

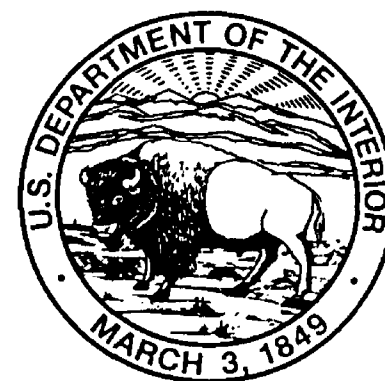
Irrigated Croplands, Estimated Pumpage, and Water-Level Changes in Diamond Valley, Eureka and Elko Counties, Nevada, through 1990

By FREDDY E. ARTEAGA, J. LARUE SMITH, and JAMES R. HARRILL

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For additional information
write to:

District Chief
U.S. Geological Survey
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Carson City, NV 89706-0866

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CONVERSION FACTORS, VERTICAL DATUM, AND OTHER ABBREVIATIONS USED IN REPORT

Multiply	By	To obtain
acre	4,047	square meter
acre-foot (acre-ft)	1,233	cubic meter
acre-foot per year (acre-ft/yr)	1,233	cubic meter per year
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer

Temperature: Degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) by using the formula $^{\circ}\text{F} = [1.8(^{\circ}\text{C})] + 32$. Degrees Fahrenheit can be converted to degrees Celsius by using the formula $^{\circ}\text{C} = 0.556(^{\circ}\text{F} - 32)$.

Sea level: In this report, “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929, formerly called “Sea-Level Datum of 1929”), which is derived from a general adjustment of the first-order leveling networks of the United States and Canada.

Other abbreviations:

kilowatthour	kWh
kilowatthour per acre-foot	kWh/acre-ft
kilowatthour per acre-foot, per foot	(kWh/acre-ft)/ft

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By Freddy E. Arteaga, J. LaRue Smith, and James R. Harrill

ABSTRACT

Ground-water pumpage and crop data were compiled as part of an investigation of ground-water withdrawals in Diamond Valley, Eureka and Elko Counties, Nevada. Cumulative ground-water withdrawals from 1950 to 1990 exceeded 1.2 million acre-feet—an average of more than 29,000 acre-feet per year. During 1972-90, pumpage of ground water for irrigation increased from about 23,000 acre-feet to about 64,000 acre-feet. The net decline in ground-water levels has been about 50 feet in the developed area of southern Diamond Valley. Field investigations during the summer of 1990 indicated that of 291 irrigation wells visited, 158 were in operation. Landsat imagery and a geographical information system were used to determine that about 19,400 acres of land were irrigated in 1989. The area of croplands irrigated by a typical center-pivot sprinkler in 1989 (determined from the Landsat image) was about 125 acres compared to the 135 acres that can potentially be irrigated on a 160-acre field by that system. The use of 125 acres as the area irrigated by a typical center-pivot sprinkler to calculate total irrigated acreage might improve the accuracy of estimates derived from field inventories made throughout the State.

INTRODUCTION

Diamond Valley has supported pumping for irrigation since 1949 when two wells were drilled on the eastern side of the valley to develop land under the

Desert Land Act (Eakin, 1962, p. 5). Development continued at a moderate rate through the 1950's and 1960's. By 1965, more than 200 irrigation wells had been drilled; however, probably not more than 80 had been pumped in any single growing season (Harrill, 1968, p. 6). In 1972, electric power became available, and the number of wells pumped for irrigation increased markedly. The annual rate of pumping increased accordingly. In 1972, annual pumpage for irrigation was about 23,000 acre-ft. By 1975, estimates of annual pumpage exceeded the estimates of perennial yield. Large-scale pumping for irrigation continued successfully through 1990, and in 1990, the amount of pumpage was about 64,000 acre-ft. Cumulative ground-water withdrawals from 1950 through 1990 exceeded 1.2 million acre-ft—an average of slightly more than 29,000 acre-ft/yr. In 1990, however, pumping was concentrated in the southern part of the valley and the overdraft was basinwide—annual pumpage continues to exceed the estimated perennial yield. Consequently, concerns exist about the long-term continuation of the development.

In 1990, the U.S. Geological Survey, in cooperation with the Nevada Division of Water Resources, began to compile information to better estimate pumpage from irrigation wells in Diamond Valley. The purpose of this effort was to provide the initial information needed to manage the ground-water resource.

Purpose and Scope

This report summarizes (1) irrigated acreage and pumpage reported by previous investigations (Eakin, 1962; and Harrill, 1968); (2) field inventories made by the Nevada Division of Water Resources from

1966 through 1989; (3) remotely sensed Landsat Thematic Mapper (TM) data recorded July 30, 1989, that show the extent of irrigated land; (4) well-efficiency tests made by the University of Nevada Cooperative Extension Service, Eureka County; and (5) water-level measurements made by the Nevada Division of Water Resources and U.S. Geological Survey through 1990. The investigation also included a field inventory of 291 wells in 1990, evaluation of consumptive use by crops, and determination of power-consumption coefficients from results of well-efficiency tests.

Study Area

Diamond Valley is an intermontane valley in east-central Nevada. Most of the valley, including all the farmlands, is in Eureka County; a small part of the valley extends into Elko County (fig. 1). Eureka, the county seat of Eureka County, is in the southern part of the valley and is the only town in the study area. The population of the county, estimated at 767 in 1960 (Nevada State Department of Administration, 1990), had increased to 2,110 by 1990 (Maud Naroll, Office of the Nevada State Demographer, Bureau of Business and Economic Records, University of Nevada, Reno, written commun., 1991). Much of this population growth is because of a surge of mining activity in the area. In a previous study of Diamond Valley, Harrill (1968) divided the area into two subareas: southern and northern Diamond Valley (fig. 1). Southern Diamond Valley, about 276,000 acres, is where the field census of wells was done and where the 158 irrigation wells were in use. In comparison, northern Diamond Valley, about 194,000 acres, contains fewer than 10 irrigation wells, and no field work was done there.

Previous Hydrologic Studies of Diamond Valley

Eakin (1962) completed a preliminary evaluation of the hydrology of Diamond Valley. Harrill (1968) provided a moderately detailed appraisal of water supply in the valley, including a ground-water budget, chemical analyses of water, estimates of irrigated acreage and pumpage, and estimates of consumptive

use for major crops. Pennington (1980) evaluated evapotranspiration rates for alfalfa in the valley during 1977-78.

Acknowledgments

The authors are grateful for the cooperation of the local residents of the valley in providing data and permitting access to their wells during this investigation. The authors also acknowledge the assistance received from Federal, State, and local governmental agencies. Locations of most of the wells and documentation of corresponding electric utility and meter numbers were checked in the field by James V. Enloe, Nevada Division of Water Resources. Data on well-efficiency tests were made available by Steve R. Lewis, Eureka County Cooperative Extension Service, University of Nevada, Reno.

NUMBERING SYSTEMS FOR WELLS AND SPRINGS

Local Identification System

A local site designation is used in Nevada to identify a site by the hydrographic area (Rush, 1968) and by the official rectangular subdivision of the public lands referenced to the Mount Diablo base line and meridian. Each site designation consists of four units: (1) the number of the hydrographic area; (2) the township, preceded by an N or S to indicate location north or south of the base line (half townships are indicated by an H following the township number); (3) the range, preceded by an E to indicate location east of the meridian; and (4) the section number and letters designating the quarter section, quarter-quarter section, and so on (A, B, C, and D indicate the northeast, northwest, southwest, and southeast quarters, respectively), followed by a number indicating the sequence in which the site was recorded. For example, site 153 N20 E53 01BDDA1 is in Diamond Valley (hydrographic area 153). It is the first site recorded in the northeast quarter of the southeast quarter of the southeast quarter of the northwest quarter of section 1, Township 20 North, Range 53 East, Mount Diablo base line and meridian.

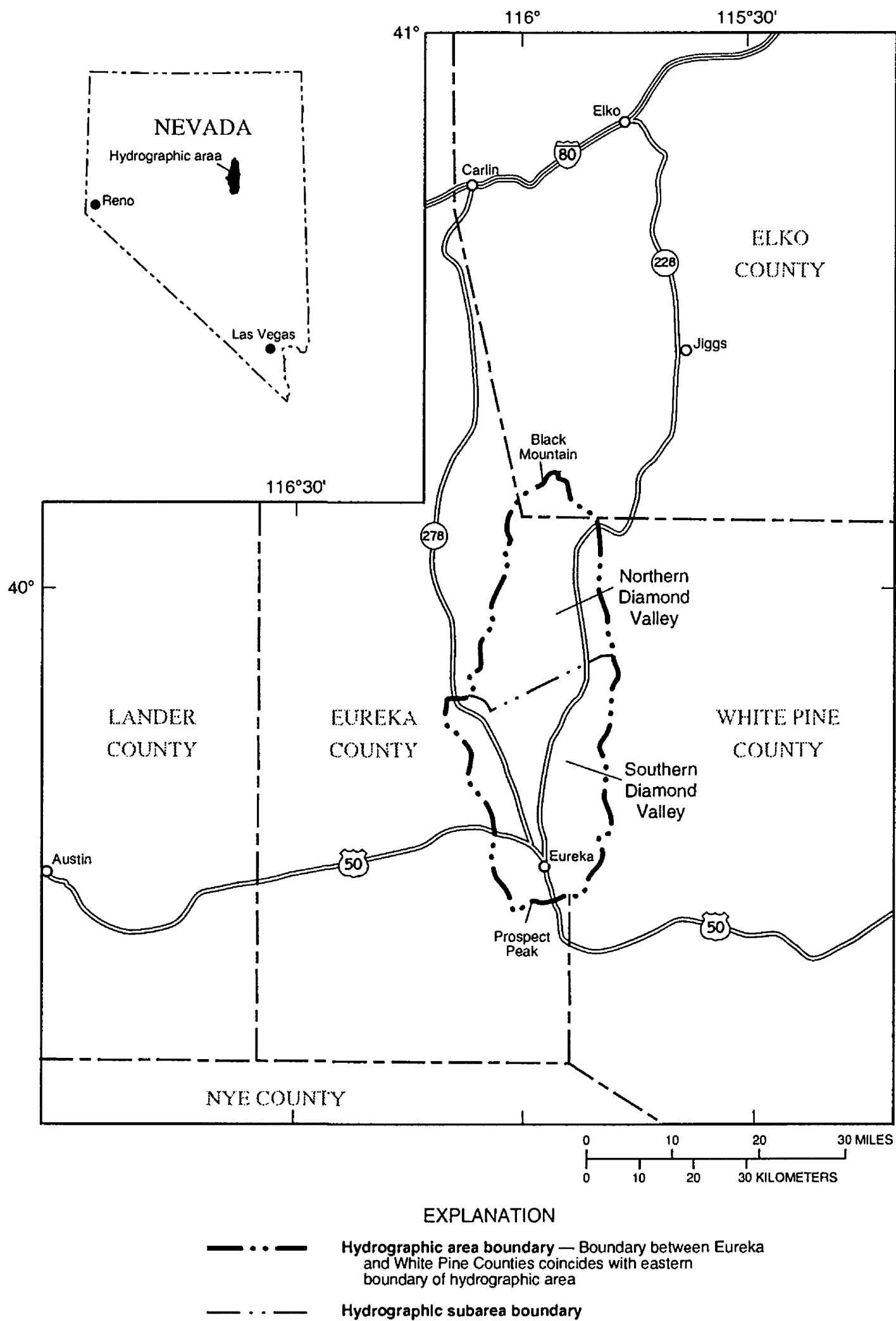


Figure 1. Location of Diamond Valley hydrographic area and boundary between northern and southern Diamond Valley hydrographic subareas.

Standard Identification System

The U.S. Geological Survey identification (ID) system is based on latitude and longitude. The site ID indicates the geographic location of each site and provides a unique number for each. The ID consists of 15 digits: the first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify the sites within a 1-second grid. For example, site 393731115570301 is at 39°37'31" latitude and 115°57'03" longitude, and it is the first site recorded in that 1-second grid. The originally assigned number is retained as a permanent identifier even if a more accurate latitude and longitude are later determined.

IRRIGATED CROPLANDS

Irrigation Methods

The three principal irrigation methods used in Diamond Valley are center-pivot sprinkler systems, border irrigation, and furrow irrigation. In 1990, center-pivot, self-propelled sprinkler systems—the primary form of irrigation in Diamond Valley—were used for approximately 16,000 acres. A single center-pivot system can cover a circular area of about 135 acres (U.S. Soil Conservation Service, 1981, p. NV 685-10). Border irrigation and flood irrigation were used for the remaining area under cultivation—approximately 6,000 acres.

Estimates of Irrigated Acreage

Field Inventories

Field inventories of irrigated acreage have been made by the Nevada Division of Water Resources during 1966-69 and 1975-89 and by the U.S. Geological Survey in 1990. These inventories, along with previously published information on ground-water pumpage (Harrill, 1968, p. 48-49), are listed in table 1.

Landsat Data

The field inventories reported in table 1 are labor intensive, and detailed inventories involve committing

considerable time and resources. Another technique being used with increasing frequency is remote sensing. Remote sensing has been used extensively for large inventories of irrigated acreage, especially in the arid and semi-arid regions of the United States. For example, Heimes and Luckey (1983) used remote sensing to inventory irrigation in the High Plains in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming. The U.S. Geological Survey has incorporated remotely sensed Landsat data and geographic information system (GIS) technology into a method to identify irrigated acreage, and this method was applied in Diamond Valley. The satellite image chosen for analysis consisted of Landsat Thematic Mapper (TM) data (scene-identification number Y5197717534X0) from July 30, 1989.

The Landsat TM scanner measures radiation, or energy reflected by objects, at different wavelengths of the electromagnetic spectrum. Common land covers have distinctly different spectral patterns in the visible and near-infrared regions of the electromagnetic spectrum, as illustrated in figure 2. Irrigated croplands (represented by corn leaves in fig. 2) show a characteristic low reflectance in TM channel 3 and high reflectance in TM channel 4; playas have a high reflectance in all TM channels; and sage generally has a low reflectance in TM channels 1 through 3, as well as a lower reflectance than irrigated croplands in TM channel 4. Reflectance from croplands contrasts with that of most native vegetation in Nevada.

Digital TM data can be processed to distinguish croplands from other land covers. Digital data from the satellite are stored as an array of cells, or pixels, as one data layer for each TM channel. Each pixel represents a square 30-meter-by-30-meter area. Land cover is identified from the TM data by using the spectral pattern recognition technique known as unsupervised classification (Lillesand and Kiefer, 1987). Distinct spectral patterns are identified from the data, statistics about the patterns are tabulated, and each pattern is assigned a value. The data for each pixel in each layer are then compared to the spectral patterns. The value assigned to the pixel that the data most closely resemble is placed in a new, single data layer. The spectral patterns are analyzed and related to the appropriate land-cover type or class. This process is referred to as "land-cover classification."

Table 1. Estimated irrigated acreage and estimated pumpage in Diamond Valley, Nevada, 1950-90

[Data for 1950-65 from Harrill (1968, tables 16 and 17, p. 48, 49); data for 1966-69 and 1975-89 from files of Nevada Division of Water Resources, Carson City; data for 1990 based on field inventories by U.S. Geological Survey; --, data not available]

Year	Number of wells visited	Number of active wells	Irrigated cropland (acres)				Total Irrigated acreage	Pumpage (acre-feet)
			Alfalfa	Grain	Pasture	Other		
1950	--	--	--	--	--	--	--	300
1951	--	--	--	--	--	--	--	600
1952	--	--	--	--	--	--	--	800
1953	--	--	--	--	--	--	--	800
1954	--	--	--	--	--	--	--	800
1955	--	--	--	--	--	--	--	1,000
1956	--	--	--	--	--	--	--	1,000
1957	--	--	--	--	--	--	--	1,200
1958	--	--	--	--	--	--	--	1,200
1959	--	--	--	--	--	--	--	1,800
1960	--	--	--	--	--	--	--	2,400
1961	--	--	70	2,900	--	220	3,200	6,100
1962	--	--	300	3,000	--	2,300	5,600	11,000
1963	--	--	400	3,740	--	700	4,800	9,700
1964	--	--	985	4,710	--	41	5,740	12,000
1965	281	70-75	2,130	5,450	--	19	7,600	16,000
1966	--	74	--	--	--	--	13,000	22,400
1967	--	--	--	--	--	--	9,500	19,400
1968	--	--	--	--	--	--	9,000	18,200
1969	--	--	--	--	--	--	--	22,900
1970-74:			No data available					
1975	228	125	10,700	5,250	0	1,860	17,800	53,400
1976	232	137	10,800	6,760	0	1,190	18,700	56,200
1977	233	143	12,800	6,650	515	0	19,800	53,000
1978	233	164	14,800	5,800	0	1,260	21,900	59,800
1979	234	172	15,800	5,910	0	830	22,600	61,800
1980	240	187	17,400	5,130	0	545	23,100	64,000
1981	238	183	20,700	4,090	0	485	25,300	71,700
1982	242	180	22,300	2,580	0	445	25,300	73,300
1983	243	188	22,000	2,580	0	240	24,800	71,900
1984	248	189	24,300	2,400	0	100	26,800	78,100
1985	248	189	24,300	2,400	0	100	26,800	78,100
1986	249	174	21,100	2,860	126	100	24,200	69,600
1987	249	166	20,100	2,210	660	0	23,000	66,000
1988	249	163	20,200	1,060	0	295	21,600	63,400
1989	239	168	19,800	2,660	0	1,070	23,500	66,700
1990	291	158	19,900	2,010	150	135	22,200	64,400

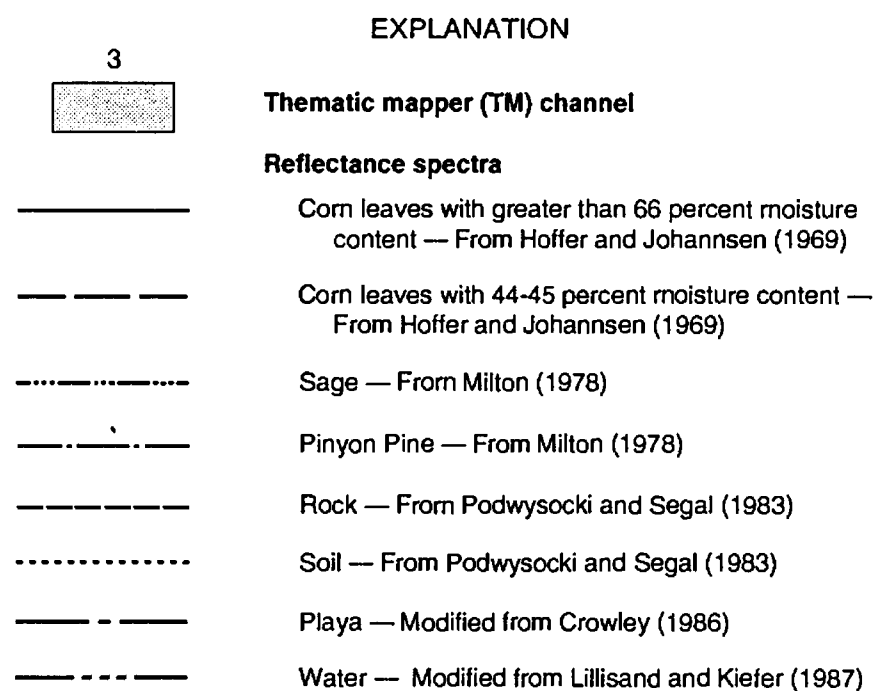
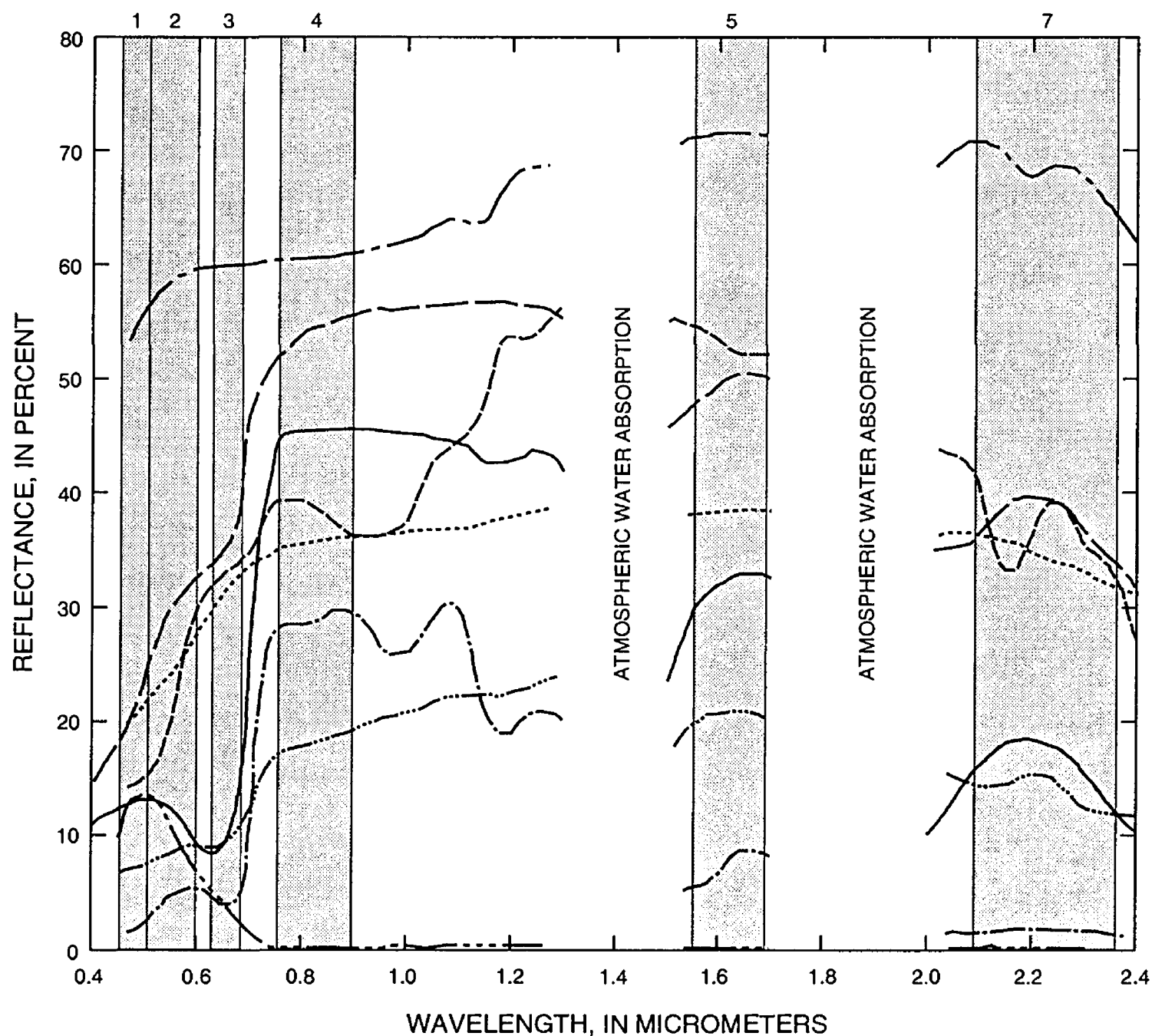


Figure 2. Spectra of various land covers show distinctly different reflectance characteristics. These differences are used in classifying land covers from satellite imagery. (Data are not from Diamond Valley.)

The digital data are incorporated in a GIS for further analysis. After the classes of croplands are converted from image format to vector (line-based) format, they can be integrated with other digital-data layers, such as planimetric base features (roads, hydrography, and public-land survey system). Because the Landsat image and the GIS data layer for the land-cover classification of croplands are registered to each other, the two can be visually compared to check for errors or inconsistencies and improve the classification. For example, riparian vegetation (green vegetation along streams or areas of runoff from irrigated fields) may be spectrally inseparable from irrigated croplands and, therefore, be incorrectly classified as irrigated croplands. Also, irrigated areas where crops have recently been harvested may not show the reflectance characteristic of irrigated croplands and, therefore, may be incorrectly omitted from the classification. However, if analysts view the Landsat image with the land-cover classification, they can identify the characteristic stream or irrigation channel with riparian vegetation or the characteristic circular or rectangular shape of irrigated croplands and thereby refine the classification, edit the linework, and update the GIS. The interpretation of some areas of the image may not be as straightforward and may require more extensive fieldwork. An effective use of the remote sensing and GIS method is to (1) acquire a satellite TM scene at the peak of the growing season, (2) process the data for the land-cover classification immediately thereafter, and (3) provide maps for field verification and to assist in the field inventory for that growing season.

In this study, three classes of irrigated croplands were identified from the image of July 30, 1989: (1) irrigated croplands; (2) probably irrigated croplands; and (3) previously irrigated croplands (that is, farmlands that may have been taken out of production). Criteria used in the interpretation and refinement of the land-cover classification are as follows:

- Riparian areas that were easily recognized were removed from the classification.
- Areas that were spectrally classified as irrigated croplands and had well-defined circular or rectangular shapes, indicative of irrigation systems, were classified as *irrigated*.
- Areas that were spectrally classified as irrigated croplands but were not circular, rectangular, or riparian were classified as

probably irrigated. These areas require field verification.

- Areas that appeared on the image to have been productive farmlands (circular or rectangular areas that have spectral features similar to that of irrigated croplands) but were not spectrally classified as irrigated croplands were reclassified as *previously irrigated*. These areas also require field verification.

Plate 1 shows the final classification. The areas calculated from the GIS are as follows:

- Class 1 includes 17,400 acres of irrigated croplands.
- Class 2 includes 2,000 acres of probably irrigated croplands.
- Class 3 includes 400 acres of previously irrigated croplands.

The total area of Class 1 and Class 2 lands—19,400 acres—is 4,100 acres less than the estimate of total acreage in 1989 from the well inventories listed in table 1.

There are three probable reasons for the difference in total areas determined by field inventory and by image classification. First, the areas determined from the image represent irrigated croplands as of the end of July 1989. Crops harvested earlier and new crops planted later in the season were not included. Second, as determined from the Landsat data, the area of croplands irrigated by a single center-pivot sprinkler system on an 160-acre field in 1989 was typically about 125 acres. This number compares closely with the area of a circle with a radius of 0.25 mi, which is 125.6 acres. This area is smaller than the 135 acres that can potentially be irrigated by such a system. If 135 acres was used as the standard area irrigated by this system to calculate acreage, there would be a 10-acre difference between the acreage obtained by that calculation and that seen on an image. With 130 pivot systems active in 1989, this discrepancy accounts for about 1,300 acres of difference. Third, uneven water distribution or soil conditions may result in the green vegetation within a field being less than the total area of the irrigated field. Field checking of the images would be the best way to resolve these differences and would increase the accuracy of the assessment.

PUMPAGE AND WELL-EFFICIENCY TESTS

Pumpage prior to 1966 was estimated by Harrill (1968, p. 49). Pumpage from 1966 to 1969 and from 1975 to 1989 was estimated by the Nevada Division of Water Resources, primarily on the basis of inventories of irrigated land and water duties (estimates are not available for 1970-74). These estimates are listed in table 1 and shown in figure 3, along with the estimates of acreage of irrigated croplands.

The University of Nevada Cooperative Extension Service office in Eureka, Nev., provided reports of 418 well-efficiency tests for Diamond Valley spanning 1972-89. The test reports contain information on approximate well location, type of pump and motor, water level, pumping level, friction head, pressure head, discharge rate, date and method of measurement, and overall efficiency. Complete information is available for 285 of the tests, and for these tests, additional computations were made to determine the power, in kilowatthours, needed to pump 1 acre-ft of water. A

second variable was computed by dividing the kilowatthours per acre-foot by the total head (the sum of depth to pumping level, friction head, and pressure head) to determine the power consumed to lift 1 acre-ft of water 1 ft. Of the 285 tests with complete data, about 17 percent were in T. 20 N.; about 71 percent were in T. 21 N.; about 11 percent were in T. 22 N.; and about 1 percent were in T. 23 N. Most of the tests were made from the mid-1970's to the early 1980's; testing continued at a reduced rate through 1989. Graphs known as boxplots (Tukey, 1977) are used to display information on the statistical distribution of discharge, pumping level, total head, power consumed pumping each acre-foot of water, and power consumed lifting each acre-foot of water by 1 ft (fig. 4) for three areas in the valley:

- Area 1 includes 49 tests from T. 20 N., R. 53 and 54 E.;
- Area 2 includes 201 tests from T. 21 N., R. 53 and 54 E.; and
- Area 3 includes 32 tests from T. 22 N., R. 53 and 54 E.

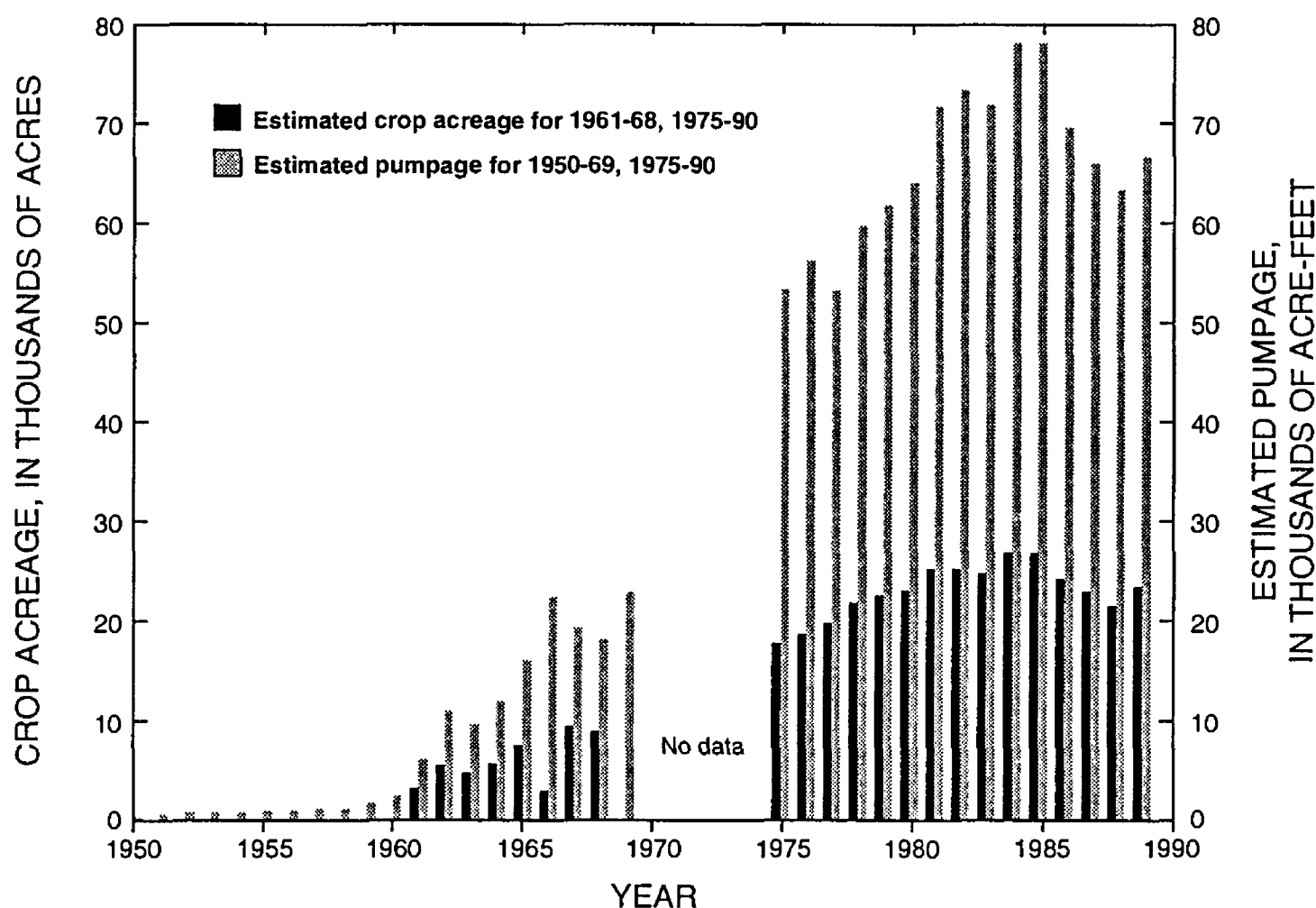


Figure 3. Estimated crop acreage and estimated pumpage in Diamond Valley, Nev., 1950-90.

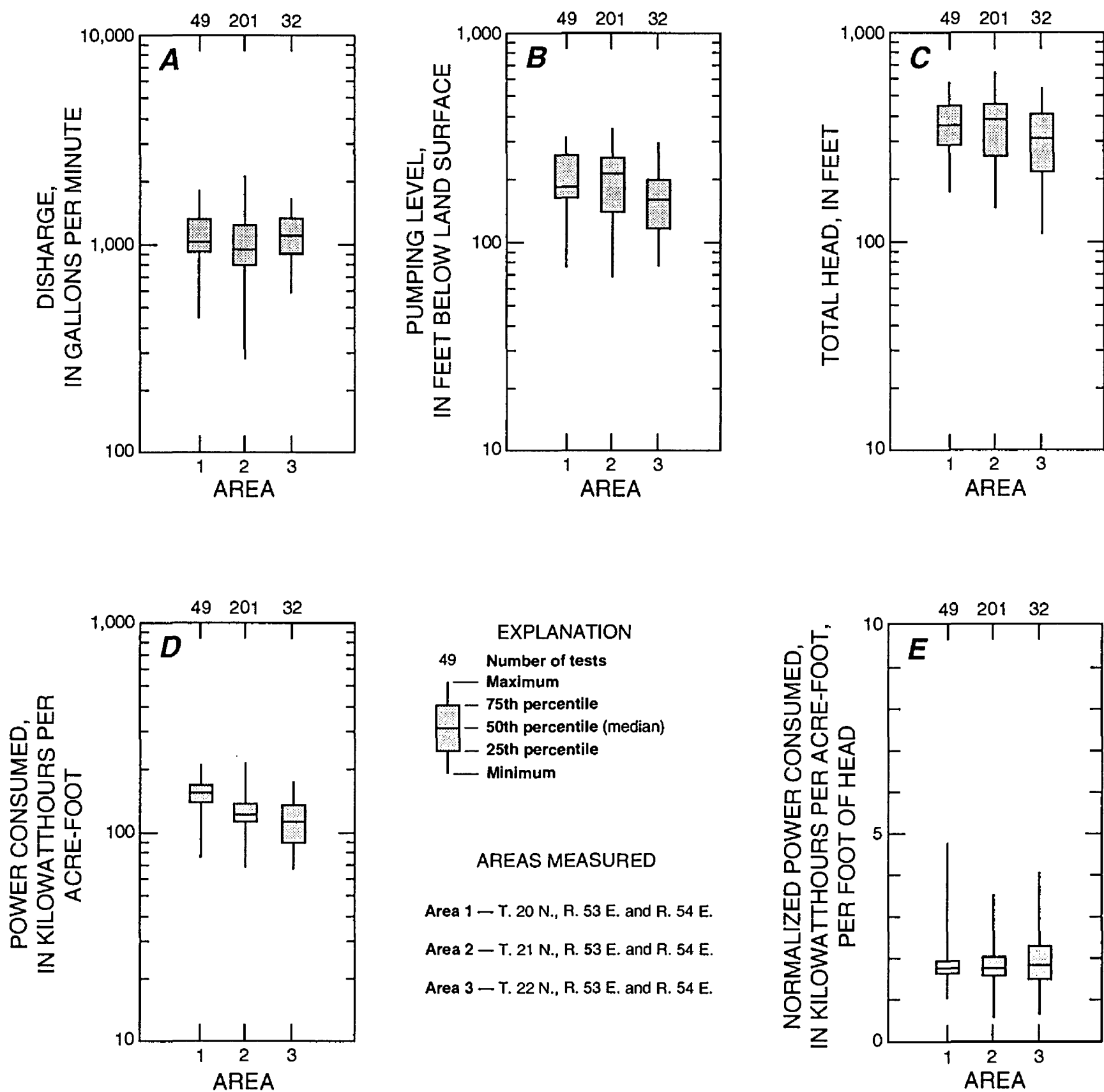


Figure 4. Boxplots showing results of well-efficiency tests made between 1975-89: **A**, discharge; **B**, pumping level; **C**, total head; **D**, power consumed to pump 1 acre-foot of water; and **E**, normalized power consumed to lift 1 acre-foot of water 1 foot.

The number of tests and median values for each of the five variables are represented visually by features known as “boxes” and “whiskers” (fig. 4). A “box” defines the spread of the middle 50 percent of the data (the values that lie between the 25th and 75th percentiles). The median value of the data (the 50th percentile) is indicated by a horizontal line within the box. The vertical lines beyond each end of the box are called whiskers. They show the range for values that extend beyond the ends of the box to the maximum and minimum data values. The median values of power consumed per acre-foot of water, per foot of total head, are similar to the value (1.8 kWh/acre-ft/ft)—reported in a study of 60 wells in Idaho (Moreland, 1977, p. 16). Where adequate information on total head is available for specific irrigation seasons, pumpage can be roughly estimated from power-consumption records by the following relation (from Moreland, 1977, fig. 4E):

$$\text{Acre-feet pumped} = kWh / 1.8TH, \quad (1)$$

where *kWh* is power used, in kilowatthours;

TH is total head, in feet; and

1.8 is typical value of *kWh* per acre-foot per foot of total head.

The values of total head shown in figure 4C span 1972-89. During that period, water levels declined throughout the pumping area (pl. 1), which would systematically decrease total head with time. However, during the same period, most irrigators converted from high-pressure to low-pressure sprinkler systems that are more efficient and, as a result, cause a increase in total head. Consequently, the total heads shown in figure 4C should not be used to make estimates of pumpage for any specific year. If an independent check is desired on estimates that are based on crop inventories and duties of water, the preceding relation, supported by field determinations of total head, could be used to develop an independent estimate of pumpage.

WATER-LEVEL CHANGES

Water levels in most wells in the developed area of southern Diamond Valley have undergone a net decline of approximately 50 ft since pumping for irrigation began. Water levels measured in selected wells over relatively long periods are listed in the appendix.

Hydrographs of 13 selected wells (pl. 1) show water-level changes during various periods. The rate of decline appears to have increased somewhat during the mid-1970's throughout the developed area. As of 1990, measured water levels in this area were declining at rates of 1.5 to 2.5 ft/yr. Hydrographs of miscellaneous measurements at two springs, Shipley Hot Spring and Thompson Ranch Spring, are also shown on plate 1. Measurements of flow at Thompson Ranch Spring ranged from a high of about 1,900 gal/min in 1983 to 50 gal/min in 1990.

SUMMARY

Ground-water pumpage and crop data were compiled as part of an investigation of ground-water withdrawals in Diamond Valley, Eureka and Elko Counties, Nev. Cumulative ground-water withdrawals from 1950 to 1990 exceeded 1.2 million acre-ft. The pumpage of ground water for irrigation increased from about 23,000 acre-ft in 1972 to about 64,000 acre-ft in 1990. The net decline in ground-water levels has been about 50 feet in the developed area of southern Diamond Valley.

Field investigations during the summer of 1990 indicated that of 291 irrigation wells visited, 158 were in operation. Landsat imagery and a geographical information system were used to determine that about 19,400 acres of croplands were irrigated in 1989. Also, the area of croplands irrigated by a typical center-pivot sprinkler in 1989 (determined from the Landsat image) was about 125 acres, compared to 135 acres that can potentially be irrigated on a 160-acre field by a center-pivot system. The area of a circle with a radius of 0.25 mi is 125.6 acres, which agrees closely with the areas of irrigated fields as determined from the Landsat image. The use of 125 acres as the area irrigated by a standard-sized pivot system to calculate total irrigated acreage might improve the accuracy of estimates derived from field inventories made throughout the State.

Well-efficiency tests are available for 418 wells in the valley. For these tests, the median power consumption required to lift 1 acre-ft of water 1 ft is about 1.8 kWh. This value can be used to estimate approximate ground-water pumpage, using power-consumption data and specific information on total head.

REFERENCES CITED

- Crowley, J.K., 1986, Visible and near-infrared spectra of carbonate rocks—Reflectance variations related to petrographic textures and impurities: *Journal of Geophysical Research*, v. 91, no. B5, p. 5001-5012.
- Eakin, T.E., 1962, Ground-water appraisal of Diamond Valley, Eureka and Elko Counties, Nevada: Nevada Department of Conservation and Natural Resources, Ground-Water Resources—Reconnaissance Report 6, 60 p.
- Harrill, J.R., 1968, Hydrologic response to irrigation pumping in Diamond Valley, Eureka and Elko Counties, Nevada, 1950-65: Nevada Department of Conservation and Natural Resources, Water Resources Bulletin 35, 85 p.
- Heimes, F.J., and Luckey, R.R., 1983, Estimating 1980 ground-water pumpage for irrigation on the High Plains in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Water-Resources Investigations Report 83-4123, 36 p.
- Hoffer, R.M., and Johannsen, C.J., 1969, Ecological potentials in spectral signature and analysis, *in* Johnson, P.L., ed., *Remote sensing in ecology*: Athens, University of Georgia Press, p. 1-16.
- Lillesand, T.M., and Kiefer, R.W., 1987, *Remote sensing and image interpretation*: New York, John Wiley, 721 p.
- Milton, Nancy, 1978, Spectral reflectance measurements of plants in the East Tintic Mountains, Utah: U.S. Geological Survey Open-File Report 78-448, 123 p.
- Moreland, J.A., 1977, Ground water-surface water relations in the Silver Creek area, Blaine County, Idaho: Idaho Department of Water Resources, Water Information Bulletin 44, 42 p.
- Nevada State Department of Administration, 1990, Nevada statistical abstract—1990 edition: Carson City, Nev., 458 p.
- Pennington, R.W., 1980, Evaluation of empirical methods for estimating crop water consumptive use for selected sites in Nevada: Nevada Division of Water Planning, Report 3, 206 p.
- Podwysocki, M.H., and Segal, D.B., 1983, Use of multi-spectral scanner images for assessment of hydrothermal alterations in the Marysvale, Utah, mining area: *Economic Geology*, v. 78, p. 675-687.
- Rush, F.E., 1968, Index of hydrographic areas in Nevada: Nevada Division of Water Resources, Information Report 6, 38 p.
- Tukey, J.W., 1977, *Exploratory data analysis*: Menlo Park, Calif., Addison-Wesley, 688 p.
- U.S. Soil Conservation Service, 1981, Nevada irrigation guide: Reno, Nev., 327 p.

Appendix

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90

Local identification—See section in text, "Numbering System for Wells and Springs," for explanation.

Standard identification—See section in text, "Numbering System for Wells and Springs," for explanation.

Date—Date water level measured; 00 indicates exact day not known.

Water level—Measurements are reported to either nearest hundredth or nearest tenth of a foot, based on accuracy indicated in Ground Water Site Inventory (GWSI) data base.

Status—D, dry or destroyed; P, pumping; S, nearby well is pumping and taps same aquifer ; Z, other; --, reported water-level measurement represents static level.

Method—R, data reported but method not known; S, steel-tape measurement by U.S. Geological Survey; Z, measured by Nevada Division of Water Resources; --, method not specified.

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 01BDDA1	393731115570301	173	5,951	01-01-60	86.38	--	S
				11-00-61	81.8	--	Z
				03-00-65	85.7	--	Z
				11-00-65	89.0	--	Z
				03-00-66	86.4	--	Z
				03-00-68	92.2	--	Z
				03-00-69	91.8	--	Z
				11-00-69	101.7	--	Z
				10-01-73	113.5	--	Z
				03-00-74	99.0	--	Z
				11-03-75	107.8	--	Z
				03-01-76	103.0	--	Z
				11-08-76	108.8	--	Z
				03-00-77	102.4	--	Z
				11-14-77	110.6	--	Z
				03-00-79	113.8	--	Z
				11-08-84	150.0	--	Z
				10-23-89	132.1	--	Z
153 N20 E53 02ACDD1	393724115580201	220	5,932	05-17-66	67.08	--	S
				10-01-73	89.1	--	Z
				11-03-75	87.6	--	Z
				03-01-76	82.9	--	Z
				11-08-76	95.2	--	Z
				11-14-77	109.8	--	Z
				11-08-78	112.3	--	Z
				11-01-79	109.8	--	Z
				11-01-80	112.7	--	Z
				11-01-81	125.6	--	Z
				11-09-82	123.6	--	Z
				05-01-83	122.8	--	Z
				11-09-83	126.8	--	Z
				11-08-84	118.4	--	Z
				12-04-85	119.8	--	Z
				11-05-86	120.0	--	Z
				11-18-87	121.4	--	Z
				10-20-88	122.1	--	Z
				10-23-89	115.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 02DDDD1	393705115574201	250	5,963	09-01-63	102	--	R
				11-00-63	98.9	--	R
				04-00-65	99.8	--	R
				11-00-65	101.4	--	R
				04-06-66	105.69	--	Z
				11-00-67	108.1	--	R
				04-00-68	102.8	--	R
				04-00-69	105.3	--	R
				09-08-69	113.0	S	Z
				04-15-71	108.2	--	Z
				11-17-71	110.9	--	Z
				02-23-72	109.7	--	Z
				12-05-72	71.3	--	Z
				02-27-73	113.0	--	Z
				08-07-73	121.5	S	Z
				10-01-73	126.2	--	Z
				03-12-74	122.4	--	R
				11-03-75	120.6	--	Z
				03-01-76	120.5	--	Z
				11-08-76	126.2	--	Z
				03-05-77	120.4	--	Z
				11-14-77	128.9	--	Z
				03-29-78	127.9	--	Z
				11-08-78	--	P	--
				04-05-79	125.7	--	Z
				04-15-80	139.5	--	Z
				11-01-80	135.1	--	Z
				11-01-81	148.4	--	Z
				11-09-82	147.0	--	Z
				05-01-83	147.9	--	Z
				11-09-83	153.2	--	Z
				11-08-84	148.1	--	Z
				11-05-86	152.1	--	Z
				11-18-87	143.7	--	Z
				10-20-88	160.6	--	Z
				10-23-89	162.0	--	Z
153 N20 E53 04ACDD1	393743116002101	131	5,925	09-13-61	56.5	--	--
				11-01-61	55	--	--
				04-04-66	60.63	--	Z
				08-21-68	68.0	S	Z
				02-17-69	65.4	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
Local Identification	Standard identification										
153 N20 E53 04ACDD1 (Continued)				09-08-69	67.9	S	Z				
				04-15-71	67.4	--	Z				
				08-07-73	77.6	S	Z				
				10-01-73	72.9	--	Z				
				11-05-73	73.3	--	Z				
								03-12-74	72.1	--	Z
								03-05-77	78.3	--	Z
								11-14-77	84.4	--	Z
								11-08-78	84.2	--	Z
								04-06-79	83.9	--	Z
								11-01-79	93.1	--	Z
								11-01-80	95.3	--	Z
								11-01-81	106.1	--	Z
								11-09-82	105.4	--	Z
								05-01-83	98.4	--	Z
								11-09-83	99.6	--	Z
								11-08-84	97.9	--	Z
								11-05-86	101.0	--	Z
								11-18-87	115.6	--	Z
								10-24-89	107.4	--	Z
								09-13-90	--	P	--
				153 N20 E53 04DDBB1	393714116000301	177	5,928	11-00-61	56.5	--	Z
								11-00-63	58.9	--	Z
11-00-64	66.7	--	Z								
11-00-65	66.2	--	Z								
03-00-66	60.7	--	Z								
								04-05-66	60.71	--	S
								11-00-67	65.6	--	Z
								03-00-68	67.9	--	Z
								11-00-68	68.3	--	Z
								03-00-69	65.1	--	Z
								11-00-69	69.3	--	Z
								10-01-73	73.3	--	Z
								03-00-74	70.9	--	Z
								11-03-75	63.1	--	Z
								03-01-76	63.4	--	Z
								11-08-76	64.0	--	Z
								11-14-77	67.8	--	Z
								11-08-78	70.1	--	Z
								03-00-79	82.8	--	Z
								11-01-79	82.8	--	Z
								11-01-80	88.5	--	Z
								11-01-81	93.2	--	Z
								11-09-82	91.6	--	Z
				05-01-83	93.8	--	Z				
				09-13-90	--	P	--				

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 10ADDD1	393645115585801	180	5,947	11-00-61	72.5	--	Z
				11-00-63	76.8	--	Z
				03-00-64	76.5	--	Z
				11-00-64	79.4	--	Z
				11-00-65	80.0	--	Z
				03-00-66	83.1	--	Z
				04-05-66	83.05	--	S
				11-00-67	84.8	--	Z
				03-00-68	87.8	--	Z
				03-00-69	83.6	--	Z
				11-00-69	89.8	--	Z
				11-00-71	83.3	--	Z
				03-00-72	88.3	--	Z
				11-00-72	90.6	--	Z
				03-00-73	95.3	--	Z
				10-01-73	106.1	--	Z
				03-00-74	98.2	--	Z
				11-03-75	102.5	--	Z
				03-01-76	97.8	--	Z
				11-08-76	101.4	--	Z
				03-00-77	99.5	--	Z
				11-14-77	105.3	--	Z
				03-00-78	101.1	--	Z
				03-00-79	101.8	--	Z
				11-01-79	111.4	--	Z
				11-01-80	113.3	--	Z
				11-01-81	127.9	--	Z
				05-01-83	133.4	--	Z
				11-09-83	135.6	--	Z
153 N20 E53 10BADD1	393645115592801	220	5,936	04-05-66	67.44	--	S
				10-01-73	98.3	--	Z
				11-03-75	86.5	--	Z
				03-01-76	84.4	--	Z
				11-08-76	91.0	--	Z
				11-14-77	--	P	--
				11-08-78	--	P	--
				11-01-79	100.8	--	Z
				11-01-80	108.7	--	Z
				11-01-81	115.1	--	Z
				11-09-82	106.7	--	Z
				05-01-83	114.0	--	Z
				11-09-83	107.3	--	Z
				11-07-84	112.6	--	Z
				11-05-86	113.0	--	Z
				10-24-89	116.9	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N20 E53 10CACC1	393623115593301	220	5,942	04-05-66	73.06	--	S
				10-01-73	96.4	--	Z
				11-03-75	108.6	--	Z
				03-01-76	107.7	--	Z
				11-08-76	83.5	--	Z
				11-14-77	103.0	--	Z
				11-08-78	103.3	--	Z
				11-01-79	111.7	--	Z
				11-01-80	114.3	--	Z
				11-01-81	119.8	--	Z
				11-09-82	113.2	--	Z
				05-01-83	111.3	--	Z
				11-09-83	112.9	--	Z
				11-07-84	109.6	--	Z
				11-05-86	122.3	--	Z
				10-23-89	143.0	--	Z
153 N20 E53 10DDDD1	393613115585101	200	5,956	08-09-61	79	--	--
				11-01-63	84.6	--	Z
				04-01-64	74.0	--	Z
				04-01-65	76.9	--	Z
				04-05-66	91.7	--	Z
				11-01-67	93.0	--	Z
				04-01-68	92.0	--	Z
				04-01-69	91.6	--	Z
				09-08-69	97.4	S	Z
				11-17-71	97.7	--	Z
				02-23-72	95.7	--	Z
				12-05-72	98.9	--	Z
				02-27-73	97.2	--	Z
				11-05-73	102.5	--	Z
				03-12-74	108.4	--	Z
				11-03-75	93.1	--	Z
				04-06-76	101.0	--	Z
				11-08-76	109.8	--	Z
				03-05-77	106.9	--	Z
				11-15-77	112.2	--	Z
				03-29-78	109.4	--	Z
				11-10-78	115.0	--	Z
				04-06-79	111.2	--	Z
				11-09-79	119.3	--	Z
				04-15-80	116.1	--	Z
				11-19-80	121.1	--	Z
				11-01-81	126.9	--	Z
				11-09-82	125.2	--	Z
				05-01-83	123.1	--	Z
				11-09-83	125.7	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey aite designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
Local identification	Standard identification										
153 N20 E53 10DDDD1 (Continued)				12-04-85	126.3	--	Z				
				11-05-86	129.8	--	Z				
				11-18-87	132.7	--	Z				
				03-30-88	130.8	--	Z				
				10-20-88	141.3	--	Z				
				04-05-89	138.7	--	Z				
				10-23-89	131.3	--	Z				
				11-28-90	142.0	--	Z				
				153 N20 E53 11ACCD1 393647115582601				04-05-66	103.01	--	S
11-03-75	117.5	--	Z								
11-08-76	125.8	--	Z								
11-14-77	125.5	--	Z								
11-01-80	138.6	--	Z								
153 N20 E53 11ADCC1 393647115574901				04-05-66	100.04	--	S				
				11-01-80	139.8	--	Z				
				11-01-81	134.3	--	Z				
				11-09-82	131.1	--	Z				
				05-01-83	129.3	--	Z				
				11-09-83	131.0	--	Z				
				11-08-84	129.5	--	Z				
				12-04-85	135.4	--	Z				
				11-05-86	139.5	--	Z				
				11-18-87	145.3	--	Z				
				10-20-88	--	P	--				
				10-23-89	147.1	--	Z				
				153 N20 E53 11CDBB1 393623115582401				04-05-66	91.36	--	S
								10-01-73	102.3	--	Z
								11-03-75	107.8	--	Z
03-01-76	112.1	--	Z								
11-08-76	110.7	--	Z								
11-14-77	112.6	--	Z								
11-08-78	115.7	--	Z								
11-01-79	120.1	--	Z								
11-01-80	123.0	--	Z								
11-01-81	131.6	--	Z								
11-09-82	124.3	--	Z								
05-01-83	133.3	--	Z								
11-09-83	137.1	--	Z								
11-07-84	127.1	--	Z								
11-18-87	136.1	--	Z								
10-20-88	142.9	--	Z								
10-23-89	133.7	--	Z								

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N20 E53 11DDBB1	393623115575801	--	5,967	10-01-73	115.1	--	Z
				11-03-75	117.8	--	Z
				03-01-76	115.3	--	Z
				11-08-76	120.0	--	Z
				11-14-77	122.9	--	Z
				11-08-78	125.1	--	Z
				11-01-79	129.2	--	Z
				11-01-80	131.5	--	Z
153 N20 E53 15CDDD1	393519115592401	398	5,996	11-00-65	122.2	--	R
				04-05-66	121.54	--	Z
				11-00-66	137.8	--	R
				04-00-67	126.3	--	R
				11-00-67	135.4	--	R
				04-00-68	131.0	--	R
				04-00-69	125.8	--	R
				09-08-69	129.5	S	Z
				04-15-71	128.8	--	Z
				11-17-71	132.2	--	Z
				02-23-72	129.0	--	Z
				12-05-72	132.8	--	Z
				02-27-73	132.2	--	Z
				10-01-73	141.1	--	Z
				03-12-74	139.0	--	Z
				11-03-75	147.4	--	Z
				03-01-76	143.0	--	Z
				11-08-76	155.9	--	Z
				03-05-77	142.4	--	Z
				11-14-77	161.3	--	Z
				03-29-78	157.1	--	Z
				11-08-78	159.7	--	Z
				04-06-79	156.9	--	Z
				11-01-79	162.8	--	Z
				04-15-80	159.2	--	Z
				11-01-80	161.9	--	Z
				11-01-81	169.2	--	Z
				11-09-82	168.5	--	Z
				05-01-83	167.1	--	Z
				11-09-83	169.9	--	Z
				11-07-84	170.0	--	Z
				12-04-85	170.4	--	Z
				11-05-86	171.0	--	Z
				11-18-87	173.8	--	Z
				10-20-88	179.5	--	Z
				10-23-89	180.4	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 17BCCC1	393545116021101	--	5,946	11-08-76	59.7	--	Z
				11-14-77	64.1	--	Z
				10-25-90	79.0	--	Z
153 N20 E53 18DCCC1	393522116024501	165	5,954	04-03-62	44.0	--	R
				11-00-63	46.5	--	R
				04-00-64	59.5	--	R
				04-00-65	42.6	--	R
				11-00-65	47.5	--	R
				04-04-66	48.19	--	Z
				11-00-66	55.9	--	R
				04-00-67	56.9	--	R
				11-00-67	52.5	--	R
				04-00-68	50.8	--	R
				04-00-69	52.6	--	R
				09-08-69	53.7	S	Z
				04-14-71	--	P	--
				11-17-71	55.0	--	Z
				02-23-72	65.8	--	Z
				12-05-72	66.1	--	Z
				02-27-73	64.1	--	Z
				08-07-73	--	P	--
				11-06-73	64.2	--	Z
				03-12-74	63.6	--	Z
				11-04-75	59.0	--	Z
				03-05-77	60.6	--	Z
				11-15-77	57.4	--	Z
				03-30-78	70.2	--	Z
				11-10-78	65.7	--	Z
				04-06-79	63.6	--	Z
				11-09-79	69.0	--	Z
				04-15-80	63.5	--	Z
				11-19-80	70.0	--	Z
				11-01-81	83.9	--	Z
				11-09-82	79.3	--	Z
				05-01-83	82.7	--	Z
				11-09-83	81.1	--	Z
				11-07-84	80.2	--	Z
				12-03-85	79.9	--	Z
				11-05-86	79.8	--	Z
				11-18-87	81.4	--	Z
				10-20-88	81.0	--	Z
				10-23-89	75.7	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 20ADCB1	393509116011801	275	5,966	04-04-66	97.06	--	S
				10-01-73	113.9	--	Z
				11-03-75	119.8	--	Z
				11-08-76	129.9	--	Z
				11-14-77	133.7	--	Z
				11-08-78	136.5	--	Z
				11-01-79	143.5	--	Z
				11-01-80	152.1	--	Z
				11-01-81	138.5	--	Z
153 N20 E53 20CCAB1	393453116014201	200	5,961	04-04-66	91.83	--	S
				10-01-73	104.9	--	Z
				11-03-75	109.3	--	Z
				03-01-76	102.7	--	Z
				11-08-76	117.3	--	Z
				11-14-77	120.4	--	Z
				11-08-78	123.1	--	Z
153 N20 E53 20DCAA1	393442116010701	200	5,960	04-04-66	91.64	--	S
				10-01-73	106.5	--	Z
				11-03-75	112.6	--	Z
				03-01-76	107.0	--	Z
				11-08-76	116.4	--	Z
				11-14-77	118.3	--	Z
				11-08-78	120.2	--	Z
				11-01-79	128.2	--	Z
				11-01-80	129.5	--	Z
				11-01-81	135.2	--	Z
153 N20 E53 21AACC1	393455116001301	200	5,974	03-05-62	99	--	R
				04-04-66	98.29	--	Z
				11-00-66	101.3	--	R
				04-00-67	104.7	--	R
				11-00-67	124.8	--	R
				04-00-68	120.8	--	R
				08-21-68	105.6	S	Z
				04-00-69	102.7	--	R
				09-08-69	105.1	S	Z
				04-15-71	105.8	--	Z
				11-17-71	119.5	--	Z
				02-23-72	107.6	--	Z
				12-05-72	111.1	--	Z
				02-27-73	111.1	--	Z
				08-08-73	117.5	S	Z
				10-01-73	123.3	--	Z
				03-12-74	110.9	--	Z
				11-03-75	123.1	--	Z
				03-01-76	124.8	--	Z
				11-08-76	129.6	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 21AACC1 (Continued)				03-05-77	119.70	--	Z
				11-14-77	132.6	--	Z
				03-30-78	126.8	--	Z
				11-08-78	130.3	--	Z
				04-06-79	123.3	--	Z
				11-09-79	136.3	--	Z
				04-15-80	130.1	--	Z
				11-01-80	135.5	--	Z
				11-00-81	142.8	--	R
				03-31-83	150.6	--	Z
153 N20 E53 21BDDD1	393505116003501	200	5,966	04-04-66	98.29	--	S
				11-03-75	119.9	--	Z
				03-01-76	116.4	--	Z
				11-08-76	122.4	--	Z
				11-14-77	128.7	--	Z
				11-08-78	124.0	--	Z
				11-01-79	136.3	--	Z
				11-01-80	135.4	--	Z
				11-01-81	148.2	--	Z
				11-09-82	151.4	--	Z
				05-01-83	150.6	--	Z
				11-09-83	152.6	--	Z
				11-05-86	153.1	--	Z
				11-18-87	154.0	--	Z
				10-20-88	157.9	--	Z
				10-23-89	151.5	--	Z
153 N20 E53 21CDDC1	393440116001901	248	5,974	04-04-66	124.29	--	S
				10-01-73	120.8	--	Z
				11-03-75	128.0	--	Z
				11-08-76	132.8	--	Z
				11-14-77	134.2	--	Z
				11-08-78	136.8	--	Z
				11-01-79	141.1	--	Z
				11-01-80	142.8	--	Z
				11-01-81	146.3	--	Z
				11-09-82	147.0	--	Z
				05-01-83	145.3	--	Z
				11-09-83	150.8	--	Z
				11-07-84	--	P	--
				11-05-86	151.0	--	Z
				11-18-87	152.8	--	Z
				10-20-88	156.5	--	Z
				10-23-89	154.8	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 22BDDD1	393459115592501	320	6,015	04-05-66	137.33	--	S
				10-01-73	135.6	--	Z
				11-03-75	156.9	--	Z
				03-01-76	155.4	--	Z
				11-08-76	161.1	--	Z
				11-14-77	162.6	--	Z
				11-09-83	192.4	--	Z
				11-07-84	192.0	--	Z
153 N20 E53 24DBBA1	393448115570201	--	6,071	10-01-73	193.9	--	Z
				11-03-75	185	--	Z
				03-01-76	185	--	Z
				11-08-76	200	--	Z
				11-14-77	200	--	Z
				11-08-78	200	--	Z
				11-01-79	200	--	Z
				11-01-80	200	--	Z
				11-01-81	200	--	Z
				11-09-82	200	--	Z
				11-08-83	244.5	--	Z
				11-13-86	247.4	--	Z
153 N20 E53 28ADDC1	393408116000301	225	6,024	04-04-66	154.14	--	S
				11-09-83	194	--	Z
				11-14-84	195.5	--	Z
				11-13-86	196.9	--	Z
				11-17-87	200	--	Z
153 N20 E53 28BCDD1	393401116003401	230	5,987	05-18-65	128	--	--
				04-04-66	118.73	--	Z
				11-00-67	125.0	--	R
				04-00-68	121.4	--	R
				08-22-68	123.4	S	Z
				04-00-69	122.6	--	R
				09-08-69	124.5	S	Z
				04-15-71	126.0	--	Z
				11-17-71	136.6	--	Z
				02-23-72	135.6	--	Z
				12-05-72	129.2	--	Z
				02-27-73	129.1	--	Z
				10-01-73	131.8	--	Z
				03-12-74	131.1	--	Z
				11-03-75	139.6	--	Z
				03-01-76	137.6	--	Z
				11-08-76	144.7	--	Z
				03-05-77	143.5	--	Z
				11-14-77	144.7	--	Z
				03-30-78	142.8	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
153 N20 E53 28BCDD1 (Continued)				11-08-78	148.5	--	Z				
				04-06-79	145.7	--	Z				
				11-01-79	152.6	--	Z				
				04-15-80	150.3	--	Z				
				11-01-80	156.1	--	Z				
				11-01-81	160.4	--	Z				
				11-09-82	159.0	--	Z				
				05-01-83	161.4	--	Z				
				11-09-83	164.2	--	Z				
				11-14-84	162.6	--	Z				
				11-15-86	169.1	--	Z				
				11-18-87	178.3	--	Z				
				10-20-88	187.4	--	Z				
				10-23-89	187.1	--	Z				
				153 N20 E53 29ADBB1	393410116011001	302	5,974	04-04-66	105.97	--	S
								10-01-73	118.2	--	Z
11-03-75	126.6	--	Z								
03-01-76	124.4	--	Z								
11-08-76	128.6	--	Z								
11-14-77	132.1	--	Z								
11-08-78	135.5	--	Z								
11-01-79	139.7	--	Z								
11-01-81	146.0	--	Z								
05-01-83	143.8	--	Z								
11-09-83	148.0	--	Z								
11-07-84	145.9	--	Z								
12-04-85	149.8	--	Z								
11-15-86	150.8	--	Z								
11-18-87	159.7	--	Z								
10-20-88	168.1	--	Z								
10-23-89	157.5	--	Z								
153 N20 E53 30ABCC1	393413116023001	155	5,984	12-00-60	54.6	--	--				
				11-00-63	66.1	--	R				
				11-00-64	66.1	--	R				
				04-00-65	58.4	--	R				
				11-00-65	59.4	--	R				
				04-04-66	59.23	--	Z				
				09-08-69	73.0	S	Z				
				02-23-72	61.7	--	Z				
				12-05-72	68.0	--	Z				
				02-27-73	67.4	--	Z				
				08-07-73	--	P	--				
				10-01-73	70.5	--	Z				
				03-12-74	85.1	--	Z				
				07-26-74	110	--	Z				
				11-04-75	86.1	--	Z				

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
				Date	Feet below land surface	Status	Method
153 N20 E53 30ABCC1	(Continued)			04-06-76	80.8	--	Z
				11-08-76	75.1	--	Z
				03-05-77	65.0	--	Z
				11-15-77	76.0	--	Z
				03-30-78	73.4	--	Z
				11-10-78	75.9	--	Z
				04-06-79	74.1	--	Z
				11-09-79	80.7	--	Z
				04-15-80	75.5	--	Z
				11-19-80	83.4	--	Z
				11-01-81	91.8	--	Z
				11-09-82	89.1	--	Z
				03-31-83	90.1	--	Z
				11-09-83	90.5	--	Z
				11-07-84	88.1	--	Z
				12-04-85	88.5	--	Z
				11-05-86	95.0	--	Z
				11-18-87	94.0	--	Z
				10-20-88	100.3	--	Z
153 N20 E53 30DCCC1	393343116023001	210	6,029	04-26-66	94.19	--	S
				10-01-73	134.1	--	Z
				11-08-76	138.1	--	Z
				11-14-77	140.2	--	Z
				11-08-78	142.9	--	Z
				11-01-79	148.6	--	Z
				11-01-80	150.4	--	Z
				11-01-81	157.2	--	Z
				12-05-85	136.7	--	Z
				11-05-86	139.2	--	Z
				11-18-87	131.1	--	Z
				10-20-88	138.8	--	Z
				10-23-89	140.4	--	Z
153 N20 E53 31DAAC1	393310116020001	192	6,100	03-15-51	158.55	--	--
				09-11-51	159.30	--	--
				10-01-52	157.11	--	--
				12-11-52	158.04	--	--
				12-18-52	157.89	--	--
				12-27-52	157.84	--	--
				01-03-53	157.81	--	--
				01-06-53	157.87	--	--
				01-18-53	157.84	--	--
				01-25-53	157.78	--	--

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
				Date	Feet below land surface	Status	Method
153 N20 E53 31DAAC1 (Continued)				01-31-53	157.97	--	--
				02-10-53	157.99	--	--
				02-17-53	158.04	--	--
				11-16-53	157.54	--	--
				03-09-54	156.95	--	--
				08-29-55	157.53	--	--
				10-27-55	157.60	--	--
				01-20-56	157.43	--	--
				03-26-56	157.39	--	--
				05-10-56	157.59	--	--
				06-20-56	157.28	--	--
				08-07-56	157.70	--	--
				11-19-56	156.59	--	--
				01-15-57	156.92	--	--
				03-06-57	156.42	--	--
				05-02-57	156.22	--	--
				07-11-57	155.99	--	--
				09-06-57	155.46	--	S
				01-07-58	155.89	--	--
				05-07-58	155.77	--	--
				07-15-58	156.06	--	--
				11-23-58	156.72	--	--
				09-21-61	165.02	--	S
				03-26-63	159.97	--	--
				09-10-63	160.84	--	--
				03-24-64	160.00	--	--
				09-16-64	161.92	--	--
				03-23-65	160.72	--	--
				09-20-65	161.54	--	--
				04-04-66	161.11	--	S
				09-15-66	163.85	--	S
				03-22-67	162.92	--	S
				03-19-68	162.88	--	S
				04-22-69	164.00	--	S
				04-22-70	165.36	--	S
				04-19-71	167.71	--	S
				03-03-72	167.42	--	S
				04-28-73	168.12	--	S
				03-17-74	193.92	--	S
				04-14-75	171.58	--	S
				03-19-76	173.10	--	--
				03-25-77	174.81	--	--
				04-12-78	176.7	--	--
				03-20-79	189.07	--	S
				03-18-80	--	D	--

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement				
				Date	Feet below land surface	Status	Method	
153 N20 E53 31DAAC1 (Continued)				03-17-81	--	D	--	
				03-16-82	--	D	--	
				03-25-85	--	D	--	
153 N20 E53 32BBBA1	393332116015001	240	6,024	04-04-66	87.98	--	Z	
				10-08-66	98	--	--	
				11-00-67	91.9	--	R	
				04-00-68	90.5	--	R	
				08-21-68	93.4	S	Z	
				04-00-69	91.6	--	R	
				09-08-69	94.8	S	Z	
				04-14-71	94.8	--	Z	
				11-17-71	98.2	--	Z	
				02-23-72	94.8	--	Z	
				12-05-72	99.7	--	Z	
				08-07-73	105.6	S	Z	
				10-01-73	98.9	--	Z	
				03-12-74	103.1	--	Z	
				11-03-75	102.8	--	Z	
				11-08-76	104.8	--	Z	
				03-05-77	101.7	--	Z	
				11-14-77	107.7	--	Z	
				03-30-78	102.4	--	Z	
				11-08-78	111.6	--	Z	
				04-06-79	108.8	--	Z	
				11-01-79	111.3	--	Z	
				04-15-80	104.1	--	Z	
				11-01-80	113.9	--	Z	
				11-01-81	119.1	--	Z	
				11-12-82	117.8	--	Z	
				03-31-83	113.7	--	Z	
				11-09-83	119.5	--	Z	
				11-07-84	116.6	--	Z	
				12-04-85	121.1	--	Z	
				11-05-86	120.8	--	Z	
				11-18-87	128.3	--	Z	
				10-20-88	133.3	--	Z	
				10-23-89	133.2	--	Z	
		393327116013601	218	6,052	04-04-66	112.98	--	S
					10-01-73	137.5	--	Z
					11-03-75	130.2	--	Z
					11-01-81	162.6	--	Z
					11-09-83	161.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N20 E53 32BDCC1 (Continued)				11-07-84	155.2	--	Z
				12-04-85	160.4	--	Z
				11-05-86	167.0	--	Z
				11-18-87	170.8	--	Z
				10-20-88	175.6	--	Z
				10-23-89	163.3	--	Z
153 N20 E53 32CCAA1	393310116013901	255	6,062	04-04-66	123.99	--	S
				10-01-73	149.2	--	Z
				11-03-75	138.7	--	Z
				03-01-76	146.1	--	Z
				11-08-76	140.0	--	Z
				11-14-77	147.7	--	Z
				11-08-78	154.8	--	Z
				11-01-79	162.8	--	Z
				11-01-81	174.1	--	Z
				11-09-83	172.3	--	Z
				11-07-84	170.4	--	Z
				12-04-85	174.7	--	Z
				11-05-86	175.2	--	Z
				10-23-89	156.1	--	Z
153 N20 E54 19BBCC1	393525115562001	--	6,043	04-23-65	172.19	--	S
				11-01-80	200	--	Z
				11-01-81	200	--	Z
				11-09-82	200	--	Z
				11-08-83	211.0	--	Z
				11-14-84	210.0	--	Z
				11-13-86	214.6	--	Z
153 N21 E53 01BCAA1	394248115572701	210	5,884	04-06-66	36.57	--	S
				11-01-80	63.2	--	Z
				11-01-81	68.9	--	Z
				11-09-82	68.2	--	Z
				11-10-83	68.5	--	Z
				11-09-84	69.9	--	Z
				12-03-85	74.4	--	Z
				11-12-86	74.6	--	Z
				11-17-87	75.4	--	Z
				10-19-88	81.9	--	Z
				11-02-89	84.1	--	Z
				09-14-90	--	P	--
153 N21 E53 01CDCC1	394232115572701	182	5,887	02-03-61	33	--	--
				04-00-65	38.3	--	Z
				04-16-66	37.98	--	Z
				11-00-66	38.0	--	Z
				09-10-69	54.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E53 01CDCC1 (Continued)				02-22-72	39.4	--	Z
				12-04-72	40.4	--	Z
				11-05-75	56.7	--	Z
				11-08-76	58.1	--	Z
				03-05-77	53.0	--	Z
				11-14-77	70.2	--	Z
				03-28-78	65.1	--	Z
				11-08-78	66.5	--	Z
				04-15-79	60.8	--	Z
				11-06-79	71.4	--	Z
				04-04-80	64.5	--	Z
				11-20-80	70.8	--	Z
				11-00-81	75.3	--	Z
				04-05-82	67.6	--	Z
				03-29-83	72.2	--	Z
153 N21 E53 02CCAA1	394232115584201	182	5,887	05-01-61	35	--	R
				11-00-63	38.0	--	R
				04-00-64	41.7	--	R
				04-00-65	40.6	--	R
				11-00-65	38.6	--	R
				11-00-66	43.1	--	R
				11-00-67	49.1	--	R
				04-00-68	40.1	--	R
				08-26-68	47.2	--	Z
				04-24-69	41.9	--	Z
				09-10-69	54.5	--	Z
				11-19-71	53.3	--	Z
				02-22-72	40.9	--	Z
				12-04-72	--	P	--
				02-27-73	36.8	--	Z
				11-10-83	69.6	--	Z
				11-09-84	71.6	--	Z
				12-03-85	73.6	--	Z
				11-12-86	77.1	--	Z
				11-17-87	78.0	--	Z
				10-19-88	84.6	--	Z
				11-02-89	84.8	--	Z
				09-14-90	--	P	--
153 N21 E53 03BBDD2	394310115594702	198	5,882	10-19-67	39	--	--
				08-26-68	45.2	--	Z
				04-24-69	39.7	--	Z
				09-10-69	49.7	--	Z
				11-19-71	51.1	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
153 N21 E53 03BBDD2 (Continued)				12-04-72	46.5	--	Z				
				02-27-73	46.4	--	Z				
				07-25-73	--	P	--				
				03-11-74	46.3	--	Z				
				11-05-75	52.6	--	Z				
				04-07-76	51.1	--	Z				
				11-08-76	55.0	--	Z				
				03-05-77	52.3	--	Z				
				11-14-77	59.0	--	Z				
				03-28-78	57.9	--	Z				
				11-08-78	60.0	--	Z				
				04-05-79	58.2	--	Z				
				11-06-79	68.0	--	Z				
				04-04-80	58.1	--	Z				
				11-18-80	68.9	--	Z				
				11-00-81	76.8	--	R				
				04-05-82	70.6	--	Z				
				03-29-83	67.8	--	Z				
				153 N21 E53 03CDBB1	394230115594401	182	5,887	11-00-61	37.8	--	Z
								03-00-66	40.0	--	Z
								04-06-66	40.00	--	S
								11-00-67	48.6	--	Z
								11-00-71	57.5	--	Z
								03-00-72	46.8	--	Z
								11-00-72	47.9	--	Z
03-00-73	47.2	--	Z								
11-08-76	60.0	--	Z								
11-14-77	67.0	--	Z								
03-00-78	59.3	--	Z								
11-08-78	64.5	--	Z								
03-00-79	61.0	--	Z								
11-01-79	68.8	--	Z								
11-01-80	70.3	--	Z								
11-01-81	76.5	--	Z								
03-00-82	68.5	--	Z								
11-09-82	75.9	--	Z								
11-07-83	72.6	--	Z								
11-09-84	76.1	--	Z								
12-03-85	75.0	--	Z								
11-12-86	79.1	--	Z								
11-17-87	80.5	--	Z								
10-19-88	85.6	--	Z								
11-02-89	83.5	--	Z								

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 03DDBB1	394238115593301	182	5,884	11-00-61	38.2	--	Z
				11-00-63	39.8	--	Z
				03-00-64	40.7	--	Z
				03-00-65	38.5	--	Z
				11-00-65	40.7	--	Z
				03-00-66	39.1	--	Z
				04-06-66	39.12	--	S
				03-00-67	40.1	--	Z
				11-00-67	47.8	--	Z
				11-00-71	55.6	--	Z
				03-00-72	45.6	--	Z
				11-00-72	46.1	--	Z
				03-00-73	45.7	--	Z
				03-00-74	47.1	--	Z
				11-00-75	56.0	--	Z
				11-00-76	52.8	--	Z
				03-00-77	52.6	--	Z
				11-00-77	54.4	--	Z
				11-00-78	60.3	--	Z
				03-00-79	55.9	--	Z
				11-00-79	68.0	--	Z
				11-00-80	69.3	--	Z
				11-00-81	77.2	--	Z
153 N21 E53 04ADD1	394258116000401	182	5,883	05-03-61	36	--	--
				11-00-63	37.2	--	R
				04-00-64	37.8	--	R
				11-00-64	40.8	--	R
				04-00-65	36.5	--	R
				11-00-65	38.6	--	R
				04-06-66	40.38	--	Z
				11-00-67	47.8	--	R
				04-00-68	44.8	--	R
				08-26-68	45.5	--	Z
				04-24-69	42.2	--	Z
				09-10-69	49.4	--	Z
				04-15-71	67.9	--	Z
				11-19-71	58.4	--	Z
				02-22-72	47.6	--	Z
				12-04-72	46.5	--	Z
				02-27-73	43.5	--	Z
				07-25-73	--	P	--
				10-30-73	51.1	--	Z
				03-11-74	47.8	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 04ADD1 (Continued)				11-05-75	52.9	--	Z
				04-07-76	50.1	--	Z
				11-08-76	55.5	--	Z
				03-05-77	58.5	--	Z
				11-14-77	57.9	--	Z
				03-28-78	54.5	--	Z
				11-08-78	60.6	--	Z
				04-05-79	56.0	--	Z
				11-06-79	64.9	--	Z
				04-04-80	61.1	--	Z
				11-18-80	62.3	--	Z
				11-00-81	70.5	--	R
				04-05-82	69.0	--	Z
				03-29-83	69.1	--	Z
153 N21 E53 04CDBB1	394228116004601	182	5,882	06-06-66	38.03	--	--
				11-01-80	53.0	--	Z
				11-01-81	69.4	--	Z
				11-09-82	72.4	--	Z
				11-07-83	76.1	--	Z
				11-14-84	79.2	--	Z
				11-12-86	79.4	--	Z
				11-17-87	81.1	--	Z
				10-19-88	83.7	--	Z
				11-02-89	83.2	--	Z
				08-28-90	--	P	--
153 N21 E53 04DDD1	394233116000401	188	5,884	07-21-63	42	--	--
				11-00-63	39.6	--	Z
				04-00-64	40.0	--	Z
				04-00-65	29.9	--	Z
				04-06-66	40.35	--	Z
				11-00-67	53.9	--	Z
				04-00-68	43.7	--	Z
				08-26-68	48.1	--	Z
				04-24-69	44.2	--	Z
				09-10-69	50.7	--	Z
				11-19-71	57.2	--	Z
				02-22-72	48.5	--	Z
				12-04-72	48.1	--	Z
				02-27-73	46.2	--	Z
				03-11-74	48.5	--	Z
				11-05-75	54.4	--	Z
				03-05-76	53.6	--	Z
				04-07-76	53.1	--	Z
				11-08-76	57.0	--	Z
				11-00-77	62.5	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 04DDD1 (Continued)				03-28-78	58.8	--	Z
				11-08-78	59.6	--	Z
				04-05-79	58.2	--	Z
				11-06-79	68.6	--	Z
				04-04-80	64.5	--	Z
				11-18-80	70.6	--	Z
				11-00-81	70.0	--	Z
				04-05-82	63.3	--	Z
				03-29-83	65.4	--	Z
153 N21 E53 05CBBC1	394250116020001	42.0	5,880	03-15-51	28.87	--	--
				09-11-51	28.92	--	--
				10-01-52	28.86	--	--
				03-03-53	28.76	--	--
				09-15-53	28.69	--	--
				03-08-54	28.61	--	S
				09-16-54	28.68	--	--
				08-29-55	28.96	--	--
				03-26-56	28.93	--	--
				08-28-56	29.00	--	--
				09-12-61	30.89	--	--
				09-22-61	30.88	--	--
				03-25-62	30.96	--	--
				10-14-62	32.28	--	--
				03-25-63	32.60	--	--
				09-10-63	33.08	--	--
				03-24-64	33.90	--	--
				09-16-64	33.73	--	--
				03-23-65	33.70	--	--
				09-22-65	34.55	--	S
				04-06-66	34.51	--	S
				09-15-66	35.91	--	S
				03-23-67	35.97	--	S
				03-20-68	37.06	--	S
				04-22-69	38.42	--	S
				04-22-70	38.80	--	S
				04-20-71	39.50	--	S
				03-03-72	40.77	--	S
				04-28-73	41.48	--	S
				03-14-75	--	D	--
153 N21 E53 06CDBB1	394243116030601	--	5,879	11-03-75	56.9	--	Z
				03-01-76	51.7	--	Z
				11-08-76	56.2	--	Z
				11-14-77	58.9	--	Z
				11-08-78	60.8	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E53 06CDBB1				11-01-79	64.7	--	Z
				11-01-80	66.4	--	Z
				11-01-81	70.6	--	Z
				11-09-82	70.3	--	Z
				11-07-83	71.7	--	Z
				11-14-84	74.3	--	Z
				12-03-85	75.1	--	Z
				11-12-86	78.0	--	Z
				11-17-87	88.3	--	Z
				10-19-88	93.9	--	Z
				11-02-89	89.5	--	Z
				08-27-90	126.9	--	Z
153 N21 E53 06DCAA2	394244116023501	--	5,880	11-03-75	50.2	--	Z
				03-01-76	47.5	--	Z
				11-08-76	58.2	--	Z
				11-14-77	60.6	--	Z
				11-08-78	61.0	--	Z
				11-01-79	67.0	--	Z
				11-01-80	64.1	--	Z
				11-01-81	71.3	--	Z
				11-09-82	65.3	--	Z
				11-07-83	65.4	--	Z
				11-14-84	72.1	--	Z
				11-12-86	73.3	--	Z
				11-17-87	79.1	--	Z
				10-19-88	84.8	--	Z
153 N21 E53 08DCAA1	394145116013401	192	5,893	11-00-61	42.1	--	Z
				11-00-63	58.2	--	Z
				03-00-66	46.2	--	Z
				04-06-66	46.18	--	S
				11-00-67	55.1	--	Z
				03-00-68	49.5	--	Z
				11-00-68	54.3	--	Z
				03-00-69	50.8	--	Z
				11-00-69	55.7	--	Z
				11-00-71	49.9	--	Z
				03-00-72	54.4	--	Z
				11-00-72	56.9	--	Z
				03-00-74	51.0	--	Z
				11-08-76	69.4	--	Z
				11-08-78	71.9	--	Z
				03-00-79	59.6	--	Z
				11-01-80	78.9	--	Z
				11-01-81	88.1	--	Z
				03-00-82	85.9	--	Z
				11-09-82	86.1	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 08DCAA1 (Continued)				11-14-84	91.3	--	Z
				11-12-86	99.1	--	Z
				11-17-87	102.3	--	Z
				10-19-88	109.1	--	Z
				10-24-89	102.3	--	Z
				08-30-90	--	P	--
153 N21 E53 09BBDD1	394219116005401	183	5,886	07-20-64	55.0	--	--
				11-00-64	39.0	--	R
				11-00-65	38.5	--	R
				04-06-66	37.53	--	Z
				04-00-67	39.2	--	R
				11-00-67	47.1	--	R
				04-00-68	41.3	--	R
				08-26-68	52.5	--	Z
				04-23-69	41.2	--	Z
				09-10-69	48.1	--	Z
				11-18-71	45.9	--	Z
				02-22-72	48.7	--	Z
				12-04-72	50.0	--	Z
				07-23-73	--	P	--
				10-30-73	60.3	--	Z
				03-12-74	51.9	--	Z
				11-05-75	53.7	--	Z
				04-07-76	54.8	--	Z
				11-08-76	57.6	--	Z
				03-05-77	54.0	--	Z
				11-14-77	62.0	--	Z
				03-28-78	56.9	--	Z
				11-08-78	62.3	--	Z
				04-05-79	58.7	--	Z
				11-06-79	71.6	--	Z
				04-04-80	69.0	--	Z
				11-18-80	70.8	--	Z
				11-00-81	73.6	--	R
				04-06-82	66.8	--	Z
				03-29-83	75.8	--	Z
153 N21 E53 09DBDD1	394149116003201	182	5,893	04-06-66	43.70	--	S
				10-01-73	47.8	--	Z
				11-03-75	45.2	--	Z
				03-01-76	42.6	--	Z
				11-08-76	50.7	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 09DBDD1 (Continued)				11-14-77	54.8	--	Z
				11-08-78	58.4	--	Z
				11-01-79	66.9	--	Z
				11-01-80	69.3	--	Z
				10-24-89	99.6	--	Z
				08-29-90	--	P	--
153 N21 E53 10CCAA1	394151115594801	182	5,894	07-18-61	52	--	--
				11-00-63	44.6	--	R
				04-00-65	43.5	--	R
				04-06-66	49.80	--	Z
				11-00-67	51.7	--	R
				04-00-68	48.1	--	R
				08-26-68	52.8	--	Z
				04-23-69	47.9	--	Z
				09-10-69	54.2	--	Z
				11-19-71	52.2	--	Z
				07-23-73	--	P	--
				10-30-73	53.3	--	Z
				10-01-73	--	P	--
				11-03-75	57.9	--	Z
153 N21 E53 10DCAA2	394151115591301	--	5,893	03-01-76	53.6	--	Z
				11-08-76	63.2	--	Z
				11-14-77	66.5	--	Z
				11-08-78	69.2	--	Z
				11-01-79	75.1	--	Z
				11-01-80	75.2	--	Z
				11-01-81	83.3	--	Z
				11-10-82	80.4	--	Z
				11-07-83	83.4	--	Z
				11-09-84	85.6	--	Z
				11-12-86	92.1	--	Z
				10-19-88	102.5	--	Z
				10-24-89	106.3	--	Z
				09-18-90	--	P	--
153 N21 E53 11BCAA1	394218115584401	192	5,886	11-06-60	36.0	--	--
				11-00-63	41.9	--	R
				09-10-69	54.2	--	Z
				04-20-71	--	P	--
				12-04-72	49.2	--	Z
				03-12-73	48.9	--	Z
				07-24-73	89.1	S	Z
				11-02-73	58	--	Z
				11-05-75	56.4	--	Z
				04-06-76	56.1	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
Local Identification	Standard Identification										
153 N21 E53 11BCAA1 (Continued)				11-08-76	62.6	--	Z				
				03-05-77	53.6	--	Z				
				11-14-77	67.3	--	Z				
				03-28-78	64.0	--	Z				
				11-08-78	64.0	--	Z				
								04-05-79	62.7	--	Z
								11-06-79	70.6	--	Z
								04-04-80	67.3	--	Z
								11-20-80	72.0	--	Z
								11-00-81	78.2	--	R
								04-05-82	76.8	--	Z
								03-29-83	77.0	--	Z
153 N21 E53 11CDBB1 394149115584301				--	5,890						
				09-30-60	36	--	--				
				11-00-63	43.2	--	R				
				04-00-64	45.4	--	R				
				11-00-64	46.7	--	R				
				11-00-65	44.5	--	R				
								04-06-66	42.65	--	Z
								11-00-66	46.5	--	R
								04-00-67	48.4	--	R
								11-00-67	58.0	--	R
								04-00-68	45.5	--	R
								08-28-68	52.7	--	Z
								04-23-69	45.1	--	Z
								09-10-69	55.2	--	Z
								04-20-71	50.7	--	Z
								11-19-71	58.3	--	Z
								12-04-72	52.4	--	Z
								07-24-73	80.5	S	R
								11-02-73	57.4	--	Z
								03-12-74	50	--	Z
								11-05-75	55.5	--	Z
								04-06-76	49.3	--	Z
								11-08-76	56.0	--	Z
								03-05-77	54.7	--	Z
								11-14-77	60.6	--	Z
								03-28-78	58.6	--	Z
								11-08-78	66.3	--	Z
								04-05-79	62.4	--	Z
				11-06-79	75.9	--	Z				
				04-04-80	67.0	--	Z				
				11-20-80	75.1	--	Z				
				11-00-81	81.0	--	R				
				04-05-82	79.3	--	Z				

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 11DACC1	394147115581001	183	5,893	04-06-66	42.65	--	S
				11-14-77	35.3	--	Z
				11-08-78	67.0	--	Z
				11-01-79	75.7	--	Z
				11-01-80	74.7	--	Z
				11-01-81	81.1	--	Z
				11-10-82	85.1	--	Z
				11-10-83	87.6	--	Z
				11-09-84	87.3	--	Z
				11-12-86	86.5	--	Z
				10-24-89	104.4	--	Z
				09-17-90	--	P	--
153 N21 E53 12CCBC1	394144115574801	200	5,894	05-12-61	44	--	--
				11-00-63	46.9	--	R
				04-00-64	49.3	--	R
				11-00-64	49.9	--	R
				04-00-65	42.6	--	R
				11-00-65	49.4	--	R
				04-06-66	44.28	--	Z
				04-00-67	45.7	--	R
				11-00-67	57.6	--	R
				04-00-68	48.4	--	--
				08-26-68	55.1	--	Z
				04-23-69	46.8	--	Z
				09-10-69	57.0	S	Z
				04-20-71	50.4	--	Z
				11-19-71	59.3	--	Z
				02-22-72	52.9	--	Z
				12-04-72	53.6	--	Z
				07-24-73	92.6	S	Z
				11-02-73	60.5	--	Z
				03-12-74	53.0	--	Z
				11-05-75	60.1	--	Z
				04-07-76	58.3	--	Z
				11-08-76	65.2	--	Z
				03-05-77	58.0	--	Z
				11-14-77	66.1	--	Z
				03-28-78	58.9	--	Z
				11-08-78	66.8	--	Z
				04-05-79	62.3	--	Z
				11-06-79	76.9	--	Z
				04-04-80	67.5	--	Z
				11-20-80	65.4	--	Z
				11-00-81	81.5	--	R
				04-05-82	77.6	--	R
				03-30-83	74.5	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 12DCAA1	394145115571701	192	5,889	04-06-66	38.69	--	S
				10-01-73	73.1	--	Z
				11-03-75	60.1	--	Z
				03-01-76	58.3	--	Z
				11-08-76	57.6	--	Z
				11-14-77	61.3	--	Z
				11-08-78	64.3	--	Z
				11-01-79	77.8	--	Z
				11-01-80	72.7	--	Z
				11-01-81	78.8	--	Z
				11-10-82	77.5	--	Z
				11-10-83	75.6	--	Z
				11-09-84	77.5	--	Z
				11-12-86	80.2	--	Z
				11-17-87	85.1	--	Z
				10-19-88	89.9	--	Z
				10-24-89	93.9	--	Z
				09-17-90	--	P	--
153 N21 E53 13BACC1	394118115574601	182	5,896	11-00-61	42.4	--	Z
				11-00-64	49.8	--	Z
				03-00-65	48.5	--	Z
				11-00-65	49.7	--	Z
				03-00-66	44.0	--	Z
				04-06-66	43.99	--	S
				03-00-67	46.1	--	Z
				11-00-67	58.0	--	Z
				03-00-68	50.8	--	Z
				11-00-68	59.7	--	Z
				03-00-69	51.0	--	Z
				11-00-69	57.6	--	Z
				11-00-71	62.7	--	Z
				11-00-72	63.4	--	Z
				03-00-73	55.2	--	Z
				03-00-74	53.8	--	Z
				11-00-75	63.2	--	Z
				03-00-76	61.1	--	Z
				11-00-76	66.7	--	Z
				03-00-77	60.4	--	Z
				11-00-77	72.5	--	Z
				11-00-78	74.1	--	Z
				11-00-80	77.8	--	Z
				11-00-81	86.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 14CACC1	394056115585001	180	5,899	04-06-66	48.25	--	S
				10-01-73	64.5	--	Z
				11-03-75	66.7	--	Z
				11-08-76	70.4	--	Z
				11-14-77	73.5	--	Z
				11-08-78	75.7	--	Z
				11-01-79	85.6	--	Z
				11-01-80	83.2	--	Z
				11-01-81	92.8	--	Z
				11-10-82	88.7	--	Z
				11-07-83	89.2	--	Z
				11-09-84	90.7	--	Z
				12-04-85	92.0	--	Z
				11-13-86	93.2	--	Z
				11-18-87	101.5	--	Z
				10-19-88	108.9	--	Z
				10-24-89	106.0	--	Z
				09-18-90	--	P	--
153 N21 E53 15BACC1	394118115595501	182	5,898	11-00-61	43.2	--	Z
				11-00-64	48.1	--	Z
				11-00-65	47.7	--	Z
				03-00-66	46.1	--	Z
				04-06-66	46.10	--	S
				03-00-67	48.3	--	Z
				11-00-67	57.9	--	Z
				03-00-68	54.1	--	Z
				11-00-68	56.7	--	Z
				03-00-69	50.0	--	Z
				11-00-69	59.1	--	Z
				11-00-71	57.7	--	Z
				03-00-72	55.5	--	Z
				11-00-72	57.9	--	Z
				11-00-73	60.3	--	Z
				03-00-74	62.6	--	Z
				11-00-75	63.6	--	Z
				03-00-76	59.4	--	Z
				11-00-76	67.7	--	Z
				03-00-77	61.3	--	Z
				11-00-77	72.2	--	Z
				03-00-78	68.0	--	Z
				11-00-78	74.2	--	Z
				03-00-79	69.8	--	Z
				11-00-79	89.1	--	Z
				11-00-80	90.7	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E53 16CCAA2	394101116005701	--	5,911	10-01-73	75.4	--	Z
				11-03-75	69.2	--	Z
				03-01-76	67.3	--	Z
				11-08-76	86.3	--	Z
				11-14-77	89.1	--	Z
				11-08-78	91.1	--	Z
				11-01-79	104.3	--	Z
				11-01-80	101.8	--	Z
				11-01-81	113.5	--	Z
				11-10-82	116.2	--	Z
				11-09-83	119.1	--	Z
				11-08-84	117.9	--	Z
				12-04-85	124.2	--	Z
				11-13-86	126.5	--	Z
				11-18-87	134.6	--	Z
				10-21-88	135.0	--	Z
				11-29-89	122.3	--	Z
				09-10-90	--	P	--
153 N21 E53 17CDBB1	394104116020001	200	5,922	06-03-64	56	--	--
				04-00-65	73.5	--	R
				11-00-65	75.7	--	R
				04-06-66	74.52	--	Z
				11-00-66	78.4	--	R
				04-00-67	79.2	--	R
				11-00-67	84.3	--	R
				04-00-68	77.8	--	R
				08-23-68	83.6	S	Z
				04-19-69	79.2	--	Z
				09-09-69	82.4	--	Z
				04-20-71	85.5	--	Z
				11-18-71	83.9	--	--
				02-23-72	96.5	--	Z
				07-25-73	102.9	S	Z
				11-03-73	92.6	--	Z
				03-11-74	86.1	--	Z
				11-03-75	94.3	--	Z
				04-05-76	90.7	--	Z
				11-08-76	100.0	--	Z
				03-05-77	94.5	--	Z
				11-14-77	103.3	--	Z
				03-28-78	101.8	--	Z
				11-08-78	102.9	--	Z
				04-09-79	91.6	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
				Date	Feet below land surface	Status	Method
153 N21 E53 17CDBB1	(Continued)			11-06-79	109.8	--	Z
				04-04-80	102.2	--	Z
				11-18-80	110.2	--	Z
				11-00-81	116.2	--	R
				04-06-82	110.6	--	Z
				03-29-83	114.9	--	Z
153 N21 E53 20AACC1	394037116102101	196	5,926	03-00-61	70.8	--	Z
				09-13-61	72	--	R
				03-00-64	75.9	--	Z
				09-15-64	75.92	--	S
				03-00-65	75.9	--	Z
				04-28-65	73.5	--	Z
				10-18-65	75.90	--	S
				04-06-66	74.73	--	S
				03-00-68	102.0	--	Z
				03-00-69	90.7	--	Z
				03-00-71	94.1	--	Z
				03-00-75	97.0	--	Z
				03-00-77	109.6	--	Z
				03-00-78	104.6	--	Z
				03-00-79	110.8	--	Z
				03-00-80	116.4	--	Z
153 N21 E53 20DDBB1	394007116012801	--	5,935	10-01-73	107.5	--	Z
				11-03-75	105.4	--	Z
				03-01-76	103.1	--	Z
				11-14-77	115.7	--	Z
				11-01-80	125.2	--	Z
				11-01-81	134.6	--	Z
				11-10-82	133.1	--	Z
				11-09-83	131.4	--	Z
				11-08-84	130.3	--	Z
				12-04-85	136.1	--	Z
				11-05-86	140.3	--	Z
				11-18-87	143.0	--	Z
				10-21-88	146.5	--	Z
				09-11-90	--	P	--
153 N21 E53 21BBDD1	394033116005201	190	5,918	08-31-61	52	--	--
				11-00-63	62.9	--	R
				04-00-64	62.3	--	R
				11-00-64	65.2	--	R
				04-00-65	64.7	--	R
				11-00-65	65.1	--	R
				04-06-66	63.55	--	Z
				04-00-67	60.6	--	R
				11-00-67	76.0	--	R
				08-23-68	83.2	S	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
				04-25-69	67.4	--	Z
				09-09-69	78.5	--	Z
				04-20-71	64.6	S	Z
				11-18-71	85.8	--	Z
				12-06-72	64.8	--	Z
				02-27-73	77.6	--	Z
				11-05-73	85.3	--	Z
				03-11-74	77.1	--	Z
				11-03-75	86.1	--	Z
				04-05-76	84.3	--	Z
				11-08-76	94.2	--	Z
				03-05-77	84.0	--	Z
				11-16-77	92.8	--	Z
				03-29-78	86.4	--	Z
				11-09-78	94.4	--	Z
				04-05-79	88.1	--	Z
				11-08-79	102.2	--	Z
				04-14-80	115.1	--	Z
				11-18-80	103.8	--	Z
				11-00-81	119.0	--	R
				04-06-82	111.3	--	Z
				11-10-82	117.80	--	Z
				03-30-83	108.6	--	Z
				11-09-83	115.3	--	Z
				11-08-84	108.7	--	Z
				12-04-85	111.20	--	Z
153 N21 E53 21DCAA1	394004116002101	180	5,910	04-06-66	57.59	--	S
				10-01-73	75	--	Z
				11-03-75	77.4	--	Z
				11-08-76	84.3	--	Z
				11-14-77	87.6	--	Z
				11-08-78	89.8	--	Z
				11-01-79	97.4	--	Z
				11-01-80	98.1	--	Z
				11-01-81	103.4	--	Z
				11-10-82	102.0	--	Z
				11-09-83	106.2	--	Z
				11-08-84	103.7	--	Z
				12-04-85	105.5	--	Z
				11-13-86	107.4	--	Z
				11-18-87	115.5	--	Z
				10-21-88	116.3	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 22BDBB1	394032115594401	180	5,904	05-12-63	51	--	--
				11-00-63	51.9	--	R
				04-00-64	53.4	--	R
				11-00-64	54.6	--	R
				04-00-65	51.4	--	R
				11-00-65	54.6	--	R
				04-06-66	53.06	--	Z
				11-00-66	57.2	--	R
				04-00-67	54.2	--	R
				11-00-67	65.5	--	R
				04-00-68	55.9	--	R
				08-23-68	64.9	S	Z
				04-24-69	56.9	--	Z
				09-09-69	64.0	S	Z
				04-20-71	63.5	--	Z
				11-18-71	61.5	--	Z
				02-24-72	61.3	--	Z
				02-27-73	59.9	--	Z
				07-23-73	81.4	S	Z
				10-30-73	73.2	--	Z
				03-11-74	63.5	--	Z
				11-03-75	71.3	--	Z
				04-05-76	71.5	--	Z
				11-08-76	79.0	--	Z
				03-05-77	72.5	--	Z
				03-29-78	82.7	--	Z
				11-09-78	82.1	--	Z
				04-09-79	76.6	--	Z
				11-08-79	87.1	--	Z
				04-14-80	83.1	--	Z
				11-20-80	91.3	--	Z
				11-00-81	99.3	--	R
				04-06-82	97.9	--	Z
				11-10-82	98.70	--	Z
				03-30-83	98.8	--	Z
				11-09-83	101.30	--	Z
				11-08-84	100.60	--	Z
				12-04-85	102.80	--	Z
153 N21 E53 23ACCC1	394036115580101	172	5,903	09-18-60	44.0	--	--
				11-00-63	51.6	--	R
				04-00-64	51.0	--	R
				04-00-65	45.6	--	R
				04-06-66	47.30	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
				Date	Feet below land surface	Status	Method
153	N21 E53 23ACCC1 (Continued)			11-00-66	56.7	--	R
				04-00-67	48.3	--	R
				11-00-67	60.7	--	R
				04-00-68	48.9	--	R
				08-26-68	55.3	--	Z
				04-23-69	50.6	--	Z
				09-09-69	60.1	S	Z
				11-18-71	55.0	--	Z
				02-24-72	51.0	--	Z
				12-06-72	47.4	--	Z
				02-27-73	53.2	--	Z
				07-24-73	76.7	S	Z
				11-02-73	54.6	--	Z
				03-12-74	56.2	--	Z
				11-05-75	62.8	--	Z
				04-06-76	64.3	--	Z
				11-15-77	79.5	--	Z
				03-28-78	74.4	--	Z
				11-08-78	78.1	--	Z
				04-05-79	73.3	--	Z
				11-08-79	85.5	--	Z
				04-14-80	77.6	--	Z
				11-20-80	86.6	--	Z
				11-00-81	98.7	--	Z
				04-05-82	95.3	--	Z
				03-30-83	101.0	--	Z
153	N21 E53 23BDBB1	216	5,903	04-06-66	50.29	--	S
	394021115584801			10-01-73	70.1	--	Z
				11-03-75	70.3	--	Z
				03-01-76	64.8	--	Z
				11-08-76	76.9	--	Z
				11-14-77	76.3	--	Z
				11-08-78	80.4	--	Z
				11-01-79	87.4	--	Z
				11-01-80	89.1	--	Z
				11-01-81	98.4	--	Z
				11-09-82	96.6	--	Z
				11-09-83	101.7	--	Z
				11-09-84	97.2	--	Z
				11-13-86	99.1	--	Z
				11-18-87	100.6	--	Z
				10-19-88	103.9	--	Z
				10-24-89	106.3	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 24CDDD1	393956115571101	280	5,918	06-20-64	62.0	--	--
				04-06-66	62.40	--	Z
				11-00-67	74.6	--	R
				04-00-68	65.6	--	R
				08-28-68	77.1	--	Z
				02-18-69	67.3	--	Z
				09-18-69	73.7	S	Z
				04-20-71	68.2	--	Z
				11-18-71	72.1	--	Z
				12-06-72	72.4	--	Z
				04-00-73	73.3	--	Z
				07-24-73	92.5	S	Z
				03-12-74	73.1	--	Z
				11-05-75	78.9	--	Z
				04-06-76	75.2	--	Z
				11-08-76	86.5	--	Z
				03-05-77	78.4	--	Z
				11-14-77	89.2	--	Z
				03-29-78	82.9	--	Z
				11-08-78	90.4	--	Z
				04-05-79	84.6	--	Z
				11-08-79	104.7	--	Z
				04-14-80	94.2	--	Z
				11-20-80	98.6	--	Z
				11-00-81	101.3	--	R
				04-00-82	98.5	--	R
				03-30-83	96.9	--	Z
153 N21 E53 26AACC1	393942115580401	181	5,907	09-13-61	48	--	--
				04-00-64	53.4	--	R
				11-00-64	56.0	--	R
				04-00-65	51.2	--	R
				04-06-66	58.40	--	Z
				11-00-66	60.0	--	R
				04-00-67	54.9	--	R
				11-00-67	68.7	--	R
				04-00-68	55.7	--	R
				02-18-69	59.0	--	Z
				09-09-69	68.0	S	Z
				04-15-71	61.8	--	Z
				02-23-72	59.9	--	Z
				12-06-72	62.4	--	Z
				02-27-73	63.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 26AACC1 (Continued)				11-03-73	71.4	--	Z
				03-12-74	63.6	--	Z
				11-05-75	72.8	--	Z
				04-06-76	70.1	--	Z
				11-15-77	74.7	--	Z
				03-29-78	71.6	--	Z
				11-00-81	103.7	--	R
				03-30-83	94.0	--	Z
153 N21 E53 27ACAA1	393940115591701	--	5,909	04-06-66	55.18	--	S
				10-01-73	77.2	--	Z
				11-03-75	78.0	--	Z
				03-01-76	73.0	--	Z
				11-08-76	87.1	--	Z
				11-14-77	--	P	--
				11-08-78	86.1	--	Z
				11-01-79	96.8	--	Z
				11-01-80	96.7	--	Z
				11-01-81	105.5	--	Z
				11-10-82	--	P	--
				11-09-83	112.3	--	Z
				11-08-84	105.2	--	Z
				11-13-86	114.1	--	Z
				11-19-87	115.3	--	Z
				10-21-88	117.9	--	Z
				10-24-89	117.9	--	Z
153 N21 E53 28CCAA1	393915116011001	186	5,942	04-06-66	85.60	--	S
				10-01-73	104.3	--	Z
				11-03-75	109.4	--	Z
				03-01-76	--	P	--
				11-08-76	116.7	--	Z
				11-14-77	120.1	--	Z
				11-08-78	115.1	--	Z
				11-01-79	127.2	--	Z
				11-01-80	129.4	--	Z
				11-01-81	138.8	--	Z
				11-09-83	127.9	--	Z
153 N21 E53 33AACC1	393838116002401	112	5,920	03-00-64	60.0	--	Z
				11-00-64	56.0	--	Z
				03-00-65	59.6	--	Z
				11-00-65	62.0	--	Z
				03-00-66	61.7	--	Z
				04-06-66	61.67	--	S
				03-00-67	62.5	--	Z
				11-00-67	71.9	--	Z
				03-00-68	64.3	--	Z
				11-00-68	73.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement				
				Date	Feet below land surface	Status	Method	
153	N21 E53 33AACC1 (Continued)			03-00-69	65.1	--	Z	
				11-00-69	69.6	--	Z	
				11-00-71	69.0	--	Z	
				03-00-72	69.3	--	Z	
				11-00-73	77.3	--	Z	
				03-00-74	74.4	--	Z	
				11-00-75	83.2	--	Z	
				03-00-76	77.7	--	Z	
				11-00-76	91.6	--	Z	
				03-00-77	82.6	--	Z	
				11-00-77	96.1	--	Z	
				03-00-78	91.9	--	Z	
				11-00-78	89.3	--	Z	
				03-00-79	85.4	--	Z	
				11-00-79	94.9	--	Z	
				11-00-80	95.9	--	Z	
				11-00-81	102.5	--	Z	
				03-00-82	99.2	--	Z	
153	N21 E53 34BCAA1	393849116000201	128	5,920	07-10-61	60	--	--
					04-00-64	47.5	--	R
					11-00-64	61.4	--	R
					04-05-66	62.34	--	Z
					11-00-66	64.7	--	R
					04-00-67	62.8	--	R
					11-00-67	73.1	--	R
					04-00-68	64.4	--	R
					08-22-68	73.5	S	Z
					02-18-69	64.8	--	Z
					09-09-69	69.6	S	Z
					04-15-71	69.4	--	Z
					02-23-72	67.7	--	Z
					12-05-72	70.0	--	Z
					02-27-73	68.5	--	Z
					04-00-73	65.4	--	R
					07-24-73	--	P	--
					11-03-73	75.9	--	Z
					03-11-74	73.1	--	Z
					04-14-80	87.5	--	Z
153	N21 E53 34DDBB1	393816115591701	157	5,919	04-05-66	57.82	--	S
					10-01-73	71.5	--	Z
					11-03-75	77.6	--	Z
					03-01-76	72.3	--	Z
					11-08-76	80.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
153 N21 E53 34DDBB1 (Continued)				11-14-77	84.4	--	Z				
				11-01-79	94.9	--	Z				
				11-01-80	97.1	--	Z				
				11-01-81	108.0	--	Z				
				11-12-82	105.8	--	Z				
				11-09-83	110.3	--	Z				
				11-08-84	108.6	--	Z				
				11-05-86	109.0	--	Z				
				11-18-87	109.4	--	Z				
				10-20-88	113.1	--	Z				
				10-24-89	109.6	--	Z				
				09-20-90	--	P	--				
				153 N21 E53 35CCDD1	393809115583901	195	5,927	06-13-61	54.0	--	--
								02-23-72	74.9	--	Z
								12-05-72	69.3	--	Z
02-27-73	70.2	--	Z								
11-03-73	82.1	--	Z								
03-12-74	73.6	--	Z								
11-04-75	79.7	--	Z								
04-06-76	75.7	--	Z								
11-08-76	82.7	--	Z								
03-05-77	81.9	--	Z								
11-15-77	87.3	--	Z								
03-29-78	83.4	--	Z								
11-09-78	91.4	--	Z								
04-06-79	90.8	--	Z								
11-08-79	109.4	--	Z								
04-14-80	101.6	--	Z								
11-19-80	113.2	--	Z								
11-00-81	122.4	--	R								
04-06-82	118.7	--	Z								
03-30-83	121.6	--	Z								
153 N21 E53 36ACAB1	393850115570101	152	5,935	08-29-60	61.5	--	--				
				11-00-63	70.5	--	R				
				04-00-64	55.9	--	R				
				11-00-64	50.1	--	R				
				04-05-66	69.10	--	Z				
				11-00-67	97.2	--	R				
				04-00-68	81.8	--	R				
				02-18-69	72.1	--	Z				
				09-09-69	83.1	S	Z				
				04-15-71	76.6	--	Z				

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N21 E53 36ACAB1 (Continued)				11-17-71	81.7	--	Z
				12-05-72	79.2	--	Z
				02-23-73	75.7	--	Z
				07-24-73	--	P	--
				11-03-73	99.7	--	Z
				03-12-74	89.7	--	Z
				04-14-80	108.2	--	Z
				03-30-83	99.6	--	T
153 N21 E53 36CDDD1	393810115571501	--	5,941	11-00-63	89.8	--	R
				04-00-64	80.5	--	R
				11-00-64	85.1	--	R
				04-05-66	78.77	--	Z
				11-00-66	91.0	--	R
				04-00-67	83.0	--	R
				11-00-67	96.3	--	R
				04-00-68	89.8	--	R
				08-21-68	--	P	--
				02-18-69	83.9	--	Z
				09-09-69	94.9	S	Z
				11-17-71	82.1	--	Z
				02-23-72	83.0	--	Z
				02-27-73	89.8	--	Z
				07-24-73	--	P	--
				11-03-73	107.80	--	Z
				03-12-74	104.9	--	Z
				11-06-75	105.7	--	Z
				04-06-76	100.4	--	Z
				11-08-76	111.2	--	Z
				03-05-77	109.7	--	Z
				11-15-77	114.7	--	Z
				11-09-78	111.6	--	Z
				04-05-79	105.4	--	Z
				11-08-79	116.3	--	Z
				04-14-80	111.3	--	Z
				11-19-80	112.2	--	Z
				11-00-81	122.6	--	R
				04-06-82	119.2	--	Z
				03-30-83	115.4	--	Z
153 N21 E54 05BBBB1	394312115551601	150	5,876	11-00-64	25.8	--	R
				04-07-66	23.43	--	Z
				11-00-66	28.9	--	R
				11-00-67	30.1	--	R
				04-00-68	26.5	--	R

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E54 05BBBB1 (Continued)				08-27-68	33.1	--	Z
				04-21-69	28.0	--	Z
				09-11-69	35.3	S	Z
				11-28-73	36.2	--	Z
				11-06-75	41.6	--	Z
				04-07-76	36.6	--	Z
				11-08-76	44.2	--	Z
				03-05-77	40.8	--	Z
				11-16-77	47.0	--	Z
				03-30-78	42.30	--	Z
				04-09-79	43.3	--	Z
				11-08-79	54.8	--	Z
				04-15-80	50.0	--	Z
				11-21-80	55.0	--	Z
				11-00-81	63.6	--	R
				04-06-82	61.1	--	Z
				03-31-83	58.3	--	Z
153 N21 E54 05DCCC1 394232115545701				04-07-66	24.14	--	S
				10-01-73	46.7	--	Z
				11-03-75	41.2	--	Z
				03-01-76	42.2	--	Z
				11-08-76	46.0	--	Z
				11-14-77	--	P	--
				11-08-78	51.6	--	Z
				11-01-79	59.5	--	Z
153 N21 E54 05DCCC1 394232115545701				11-01-80	60.6	--	Z
				11-01-81	66.8	--	Z
				11-09-82	67.3	--	Z
				05-01-83	64.9	--	Z
				11-10-83	66.9	--	Z
				11-01-84	65.3	--	Z
				11-04-86	71.1	--	Z
				11-18-87	71.6	--	Z
				10-19-88	73.1	--	Z
				11-02-89	79.7	--	Z
153 N21 E54 08CDD1 394141115552601				08-29-64	37.0	--	--
				11-00-65	34.0	--	R
				04-07-66	33.44	--	Z
				11-00-67	44.8	--	R
				08-27-68	48.4	--	Z
				04-21-69	49.0	--	Z
				09-11-69	45.9	S	Z
				11-16-71	56.1	--	Z
				02-24-72	48.2	--	Z
				08-09-73	54.5	S	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E54 08CDD1 (Continued)				11-28-73	46.7	--	Z
				11-06-75	49.1	--	Z
				04-07-76	48.7	--	Z
				11-08-76	51.5	--	Z
				03-05-77	56.0	--	Z
				11-16-77	63.7	--	Z
				03-30-78	62.9	--	Z
				11-00-78	66.5	--	R
				04-09-79	64.6	--	Z
				11-08-79	77.0	--	Z
				04-15-80	71.6	--	Z
				11-21-80	73.7	--	Z
				11-00-81	78.2	--	R
				04-06-82	67.5	--	Z
				03-31-83	75.5	--	Z
153 N21 E54 08DBBB1	394206115545801	--	5,880	10-01-73	46.7	--	Z
				11-03-75	49.1	--	Z
				03-01-76	48.7	--	Z
				11-08-76	57.2	--	Z
				11-14-77	--	P	--
				11-08-78	60.4	--	Z
				11-01-79	65.4	--	Z
				11-01-80	66.8	--	Z
				11-01-81	75.1	--	Z
				11-09-82	79.0	--	Z
				05-01-83	76.8	--	Z
				11-10-83	75.6	--	Z
				11-01-84	76.0	--	Z
				11-04-86	81.1	--	Z
				11-18-87	77.4	--	Z
				10-19-88	87.5	--	Z
				11-03-89	80.5	--	Z
153 N21 E54 16CDD1	394049115535901	240	5,980	07-31-63	120	--	--
				11-00-63	120.2	--	R
				04-00-64	116.9	--	R
				11-00-65	119.9	--	R
				04-07-66	119.02	--	Z
				11-00-67	135.6	--	R
				08-27-68	138.7	--	Z
				04-21-69	134.8	--	Z
				09-11-69	135.0	S	Z
				11-16-71	145.8	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
Local Identification	Standard Identification										
153 N21 E54 16CDCD1 (Continued)				02-24-72	148.1	--	Z				
				11-06-75	138.6	--	Z				
				11-08-76	142.9	--	Z				
				03-05-77	147.5	--	Z				
				11-16-77	146.8	--	Z				
				03-30-78	141.8	--	Z				
				11-00-78	152.1	--	R				
				04-09-79	151.7	--	Z				
				11-21-80	159.8	--	Z				
				11-00-81	160.6	--	R				
				04-06-82	157.7	--	Z				
				03-31-83	157.7	--	Z				
				153 N21 E54 17CDDD1 394049115550201 240 5,920				06-24-62	60	--	--
								07-31-62	60.0	--	--
								11-00-63	70.9	--	R
04-00-64	67.9	--	R								
04-00-65	62.4	--	R								
11-00-65	62.9	--	R								
04-07-66	62.33	--	Z								
04-00-67	64.8	--	R								
11-00-67	85.8	--	R								
04-00-68	77.4	--	R								
08-27-68	84.1	--	Z								
04-21-69	84.9	--	Z								
09-10-69	75.8	S	Z								
11-16-71	109.8	--	Z								
02-24-72	105.8	--	Z								
08-09-73	91.6	S	Z								
11-28-73	105.7	--	Z								
03-12-74	100.8	--	Z								
11-15-75	103.6	--	Z								
03-05-77	84.9	--	Z								
11-16-77	102.9	--	Z								
03-30-78	97.4	--	Z								
11-00-78	103.6	--	R								
04-09-79	98.8	--	Z								
11-08-79	109.9	--	Z								
04-15-80	101.1	--	Z								
11-21-80	98.0	--	Z								
11-00-81	103.8	--	R								
04-06-82	103.5	--	Z								
03-31-83	103.1	--	Z								

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E54 17DDDD1	394048115542601	200	5,949	06-15-62	105	--	--
				04-00-64	90.0	--	R
				04-00-65	90.6	--	R
				11-00-65	90.7	--	R
				04-07-66	89.50	--	Z
				04-00-67	92.9	--	R
				11-00-67	115.4	--	R
				04-00-68	97.8	--	R
				08-27-68	102.8	--	Z
				04-21-69	101.4	--	Z
				09-10-69	107.4	S	Z
				11-16-71	120.6	--	Z
				02-24-72	127.9	--	Z
				08-09-73	119.1	S	Z
				11-28-73	127.7	--	Z
				04-00-74	121.3	--	Z
				11-06-75	110.9	--	Z
				04-07-76	106.7	--	Z
				11-00-76	116.6	--	Z
				03-05-77	115.4	--	Z
				11-16-77	119.2	--	Z
				03-30-78	115.6	--	Z
				11-00-78	120.1	--	R
				04-09-79	118.3	--	Z
				11-08-79	126.0	--	Z
				04-15-80	122.7	--	Z
				11-21-80	127.4	--	Z
				11-00-81	133.3	--	R
				04-06-82	129.0	--	Z
				03-31-83	130.1	--	Z
153 N21 E54 20BACC1	394037115551401	--	5,921	04-07-66	67.98	--	Z
				08-27-68	87.6	--	Z
				04-21-69	80.6	--	Z
				09-11-69	79.2	S	Z
				11-16-71	78.8	--	Z
				02-24-72	78.3	--	Z
				08-09-73	97.2	S	Z
				11-00-73	82.2	--	Z
				11-06-75	86.2	--	Z
				04-07-76	84.0	--	Z
				11-08-76	95.2	--	Z
				03-05-77	94.2	--	Z
				11-16-77	99.3	--	Z
				03-30-78	91.2	--	Z
				11-00-78	99.4	--	R

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard Identification			Date	Feet below land surface	Status	Method
153 N21 E54 20BACC1 (Continued)				04-09-79	95.2	--	Z
				11-08-79	102.1	--	Z
				04-15-80	98.0	--	Z
				11-21-80	103.2	--	Z
				03-31-83	106.7	--	Z
153 N21 E54 20CCCC1	393958115552701	230	5,932	04-07-66	83.05	--	S
				11-03-75	96.0	--	Z
				03-01-76	93.5	--	Z
				11-08-76	99.1	--	Z
				11-14-77	101.3	--	Z
				11-08-78	104.5	--	Z
				11-01-79	108.0	--	Z
				11-01-80	110.0	--	Z
				11-01-81	126.5	--	Z
				11-09-82	123.1	--	Z
				05-01-83	115.8	--	Z
				11-10-83	122.0	--	Z
				11-09-84	119.7	--	Z
				11-12-86	119.4	--	Z
				11-03-89	124.2	--	Z
				10-18-90	124.7	--	Z
153 N21HE52 01BC 1	394342114385401	70	5,888	10-21-65	50.20	--	S
				04-08-66	48.78	--	S
				04-05-77	58.11	--	S
				04-12-78	59.34	--	S
				03-20-79	60.81	--	S
				03-19-80	62.55	--	S
				03-20-81	63.95	--	S
				03-16-82	65.28	--	S
				02-09-87	--	--	--
153 N21HE52 01BC 2	394342114385402	160	5,888	02-09-87	72.05	--	S
				03-18-88	73.02	--	S
				04-20-89	--	P	--
				05-24-90	74.02	--	S
153 N21HE54 32DCCC1	394327115545301	242	5,867	04-15-62	12	--	--
				11-00-63	22.6	--	R
				04-00-64	23.5	--	R
				04-00-65	23.2	--	R
				08-27-68	33.2	--	Z
				04-21-69	26.2	--	Z
				08-12-69	29.9	--	Z
				03-11-74	35.0	--	Z
				11-06-75	35.7	--	Z
				04-00-76	32.1	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
Local Identification	Standard Identification										
153 N21HE54 32DCCC1 (Continued)				11-08-76	38.5	--	Z				
				03-05-77	33.8	--	Z				
				11-16-77	46.2	--	Z				
				03-30-78	40.7	--	Z				
				11-14-78	49.2	--	Z				
				04-12-79	44.0	--	Z				
				11-07-79	49.2	--	Z				
				04-17-80	42.1	--	Z				
				11-21-80	49.2	--	Z				
				11-09-82	56.3	--	Z				
				03-31-83	53.7	--	Z				
				153 N21HE54 33DDDD1 394326115531701 102 5,880				01-10-62	21.58	--	--
								04-26-66	32.08	--	R
11-00-67	39.7	--	R								
04-00-68	28.3	--	R								
08-27-68	46.0	--	Z								
04-21-69	39.0	--	Z								
09-12-69	43.9	--	R								
11-16-71	42.7	--	Z								
02-24-72	41.1	--	Z								
08-09-73	45.0	--	Z								
11-28-73	44.0	--	Z								
03-12-74	43.8	--	Z								
11-14-75	59.1	--	Z								
03-05-77	50.8	--	Z								
11-16-77	53.0	--	Z								
03-30-78	54.1	--	Z								
11-00-78	59.1	--	R								
04-12-79	55.0	--	Z								
11-07-79	62.3	--	Z								
04-17-80	58.2	--	Z								
11-21-80	66.1	--	Z								
11-09-82	74.7	--	Z								
03-31-83	69.2	--	Z								
153 N22 E54 05CDBB1 394839115550801 210 5,836								04-07-66	3.88	--	S
								10-01-73	11.9	--	Z
								11-03-75	15.7	--	Z
								03-01-76	9.8	--	Z
				11-08-76	17.4	--	Z				
				11-14-77	21.0	--	Z				
				11-08-78	22.1	--	Z				
				11-01-79	29.7	--	Z				
				11-01-80	26.8	--	Z				
				11-01-81	39.9	--	Z				

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local Identification	Standard identification			Date	Feet below land surface	Status	Method
153 N22 E54 05CDBB1 (Continued)				11-09-82	32.9	--	Z
				05-01-83	23.2	--	Z
				10-07-83	36.0	--	Z
				11-01-84	35.2	--	Z
				11-04-86	36.8	--	Z
				11-12-87	40.0	--	Z
				10-17-88	48.3	--	Z
				11-02-89	40.8	--	Z
153 N22 E54 05DDBB1	394833115542001	240	5,835	04-07-66	3.58	--	S
				11-03-75	12.6	--	Z
				03-01-76	9.6	--	Z
				11-08-76	17.6	--	Z
				11-14-77	20.0	--	Z
				11-08-78	23.0	--	Z
				11-01-79	30.8	--	Z
				11-01-80	27.0	--	Z
				11-01-81	34.9	--	Z
				11-09-82	29.8	--	Z
				05-01-83	20.0	--	Z
				11-07-83	30.2	--	Z
				11-01-84	30.8	--	Z
				11-04-86	35.4	--	Z
				11-12-87	38.7	--	Z
153 N22 E54 06CCCC1	394835115561801	250	5,840	04-07-66	7.82	--	S
				10-01-73	15.3	--	Z
				11-03-75	18.5	--	Z
				03-01-76	15.2	--	Z
				11-08-76	20.2	--	Z
				11-14-77	23.1	--	Z
				11-08-78	24.9	--	Z
				11-01-79	33.6	--	Z
				11-04-86	36.9	--	Z
				11-12-87	39.7	--	Z
				10-17-88	47.6	--	Z
				11-03-89	43.9	--	Z
153 N22 E54 07DDCD2	394743115554302	107	5,843	11-00-63	13.0	--	Z
				11-00-64	15.5	--	Z
				11-07-75	27.1	--	Z
				04-08-76	17.6	--	Z
				11-08-76	25.1	--	Z
				03-05-77	19.2	--	Z
				11-17-77	23.1	--	Z
				04-04-78	21.1	--	Z
				11-14-78	26.2	--	Z
				11-07-79	29.4	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N22 E54 07DDCD2 (Continued)				04-17-80	23.4	--	Z
				12-01-80	29.4	--	Z
				11-09-82	32.0	--	Z
				04-01-83	25.3	--	Z
153 N22 E54 08CDCD1	394743115550601	--	5,843	10-16-63	11.97	--	Z
				11-00-63	12.9	--	Z
				04-00-64	11.0	--	Z
				09-16-64	14.78	--	Z
				11-00-64	14.8	--	Z
				04-05-65	9.2	--	Z
				10-20-65	11.20	--	Z
				04-07-66	8.06	--	Z
				04-00-67	10.5	--	Z
				11-00-67	17.1	--	Z
				04-00-68	11.1	--	Z
				08-28-68	19.7	--	Z
				04-23-69	10.8	--	Z
				09-17-69	19.5	--	Z
				11-16-71	13.9	--	Z
				08-10-73	30.0	--	Z
				11-29-73	17.7	--	Z
				11-07-75	20.1	--	Z
				04-08-76	14.8	--	Z
				11-08-76	21.6	--	Z
				03-05-77	15.0	--	Z
				11-17-77	25.2	--	Z
				04-04-78	19.0	--	Z
				11-14-78	26.4	--	Z
				11-07-79	32.9	--	Z
				04-17-80	26.2	--	Z
				12-01-80	32.6	--	Z
				11-09-82	35.4	--	Z
				04-01-83	26.8	--	Z
153 N22 E54 18CADD1	394703115560401	258	5,848	09-23-66	13	--	--
				04-00-68	14.9	--	Z
				08-28-68	20.9	--	Z
				04-23-69	14.8	--	Z
				11-00-69	21.0	--	Z
				11-16-71	15.2	--	Z
				10-01-73	15.8	--	Z
				11-03-75	24.2	--	Z
				03-01-76	19.4	--	Z
				11-08-76	26.1	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
153 N22 E54 18CADD1 (Continued)				04-00-77	22.1	--	Z				
				11-14-77	29.0	--	Z				
				04-04-78	24.0	--	Z				
				11-08-78	31.2	--	Z				
				11-01-79	35.8	--	Z				
				04-17-80	27.8	--	Z				
				11-01-80	34.3	--	Z				
				11-01-81	42.5	--	Z				
				11-09-82	38.8	--	Z				
				05-01-83	36.8	--	Z				
				11-07-83	39.9	--	Z				
				11-01-84	40.6	--	Z				
				12-03-85	39.4	--	Z				
				11-04-86	43.5	--	Z				
				11-12-87	44.5	--	Z				
				10-17-88	54.1	--	Z				
				11-03-89	49.5	--	Z				
				153 N22 E54 18DAAC1	394709115554301	200	5,850	11-00-61	15.9	--	Z
								11-00-63	15.2	--	Z
								11-00-64	17.3	--	Z
03-00-65	12.1	--	Z								
03-00-66	12.4	--	Z								
04-07-66	12.35	--	S								
03-00-67	14.0	--	Z								
03-00-68	15.5	--	Z								
11-00-68	18.0	--	Z								
03-00-69	14.4	--	Z								
11-00-69	18.1	--	Z								
11-00-71	14.5	--	Z								
11-00-73	14.7	--	Z								
11-00-75	18.6	--	Z								
03-00-76	16.3	--	Z								
11-00-76	21.7	--	Z								
03-00-77	14.4	--	Z								
11-00-77	22.4	--	Z								
03-00-78	18.6	--	Z								
11-00-78	24.2	--	Z								
11-00-79	31.4	--	Z								
11-00-81	41.3	--	Z								
153 N22 E54 22BDAA1	394611115525101	200	5,863	04-06-66	20.42	--	S				
				10-01-73	26.1	--	Z				
				11-03-75	31.1	--	Z				
				03-01-76	28.4	--	Z				
				11-08-76	36.1	--	Z				

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N22 E54 22BDAA1 (Continued)				11-14-77	40.5	--	Z
				11-08-78	42.6	--	Z
				11-01-79	48.9	--	Z
				11-01-80	50.5	--	Z
				11-01-81	51.1	--	Z
				11-09-82	50.8	--	Z
				05-01-83	46.9	--	Z
				11-07-83	47.5	--	Z
				11-01-84	44.1	--	Z
				11-12-87	56.9	--	Z
				10-17-88	60.8	--	Z
				11-02-89	63.7	--	Z
153 N22 E54 22CCDD1		120	5,858	03-15-62	8.0	--	--
				11-00-65	14.5	--	Z
				04-07-66	12.58	--	Z
				03-12-74	19.2	--	Z
				11-06-75	24.6	--	Z
				04-08-76	21.6	--	Z
				11-08-76	28.7	--	Z
				03-05-77	25.2	--	Z
				04-04-78	28.9	--	Z
				11-14-78	34.1	--	Z
				11-07-79	37.8	--	Z
				04-17-80	32.8	--	Z
				11-21-80	37.6	--	Z
				04-01-83	45.6	--	Z
153 N22 E54 27CAAB1		94	5,858	08-11-49	5.49	--	--
				03-15-51	8.39	--	--
				09-11-51	8.18	--	--
				10-01-52	7.33	--	S
				03-03-53	8.55	--	--
				09-15-53	10.04	--	--
				03-10-54	10.15	--	--
				09-17-54	10.87	--	--
				08-29-55	11.84	--	--
				09-06-57	12.44	--	--
				09-22-61	12.68	--	--
				03-25-62	11.08	--	--
				10-14-62	14.74	--	--
				03-25-63	12.21	--	--
				09-10-63	19.27	--	--
				03-24-64	17.01	--	--
				09-21-65	17.49	--	--
				04-07-66	15.52	--	S
				03-23-67	19.69	--	S
				03-20-68	21.00	--	S

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
				Date	Feet below land surface	Status	Method
153 N22 E54 27CAABI (Continued)				04-22-69	21.26	--	S
				04-22-70	21.41	--	S
				04-20-71	22.26	--	S
				03-03-72	21.03	--	S
				04-28-73	16.02	--	S
				05-13-74	23.50	--	S
				03-14-75	26.23	--	S
				03-18-76	25.32	--	S
				03-24-77	29.30	--	S
				04-12-78	32.72	--	S
				03-20-79	34.35	--	S
				03-19-80	37.92	--	S
				03-20-81	40.05	--	S
				03-16-82	44.27	--	S
				03-25-85	39.48	--	S
				03-27-87	47.62	--	S
				03-18-88	50.67	--	S
				04-20-89	53.88	S	S
				05-24-90	57.70	--	S
				153 N22 E54 28AACCI	394542115533001	184	5,856
11-00-61	13.5	--	Z				
10-16-63	15.07	--	S				
11-00-63	17.6	--	Z				
03-00-66	14.6	--	Z				
11-00-67	28.7	--	Z				
11-00-68	24.6	--	Z				
03-00-69	20.5	--	Z				
11-00-69	21.7	--	Z				
03-00-74	19.2	--	Z				
11-00-75	25.0	--	Z				
03-00-76	21.7	--	Z				
11-00-76	27.8	--	Z				
03-00-77	24.4	--	Z				
11-00-77	30.6	--	Z				
03-00-78	29.7	--	Z				
11-00-78	31.0	--	Z				
11-00-79	45.0	--	Z				
11-00-80	40.0	--	Z				
11-00-81	48.8	--	Z				
153 N22 E54 28DCCC1	394507115534101	350	5,862	05-30-61	13	--	--
				11-00-63	17.6	--	Z
				04-07-66	14.62	--	Z
				11-00-67	28.7	--	Z
				04-00-68	20.8	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N22 E54 28DCCC1 (Continued)				08-27-68	24.9	--	Z
				04-21-69	19.1	--	Z
				09-12-69	22.9	--	Z
				11-15-71	21.8	--	Z
				02-24-72	20.8	--	Z
				11-29-73	24.1	--	Z
				03-13-74	25.6	--	Z
				04-00-75	28.4	--	R
				11-06-75	25.8	--	Z
				04-00-76	24.9	--	Z
				11-08-76	32.5	--	Z
				03-05-77	28.8	--	Z
				11-17-77	35.3	--	Z
				04-04-78	33.6	--	Z
				11-14-78	37.5	--	Z
				11-07-79	44.7	--	Z
				04-17-80	40.5	--	Z
				11-21-80	46.3	--	Z
				11-09-82	48.9	--	Z
				04-01-83	45.3	--	Z
153 N22 E54 32BCCC1	394439115552901	259	5,864	11-03-75	30.5	--	Z
				03-05-77	32.0	--	Z
				11-14-77	43.3	--	Z
				04-04-78	36.2	--	Z
				11-08-78	46.6	--	Z
				11-01-79	51.6	--	Z
				04-17-80	45.7	--	Z
				11-01-80	48.5	--	Z
				11-01-81	55.2	--	Z
				11-09-82	55.3	--	Z
				05-01-83	53.4	--	Z
				11-02-89	71.6	--	Z
				05-01-61	60	--	--
				11-00-64	18.4	--	R
153 N22 E54 33BBDD1	394452115540801	300	5,865	04-07-66	15.68	--	Z
				11-00-66	18.3	--	R
				11-00-67	26.0	--	R
				04-00-68	21.5	--	R
				08-27-68	27.0	--	Z
				04-21-69	21.4	--	Z
				09-12-69	25.4	--	Z
				11-16-71	24.3	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N22 E54 33BBDD1 (Continued)				08-10-73	37.1	--	Z
				11-29-73	23.2	--	Z
				03-13-74	23.6	--	Z
				11-06-75	30.5	--	Z
				04-07-76	31.2	--	Z
				11-08-76	34.7	--	Z
				03-05-77	30.8	--	Z
				11-17-77	37.6	--	Z
				04-04-78	33.5	--	Z
				11-14-78	35.5	--	Z
				11-07-79	46.1	--	Z
				04-17-80	39.5	--	Z
				11-21-80	45.2	--	Z
				11-09-82	57.9	--	Z
				04-01-83	55.2	--	Z
153 N23 E53 27BB1	395100115593001	22	5,820	09-16-64	12.64	--	S
				04-23-65	12.59	--	S
				10-21-65	12.63	--	S
				04-08-66	12.57	--	S
				11-18-66	12.52	Z	S
				03-20-68	12.65	--	S
				04-22-69	11.60	--	S
				04-22-70	12.62	--	S
				04-20-71	12.63	--	S
				03-03-72	12.73	--	S
				04-28-73	12.76	--	S
				05-13-74	12.85	--	S
				03-13-75	12.89	--	S
				03-18-76	12.88	--	--
				03-24-77	12.97	--	S
				04-12-78	13.04	--	S
				03-20-79	13.09	--	S
				03-19-80	13.21	--	S
				03-20-81	13.27	--	S
				03-16-82	13.36	--	S
				03-25-85	13.03	--	S
				02-09-87	13.34	--	S
				03-18-88	13.46	--	S
				04-20-89	13.55	--	S
				05-24-90	13.34	--	S
153 N23 E53 30DD 1	395020116030001	22	5,821	09-16-64	14.21	--	S
				04-23-65	14.15	--	S
				10-21-65	14.17	--	S
				04-08-66	14.12	--	S
				11-18-66	14.24	Z	S

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement							
				Date	Feet below land surface	Status	Method				
153 N23 E53 30DD 1 (Continued)				03-20-68	14.15	--	S				
				04-22-69	16.16	--	S				
				04-22-70	14.05	--	S				
				04-20-71	14.07	--	S				
				03-03-72	14.15	--	S				
				04-28-73	14.08	--	S				
				05-13-74	14.26	--	S				
				03-13-75	14.28	--	S				
				03-18-76	14.27	--	--				
				03-24-77	14.39	--	S				
				04-12-78	14.50	--	S				
				03-20-79	14.50	--	S				
				03-19-80	14.68	--	S				
				03-20-81	14.66	--	S				
				03-16-82	14.72	--	S				
				03-25-85	14.14	--	S				
				02-09-87	14.44	--	S				
				03-18-88	14.62	--	S				
				04-20-89	14.76	--	S				
				05-24-90	14.42	--	S				
				153 N23 E54 18DB 1	395220115561001	32	5,800	09-16-64	17.26	--	S
								04-23-65	17.01	--	S
								10-21-65	17.21	--	S
04-08-66	16.64	--	S								
11-18-66	16.45	Z	S								
03-20-68	16.97	--	S								
04-22-69	16.93	--	S								
04-22-70	16.78	--	S								
04-20-71	16.78	--	S								
03-03-72	16.89	--	S								
04-28-73	16.74	--	S								
05-13-74	16.85	--	S								
03-13-75	17.10	--	S								
03-18-76	17.15	--	--								
04-12-78	17.45	--	S								
03-20-79	17.65	--	S								
03-19-80	17.91	--	S								
03-20-81	17.97	--	S								
03-16-82	18.24	--	S								
03-25-85	18.02	--	S								
02-09-87	18.10	--	S								
03-18-88	18.08	--	S								
04-20-89	17.98	--	S								
05-24-90	17.55	--	S								

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N23 E54 29CDDD1	395019115543801	189	5,827	11-00-64	5.8	--	Z
				11-00-65	3.8	--	Z
				03-00-66	1.6	--	Z
				04-07-66	1.62	--	S
				11-00-66	4.8	--	Z
				03-00-67	3.8	--	Z
				11-00-67	7.7	--	Z
				03-00-68	4.4	--	Z
				11-00-68	9.8	--	Z
				11-00-69	7.1	--	Z
				11-00-71	5.7	--	Z
				03-00-77	8.6	--	Z
				11-14-77	16.5	--	Z
				11-08-78	15.2	--	Z
				11-01-79	23.4	--	Z
				11-01-80	24.1	--	Z
				11-01-81	31.4	--	Z
				11-09-82	25.5	--	Z
				05-01-83	16.7	--	Z
				11-07-83	26.4	--	Z
				11-01-84	28.8	--	Z
				12-03-85	25.6	--	Z
				11-04-86	32.3	--	Z
				11-12-87	33.4	--	Z
				10-17-88	41.5	--	Z
				11-02-89	42.8	--	Z
153 N23 E54 30DDD 1	395019115551501	220	5,829	07-19-65	4.0	--	--
				04-07-66	2.31	--	R
				08-28-68	7.0	--	Z
				09-17-69	5.4	--	Z
				11-16-71	2.5	--	Z
				08-10-73	3.8	--	Z
				03-05-77	6.3	--	Z
				11-17-77	13.2	--	Z
				04-07-78	9.7	--	Z
				11-14-78	14.8	--	Z
				11-07-79	21.0	--	Z
				04-17-80	14.2	--	Z
				12-01-80	19.3	--	Z
				11-09-82	23.0	--	Z
				04-01-83	8.8	--	Z
153 N23 E54 32DCCC1	394927115543601	280	5,831	06-05-64	15	--	R
				04-00-66	2.21	--	Z
				11-00-66	7.0	--	Z
				04-00-68	5.1	--	Z
				08-28-68	13.0	--	Z

Appendix. Water-level measurements in selected wells, Diamond Valley, Nevada, 1960-90—Continued

U.S. Geological Survey site designation		Depth of well (feet)	Land- surface altitude (feet above sea level)	Water-level measurement			
Local identification	Standard identification			Date	Feet below land surface	Status	Method
153 N23 E54 32DCCC1 (Continued)				04-23-69	4.9	--	Z
				08-17-69	9.7	--	Z
				11-00-69	10.3	--	Z
				11-16-71	6.1	--	Z
				08-10-73	14.2	--	Z
				11-29-73	5.8	--	Z
				11-03-75	11.1	--	Z
				03-01-76	8.5	--	Z
				11-08-76	13.3	--	Z
				03-05-77	10.2	--	Z
				11-14-77	18.8	--	Z
				04-04-78	11.6	--	Z
				11-08-78	18.4	--	Z
				11-01-79	24.0	--	Z
				11-01-81	36.5	--	Z
				11-09-82	27.7	--	Z
				11-07-83	28.5	--	Z
				11-01-84	20.4	--	Z
				12-03-85	27.0	--	Z
				11-04-86	--	P	--
				11-12-87	36.8	--	Z
				10-17-88	45.8	--	Z
				11-02-89	43.5	--	Z