unperforated.

	Thickness (feet)	Depth (feet)
Clay and soil -----	7	7
Sand, fine -----	2	9
Sand and gravel, coarse -----	5	14
Clay -----	2	16
Sand and gravel, coarse -----	4	20
Clay, soft -----	18	38
Clay, hard -----	7	45
Clay, soft -----	5	50
Clay, hard, some white -----	26	76
Cemented "formation" -----	2	78
Silt, sandy, and hard -----	21	99
Sand and gravel -----	1	100
Silt, sandy -----	5	105
Silt, sandy and hard -----	3	108
Silt, sandy -----	27	135
Sand and gravel -----	2	137
Silt, sandy -----	8	145
Sand and gravel -----	1	146
Sand and clay -----	3	149
Sand and gravel -----	1	150
Clay, sandy -----	7	157
Gravel -----	1	158
Clay, sandy -----	16	174
Clay, hard and tough -----	4	178
Clay -----	2	180
Gravel and clay bottom -----	--	--

9/3-15Z1. L. K. L. Ranch. Altitude about 2,235 ft. Drilled by Ephraim Harris in 1951. 12-inch casing, unperforated.

	Thickness (feet)	Depth (feet)
Soil -----	2	2
"River" sand and gravel -----	11	13
Clay -----	10	23
Clay and gravel -----	32	55
Clay, buff, hard and brittle -----	31	86
Silt, sandy -----	9	95
Shale, hard -----	35	130
Sand and clay, hard packed -----	52	182
Sand -----	2	184
Clay, hard -----	19	203
Sand and gravel -----	1	204
Clay -----	2	206
Sand and gravel -----	1	207
Clay, sandy -----	2	209
Sand and gravel -----	4	213
Clay, sandy -----	2	215
Sand and gravel -----	1	216
Clay, sandy -----	1	217
Sand and gravel -----	3	220
Sand and clay, hard packed -----	5	225
Sand and gravel, fine -----	1	226
Clay, sandy -----	2	228
Sand and gravel -----	2	230
Clay, sandy -----	34	264
Sand and gravel -----	2	266
Clay -----	2	268
Sand and gravel -----	2	270

9/3-26H1. James Conway (Dunes Motel). Altitude about 2,360 ft. Drilled by McDougall in 1950. 12-inch casing, perforated 38-46, 59-64, 81-83, 148-169, 173-183 ft.

	Thickness (feet)	Depth (feet)
Topsoil -----	1	1
"Hardpan" -----	3	4
Clay, light, sandy -----	17	21
Gravel and broken rocks -----	2	23
Clay, light, sandy with very hard "ribs" -----	17	40
Gravel -----	4	44
Clay, light, sandy, very hard -----	3	47
Sand, coarse; "small" gravel -----	3	50
Clay, soft, light, sandy -----	4	54
Sand, coarse; gravel, large; rocks -----	5	59
Clay, light, sandy with few rocks -----	5	64
Gravel and sand, coarse -----	5	69
Clay, sandy, hard -----	12	81
Sand, coarse, with small gravel -----	2	83
Clay, rocky, hard -----	3	86
Clay, sandy, loose -----	33	119
Clay, dark-brown, sandy -----	31	150
"Water" sand, coarse -----	3	153
Sand coarse; gravel, small; rocks, large -----	15	168
Clay, brown, sandy, hard -----	3	171
Clay, light-brown, sandy -----	8	179
Sand, coarse; gravel, large -----	2	181
Clay, brown, sandy, very hard -----	5	186
Clay, light-brown, sandy, loose -----	16	202

10/1-30P1. Barstow Cemetery. Altitude about 2,190 ft. Drilled by Charles Mitchell. 12-inch casing, perforated 120-130 ft.

Silt, sand, and "wash" gravel -----	20	20
Gravel to 1½ inches -----	21	41
Clay, red -----	4	45
Sand and "wash" gravel to 1½ inches -----	10	55
Conglomerate, very hard, cemented -----	5	60
Clay, brown -----	3	63
Conglomerate, very hard -----	12	75
Gravel to ¾ inch -----	5	80
Clay, gray, very tough -----	2	82
Conglomerate, very hard -----	8	90
Gravel to 2 inches -----	6	96
Conglomerate with rocks to 10 inches, very hard -----	16	112
Gravel, ¾ inch -----	3	115
Gravel to 4 inches -----	2	117
Clay, brown -----	3	120
Gravel, 75 percent 1-inch; 25 percent fine -----	10	130
"Lime" rock -----	8	138

10/1-30Q1. Barstow Rodeo and Riding Club. Altitude 2,151.4 ft. Redrilled by Ephraim Harris in 1954. 10-inch casing to 83 ft, 6-5/8 inch casing to 106 ft, perforated 82-106 ft.

	Thickness (feet)	Depth (feet)
Old 10-inch well, not logged -----	83	83
Sand, gravel and clay -----	9	92
Sand and gravel -----	1	93
Clay -----	3	96
Sand; gravel; stones and clay, gray -----	8	104
Sand and gravel, cemented -----	2	106

10/1-30R2. Barstow Airport, Altitude about 2,140 ft. Drilled by Ephraim Harris in 1952. 12-inch casing, perforated 85-125 ft.

Soil, sand, and clay -----	103	103
"Lime," "shale," and "granite," rust-colored -----	27	130

10/1-31L13. Vernon G. Wister. Altitude about 2,105 ft. Drilled by Ephraim Harris in 1953. 8-inch casing, perforated 55-67 ft.

Soil -----	11	11
Sand and gravel -----	17	28
Clay and silt -----	1	29
Sand and gravel -----	5	34
Clay, silt and sand -----	2	36
Sand and gravel -----	17	53
Clay -----	1	54
Sand, clay and coarse gravel to 3 inches -----	13	67

10/1-31L15. Robert M. Beck. Altitude about 2,105 ft. Drilled by Ephraim Harris in 1952. 8-inch casing, perforated 54-59 ft.

	Thickness (feet)	Depth (feet)
Topsoil -----	11	11
Sand, dirty -----	14	25
Silt and clay -----	5	30
Sand and gravel -----	9	39
Clay, buff -----	2	41
Sand and gravel with soft clay -----	9	50
Sand, clean, coarse; gravel -----	11	61
Clay, buff -----	1	62

10/1-31ML. C. F. Dorland. Altitude about 2,105 ft. Drilled by Ephraim Harris in 1955. 8-inch casing, perforated 60-96 ft.

Surface soil -----	7	7
"Mojave river" sand and gravel, dirty -----	17	24
Silt and clay, soft -----	1	25
Sand and gravel -----	19	44
"Mojave river" sand and gravel, clean -----	15	59
Clay, gray and sticky -----	1	60
"Mojave river" sand and gravel, clean -----	29	89
"Hilldrift" sand; gravel; clay, buff -----	7	96

10/1-32B1. Abraham J. Lara. Altitude about 2,115 ft. Drilled by Ephraim Harris in 1958. 10-inch casing.

Surface soil, sand and gravel -----	21	21
Silt and gravel, small -----	35	56
"River" sand and silt -----	18	74
Rock and sand, sharp, broken -----	30	104
Gravel and clay -----	--	104

10/1-32D4. Charles Mitchell. Altitude about 2,115 ft. Drilled by Ephraim Harris in 1955. 12-inch casing, perforated 65-90 ft.

Sand, fine to coarse; gravel to 4 inches -----	45	45
Silt; sand, fine, tight -----	11	56
Sand, fine to coarse; gravel to 3 inches -----	17	73
Sand, yellow and rust; gravel with silt, yellow -----	15	88
"Lime" and shale, yellow and rust -----	4	92

10/1-32E5. Mabel Tebow. Altitude about 2,110 ft. Drilled by Everett Reed in 1956. 10-inch casing, not perforated.

	Thickness (feet)	Depth (feet)
Sand, silty -----	30	30
Sand, rusty -----	27	57
Clay, gray -----	4	61
Gravel -----	2	63

10/1-32F6. Pat Baca. Altitude about 2,105 ft. Drilled by Howard Pump Co. in 1957. 6-inch casing, perforated 28-40 ft.

Sand -----	19	19
Clay -----	1	20
Gravel -----	12	32
Clay -----	1	33
Gravel -----	7	40

10/2-30D1. Currier. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1956. 8-inch casing, perforated 68-76, 94-98 and 106-138 ft.

Topsoil and gravel -----	20	20
Sand -----	3	23
Silt -----	4	27
Sand -----	2	29
Clay and silt -----	40	69
Sand -----	1	70
Clay -----	2	72
Sand -----	1	73
Clay -----	1	74
Sand -----	1	75
Clay -----	20	95
Sand -----	1	96
Clay -----	10	106
Sand and gravel -----	36	142

10/2-30N2. J. H. Record. Altitude about 2,180 ft. Drilled by Howard Ley in 1955. 12-inch casing, perforated 50-60 and 100-117 ft.

	Thickness (feet)	Depth (feet)
Clay, yellow, sandy -----	34	34
"Caliche," tough -----	4	38
Clay, yellow, sandy, soft -----	7	45
Sand and clay, very fine -----	6	51
Sand and silt -----	9	60
Clay, yellow, sandy -----	5	65
Clay and "caliche," yellow, very tough -----	31	96
Sand and clay, silty and very fine -----	9	105
Sand, coarse; clay "ribs," yellow -----	12	117
Clay, green, tough -----	4	121
Clay, blue, tough -----	11	132

10/2-30N4. J. H. Record, formerly Hamer. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1946. 12-inch casing, perforated 45-69, 96-113 and 126-135 ft.

Soil -----	29	29
Sand -----	2	31
Silt -----	6	37
Sand and silt -----	13	50
Sand, fine -----	6	56
Silt -----	2	58
Sand -----	5	63
Silt -----	2	65
Sand -----	1	66
Silt -----	31	97
Sand and silt -----	11	108
Sand -----	5	113
Silt, hard -----	9	122
Sand, dirty -----	5	127
Silt, hard -----	2	129
Silt, blue -----	6	135

10/2-32N2. Ralph Hunt (Tip Top Dairy). Altitude about 2,175 ft. Drilled by Howard Ley in 1955. 8-inch casing, perforated 48-68 ft.

Soil -----	3	3
Sand, coarse; gravel and rocks to 4 inches -----	26	29
Clay, yellow and sandy -----	3	32
Sand, coarse with some silt -----	6	38
"Caliche" and clay, gray -----	17	55
Gravel; rock and sand, coarse -----	17	72

10/2-33D5. Harold R. Coffman. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1958. 8-inch casing, perforated 123-126 ft.

	Thickness (feet)	Depth (feet)
"Surface" sand, silt, and gravel -----	55	55
Clay; silt; sand, fine -----	47	102
Gravel, coarse -----	1	103
Silt -----	11	114
Sand and gravel -----	1	115
Clay, light, hard -----	4	119
Sand and gravel, clean and coarse -----	7	126
Clay, hard -----	1	127

10/2-33N1. Melvin Hill. Altitude about 2,170 ft. Drilled by Ephraim Harris in 1956. 20-inch casing, perforated 58-191 ft.

Not logged -----	36	36
Sand and gravel -----	10	46
Silt and clay -----	8	54
Sand and gravel, clean -----	23	77
Sand and gravel, nearly 50 percent gravel -----	15	92
Silt and clay, sandy -----	11	103
Sand and gravel -----	25	128
Sand, gravel, and clay -----	38	166
Sand; gravel to 4 inches -----	12	178
Clay -----	8	186
Sand and gravel, coarse and clean -----	7	193
Clay, light green, and tough -----	6	199
Sand, gravel, and clay -----	7	206

10/2-33R4. Lafa Coker. Altitude about 2,160 ft. Drilled by Ephraim Harris in 1954. 8-inch casing.

Sand and soil -----	30	30
Sand and gravel, coarse -----	9	39
Clay, soft -----	2	41
Sand, gravel, and clay, interbedded -----	9	50
Clay, soft -----	3	53
Sand, fine, clean -----	5	58
Sand; gravel, coarse, clean -----	4	62
Clay, soft -----	1	63

10/2-33R5. Dr. R. H. Chapin. Altitude about 2,155 ft. Drilled in 1950. 12-inch casing, perforated below 45 ft.

	Thickness (feet)	Depth (feet)
Top loam -----	10	10
Sand -----	4	14
Clay -----	1	15
Rock, coarse -----	20	35
Clay -----	2	37
Silt, fine -----	6	43
Clay -----	2	45
Sand, coarse -----	19	64

10/2-33R6. H. L. Patterson. Altitude about 2,155 ft. Drilled by Ephraim Harris in 1951. 8-inch casing, perforated 35-47 ft..

Not logged -----	10	10
Sand, dirty, fine; gravel, small -----	25	35
Sand, coarse, clean; heavy gravel to 4 inches -----	5	40
Sand, coarse, clean; very little gravel -----	8	48
Sand, coarse, clean; gravel, very coarse -----	1	49

10/2-33R10. M. E. Little. Altitude about 2,155 ft. Drilled by Ephraim Harris in 1952. 12-inch casing, perforated 50-80 ft.

Topsoil -----	3	3
Sand -----	15	18
Sand and gravel -----	20	38
Clay -----	2	40
Sand and gravel -----	20	60
Sand and gravel to 4 inches -----	20	80
Clay -----	1	81
Sand and gravel -----	2	83

10/2-35P3. J. Grimm. Altitude about 2,145 ft. Drilled by Ephraim Harris in 1957. 8-inch casing, perforated 45-52 ft.

"River soil" -----	12	12
Sand and gravel -----	18	30
Clay, yellow, sandy -----	2	32
Sand, coarse; gravel, clean, up to 3 inches -----	24	56

10/2-35P5. W. F. Garb. Altitude about 2,145 ft. Drilled by Ephraim Harris in 1956. 8-inch casing, perforated 40-56 ft.

	Thickness (feet)	Depth (feet)
Surface soil, sand, and gravel -----	17	17
Sand and gravel -----	32	49
Sand, gravel, and clay -----	9	58

10/2-35P6. Mrs. Alta Fetter. Altitude about 2,145 ft. Drilled by Ephraim Harris in 1956. 8-inch casing, perforated 57-59 and 70-85 ft.

Surface soil, sand, and gravel -----	26	26
Sand and gravel -----	6	32
Sand and gravel, clean -----	26	58
Sand and gravel, hard packed with clay -----	13	71
Gravel, cemented -----	3	74
Sand, gravel, and clay -----	13	87
Sand and gravel, cemented -----	4	91
Sand and gravel -----	4	95

10/2-35P8. J. A. Willis. Altitude about 2,150 ft. Drilled by Ephraim Harris in 1955. 8-inch casing, perforated 30-35 and 56-66 ft.

Surface soil, sand, and gravel -----	21	21
Sand and gravel -----	12	33
Sand, gravel, and clay -----	23	56
Sand, gravel, clay, some cement -----	10	66
Gravel, hard, cemented -----	4	70
Gravel, soft, cemented -----	7	77

10/2-35P13. J. T. Myers. Altitude about 2,150 ft. Drilled by Ephraim Harris in 1955. 8-inch casing, perforated 30-64 ft.

Surface soil, sand, and gravel -----	24	24
Silt -----	2	26
Sand and gravel -----	4	30
"Hilldrift," hard packed -----	8	38
"Hilldrift," sand, and gravel -----	1	39
Sand and clay -----	17	56
"Hilldrift," sand, gravel to 4 inches -----	2	58
Sand and gravel, cemented -----	20	78
Granite -----	2	80

10/2-36H4. Thomas S. Nappier. Altitude about 2,145 ft. Drilled by Ephraim Harris in 1951. Casing not perforated.

	Thickness (feet)	Depth (feet)
Surface sand, gravel, soil -----	25	25
Sand and gravel -----	23	48
Clay, sandy -----	3	51
Sand and gravel to 3 inches -----	5	56
Sand and gravel to 5 inches -----	8	64
Clay, sandy -----	6	70
Sand, coarse; gravel to 4 inches -----	3	73

10/2-36J2. Karl Swallow. Altitude about 2,105 ft. Drilled by Charles Mitchell in 1952. 12-inch casing, perforated 34-73 ft.

Silt -----	6	6
Gravel, black, coarse -----	18	24
Clay, brown -----	1	25
Gravel, red -----	6	31
Clay, blue -----	3	34
Gravel, coarse -----	6	40
Rock, 1 to 3 inches -----	18	58
Gravel, coarse, to 3 inches -----	12	70
Gravel, coarse -----	6	76

10/2-36N7. Barstow Union High School District. Altitude about 2,120 ft. Drilled by Ephraim Harris in 1955. 12-inch casing, perforated 40-70 ft.

Silt, sandy -----	6	6
Clay and silt, black and hard -----	8	14
Sand -----	5	19
Mud, gray, soft -----	4	23
Sand and gravel, clean, coarse -----	36	59
Clay, yellow, soft -----	1	60
Sand and gravel, clean, coarse -----	8	68
Clay, rust-colored -----	2	70
Rock, gray, soft -----	21	91

10/3-2J1. Jose Castro. Altitude about 2,150 ft. Drilled by Ephraim Harris in 1954. 8-inch casing to 20 ft, open hole to 115 ft, not perforated.

Soil, sandy -----	19	19
Conglomerate of granite, quartz, and schist; rock formation -----	96	115

10/3-2Q1. Owner unknown, formerly Allan Stevenson, formerly Athnison. Altitude about 2,140 ft. Drilled by Ephraim Harris in 1950. 8-inch casing, perforated 40-49 ft.

	Thickness (feet)	Depth (feet)
Surface soil -----	36	36
Sand, clean -----	4	40
Clay, gray -----	1	41
Sand, clean -----	2	43
Clay, gray -----	3	46
Sand, clean -----	2	48
"Decomposed granite" and clay -----	8	56
"Granite," soft -----	9	65

10/3-2Q2. G. H. McNeil. Altitude about 2,140 ft. Redrilled by Ephraim Harris in 1955. 8-inch casing to 48 ft, 6-inch casing to 112 ft, perforated 20-112 ft.

Surface soil -----	2	2
Silt, clay, and sand -----	35	37
Sand -----	2	39
Silt and clay -----	6	45
Sand and gravel -----	2	47
"Rotten" granite and quartz -----	31	78
Quartz, rust-colored; lava -----	3	81
Sand and quartz -----	29	110
"Granite," and quartz -----	2	112

10/3-2R1. J. M. Valdez. Altitude about 2,145 ft. Drilled by Ephraim Harris in 1955. 8-inch casing to 51 ft, 6-inch casing 51 to 151 ft, perforated 60-151 ft.

"Surface" soil -----	10	10
"Granite," rotten -----	50	60
Quartz, "granitic" -----	91	151

10/3-21Q1. Wesley Hensley, formerly Dewey. Altitude about 2,170 ft. Drilled by Ephraim Harris in 1949. 8-inch casing, perforated 52-60 ft.

Soil -----	4	4
Silt, sandy -----	32	36
Shale, white, crumbly -----	5	41
Conglomerate, soft becoming harder -----	9	50
"Volcanic ash," dark-gray, with small dark broken gravel -----	25	75

10/3-22N1. E. L. Epps. Altitude about 2,160 ft. Drilled by Ephraim Harris in 1949. 12-inch casing, perforated 48-85 ft.

	Thickness (feet)	Depth (feet)
Topsoil -----	1	1
Clay, soil -----	4	5
Sand -----	2	7
Clay -----	31	38
Silt, sandy -----	10	48
Sand and silt -----	13	61
Sand, dirty -----	8	69
Sand with clay -----	6	75
Sand, tight, silty, with gravel -----	6	81
"Granite," soft -----	27	108

10/3-23H2. Thomas Moffitt. Altitude about 2,155 ft. Drilled by Howard Ley in 1958. 8-inch casing, perforated 60-120 ft.

Soil -----	7	7
Sand, coarse; gravel to 3/4 inch -----	24	31
Clay, brown, silty -----	7	38
Clay, yellow, sandy -----	3	41
Sand, coarse; gravel to 1/2 inch -----	17	58
"Rib," cemented, very hard -----	1	59
Clay, brown -----	10	69
Silt and clay, sandy and loose -----	10	79
Clay, yellow, tough -----	4	83
Sand and silt, dirty -----	2	85
Clay, brown, sandy -----	18	103
Sand, coarse; silt -----	3	106
"Caliche," tough -----	4	110
Sand, coarse; gravel to 1/4 inch -----	11	121
Clay, yellow, tough -----	4	125

10/3-23N1. A. H. Harris. Altitude about 2,160 ft. Drilled by Ephraim Harris in 1950. 12-inch casing, perforated 45-170 ft.

Soil, sandy -----	50	50
Sand, clean -----	5	55
Sand and clay -----	65	120
Clay, blue, with small strata of sand -----	40	160
Rock, broken, full of clay -----	18	178

10/3-23P1. John Fitzgibbons. Altitude about 2,160 ft. Drilled by Ephraim Harris in 1953. 8-inch casing, perforated 78-107 and 136-152 ft.

	Thickness (feet)	Depth (feet)
Soil -----	3	3
Sand and gravel to $\frac{1}{2}$ inch -----	24	27
Clay, sand, and silt -----	48	75
Sand -----	5	80
Clay -----	8	88
Sand -----	2	90
Clay -----	1	91
Sand -----	1	92
Clay -----	1	93
Sand -----	2	95
Clay -----	2	97
Sand -----	8	105
Clay -----	1	106
Sand -----	1	107
Clay, hard -----	21	128
Sand, fine, dirty -----	2	130
Clay and sand, fine -----	6	136
Sand, fine to coarse -----	16	152
Clay, blue -----	8	160

10/3-23Q1. P. A. Garrison. Altitude about 2,160 ft. Drilled by Ephraim Harris in 1946. 12-inch casing, perforated 45-110 ft.

Surface soil -----	4	4
Sand, coarse, clean; bottom becoming finer and dirtier-----	54	58
Silt and sand layers -----	13	71
Silt, fine -----	5	76
Silt and sand layers -----	34	110
Clay, gray, hard, tough -----	20	130

10/3-26B1. P. B. Garrison. Altitude about 2,165 ft. Drilled by Ephraim Harris in 1948. 12-inch casing, perforated 85-172 ft.

	Thickness (feet)	Depth (feet)
Soil -----	3	3
Sand, coarse -----	34	37
Silt, sandy -----	48	85
Sand and silt layers -----	18	103
Clay, green, hard -----	25	128
Sand, fine; mica in small layers; clay, green, in small layers -----	13	141
Sand, clean, coarse -----	7	148
Clay, blue -----	8	156
Sand -----	4	160
Silt, soft; sand, fine -----	5	165
Clay, blue -----	4	169
Sand, coarse, clean -----	2	171
Sand and silt -----	4	175
Clay, blue -----	5	180

10/3-26F3. Carl Rousseau, Jr., formerly Orval Hubbard. Altitude about 2,170 ft. Drilled by Ephraim Harris in 1953. 7-inch casing.

Sand and silt -----	79	79
Clay -----	41	120
Sand, fine to coarse; clay in small layers -----	5	125
Sand, fine to coarse -----	13	138
Clay, soft -----	1	139
Sand, fine to coarse; clay in thin layers -----	9	148
Sand, fine to coarse -----	7	155

10/3-26H1. J. D. Hamilton, formerly Harvey Kuhr. Altitude about 2,170 ft. Drilled by Howard Ley in 1947. 16-inch casing, perforated 48-202 ft.

	Thickness (feet)	Depth (feet)
Soil -----	3	3
Clay, sandy -----	4	7
Sand and gravel, clean -----	11	18
Clay, sandy -----	4	22
Sand, coarse and clean; some gravel -----	15	37
Clay, sandy -----	3	40
"Water" sand, fine, dirty -----	9	49
Clay, yellow, tough -----	13	62
Clay, sandy, fine -----	5	67
Clay, yellow, tough -----	38	105
Clay, brown, silty -----	4	109
Clay, yellow -----	3	112
Silt, black, firm -----	9	121
Sand, silty and fine, some coarse; with small amount of $\frac{1}{4}$ -inch to $\frac{3}{8}$ -inch gravel -----	16	137
Clay, blue -----	43	180
Shale material, dark in color -----	15	195
"Quicksand," dark gray, with few small clay lumps -----	4	199
Clay, blue -----	7	206
Sand, cemented, very hard -----	1	207
Sand, coarse; conglomerate, rocks to $1\frac{1}{2}$ inches; cemented sand and clay lumps -----	6	213

10/3-26L1. R. G. Lemon. Altitude about 2,175 ft. Drilled by Howard Ley in 1958. 14-inch casing, perforated 110-145 ft.

"Caliche;" clay, yellow -----	102	102
Clay, gray, silty -----	11	113
Sand, dark, silty, fine -----	3	116
Sand, fine to coarse; small amount of $\frac{1}{4}$ -inch gravel ---	5	121
Sand, very fine -----	8	129
Clay, brown -----	4	133
Sand, fine to coarse; small amount of $\frac{1}{4}$ -inch gravel ---	9	142
Clay, brown -----	4	146
Clay, green -----	2	148
Clay, blue; shale, hard and lumpy -----	6	154
Clay, blue -----	11	165

10/3-26L2. R. G. Lemon. Altitude about 2,170 ft. Drilled by Howard Ley in 1947. 12-inch casing, perforated 38-156 ft.

	Thickness (feet)	Depth (feet)
Soil -----	5	5
Sand and gravel -----	34	39
Clay -----	1	40
Clay, sandy -----	6	46
Clay -----	8	54
Clay, sandy -----	2	56
Clay, yellow, heavy -----	5	61
Sand, fine -----	2	63
Clay, yellow -----	6	69
Clay, sandy -----	2	71
Clay, yellow, tough -----	21	92
Sand and clay streaks -----	11	103
Clay, gray -----	5	108
Sand and clay streaks -----	7	115
Clay, brown -----	2	117
Silt, gray -----	4	121
Sand and gravel, coarse; clay, blue -----	41	162

10/3-26M1. William Nelson, formerly Grant. Altitude about 2,185 ft. Drilled by Ephraim Harris in 1947. 16-inch casing, perforated 81-127 ft.

Soil -----	9	9
Soil, sandy -----	9	18
Sand, coarse -----	3	21
Soil, sandy -----	4	25
Sand, coarse -----	2	27
Soil, sandy -----	5	32
Silt and clay, soft -----	25	57
Sand -----	2	59
Clay, hard -----	9	68
Sand -----	1	69
Clay, hard, sticky -----	12	81
Sand and silt -----	9	90
Clay -----	1	91
Sand -----	19	110
Sand, fine -----	17	127
Clay, brown turning blue -----	15	142

10/3-26P1. Garrison Grant. Altitude about 2,185 ft. Drilled by Howard Ley in 1954. 14-inch casing, perforated 92-125 ft.

	Thickness (feet)	Depth (feet)
Not logged -----	126	126
Clay, yellow -----	2	128
Clay, green, silty -----	5	133
Clay, blue, hard -----	3	136

10/3-26P4. Garrison Grant. Altitude about 2,180 ft. Drilled by Howard Ley in 1957. 14-inch casing, perforated 90-150 ft.

Soil -----	5	5
Sand -----	1	6
"Caliche," tough -----	12	18
Sand, coarse -----	2	20
Clay, yellow, sandy -----	63	83
Clay, yellow, tough -----	21	104
Sand; gravel to $\frac{1}{2}$ inch -----	3	107
Silt and clay, gray -----	11	118
Sand, fine to coarse -----	5	123
Sand, dark, very fine -----	2	125
Clay, yellow, tough -----	2	127
Silt and clay, with small amount of sand -----	3	130
Sand, fine to coarse -----	3	133
Sand, coarse; gravel to $\frac{1}{4}$ inch -----	13	146
Clay, green -----	2	148
Clay, blue, very tough -----	6	154

10/3-26R1. Fred Shepard. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1952. 14-inch casing, perforated 117-160 and 180-196 ft.

Soil, sandy -----	3	3
Sand, coarse, clean; gravel to 2 inches -----	14	17
Silt, sandy -----	18	35
Sand -----	1	36
Silt and clay -----	31	67
Sand -----	2	69
Clay -----	1	70
Sand -----	13	83
Clay, gray, tough -----	34	117
Sand, coarse -----	1	118
Silt, soft; small layers of clean sand -----	29	147
Sand, coarse, clean -----	13	160
Clay, blue, soft -----	20	180
Clay, blue, hard; shale -----	22	202
Clay, light-blue, sticky -----	9	211
Decomposed granite -----	4	215

10/3-27D1. Hinkley Elementary School. Altitude about 2,170 ft.  
 Drilled by Howard Ley in 1948. 12-inch casing, perforated 35-102 ft.

	Thickness (feet)	Depth (feet)
Soil, sandy -----	2	2
"Adobe," some alkali -----	2	4
Sand, coarse; some alkali -----	1	5
Sand, white, fine and loose -----	1	6
"Hardpan" -----	2	8
Clay, yellow, sandy -----	32	40
"Water" sand, coarse -----	2	42
Clay, yellow, sandy -----	7	49
"Water" sand, coarse -----	3	52
Clay, sandy -----	4	56
"Water" sand, coarse, loose -----	3	59
Clay, yellow -----	11	70
Conglomerate, with dark-brown clay streaks, cemented sand lumps, and coarse sand imbedded in yellow clay -	17	87
"Decomposed" granite, hard -----	30	117
"Decomposed" granite; rock up to 8 inches -----	3	120

10/3-27F1. C. C. McDonald. Altitude about 2,170 ft. 8-inch casing.

Topsoil -----	6	6
Shale and gravel -----	54	60
"Water" gravel with 2- to 6-foot shale "breaks" -----	50	110

10/3-27J1. D. R. Krauss, formerly Robert Speth. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1953. 16-inch casing, perforated 80-110 ft.

Surface soil -----	45	45
Silt, sandy -----	1	46
Clay -----	14	60
Sand and silt -----	4	64
Clay, hard and sticky -----	11	75
Sand and silt, fine -----	15	90
Silt, fine; sand -----	10	100
Sand, coarse, clean -----	5	105
Clay, gray and green -----	13	118
Clay, blue -----	7	125
Sand and gravel, cemented -----	3	128
Granite, soft; becoming hard with depth -----	21	149

10/3-27L1. F. W. Livingston. Altitude about 2,185 ft. Drilled by Ephraim Harris in 1946. 12-inch casing.

	Thickness (feet)	Depth (feet)
Surface soil -----	17	17
Soil, with sandy strips, hard -----	36	53
Sand, clean -----	2	55
Silt or "adobe" -----	7	62
Sand -----	1	63
Silt -----	9	72
Sand -----	3	75
Silt -----	5	80
Sand -----	2.5	82.5
Clay, sticky -----	6.5	89
Sand strata -----	10	99
Silt, fine, hard, sticky -----	24	123
Sand -----	1	124
Lime, shale, fractured -----	12	136

10/3-27M1. H. M. Livingston. Altitude about 2,185 ft. Drilled by Ephraim Harris in 1950. 8-inch casing, perforated 59-116 ft.

Soil and sand -----	59	59
Sand, coarse -----	2	61
Sand and silt, fine -----	13	74
Sand, coarse -----	3	77
Clay, gray, hard -----	2	79
Sand, coarse -----	$6\frac{1}{2}$	$79\frac{1}{2}$
Clay, hard -----	$1\frac{1}{2}$	86
Sand, coarse -----	$1\frac{1}{2}$	$87\frac{1}{2}$
Clay, hard -----	$1\frac{1}{2}$	89
Sand, coarse -----	$1\frac{1}{2}$	$89\frac{1}{2}$
Clay, gray -----	$14\frac{1}{2}$	104
Volcanic rock, dark and crumbling -----	12	116
Lime shale, white -----	2	118

10/3-27P1. Frank Leyerly, formerly C. C. Peters. Altitude about 2,190 ft. Drilled by Ephraim Harris in 1947. 14-inch casing, perforated 70-110 ft.

	Thickness (feet)	Depth (feet)
Soil -----	52	52
Sand, coarse, clean -----	3	55
Silt, sandy -----	15	70
Sand, coarse, clean -----	4	74
Sand and silt strata -----	6	80
Clay, gray, hard -----	5	85
Sand and silt layers, from a few inches to 3 ft -----	15	100
Sand, coarse, clean -----	10	110
Clay, green, becoming blue at bottom -----	17	127
Limestone, soft; granite schist -----	8	135

10/3-27R1. D. R. Krauss, formerly Speth. Altitude about 2,185 ft. Originally 16-inch casing. Redrilled by C. A. Miller to a depth of 92 ft, 14-inch casing, perforated 52-92 ft. Redrilled by Ephraim Harris to a depth of 204 ft, 12-inch casing to 182 ft, perforated 76-180 ft.

Not logged -----	126	126
Clay, light-blue -----	8	134
Clay, blue, hard -----	27	161
Sand and gravel to 3/4 inch -----	2	163
Lime shale, hard -----	1	164
Conglomerate, sand and gravel -----	39	203
"Granite schist," soft, decomposed -----	1	204

10/3-28C2. Saulsberry, formerly White, formerly Wilbur Olson. Altitude about 2,170 ft. Drilled by Ephraim Harris in 1950. 14-inch casing, perforated 50-59 ft.

Not logged -----	26	26
Sand -----	10	36
"Volcanic ash," blue-gray, with small broken gravel ---	71	107
Rock, dark, broken, small -----	3	110
Volcanic ash with small broken dark rock -----	10	120

10/3-28H3. William Williams. Altitude about 2,165 ft. Drilled by J. M. Scoggin. 14-inch casing, perforated 60-116 ft.

	Thickness (feet)	Depth (feet)
Topsoil -----	10	10
Shale, gray -----	20	30
Shale, gray, sandy -----	30	60
"Water" gravel -----	10	70
Shale -----	6	76
"Water" gravel -----	4	80
Shale, red -----	3	83
"Water" gravel -----	7	90
Shale, gray -----	30	120
Shale, red, hard, with small granite boulders -----	64	184

10/3-30P1. B. H. Miller. Altitude about 2,235 ft. Drilled by Ephraim Harris in 1955. 6-inch casing, perforated 70-171 ft.

Not logged -----	55	55
Sand and gravel -----	5	60
"Rotten granite" -----	111	171

10/3-30R2. John Dickson. Altitude about 2,230 ft. Drilled by Ephraim Harris in 1954. 8-inch casing, perforated 68-114 ft.

Soil, clay, and sand -----	60	60
Clay and sand, white -----	10	70
"Decomposed" granite -----	44	114

10/3-32A1. John Daggett. Altitude about 2,215 ft. Drilled in 1955. 8-inch casing perforated 40-87 ft.

Clay, hard -----	4	4
Sand -----	16	20
Sand and clay -----	5	25
Sand, coarse -----	10	35
Sand, fine -----	5	40
Sand, fine; clay -----	15	55
Sand, coarse -----	10	65
Sand, coarse; clay -----	5	70
Sand, fine; clay, brown -----	5	75
Sand, coarse; clay -----	5	80
Clay and rock -----	5	85
Granite -----	2	87

10/3-33D1. June Ann Sanger. Altitude about 2,205 ft. Drilled by Ephraim Harris in 1955. 6-inch casing, perforated 55-90 ft.

	Thickness (feet)	Depth (feet)
Soil, sandy -----	2	2
Soil, hard packed -----	4	6
Sand -----	3	9
Sand and layers of clay -----	36	45
Clay, hard, tight -----	14	59
Sand -----	1	60
Clay and sand strata from 1 to 12 inches -----	25	85
"Rotten granite" -----	11	96

10/3-33D2. J. D. Cavanagh. Altitude about 2,210 ft. Drilled by Ephraim Harris in 1955. 6-inch casing, perforated 80-100 ft.

Soil, hard -----	5	5
Soil, sandy -----	2	7
Sand -----	9	16
Silt, sandy; clay -----	62	78
Sand and clay -----	17	95
Shale, white, hard -----	3	98
Sand and gravel -----	3	101
"Rotten granite" -----	2	103

10/3-34E1. Edward Conners, formerly E. A. Beck. Altitude about 2,215 ft. Drilled in 1948. 12-inch casing, perforated 90-142 ft.

Soil -----	40	40
Sand -----	8	48
Clay and silt -----	24	72
Sand, coarse, clean -----	28	100
Sand, fine; silt -----	22	122
Clay, blue, tight -----	8	130
Sand and gravel -----	15	145
Granite, soft -----	9	154
Shale, brown and white -----	1	155

10/3-34G1. Drake, formerly A. E. Pratt. Altitude about 2,205 ft.  
 Drilled in 1948. 12-inch casing, perforated 74-155 ft.

	Thickness (feet)	Depth (feet)
Soil -----	8	8
Sand -----	4	12
Soil -----	52	64
Sand -----	1	65
Silt, sandy -----	8	73
Sand -----	1	74
Silt -----	3	77
Sand, coarse, clean -----	7	84
Silt -----	5	89
Sand, coarse, clean; gravel to $\frac{1}{2}$ inch -----	6	95
Sand, fine, dirty -----	20	115
Silt; little layers of dirty fine sand -----	11	126
Clay, light-gray turning to blue -----	7	133
Clay, blue, tough, and hard -----	6	139
Clay, blue; with small layers of fine sand -----	16	155
Clay, blue, hard, sticky -----	13	168
Sand and gravel, soft cement -----	10	178
Shale and sand, hard -----	8	186
Granite, soft -----	--	--

10/3-35C1. J. B. Trobridge, formerly Orval Hubbard. Altitude about  
 2,185 ft. Drilled in 1955. 14-inch casing, perforated 75-172 ft.

Soil -----	29	29
Sand -----	15	44
Silt -----	26	70
Sand, coarse, clean -----	10	80
Sand and silt layers -----	16	96
Clay, gray -----	4	100
Sand and silt layers -----	16	116
Sand, fine, becoming coarse with depth -----	17	133
Clay, light-gray, soft -----	5	138
Clay, blue -----	2	140
Clay, gray, with small amount of gravel -----	7	147
Clay, blue, hard -----	22	169
Sand, blue, coarse -----	2	171
Clay, blue, sandy -----	9	180
Clay, blue -----	8	188
Clay, green to brown -----	4	192
Clay, buff, with small amount of sand and gravel -----	20	212

10/3-35F1. J. B. Trobridge, formerly Bark and Crest. Altitude about 2,195 ft. Drilled by Howard Ley in 1950. 14-inch casing, perforated 55-130 ft. Well may have been redrilled to a depth of 227 ft.

	Thickness (feet)	Depth (feet)
Soil and clay -----	22	22
Sand, coarse; some clay -----	7	29
Clay, sandy -----	24	53
Sand; some small gravel -----	10	63
Clay, yellow, sandy -----	9	72
Sand, silty, fine -----	3	75
Sand, coarse -----	7	82
Clay, yellow, sandy -----	13	95
Sand, coarse; small gravel -----	5	100
"Water" sand; clay "ribs," small, dirty -----	9	109
Clay, green, silty -----	33	142
Clay, blue, tough -----	33	175

10/3-35H1. Fred Shepard. Altitude about 2,195 ft. Drilled in 1948. 14-inch casing, perforated 75-145 ft.

Soil -----	6	6
Sand, coarse, clean -----	11	17
Silt, sandy -----	33	50
Sand and silt layers -----	17	67
Not logged -----	8	75
Sand, coarse; gravel to $\frac{1}{2}$ inch -----	3	78
Clay, gray, tough -----	2	80
Sand and silt layers; sand, clean, and coarse -----	12	92
Sand, coarse, clean -----	4	96
Silt -----	1	97
Sand, coarse -----	15	112
Sand, fine -----	8	120
Clay, gray, soft -----	5	125
Sand, gray, fine -----	20	145
Mud and clay, blue -----	9	154

10/3-35Q3. E. D. Nickerson. Altitude about 2,200 ft. Drilled by Jack Myers. Casing diameter unknown, perforated 44-242 ft.

	Thickness (feet)	Depth (feet)
Topsoil and sand -----	38	38
Clay, brown -----	8	46
Sand -----	4	50
Clay, brown -----	14	64
Clay and sand -----	11	75
Sand -----	14	89
Clay, sandy -----	5	94
Gravel -----	5	99
Sand, loose -----	12	111
Clay, brown -----	3	114
Sand, loose -----	7	121
Sand -----	16	137
Sand with clay -----	4	141
Sand, loose -----	7	148
Sand and clay streaks -----	9	157
Clay, blue -----	14	171
Sand, loose -----	8	179
Sand with clay streaks -----	6	185
Clay -----	9	194
Sand with clay streaks -----	5	199
Sand, loose -----	7	206
Clay with sand "breaks" -----	60	266

10/3-36C1. Hinkley Investment Co., formerly Robert Speth. Altitude about 2,180 ft. Drilled by Ephraim Harris in 1951. 12-inch casing, perforated 67-147 ft.

Soil -----	55	55
Sand and silt -----	7	62
Sand -----	2	64
Sand and silt -----	9	73
Clay, gray -----	4	77
Sand -----	2	79
Sand and silt -----	7	86
Clay, gray -----	7	93
Sand -----	2	95
Clay, gray -----	2	97
Silt, sandy -----	13	110
Sand, coarse -----	2	112
Sand, fine -----	14	126
Sand and clay, blue -----	8	134
Sand -----	3	137
Clay, blue -----	1	138
Sand -----	7	145
Sand, coarse -----	2	147
Clay, blue -----	7	154

10/3-36F1. John Speth. Altitude about 2,185 ft. Drilled by Howard Ley in 1954. 16-inch casing, perforated 72-117, 164-168 ft.

	Thickness (feet)	Depth (feet)
Soil; clay, yellow, sandy -----	72	72
Sand, bright, coarse -----	5	77
Clay, yellow, tough -----	9	86
Sand, fine to coarse; some gravel -----	31	117
"Quicksand," dark-gray -----	5	122
Clay, green, silty -----	15	137
Clay, blue, tough -----	27	164
Conglomerate, coarse, sandy, limy -----	4	168
"Decomposed" granite -----	7	175

10/3-36P1. Dr. Stewart Clark, formerly John Speth. Altitude about 2,190 ft. Drilled by Howard Ley in 1952. 14-inch casing, perforated 31-118 ft.

Soil -----	17	17
Sand, gravel 3/4-1 1/2 inches -----	3	20
Clay, sandy -----	4	24
Sand with some gravel -----	7	31
Clay, sandy -----	23	54
Silt, fine; sand -----	1	55
Clay, gray -----	16	71
Clay, yellow; sand -----	3	74
Clay, yellow; small amount of sand and gravel -----	4	78
Clay, yellow "ribs;" coarse sand -----	10	88
Clay, yellow, sandy -----	12	100
Clay "ribs," yellow; small amount 1/4-inch gravel, loose and dirty -----	4	104
Clay, sandy, yellow -----	6	110
Sand, coarse -----	7	117
Clay, yellow, tough -----	26	143
Clay, green -----	7	150
Clay, blue -----	5	155

10/3-36P2. Dr. Stewart Clark, formerly John Speth. Altitude about 2,190 ft. Drilled by Howard Ley in 1952. 16-inch casing, perforated 65-134 ft.

	Thickness (feet)	Depth (feet)
Soil -----	8	8
Sand, clay -----	12	20
Clay, sandy -----	7	27
Sand, coarse, clean -----	2	29
Clay, yellow -----	5	34
Clay, yellow, sandy -----	32	66
Sand, coarse -----	5	71
Clay, yellow, tough -----	10	81
Sand, yellow, coarse -----	1	82
Clay, gray, tough; "caliche" -----	12	94
Sand, coarse; small amount of $\frac{1}{2}$ -inch gravel -----	2	96
Clay, yellow, tough -----	10	106
Sand, coarse; clay "ribs" -----	9	115
Clay, gray, tough, sticky -----	5	120
Sand, gray, silty, fine -----	5	125
Sand, gray and bright yellow, fine -----	9	134
Clay, green -----	5	139
Clay, blue -----	4	143

10/4-4C1. Owner unknown. Altitude about 2,100 ft. Drilled by Rottman in 1959. 14-inch casing, perforated 145-415 ft.

Surface sand -----	30	30
Clay, sandy -----	95	125
Clay -----	71	196
Boulders and clay, sandy -----	45	241
Sand and gravel, coarse -----	159	400
Clay -----	15	415

Table 7.--Chemical analyses of water from wells

Constituents: The sum of the determined constituents is the sum of the tabulated constituents; the bicarbonate being converted to the equivalent carbonate. Because all of the commonly occurring major constituents (except silica in many of the analyses) were analytically determined, the values for dissolved solids and sum of determined constituents should be approximately the same. All values have been rounded where necessary to conform to the standards of the Geological Survey. Numbers in parentheses are values calculated by the Geological Survey, Ground Water Branch.

Analyzing laboratory: DWR California Department of Water Resources, F San Bernardino County Flood Control District, DGT U.S. Geological Survey (Thompson, 1929), H Hornkohl Co., L Luckey Co., PH California Department of Public Health, S-E Smith-Emery Co., DA U.S. Department of Agriculture, Rabidoux Laboratory, Riverside Calif., GP U.S. Geological Survey, Geochemistry and Petrology Branch, SP Southern Pacific Railroad.

Well number	:	7/2-9L1	:	8/3-4H1	:	8/3-7G1
Constituents in parts per million						
Silica (SiO <sub>2</sub> )	59	--	--	--	--	--
Iron (Fe)	.05	--	--	--	--	--
Calcium (Ca)	78	74	7	84	44	
Magnesium (Mg)	22	23	1	19	10	
Sodium (Na)	a40	a38	92	120	59	
Potassium (K)	--	--	4.6	3.5	2.4	
Bicarbonate (HCO <sub>3</sub> )	233	207	178	273	158	
Carbonate (CO <sub>3</sub> )	0	0	0	0	14	
Sulfate (SO <sub>4</sub> )	68	72	39	166	63	
Chloride (Cl)	72	73	21	111	35	
Fluoride (F)	--	.5	3.0	.9	.6	
Nitrate (NO <sub>3</sub> )	10	25	14	7.9	2.5	
Boron (B)	--	.2	.28	.32	.11	
Dissolved solids (Dis. S)	472	523	321	668	320	
Sum of determined constituents	(464)	(408)	(270)	(647)	(302)	
Hardness as CaCO <sub>3</sub>	285	(279)	(22)	(288)	154	
Percent sodium (% Na)	(23)	(23)	(88)	(47)	42	
Specific conductance (micromhos at 77°F)	--	716	435	980	534	
pH	--	7.6	8.0	7.9	8.4	
Temperature (°F)	--	--	68	--	--	
Date collected (Date)	12-30-17	4-18-52	3-26-53	4-20-54	10-2-53	
Depth of well in feet (Depth)	18.2	18.2	18.2	29	--	
Analyzing laboratory (Lab.)	DGT	DWR	DWR	DWR	F	
Laboratory number (No.)	--	N282	3135	4228	2882	
a. Includes potassium.	182					

Well number	: 8/3-	: 8/4-	: 8/4-	: 8/4-	: 8/4-
	: 7G2	: 10H1	: 10K1	: 10N3	: 10N4

Constituents in parts per million

SiO <sub>2</sub>	--	36	30	--	--
Fe <sup>2</sup>	--	.2	--	--	0
Ca	41	280	144	164	171
Mg	10	15	13	15	9.3
Na	52	675	400	460	600
K	2.8	--	3.8	4.1	13
HCO <sub>3</sub>	190	307	322	322	360
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	61	542	485	541	794
Cl	34	1012	426	434	586
F	.7	.9	.8	.8	1.0
NO <sub>3</sub>	0	5.5	4.0	2.4	11
B <sup>3</sup>	.12	1.2	1.3	1.5	1.9
Dis. S	313	2830	1680	1850	2270
Sum	(296)	(2720)	(1670)	(1780)	(2360)
Hardness	145	763	415	473	465
%Na	43	66	68	68	75
Micromhos	517	3570	2340	2500	3430
pH	7.7	7.8	8.0	8.0	8.3
OF	--	--	--	--	--
Date	12-10-53	2-27-52	3-4-52	7-9-52	--
Depth	--	30	41	30	--
Lab.	F	F	F	F	F
No.	2934	2012	2030	2223	2328

Well number	: 8/4- : 8/4- : 8/4- :	8/4-11F2
	: 10N5 : 11D1 : 11F1 :	

Constituents in parts per million

SiO <sub>2</sub>	--	--	42	13	--
Fe <sup>2</sup>	0	--	0	.02	--
Ca	236	48	225	208	297
Mg	.3	9.5	26	6.6	18
Na	765	230	440	520	700
K	28	2.7	--	--	5.8
HCO <sub>3</sub>	305	151	343	296	337
CO <sub>3</sub>	0	12	0	0	0
SO <sub>4</sub>	1120	165	509	562	826
Cl	890	261	582	621	851
F	.8	.8	.6	.8	.8
NO <sub>3</sub>	15	.5	6.0	6.5	5.5
B	2.5	.52	1.2	1.4	1.9
Dis. S	--	852	2040	2140	2940
Sum	3210	(804)	(2000)	(2090)	(2870)
Hardness	656	159	667	548	318

%Na	71	75	59	67	65
Micromhos	4480	1420	3190	3360	4390
pH	7.4	8.4	7.3	7.2	7.5
O <sub>F</sub>	--	--	67	66	--
Date	--	5-23-57	2-5-52	2-5-52	1-21-54
Depth	--	110	40	45	45
Lab.	F	F	F	F	F
No.	2329	4115	1992	1991	2972

Well number	8/4- 12A1	8/4- 12K1	8/4-12F1		
Constituents in parts per million					
SiO <sub>2</sub>	--	--	--	--	30
Fe	--	--	0	--	0
Ca	47	54	86	52	55
Mg	7.0	10	17	11	9
Na	a69	62	110	90	108
K	--	2.3	3.6	2.4	2.5
HCO <sub>3</sub>	159	203	328	290	315
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	85	79	181	72	81
Cl	67	39	76	37	42
F	.7	.6	.7	.8	1.0
NO <sub>3</sub>	1.5	8.0	9.5	6	5
B	.11	.08	.23	.12	.20
Dis. S.	389	371	632	445	470
Sum	(355)	(355)	(645)	(414)	(489)
Hardness	146	174	284	174	(307)
% Na	51	43	43	52	(57)
Micromhos	556	564	916	699	769
pH	7.6	7.9	7.9	7.5	7.4
OF	--	--	--	--	64
Date	5-14-52	7-3-54	8--52	11-9-54	5-5-55
Depth	16.1	57	29	.	.
Lab.	F	F	F	DWR	DWR
No.	2151	3195	2330	5005	5683

a. Includes potassium.

Well number	:	8/4-12Q2	:	:	8/4-
	:		:	:	12Q5

Constituents in parts per million

SiO <sub>2</sub>	26	--	--	--
Fe <sup>2</sup>	0	--	--	--
Ca	75	110	97	61
Mg	15	19	20	12
Na	a100	180	185	140
K	--	3.2	3.5	3.3
HCO <sub>3</sub>	350	569	510	390
CO <sub>3</sub>	0	0	22	0
SO <sub>4</sub>	78	162	161	107
Cl	54	84	82	44
F	.7	.6	.8	8
NO <sub>3</sub>	9.0	9.0	11	7.5
B <sup>3</sup>	.16	.42	.46	.30
Dis. S.	553	884	873	593
Sum	(530)	(848)	(934)	(575)
Hardness	247	352	323	200
% Na	47	52	55	60
Micromhos	920	1380	1320	940
pH	7.3	7.5	8.1	7.5
°F	--	--	--	--
Date	2-5-52	12-9-55	11-5-56	5-20-54
Depth	--	--	--	--
Lab.	F	F	F	F
No.	1993	3746	3991	3141

a. Includes potassium.

Well number	8/4- 12R1	8/4- 12R2	8/4- 15B1	8/4- 15B2	8/4- 15F1
Constituents in parts per million					
SiO <sub>2</sub>	--	--	17	20	--
Fe	--	--	0	0	--
Ca	117	40	48	43	35
Mg	22	7	8.1	8.7	10
Na	180	44	52	51	52
K	4.9	2.6	--	--	1.7
HCO <sub>3</sub>	459	168	185	173	183
CO <sub>3</sub>	7	0	0	0	0
SO <sub>4</sub>	222	52	52	45	50
Cl	125	29	36	36	29
F	.7	.7	.8	.8	.9
NO <sub>3</sub>	9.0	2.0	8.4	.5	2
B	.42	.10	0	.06	.03
Dis. S.	950	267	331	292	295
Sum	(914)	(260)	(243)	(294)	(271)
Hardness	383	129	153	142	134
% Na	50	42	42	44	45
Micromhos	1470	422	470	425	477
pH	8.3	7.5	7.5	7.5	7.8
OF	--	--	--	--	--
Date	5-7-54	5-20-54	2-20-52	2-20-52	6-24-53
Depth	--	--	30	30	40
Lab.	F	F	F	F	F
No.	3130	3140	2007	2009	2737

Well number	8/4-15G2	8/4-16A1	8/4-16E2	8/4-16F2
Constituents in parts per million				
SiO <sub>2</sub>	18	--	--	--
Fe	0	--	--	--
Ca	44	40	103	21
Mg	10	8.5	6.9	3
Na	58	46	350	148
K	--	2	90	1.8
HCO <sub>3</sub>	190	168	396	210
CO <sub>3</sub>	0	0	0	0
SO <sub>4</sub>	52	51	354	105
Cl	38	41	346	68
F	.8	.6	1.2	1.0
NO <sub>3</sub>	7.4	3.0	5.5	7.5
B	.04	.10	1.3	.56
Dis. S.	323	287	1440	536
Sum	(322)	(275)	(1450)	(459)
Hardness	150	134	290	64
% Na	45	42	66	83
Micromhos	470	504	2220	805
pH	7.5	7.6	7.8	7.9
OF	--	--	--	--
Date	2-20-52	1-21-54	9-18-52	9-26-55
Depth	30	30	20	75
Lab.	F	F	F	F
No.	2008	2973	2349	3695

Well number	8/4+	8/4-	8/4-	8/4-	9/1-
	16G1	16K1	16K3	16M3	5D1

Constituents in parts per million

SiO <sub>2</sub>	--	--	--	--	--
Fe	--	--	--	--	--
Ca	91	55	49	45	44
Mg	13	8	8	2	6.8
Na	320	270	250	176	a120
K	10	2.5	2.5	2.1	--
HCO <sub>3</sub>	396	354	322	171	270
CO <sub>3</sub>	0	0	0	0	--
SO <sub>4</sub>	357	268	244	146	24
Cl	220	151	142	147	81
F	.8	1.6	1.2	1.0	1.2
NO <sub>3</sub>	3.5	7.0	6.0	0	47
B	1.3	.96	1.0	.42	1.0
Dis. S.	1330	970	861	674	518
Sum	(1210)	(938)	(863)	(604)	(458)
Hardness	280	170	153	121	(139)
% Na	70	77	78	76	65
Micromhos	1890	1320	1350	1080	860
pH	7.6	7.9	8.1	7.8	8.0
OF	--	--	--	--	--
Date	9-18-52	7-7-54	7-22-54	9-22-55	8-8-51
Depth	26	40	60	18	60
Lab.	F	F	F	F	DWR
No.	2348	3200	3221	3688	N-50

a. Includes potassium.

Well number	: 9/1- :	9/1-6B1	: 9/1-
	: 5D1 :		: 6B2.

Constituents in parts per million

SiO <sub>2</sub>	--	26	56	33	7.5
Fe	--	--	.15	.9	0
Ca	51	56	88	57	44
Mg	12	12	19	13	11
Na	a131	a165	a232	a100	61
K	--	--	--	--	--
HCO <sub>3</sub>	366	--	297	233	183
CO <sub>3</sub>	--	b(102)	0	0	0
SO <sub>4</sub>	17	227	348	128	73
Cl	82	99	148	63	43
F	--	--	--	--	--
NO <sub>3</sub>	5.3	--	3.0	.8	--
B	.41	--	--	--	Trace
Dis. S.	545	687	1040	--	423
Sum	(479)	687	(1040)	(511)	(330)
Hardness	(177)	(189)	(298)	(196)	(155)
% Na	62	--	(63)	(40)	(46)
Micromhos	820	--	--	--	--
pH	7.1	--	--	--	--
OF	--	--	--	--	--
Date	11-30-51	7-21-08	9-12-17	11-17-19	11- -44
Depth	60	77			140
Lab.	DWR	DGT	EGT	EGT	S-E
No.	1815	--	237	987	--

a. Includes potassium.

b. Calculated from hypothetical combinations by the Geological Survey.

Well number	9/2-1C2		9/2-1F1		
Constituents in parts per million					
SiO <sub>2</sub>	--	--	--	--	22
Fe	--	--	--	--	--
Ca	95	31	40	45	36
Mg	20	5	7	9	9
Na	a137	50	72	64	55
K	--	1.8	1.8	1.4	2.3
HCO <sub>3</sub>	410	163	200	190	177
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	215	37	72	74	56
Cl	75	25	35	33	33
F	.3	.6	.8	.8	.7
NO <sub>3</sub>	2.0	1.0	1.3	4	1.4
B	.30	.20	.84	.14	.10
Dis. S.	726	251	360	355	304
Sum	(747)	(232)	(330)	(325)	(303)
Hardness	(320)	(98)	(129)	149	(127)
% Na	(48)	(52)	(54)	48	(48)
Micromhos	1692	389	500	524	465
pH	7.7	8.1	7.8	7.7	7.8
OF	--	--	70	55	64
Date	12-15-51	9-14-55	5-2-56	7-21-54	12-19-56
Depth	74	174			
Lab.	DWR	DWR	DWR	DWR	DWR
No.	1319	6329	6023	4495	T-5464

a. Includes potassium.

Well number	9/2-1F2	9/2-1F3	9/2-1F4		
Constituents in parts per million					
SiO <sub>2</sub>	16	27	22	26	25
Fe	0	--	--	--	--
Ca	47	45	48	48	51
Mg	13	12	10	9	9
Na	74	76	64	69	61
K	1.9	2.3	1.9	2.1	2.4
HCO <sub>3</sub>	204	195	184	180	175
CO <sub>3</sub>	0	0	0	5	0
SO <sub>4</sub>	96	100	98	90	93
Cl	43	50	37	48	41
F	.8	.7	.4	.7	.8
NO <sub>3</sub>	1.2	2.0	0	2.8	1.0
B	.35	.30	.10	.18	.35
Dis. S.	395	412	381	378	414
Sum	(393)	(411)	(372)	(390)	(371)
Hardness	(171)	(162)	160	158	164
% Na	(48)	(50)	46	48	44
Micromhos	640	625	566	622	578
pH	7.5	8.0	7.7	8.4	7.5
°F	71	64	68	70	69
Date	5-19-55	12-19-56	4-29-58	10-14-58	3-26-59
Depth	170			139	180
Lab.	DWR	DWR	DWR	DWR	DWR
No.	P-1172	T-5552	T-1812	R-2271	T-3148

Well number	9/2-3D1	9/2-3D2	9/2-4J1	9/2-4K1	9/2-5N4
Constituents in parts per million					
SiO <sub>2</sub>	--	--	--	--	--
Fe	--	--	--	--	--
Ca	42	76	51	39	65
Mg	7	13	13	8	15
Na	57	96	66	44	82
K	2.6	3.3	2.3	2	3.3
HCO <sub>3</sub>	196	29	205	163	225
CO <sub>3</sub>	0	0	0	5	0
SO <sub>4</sub>	48	137	74	45	111
Cl	28	48	58	23	74
F	.6	.6	.7	.6	.6
NO <sub>3</sub>	11	8.5	2.0	.5	1.0
B	.10	.14	.18	.12	.23
Dis. S.	288	517	366	267	478
Sum	(293)	(397)	(368)	(247)	(463)
Hardness	135	242	179	128	224
% Na	47	46	44	44	44
Micromhos	508	878	638	435	800
pH	7.5	7.3	8.0	8.3	8.1
°F	--	--	--	--	--
Date	3-28-55	3-31-55	11-25-53	9-1-54	12-10-53
Depth	137	97	65	66	50
Lab.	F	F	F	F	F
No.	3499	3500	2956	3311	2933

Well number	9/2-8A1	9/2-8B1	9/2-8C1	
Constituents in parts per million				
SiO <sub>2</sub>	--	--	--	--
Fe	--	0	--	0
Ca	54	54	77	78
Mg	8.5	8.7	15	16
Na	70	66	100	104
K	2.6	4	2.8	6
HCO <sub>3</sub>	210	167	212	171
CO <sub>3</sub>	0	--	0	--
SO <sub>4</sub>	86	77	142	148
Cl	57	49	110	110
F	.6	.5	.6	1.0
NO <sub>3</sub>	5	.4	5.5	.7
B	.12	--	.24	--
Dis. S	388	465	571	680
Sum	(387)	(342)	(557)	(548)
Hardness	170	176	256	260
% Na	47	(45)	46	(46)
Micromhos	667	--	946	--
pH	7.9	8.2	7.7	7.8
O <sub>F</sub>	--	--	--	--
Date	11-5-53	12-9-53	11-5-53	12-9-53
Depth	100		117	87
Lab.	F	PH	F	PH
No.	2880	--	2881	--

Well number	: 9/2- :	9/2-10A3	: 9/2- :	9/2-
	: 10A2 :		: 10B1 :	17E1

Constituents in parts per million

SiO <sub>2</sub>	--	--	--	--	--
Fe	0.24	--	0.24	--	--
Ca	19	51	48	15	28
Mg	11	12	15	5	7
Na	49	84	44	350	115
K	1.0	3.1	2.3	2.4	3.7
HCO <sub>3</sub>	122	216	--	351	229
CO <sub>3</sub>	--	0	--	22	0
SO <sub>4</sub>	96	101	104	311	101
Cl	56	61	56	128	43
F	1.1	.9	1.1	4.0	4.0
NO <sub>3</sub>	.2	2.0	.9	5.0	2.0
B	--	.30	--	2.4	.58
Dis. S	--	466	--	1010	450
Sum	(294)	(421)	(272)	(1020)	(417)
Hardness	(93)	175	(182)	58	(99)
% Na	(53)	50	(34)	93	(71)
Micromhos	572	706	666	1653	691
pH	7.8	7.4	7.6	8.4	8.0
OF	77	--	77	--	--
Date	5-16-57	5-3-57	5-22-57	10-27-54	4-20-54
Depth	223	100		120	130
Lab.	L	F	L	DWR	DWR
No.	--	4080	--	5023	4241

Well number	:	9/2-17E1	:	9/2-19R1	:	9/2-20D1
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Constituents in parts per million

SiO <sub>2</sub>	55	--	--	--	--
Fe	0	--	--	--	--
Ca	37	29	38	11	23
Mg	2	7	7	4	6
Na	112	113	136	135	125
K	2.6	2.9	1.1	2.6	2.0
HCO <sub>3</sub>	215	220	201	224	188
CO <sub>3</sub>	0	0	0	0	7
SO <sub>4</sub>	106	102	160	85	107
Cl	43	43	60	41	48
F	4.0	3.5	2.2	2.0	3.0
NO <sub>3</sub>	4.0	3.5	12	2.5	8.0
B	.80	.74	.6	.41	.76
Dis. S	445	435	542	402	479
Sum	(472)	(473)	(516)	(394)	(423)
Hardness	(101)	102	(124)	(44)	83
% Na	70	70	71	(87)	76
Micromhos	641	699	800	638	688
pH	7.9	8.0	7.6	8.0	8.1
OF	--	--	--	--	--
Date	5-5-55	10-27-54	7-9-57	4-20-54	2-3-55
Depth	130			156	170
Lab.	DWR	DWR	DWR	DWR	F
No.	5693	5024	R-1650	4240	3460

Well number	9/2- 34D1	9/3-1E2		9/3-1J1	
Constituents in parts per million					
SiO <sub>2</sub>	--	21	18	--	25
Fe	--	--	--	--	0
Ca	28	47	26	88	39
Mg	11	7.0	5.6	18	13
Na	92	a50	34	95	50
K	--	--	--	4.0	2.5
HCO <sub>3</sub>	223	220	139	405	203
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	137	35	25	92	48
Cl	28	34	23	52	29
F	--	.7	.8	.4	.8
NO <sub>3</sub>	8.7	6.4	1.0	13	6.0
B <sup>3</sup>	.54	.10	.05	.14	.12
Dis. S.	--	318	218	665	295
Sum	(415)	(309)	(201)	(563)	(313)
Hardness	(115)	146	78	294	(151)
% Na	(63)	43	26	41	(41)
Micromhos	604	460	290	943	505
pH	8.8	8.2	7.9	8.0	7.5
OF	--	--	--	64	64
Date	3-17-32	3-27-52	3-27-52	10-28-54	5-5-55
Depth	180	167	189		
Lab.	DA	F	F	DWR	DWR
No.	5804	2068	2067	5018	5694

a. Includes potassium.

Well number	9/3-1J1	9/3-2G2	9/3-2K1	9/3-3A1	
Constituents in parts per million					
SiO <sub>2</sub>	--	--	--	--	25
Fe	--	0.10	0.10	--	--
Ca	33	62	47	41	44
Mg	2	5.8	5.8	9	7
Na	41	a52	a71	62	60
K	1.8	--	--	2.2	2.0
HCO <sub>3</sub>	140	194	209	205	195
CO <sub>3</sub>	0	0	--	0	0
SO <sub>4</sub>	32	77	74	53	53
Cl	21	38	34	37	35
F	1.1	--	--	.6	.7
NO <sub>3</sub>	4.9	27	30	2.5	0
B	.19	--	--	.08	.12
Dis. S.	214	--	--	290	325
Sum	(206)	(358)	(365)	(308)	(323)
Hardness	(91)	180	142	140	(139)
% Na	49	(39)	(52)	49	(48)
Micromhos	362	455	--	495	524
pH	7.6	7.2	7.4	7.9	7.5
°F	--	--	--	68	--
Date	7-9-57	8-31-55	8-31-55	10-27-54	5-5-55
Depth	149	110	63.9	115	--
Lab.	DWR	H	H	DWR	DWR
No.	R-1654	--	--	5019	5686

a. Includes potassium.

Well number	9/3-3H1	9/3-3H2	9/3-422	9/3-11E1	
Constituents in parts per million					
SiO <sub>2</sub>	14	16	20	--	15
Fe	--	--	.03	--	--
Ca	42	39	40	82	57
Mg	9	10	6.9	20	12
Na	64	60	a49	a186	58
K	2.3	1.9	--	--	1.6
HCO <sub>3</sub>	195	197	188	241	226
CO <sub>3</sub>	0	0	0	0	--
SO <sub>4</sub>	47	51	43	271	66
Cl	48	40	36	147	37
F	1.6	1.8	.75	--	--
NO <sub>3</sub>	1.4	1.5	3.5	--	3.1
B	.04	.19	.10	.88	.18
Dis. S.	304	310	299	--	--
Sum	(325)	(318)	(292)	(826)	(361)
Hardness	(142)	(139)	129	(287)	(192)
% Na	(49)	(48)	45	(58)	(44)
Micromhos	510	554	510	1350	669
pH	8.0	7.7	7.8	8.1	8.0
OF	--	75	--	--	--
Date	1-14-57	7-10-57	2-5-52	7-22-32	7-26-32
Depth	125		110	--	--
Lab.	DWR	DWR	F	DA	DA
No.	T5699	T-933	1996	6523	6529

a. Includes potassium.

Well number	9/3-11E1	9/3-11N1	9/3-13R1	9/3-14D1	9/3-15Q1
Constituents in parts per million					
SiO <sub>2</sub>	27	--	--	--	--
Fe	.06	--	--	--	--
Ca	46	43	45	57	44
Mg	9	9.8	8	12	8
Na	a58	42	90	58	48
K	--	1	3.0	1.6	2.5
HCO <sub>3</sub>	205	202	212	226	173
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	41	37	78	66	51
Cl	47	44	62	37	40
F	.75	.6	1.2	--	.6
NO <sub>3</sub>	5.0	9.4	0	3.1	6.0
B	.16	.18	.13	.18	.06
Dis. S.	344	332	--	--	289
Sum	(335)	(287)	406	(346)	(285)
Hardness	153	148	(145)	(192)	145
% Na	45	38	(57)	(40)	41
Micromhos	580	511	619	592	498
pH	7.9	8.1	7.7	8.1	7.8
°F	--	--	--	--	--
Date	2-5-52	7-16-52	4-20-54	8-18-32	4-27-55
Depth	--	50	212	52	134
Lab.	F	F	DWR	DA	F
No.	1995	2288	4239	6764	3539

a. Includes potassium.

Well number	: 9/3- :	9/3-15Q3
	: 15Q2 :	

Constituents in parts per million

SiO <sub>2</sub>	--	--	--	25	25
Fe	--	--	--	0	--
Ca	42	52	58	58	59
Mg	12	12	10	10	12
Na	52	50	52	51	56
K	2.3	2.6	2.5	2.6	2.3
HCO <sub>3</sub>	178	188	188	185	195
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	54	60	66	64	72
Cl	45	50	59	56	62
F	1.0	.5	.6	.7	.6
NO <sub>3</sub>	1.5	2.5	5.0	2.0	1.0
B	.07	.10	.10	.12	.14
Dis. S.	314	315	367	360	370
Sum	(298)	(323)	(346)	(360)	(386)
Hardness	155	179	186	(186)	(197)
% Na	42	37	37	(37)	(38)
Micromhos	522	540	615	535	465
pH	7.2	8.0	7.7	7.4	7.4
°F	--	62	--	63	63
Date	6- -53	12-7-54	4-27-55	5-5-55	6-21-56
Depth	92	55.1			
Lab.	F	DWR	F	DWR	DWR
No.	2790	5021	3543	5685	6969

Well number	9/3-22E1		9/3-24J1		9/3-26H1
Constituents in parts per million					
SiO <sub>2</sub>	--	--	--	40	--
Fe	--	--	--	3.8	--
Ca	59	19	18	22	20
Mg	11	3	5	2	6
Na	51	115	110	113	123
K	2.4	3.7	2.5	2.3	4.1
HCO <sub>3</sub>	178	215	198	207	203
CO <sub>3</sub>	0	--	10	0	0
SO <sub>4</sub>	82	72	74	75	117
Cl	52	40	37	40	40
F	.5	2.0	2.0	2.0	2.2
NO <sub>3</sub>	5.5	0	4.0	0	6.0
B	.12	.40	.36	.58	.62
Dis. S.	376	373	370	395	420
Sum	(352)	(361)	(361)	(403)	(419)
Hardness	195	(60)	(66)	(63)	(75)
% Na	36	(79)	(78)	(79)	(77)
Micromhos	618	569	560	619	619
pH	7.6	7.9	8.2	7.7	8.0
°F	--	--	72	--	--
Date	6-17-55	4-20-54	10-27-54	5-5-55	5-6-54
Depth	256	143			202
Lab.	F	DWR	DWR	DWR	DWR
No.	3600	4238	5015	5691	4237

Well number	:	9/3-26H1	:	9/3-28A3	
Constituents in parts per million					
SiO <sub>2</sub>	--	30	25	20	--
Fe	--	.40	--	0	--
Ca	19	21	19	58	52
Mg	6	5	6	12	10
Na	120	120	127	53	60
K	2.9	2.6	3.1	--	2.1
HCO <sub>3</sub>	173	181	177	203	200
CO <sub>3</sub>	7	0	0	0	0
SO <sub>4</sub>	122	120	126	59	72
Cl	40	39	50	59	45
F	1.8	2.0	1.5	.6	.6
NO <sub>3</sub>	6.9	5.5	4.5	6.9	0
B	.64	.68	.55	.04	.10
Dis. S.	400	410	436	412	330
Sum	(411)	(435)	(450)	(369)	(341)
Hardness	72	(73)	(72)	194	170
% Na	78	(77)	(78)	37	43
Micromhos	709	660	680	690	602
pH	8.2	7.9	8.1	7.6	7.9
OF	--	--	--	--	--
Date	12-7-54	5-5-55	12-19-56	2-5-52	10-28-54
Depth	202			85	
Lab.	DWR	DWR	DWR	F	DWR
No.	5014	5696	T-5553	1944	5022

Well number	:	9/3-28A3	:	9/3-33Z1
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Constituents in parts per million

SiO <sub>2</sub>	--	30	--	c32	56
Fe	0	--	--	--	.15
Ca	51	47	58	38	88
Mg	9	10	8	6.4	19
Na	60	62	68	a70	a232
K	2.0	2.0	1.6	--	--
HCO <sub>3</sub>	190	190	195	221	277
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	71	65	90	40	348
Cl	46	52	59	37	148
F	.8	.7	.4	--	--
NO <sub>3</sub>	0	.4	3.4	--	3.0
B	.18	.24	.10	--	--
Dis. S.	350	350	398	332	1040
Sum	(334)	(363)	(384)	(332)	(1030)
Hardness	(164)	(159)	(178)	121	298
% Na	(44)	(46)	45	(56)	(63)
Micromhos	575	526	658	--	--
pH	7.3	7.3	7.7	--	--
OF	--	--	68	--	--
Date	5-5-55	5-3-56	7-10-57	7-20-08	9-12-17
Depth	85			16	
Lab.	DWR	DWR	DWR	DGT	DGT
No.	5684	6970	R-1655	--	--

a. Includes potassium.

c. Includes iron.

Well number	9/3-34C1	9/3-34D2	9/3-34E1	9/3-34N2	10/1-31B1
Constituents in parts per million					
SiO <sub>2</sub>	--	29	37	37	--
Fe	0.7	--	trace	--	--
Ca	111	40	70	70	91
Mg	19	10	14	19	19
Na	147	60	a96	125	150
K	2.5	1.9	--	2.4	2.8
HCO <sub>3</sub>	292	173	194	268	227
CO <sub>3</sub>	0	--	0	--	10
SO <sub>4</sub>	256	67	130	153	181
Cl	127	39	104	95	173
F	.7	.4	--	.8	.6
NO <sub>3</sub>	4.4	3.4	0	2.6	9.5
B	.50	0	--	1.1	.38
Dis. S.	782	--	565	--	768
Sum	(813)	(336)	548	(638)	(749)
Hardness	(355)	(141)	232	(253)	304
% Na	(47)	50	(47)	52	52
Micromhos	1320	521	--	1020	1290
pH	7.5	7.4	--	7.5	8.1
OF	--	--	--	69	--
Date	4-13-54	5-26-54	8-16-16	5-7-54	4-13-55
Depth	100	--	--	--	130
Lab.	DWR	F	DGT	GP	F
No...	P-487	--	--	--	3542

a. Includes potassium.

Well number	10/1-31L5	10/1-31L14	10/1-32A2	10/1-32D1
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Constituents in parts per million

SiO <sub>2</sub>	17	12	--	--	--
Fe	--	.01	--	--	--
Ca	37	54	47	43	45
Mg	9	11	11	13	8
Na	51	76	245	120	64
K	2.3	--	--	2.7	--
HCO <sub>3</sub>	192	244	384	220	214
CO <sub>3</sub>	0	0	0	5	--
SO <sub>4</sub>	42	86	297	112	47
Cl	28	42	68	75	32
F	--	--	.9	.8	--
NO <sub>3</sub>	.6	--	2.5	21	2.7
B	.13	--	.55	.40	.14
Dis. S.	--	527	809	529	327
Sum	(282)	(401)	(861)	(501)	(304)
Hardness	(129)	(180)	(163)	160	(145)
% Na	(45)	(48)	77	62	49
Micromhos	464	550	1633	858	500
pH	8.1	7.8	8.1	8.1	8.2
°F	--	--	--	--	--
Date	10-5-32	10-7-50	12-15-51	2-11-56	12-14-51
Depth	156		30	--	75
Lab.	DA	S-E	DWR	F	DWR
No.	6760	327703	1318	3794	1813

Well number	10/1-32F2	10/1-32F3	10/1-32F5	10/1-32Q2
Constituents in parts per million				
SiO <sub>2</sub>	--	--	23	--
Fe	--	--	--	--
Ca	146	159	84	64
Mg	35	29	13	17
Na	330	230	156	157
K	4.1	4.6	3.2	--
HCO <sub>3</sub>	361	486	320	396
CO <sub>3</sub>	22	0	--	--
SO <sub>4</sub>	746	413	246	103
Cl	116	142	74	96
F	3.0	.6	.5	--
NO <sub>3</sub>	0	0	2.1	2.2
B	.60	.68	.20	.68
Dis. S.	1710	1300	760	682
Sum	(1581)	(1220)	(760)	(635)
Hardness	(507)	515	265	(230)
% Na	58	49	56	60
Micromhos	2070	1900	1160	970
pH	8.3	7.7	7.8	8.0
°F	--	--	--	--
Date	3-27-52	4-3-56	10-15-58	8-8-51
Depth	18	30	--	48
Lab.	DWR	PH	DWR	DWR
No.	1737	3840	R-2268	1804
				1328

Well number	10/2-19P1	10/2-30N1	10/2-30N3	10/2-30N4	
Constituents in parts per million					
SiO <sub>2</sub>	--	--	--	--	
Fe	--	--	--	--	
Ca	4	130	41	52	116
Mg	1.0	24	9.8	9	23
Na	88	92	55	41	130
K	.8	--	2	2	2.7
HCO <sub>3</sub>	168	235	210	215	371
CO <sub>3</sub>	7	0	0	0	0
SO <sub>4</sub>	25	144	41	24	240
Cl	23	179	31	34	74
F	1.0	--	.5	.5	.4
NO <sub>3</sub>	.5	33	4	6.8	10
B	.34	.29	.11	.15	.91
Dis. S.	301	--	301	308	815
Sum	(234)	(718)	(287)	(275)	(780)
Hardness	12	(423)	143	(167)	383
% Na	93	(32)	45	(35)	42
Micromhos	400	1220	498	542	1220
pH	8.4	7.5	7.9	7.5	7.4
°F	--	--	--	--	--
Date	11-5-56	7-6-32	12-10-53	4-13-54	12-10-53
Depth	190	35	115	.	135
Lab.	F	DA	F	DWR	F
No.	3993	6451	2932	P-481	2935

Well number	10/2-30Q5	10/2-30R1		10/2-30R2	
Constituents in parts per million					
SiO <sub>2</sub>	17	16	17	--	--
Fe	--	--	--	--	--
Ca	28	57	28	29	28
Mg	3.0	10	3	6	5
Na	36	50	36	37	40
K	--	--	--	2	2
HCO <sub>3</sub>	154	220	154	156	146
CO <sub>3</sub>	--	0	0	0	5
SO <sub>4</sub>	17	49	17	25	26
Cl	23	47	23	15	18
F	.6	.5	.6	.6	.6
NO <sub>3</sub>	2.5	4.0	2.5	5.0	4.0
B	.10	.04	.11	.02	.10
Dis. S.	--	358	211	165	218
Sum	(203)	(342)	(203)	(197)	(201)
Hardness	(82)	183	82	97	91
% Na	49	37	49	45	48
Micromhos	310	530	310	349	350
pH	7.6	7.8	7.6	7.8	8.3
OF	--	--	--	66	--
Date	3-13-52	3-4-52	3-13-52	10-27-54	4-5-55
Depth	109	--	110		
Lab.	F	F	F	DWR	F
No.	--	2031	2040	5013	3540

Well number	10/2-30R2	10/2-32B1	10/2-32N1
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Constituents in parts per million

SiO <sub>2</sub>	25	18	--	--	15
Fe	0	--	--	--	--
Ca	28	27	31	34	29
Mg	5	5	7	8	5
Na	38	44	46	33	37
K	1.8	1.9	--	2.5	.2
HCO <sub>3</sub>	156	134	177	139	140
CO <sub>3</sub>	0	8	0	7	0
SO <sub>4</sub>	25	30	23	34	29
Cl	16	22	18	19	23
F	.7	.2	--	.6	1.6
NO <sub>3</sub>	5.5	.8	1.3	7	3.3
B	.12	.10	.14	.04	.18
Dis. S.	205	231	--	200	205
Sum	(222)	(223)	(213)	(213)	(212)
Hardness	(91)	(88)	(106)	118	(93)
% Na	(47)	(51)	(49)	37	(46)
Micromhos	345	360	376	367	366
pH	7.6	8.6	8.2	8.2	7.8
°F	69	--	--	64	66
Date	5-5-55	7-9-57	7-6-32	10-27-54	7-10-57
Depth	110		63	130	
Lab.	DWR	DWR	DA	DWR	DWR
No.	5692	T-990	6452	5012	T-934

Well number	10/2-32Q1	10/2-33Q1	10/2-36N7	10/2-36P1	10/3-21
Constituents in parts per million					
SiO <sub>2</sub>	11	--	--	--	--
Fe	0	--	--	--	--
Ca	23	50	84	11	58
Mg	6.8	16	18	5	9
Na	34	24	74	a133	840
K	--	3.1	2.4	--	2.6
HCO <sub>3</sub>	135	298	190	246	239
CO <sub>3</sub>	0	0	2	31	5
SO <sub>4</sub>	17	66	191	42	603
Cl	17	39	63	28	860
F	.6	1.0	.6	--	4.0
NO <sub>3</sub>	4.0	16	2.5	0	0
B	.07	.13	0	--	9.6
Dis. S.	186	433	--	--	2550
Sum	(180)	(362)	(532)	(371)	2500
Hardness	86	191	(284)	48	181
% Na	46	49	(36)	(86)	91
Micromhos	310	715	833	457	3950
pH	7.5	7.4	8.0	--	8.1
O <sub>F</sub>	--	--	--	--	--
Date	2-5-52	6- -53	7-17-56	8-19-16	3-26-56
Depth	100	115	91	82	115
Lab.	F	F	F	DGT	F
No.	1997	2710	3906	--	3830

a. Includes potassium.

Well number	10/3-2Q1		10/3-2Q2		10/3-2R1
Constituents in parts per million					
SiO <sub>2</sub>	18	--	10	--	--
Fe	--	--	--	--	--
Ca	27	22	16	5	40
Mg	2.1	1	2.0	0	5
Na	364	368	354	180	860
K	2.2	2.2	2.4	1.3	3
HCO <sub>3</sub>	124	110	137	249	266
CO <sub>3</sub>	--	5	--	5	10
SO <sub>4</sub>	265	281	266	100	620
Cl	321	313	307	69	825
F	8.0	8.0	--	7.0	8.0
NO <sub>3</sub>	0	0	0	.5	1.0
B	5.0	4.9	5.6	3.4	10
Dis. S.	--	1090	--	560	2590
Sum	(1070)	(1060)	(1030)	(494)	(2510)
Hardness	(76)	60	(48)	13	121
%Na	92	93	(94)	96	94
Micromhos	1790	1900	1800	869	4240
pH	8.0	7.9	8.2	8.3	8.2
°F	--	--	--	--	--
Date	12-14-53	3-26-56	10-5-32	2-5-56	3-26-56
Depth	66.0		112		151
Lab.	--	F	DA	F	F
No.	--	3833	6762	3796	3837

Well number : 10/3-6B1, 10/3-6Z1 : 10/3-9B1 : 10/3-14D1 : 10/3-15H1

Constituents in parts per million

SiO <sub>2</sub>	--	43	--	31	20
Fe <sup>2+</sup>	--	.16	--	0	--
Ca	25	24	47	34	42
Mg	10	6	14	8	9
Na	69	a80	670	a60	68
K	--	--	4.8	--	2.0
HCO <sub>3</sub>	201	199	337	187	198
CO <sub>3</sub>	0	0	0	0	--
SO <sub>4</sub>	42	43	740	37	55
Cl	37	34	445	44	48
F	--	--	4.0	.6	--
NO <sub>3</sub>	2.5	.2	3.0	3.5	--
B	.25	--	3.6	0	.17
Dis. S.	--	328	2140	295	--
Sum	(285)	(328)	(2120)	(310)	(342)
Hardness	(104)	(85)	174	320	(141)
% Na	(59)	(68)	89	53	(55)
Micromhos	504	--	3320	500	517
pH	8.2	--	8.0	8.0	8.1
OF	--	--	--	--	--
Date	5-4-32	11-8-19	9-16-58	2-6-52	10-5-32
Depth	--	43	112.5	300	00
Lab.	DA	DCB	F	F	DA
No.	6215	--	1597	2002	6751

a. Includes potassium.

Well number	10/3-15H1	10/3-15H2	10/3-15Q1	10/3-22N1	10/3-22Q1
Constituents in parts per million					
SiO <sub>2</sub>	27	24	--	--	--
Fe	0	0	--	--	--
Ca	77	104	33	52	78
Mg	17	20	7.0	10	18
Na	a160	95	66	76	86
K	--	--	1.4	1.5	27
HCO <sub>3</sub>	366	227	178	188	185
CO <sub>3</sub>	0	0	2	0	0
SO <sub>4</sub>	125	144	50	87	139
Cl	136	171	45	69	113
F	.5	.6	.8	.6	.6
NO <sub>3</sub>	9.0	6.0	0	1.5	2.5
B	.39	.42	.16	.14	.19
Dis. S.	769	751	333	432	664
Sum	(732)	(677)	(293)	(391)	(555)
Hardness	260	342	111	170	267
% Na	57	38	56	49	41
Micromhos	1100	1020	510	683	814
pH	7.4	7.6	8.1	7.7	8.1
OT	--	--	--	--	--
Date	4-10-52	4-10-52	8-1-56	4-13-56	7-1-52
Depth	80	145	84	103	85
Lab.	F	F	F	F	F
No.	2073	2072	3986	3841	2212

a. Includes potassium.

Well number	10/3-24E1	10/3-24N1	10/3-24P1	10/3-25C1	10/3-25F1
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Constituents in parts per million

SiO <sub>2</sub>	--	27	--	--	--
Fe	--	--	--	--	--
Ca	58	37	47	171	25
Mg	11	9.5	3.7	30	4
Na	74	68	62	103	110
K	--	--	1.0	2.4	1.4
HCO <sub>3</sub>	210	196	168	185	198
CO <sub>3</sub>	--	--	0	0	7
SO <sub>4</sub>	86	52	59	252	71
Cl	57	48	52	264	49
F	--	.7	.5	.8	2.2
NO <sub>3</sub>	2.5	2.0	2.5	3.3	2.5
B	.43	.10	.10	.50	.68
Dis. S.	--	--	305	1110	386
Sum	(392)	(341)	(311)	(978)	(371)
Hardness	(190)	(180)	(133)	519	79
% Na	(45)	54	(50)	29	75
Micromhos	671	550	518	1580	650
pH	8.0	8.0	7.4	7.9	8.6
OF	--	--	--	--	--
Date	7-6-32	2-6-52	4-13-54	6-11-56	3-3-55
Depth	130	112	--	253	450
Lab.	DA	DWR	DWR	F	F
No.	6453	--	P-482	3886	3485

Well number                   : 10/3-25L1 : 10/3-25M1 : 10/3-25P1 : 10/3-25Q1 : 10/3-25R1

Constituents in parts per million

SiO <sub>2</sub>	--	--	--	--	--
Fe	--	--	--	--	--
Ca	324	92	83	139	262
Mg	49	15	14	23	42
Na	140	69	68	120	185
K	5.5	2.1	3.3	3.9	6
HCO <sub>3</sub>	256	155	200	315	315
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	517	115	124	264	584
Cl	405	143	87	121	265
F	.4	.4	.6	.5	.6
NO <sub>3</sub>	13	3.5	6	15	8
B	.76	.16	.18	.56	1.1
Dis. S.	1860	624	514	878	1610
Sum	(1580)	(516)	(485)	(872)	(1510)
Hardness	1010	292	262	443	828
% Na	23	34	36	37	33
Micromhos	2380	932	812	1290	2190
pH	7.8	7.9	8.0	7.6	7.5
°F	--	--	--	--	--
Date	5-5-54	11-25-55	5-5-54	5-5-54	5-5-54
Depth	180	105	180	180	180
Lab.	F	F	F	F	F
No.	3161	3758	3164	3162	3163

Well number	10/3-26F1	10/3-26F2	10/3-27D1		
Constituents in parts per million					
SiO <sub>2</sub>	--	--	27	--	30
Fe	--	--	0	--	0
Ca	145	92	37	53	45
Mg	27	19	9.5	9	9
Na	90	84	a68	74	74
K	3.5	3.3	--	2.0	2.0
HCO <sub>3</sub>	176	132	196	215	203
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	225	132	52	88	78
Cl	194	168	48	48	40
F	.4	.4	.7	.7	.7
NO <sub>3</sub>	11	5.5	2.0	4.5	0
B	.32	.12	.13	.32	.34
Dis. S.	1030	719	--	365	380
Sum	(783)	(569)	(341)	(386)	(379)
Hardness	475	308	(134)	169	(149)
% Na	29	37	53	48	(51)
Micromhos	1340	1050	550	633	606
pH	7.7	7.9	8.0	7.9	7.4
OF	--	--	--	--	72
Date	8-8-55	8-8-55	2-6-52	10-27-54	5-5-55
Depth	200	240	120		
Lab.	F	F	F	DWR	DWR
No.	3690	3693	2001	5017	5687

a. Includes potassium.

Well number	10/3-27D1	10/3-27N4	10/3-27R1	10/3-28A1	
Constituents in parts per million					
SiO <sub>2</sub>	--	--	25	--	46
Fe	--	--	0	--	--
Ca	38	42	137	173	117
Mg	4	11	24	26	27
Na	79	a69	129	103	124
K	1.4	--	--	3.9	3.9
HCO <sub>3</sub>	180	192	226	280	186
CO <sub>3</sub>	0	0	0	0	--
SO <sub>4</sub>	61	55	284	271	301
Cl	53	43	157	185	142
F	.5	--	.5	.3	0
NO <sub>3</sub>	3.9	2.5	5.5	11	3.6
B	.20	.16	.38	.30	1.5
Dis. S.	365	--	916	1180	--
Sum	(330)	(318)	(873)	(912)	(858)
Hardness	(111)	(150)	441	(539)	(403)
% Na	60	(50)	39	(29)	41
Micromhos	568	551	1410	1500	1280
pH	7.4	7.8	7.3	7.4	7.3
OF	--	--	68	--	69
Date	7-9-57	3-16-32	2-6-52	4-13-54	5-24-54
Depth	120	--	204		75
Lab.	DWR	DA	F	DWR	GP
No.	R-1649	5802	1998	P-483	--

a. Includes potassium.

Well number	10/3-28B1	10/3-28C1	10/3-28C4	10/3-29M1	10/3-30Q2
Constituents in parts per million					
SiO <sub>2</sub>	57	50	--	50	35
Fe <sup>2</sup>	0	.55	--	.02	--
Ca	164	29	(24)	19	18
Mg	54	25	(4)	12	6.4
Na	300	72	(99)	132	182
K	7.1	--	--	--	2.9
HCO <sub>3</sub>	389	165	(97)	179	196
CO <sub>3</sub>	0	0	--	0	0
SO <sub>4</sub>	473	94	(92)	111	179
Cl	345	70	(74)	72	90
F	.3	--	--	.9	1.2
NO <sub>3</sub>	19	--	--	2.0	0
B	2.2	--	--	.56	1.3
Dis. S.	1700	413	--	491	--
Sum	(1610)	(422)	(341)	(487)	(613)
Hardness	632	175	(76)	95	(71)
% Na	50	(47)	79	75	85
Micromhos	2540	--	--	800	968
pH	7.1	--	--	8.1	7.3
OF	--	--	--	--	70
Date	2-6-52	8-18-16	8-18-58	2-6-52	4-22-54
Depth	120	--	29	96	105
Lab.	F	DGT	SP	F	GP
No.	2000	--	--	1999	--

1. Calculated by the Geological Survey from hypothetical combinations tabulated by the analyst.

Well number	10/3-32A4	10/3-33C1		10/3-35C2	
Constituents in parts per million					
SiO <sub>2</sub>	--	57	--	30	--
Fe	--	--	--	0	--
Ca	24	27	246	151	111
Mg	8	8.5	38	21	24
Na	66	71	170	100	82
K	20	3.3	5.4	4.0	4.1
HCO <sub>3</sub>	142	159	371	317	249
CO <sub>3</sub>	5	--	0	0	0
SO <sub>4</sub>	51	63	427	200	182
Cl	46	47	253	137	115
F	.6	.4	.5	.6	.6
NO <sub>3</sub>	1.0	0	17	12	14
B	.20	1.1	.53	.30	.16
Dis. S.	306	--	1510	805	660
Sum	(274)	(356)	(1340)	(812)	(656)
Hardness	93	(104)	770	(463)	376
% Na	60	62	32	(32)	32
Micromhos	493	532	1890	1180	1020
pH	8.1	7.3	7.4	7.5	7.8
°F	--	72	--	69	68
Date	3-18-55	4-22-54	3-4-52	5-5-55	10-27-54
Depth	107	94	216		
Lab.	F	GP	F	DWR	LWA
No.	3488	--	2032	8688	5016

Well number	10/3-35C2	10/3-35E1	10/3-35F1		
Constituents in parts per million					
SiO <sub>2</sub>	25	23	--	30	44
Fe	--	--	--	--	--
Ca	164	74	172	98	25
Mg	27	71	41	17	5.6
Na	110	118	105	73	48
K	3.9	3.5	2.9	4.1	--
HCO <sub>3</sub>	364	406	348	259	137
CO <sub>3</sub>	0	0	0	0	0
SO <sub>4</sub>	226	222	244	136	29
Cl	153	128	211	86	45
F	.5	.5	.3	.5	.7
NO <sub>3</sub>	15	15	--	6.5	1.0
B	.43	.40	.30	.18	--
Dis. S.	924	932	1050	640	284
Sum	(904)	(855)	(948)	(579)	(265)
Hardness	(520)	(477)	(598)	316	86
% Na	(31)	(35)	27	33	55
Micromhos	1450	1360	1580	830	350
pH	7.5	7.6	7.4	7.6	8.4
OF	69	65	72	--	--
Date	5-3-56	12-19-56	7-9-57	3-4-52	3-4-52
Depth	216	.	.	208	227
Lab.	DWR	DWR	DWR	F	F
No.	2443	75475	R-1652	2033	2034

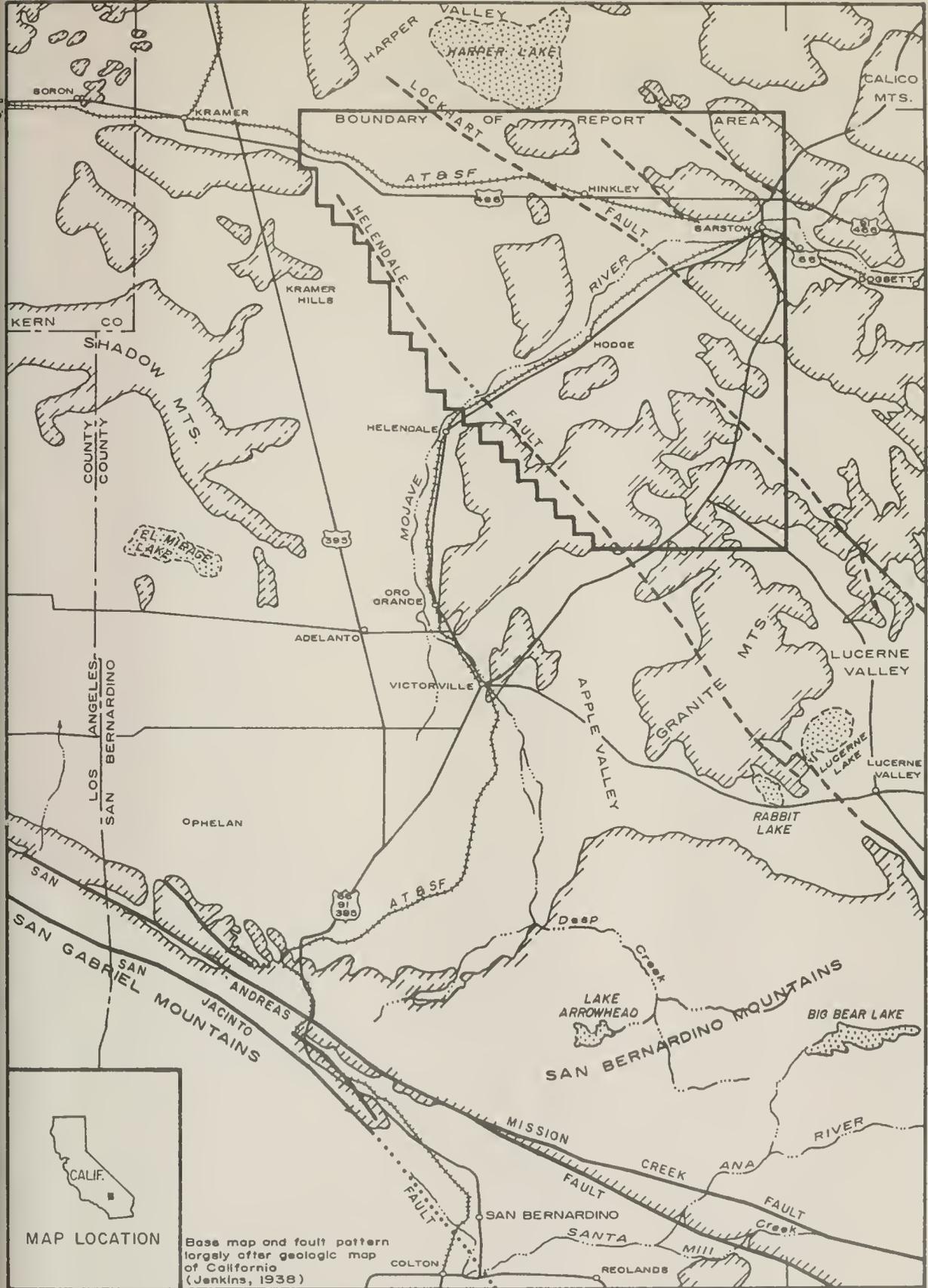
Well number	10/3-35G1	10/3-35Q1	10/3-35R1	10/3-36B1
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Constituents in parts per million

SiO <sub>2</sub>	24	--	14	--	--
Fe	0	--	--	--	--
Ca	222	142	37	63	33
Mg	40	20	7.2	15	6.0
Na	247	110	52	56	40
K	--	3.6	3.9	2.1	1.8
HCO <sub>3</sub>	483	363	165	273	163
CO <sub>3</sub>	0	0	0	0	5.0
SO <sub>4</sub>	485	204	44	67	31
Cl	251	120	32	40	19
F	.4	.4	--	.7	.8
NO <sub>3</sub>	22	15	2.5	5.0	1.0
B	.96	.36	.13	.18	.12
Dis. S.	1630	841	--	405	248
Sum	(1530)	(794)	(274)	(383)	(218)
Hardness	720	445	(122)	218	109
% Na	43	33	(47)	36	44
Micromhos	2020	1240	457	661	408
pH	7.2	7.6	8.0	7.9	8.1
°F	--	--	--	--	--
Date	4-9-52	8-27-52	10-8-32	6-13-56	11-5-56
Depth	--	--	90	180	--
Lab.	F	F	DA	F	F
No.	2071	2346	6763	3885	3092

Well number	10/3-36F1	10/4-3Q1	10/4-8P1	10/5-11D2	11/3-32P1	
Constituents in parts per million						
SiO <sub>2</sub>	--	--	--	--	48	35
Fe	--	--	--	--	1.7	--
Ca	148	181	36	19	63	47
Mg	31	19	4	4	15	14
Na	92	96	550	310	a320	91
K	3.3	3.2	7	5.9	--	.9
HCO <sub>3</sub>	266	293	146	134	257	224
CO <sub>3</sub>	0	0	0	--	0	--
SO <sub>4</sub>	261	266	435	173	261	77
Cl	143	141	535	305	303	73
F	.4	.5	.8	1.0	--	.4
NO <sub>3</sub>	10	14	5.0	6.3	5.4	1.2
B	.41	.38	2.0	.90	--	.40
Dis. S.	859	896	1690	860	1170	53
Sum	(820)	(865)	(1650)	(891)	1150	(450)
Hardness	494	531	104	(64)	219	(175)
% Na	29	28	91	90	76	54
Micromhos	1300	1260	2690	1470	--	--
pH	7.6	8.0	7.7	8.0	--	7.6
°F	--	--	--	--	--	73
Date	12-14-53	7-28-54	3-18-57	6-15-53	12-14-17	6- -54
Depth	175		300	789	800	40
Lab.	F	F	F	--	DGT	--
No.	2957	3217	4069	--	--	--

a. Includes potassium.



Base map and fault pattern largely after geologic map of California (Jenkins, 1938)

LEGEND

- VALLEY AREA
- MOUNTAIN AREA
- FAULT (DASHED WHERE INFERRED)

MAP OF PART OF SOUTHERN CALIFORNIA SHOWING AREA COVERED BY THIS REPORT

SCALE OF MILES



MAP LOCATION









EXPLANATION

UNCONSOLIDATED DEPOSITS

Qrc

River-channel deposits  
Unconsolidated sand  
along Mojave River;  
highly permeable,  
largely unsaturated  
but during periods of  
streamflow transmits  
large seepage losses  
from the streams to  
ground water

Qra

River alluvium  
Unconsolidated gravel,  
sand, silt, and clay  
beneath the Mojave  
River; highly permeable,  
where saturated yields  
water freely to wells

Qya

Younger alluvium  
Unconsolidated gravel,  
sand, silt, and clay  
beneath alluvial  
plains; largely above  
the water table but  
where saturated yields  
some water to wells

Qyf

Younger fan deposits  
Unconsolidated poorly  
sorted gravel, sand,  
silt, and mudflow  
debris locally de-  
rived; largely above  
water table; yield  
little water to wells

Qp

Playa deposits  
Unconsolidated silt,  
and clay beneath  
small lakebeds;  
yield virtually no  
water to wells

Qds

Dune sand  
Unconsolidated sand,  
actively drifting

Qol

Old lacustrine deposits  
Silt, clay, fresh-water  
marl, and lime-cemented  
gravel, sand, and silt.  
Locally interfingers  
with the older alluvium  
or older fan deposits;  
is everywhere above the  
water table

Qoa

Older alluvium  
Unconsolidated generally  
weathered gravel, sand,  
silt, and clay; where  
saturated yields water  
freely to wells

Qof

Older fan deposits  
Moderately cemented to  
moderately indurated  
boulder, gravel, sand,  
and breccia; yield  
little water to wells

CONSOLIDATED ROCKS

Tav

Acidic volcanic rocks  
Consolidated intrusive  
and extrusive felsite,  
latite, andesite,  
rhyolite, and dacite;  
yield little water  
to wells.

Tc

Continental rocks  
Consolidated conglomerate  
sandstone, siltstone,  
shale, limestone, and  
water-laid volcanic  
tuff and agglomerate;  
yield little or no  
water to wells.

bc

Basement complex  
Consolidated quartz monzonite and some  
granite, granodiorite, hornblende  
diorite, gneiss, schist, metavolcanics,  
quartzite, marble, and pegmatite dikes;  
locally deeply weathered; yields little  
water from cracks and residuum

Recent

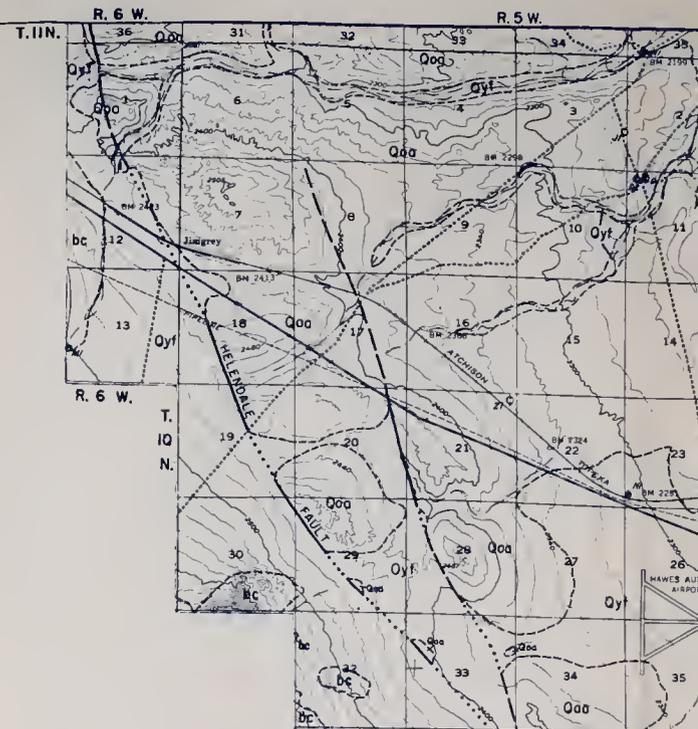
Pleistocene

Miocene and Pliocene

QUATERNARY

TERTIARY

PRE-TERTIARY



MAP SYMBOLS

Geologic contact

U  
D

Fault; dashed where approximately  
located, dotted where concealed,  
questioned where doubtful  
U, upthrown side; D, downthrown side

PI

Public-supply, industrial, or  
irrigation well

OH

Domestic, stock, or unused well

PI

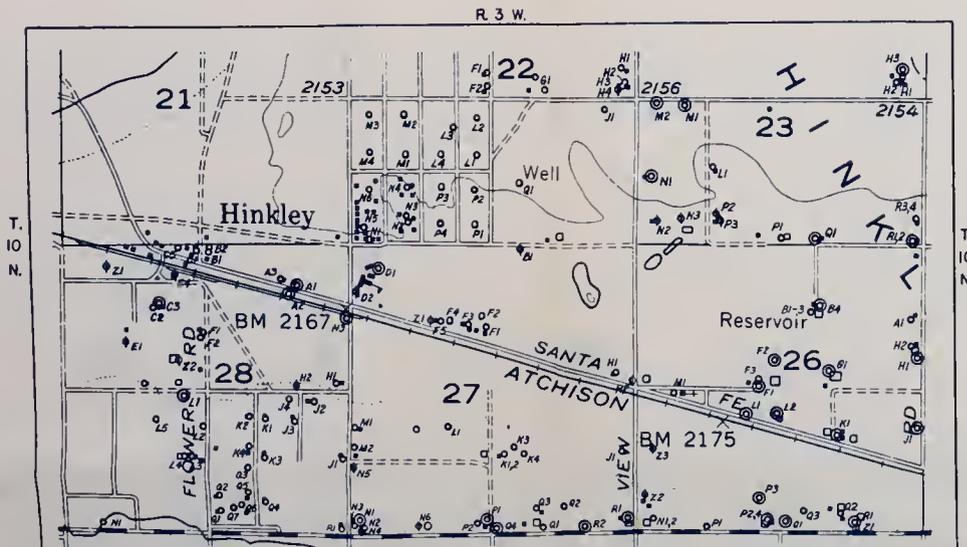
Dry or destroyed well

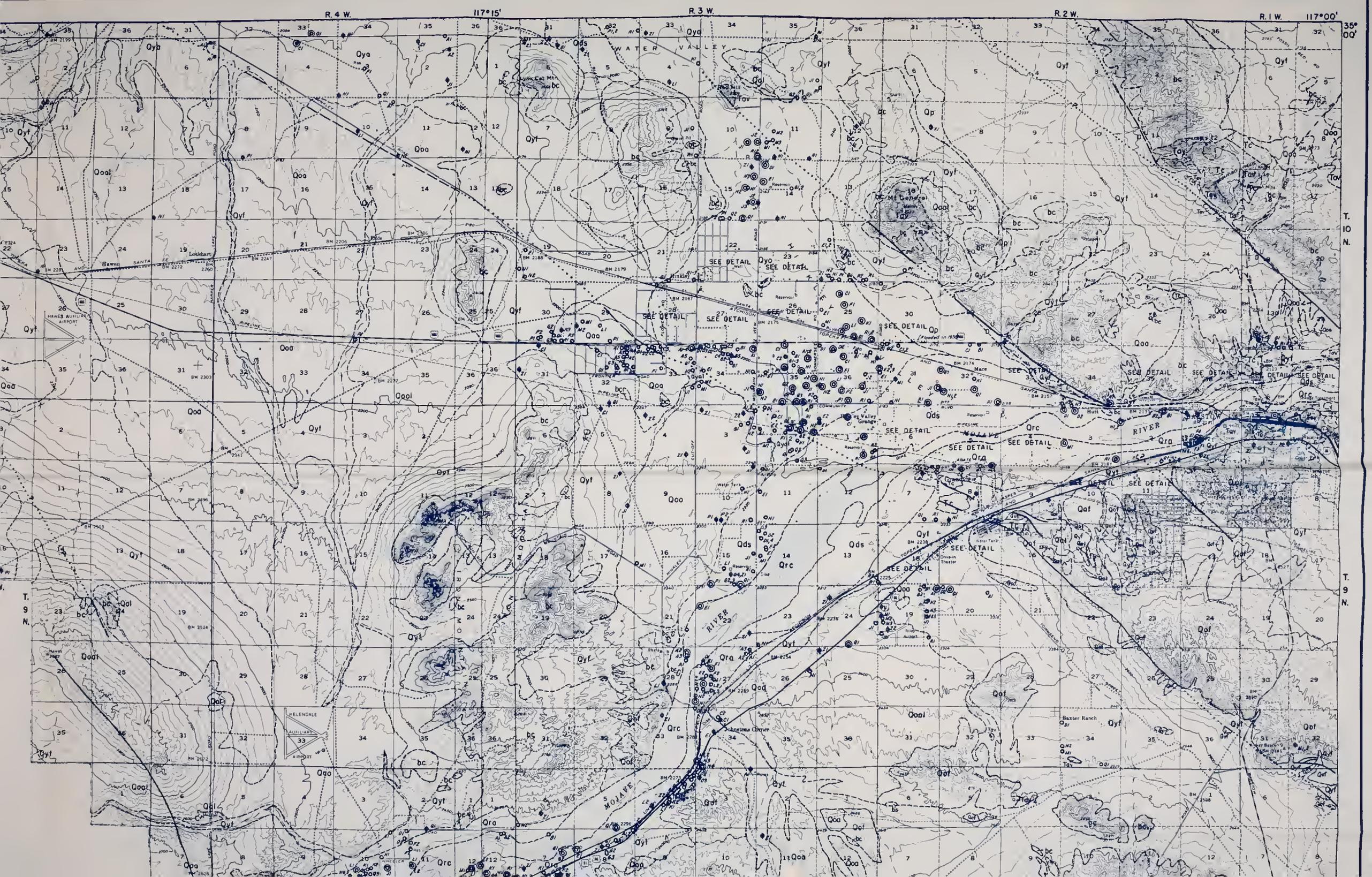
Letter after well indicates  
position in section thus:

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

For a complete description of well-

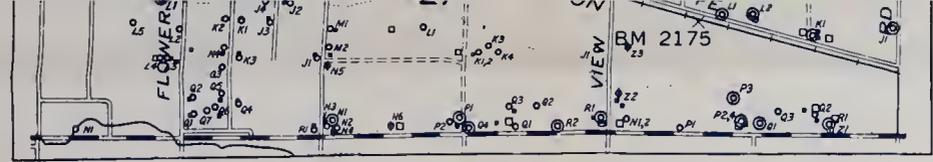




M	L	K	J
N	P	Q	R

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

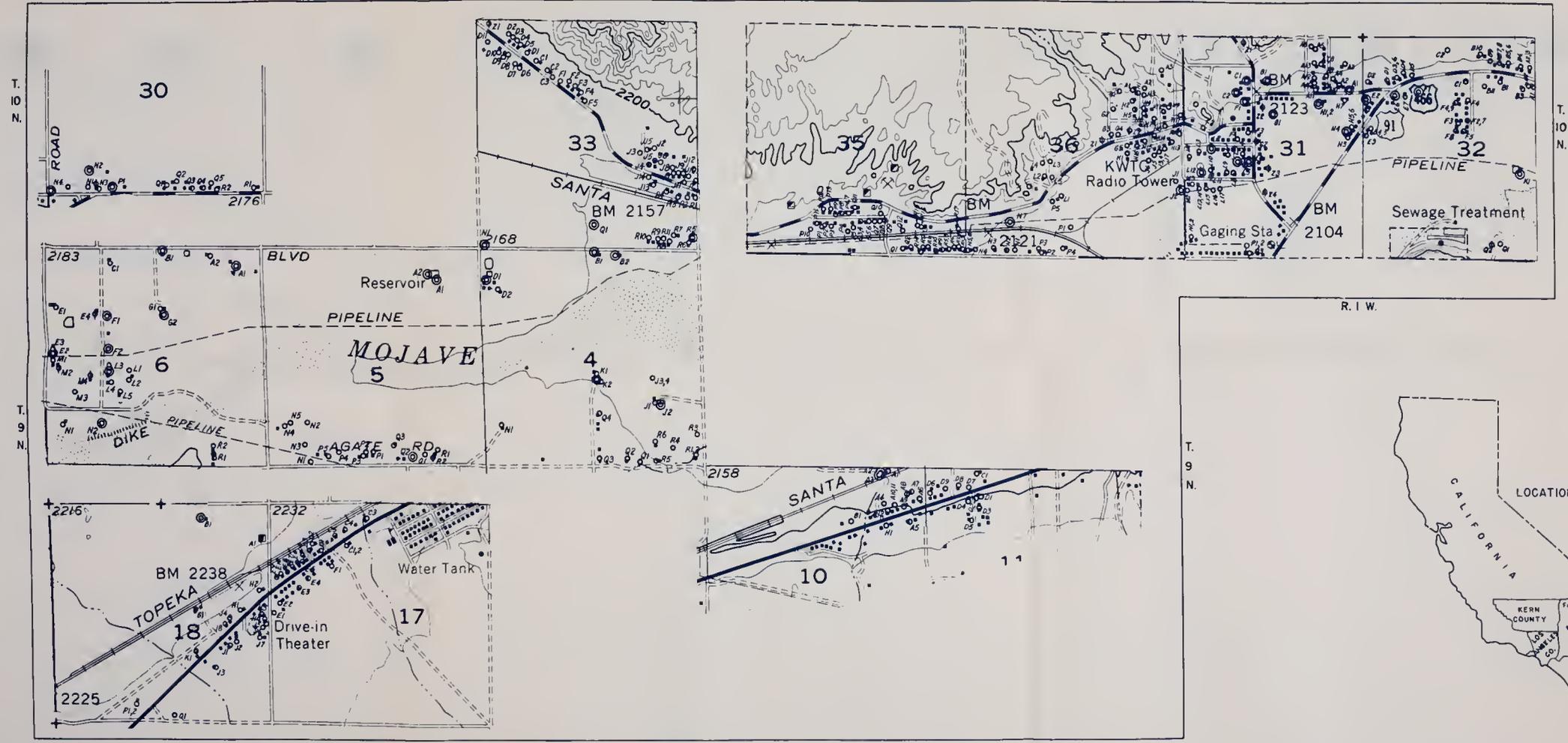
For a complete description of well-numbering system see text



R. 3 W.

R. 2 W.

R. 1 W.



R. 2 W.

R. 1 W.

T. 9 N.



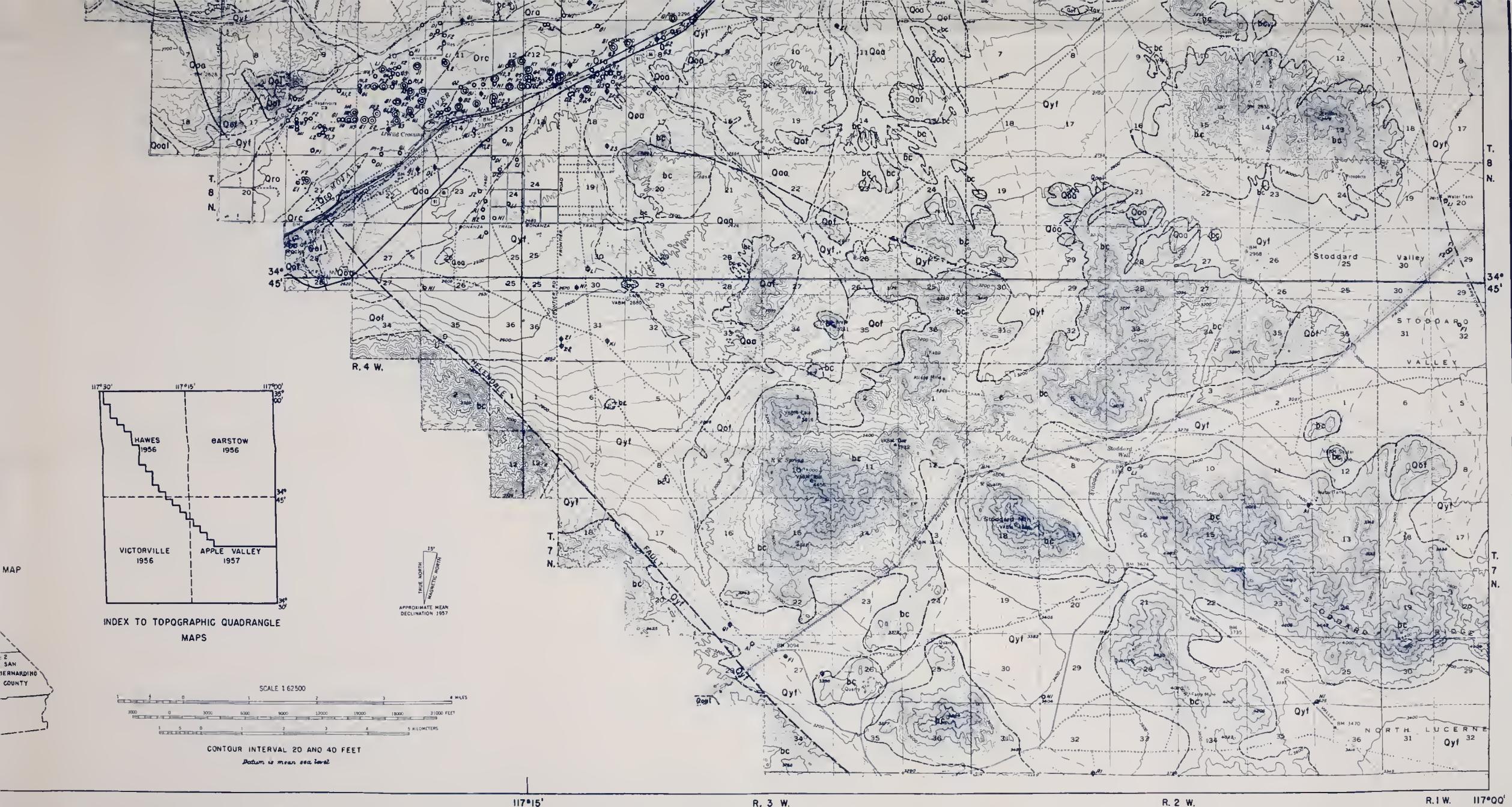
Base from U. S. Geological Survey topographic maps, scale 1:62,500, 1959

MAP OF THE EASTERN PART OF THE MIDDLE CALIFORNIA BASIN SHOWING RECONNAISSANCE GEOLOGY

STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

FEDERAL-STATE COOPERATIVE GEOLOGICAL SURVEY

PREPARED BY U. S. GEOLOGICAL SURVEY



THE MIDDLE MOJAVE VALLEY AREA, CALIFORNIA  
 GEOLOGY AND LOCATIONS OF WELLS

STATE OF CALIFORNIA  
 DEPARTMENT OF WATER RESOURCES

WATER RESOURCES INVESTIGATIONS

BY U. S. GEOLOGICAL SURVEY

Locations of wells by W. R. Moyle, Jr., R. W. Page, and others. Geology by R. W. Page and W. R. Moyle, Jr.; in large part generalized from unpublished mapping by T. W. Dibblee, Jr., and published mapping in the Barstow quadrangle by O. E. Bowen, Jr., (1951), 1959

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