GROUND-WATER-LEVEL DATA FOR THE ALBUQUERQUE-BELEN BASIN, NEW MEXICO, THROUGH WATER YEAR 1985

By G.E. Kues

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DONALD PAUL HODEL, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
Water Resources Division
Pinetree Office Park
4501 Indian School Rd. NE, Suite 200
Albuquerque, New Mexico 87110

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CONTENTS

FIGURES

FIGURES - Continued

FIGURES - Concluded

TABLE

CONVERSION FACTORS

In this report, figures for measurements are given in inch-pound units only. The following table contains factors for converting to metric units.

Multiply inch-pound units	By	To obtain metric units
foot	0.3048	meter
mile	1.609	kilometer
square mile	2.590	square kilometer

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929) -- a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Mean Sea Level of 1929."

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ABSTRACT

The Albuquerque-Belen Basin is in north-central New Mexico and is approximately 100 miles long and 25 to 40 miles wide. The only perennial stream in the area, the southward-flowing Rio Grande, approximately bisects the basin. Ground water is the only source used to obtain drinking-water supplies.

The basin's population increased more than 100 percent from 1960 to 1980. In 1980, 72 percent of the population was concentrated in the north-central part of the basin in and around the city of Albuquerque. Increases in population caused increases in water demand and ground-water pumpage. A network of wells was selected between April 1982 and September 1983 to monitor changes in ground-water levels.

Ground-water levels in the central part of the basin are approximately at the altitude of the Rio Grande. Water levels in wells near the northeast basin boundary showed a vertical difference of approximately 620 feet over a horizontal distance of about 1 mile. In continuously monitored wells on the outskirts of the city of Albuquerque, ground-water levels generally rise each year from October through February and decline from March through September. The decline in highest recorded annual water levels was greater from water year 1983 to 1984 than from water year 1984 to 1985. Such declines increased with increasing distance from the Rio Grande.

Monitoring wells that have multiple completion depths showed water levels up to approximately 20 feet higher in the uppermost screened interval than in the lowest screened interval. Water levels in wells outside the city of Albuquerque generally declined less than 6 feet from water year 1982 to water year 1985.

INTRODUCTION

The Albuquerque-Belen Basin is in central New Mexico (fig. 1). The basin is approximately 100 miles long and 25 to 40 miles wide. The perennial, southward-flowing Rio Grande approximately bisects the basin. Between 1960 and 1980, the population for major urban areas in the basin increased from 221,395 (U.S. Department of Commerce, 1960) to 461,966 (U.S. Department of Commerce, 1980), or more than 100 percent. The largest population center is the city of Albuquerque (figs. 1 and 2). In 1980, the city had a population of 331,767 (U.S. Department of Commerce, 1980), 72 percent of the basin's population.

Within the basin, drinking-water supplies are obtained totally from ground-water resources. The large increase in population has caused increased demands for ground water. For this reason, a monitoring network was established to monitor ground-water levels and changes in levels that might occur due to increases in water use (figs. 1 to 4).

Purpose and Scope

Data on ground-water levels will enhance understanding of the dynamics of the ground-water system in the Albuquerque-Belen Basin. These data will be available for use in future water-resource studies such as detailed ground-water flow models. Ground-water levels are essential for model verification and for the determination of impacts of ground-water withdrawals.

Ground-water-level data collected by Geological Survey personnel and water-level data reported by City of Rio Rancho and Kirtland Air Force Base personnel are presented. Water-level data for network wells collected prior to 1982 are included. Data are presented as hydrographs for all wells that have 12 or more water-level measurements. Miscellaneous water-level data and well-completion information also are provided.

Acknowledgments

The City of Albuquerque Water Utilities Department was very cooperative in allowing use of several strategically located municipal wells for data collection. Appreciation is also given to Milton West and Kenneth Shelor of Kirtland Air Force Base and William Pollay of the Albuquerque Utilities Corporation, which manages the City of Rio Rancho water system, for providing water-level data.

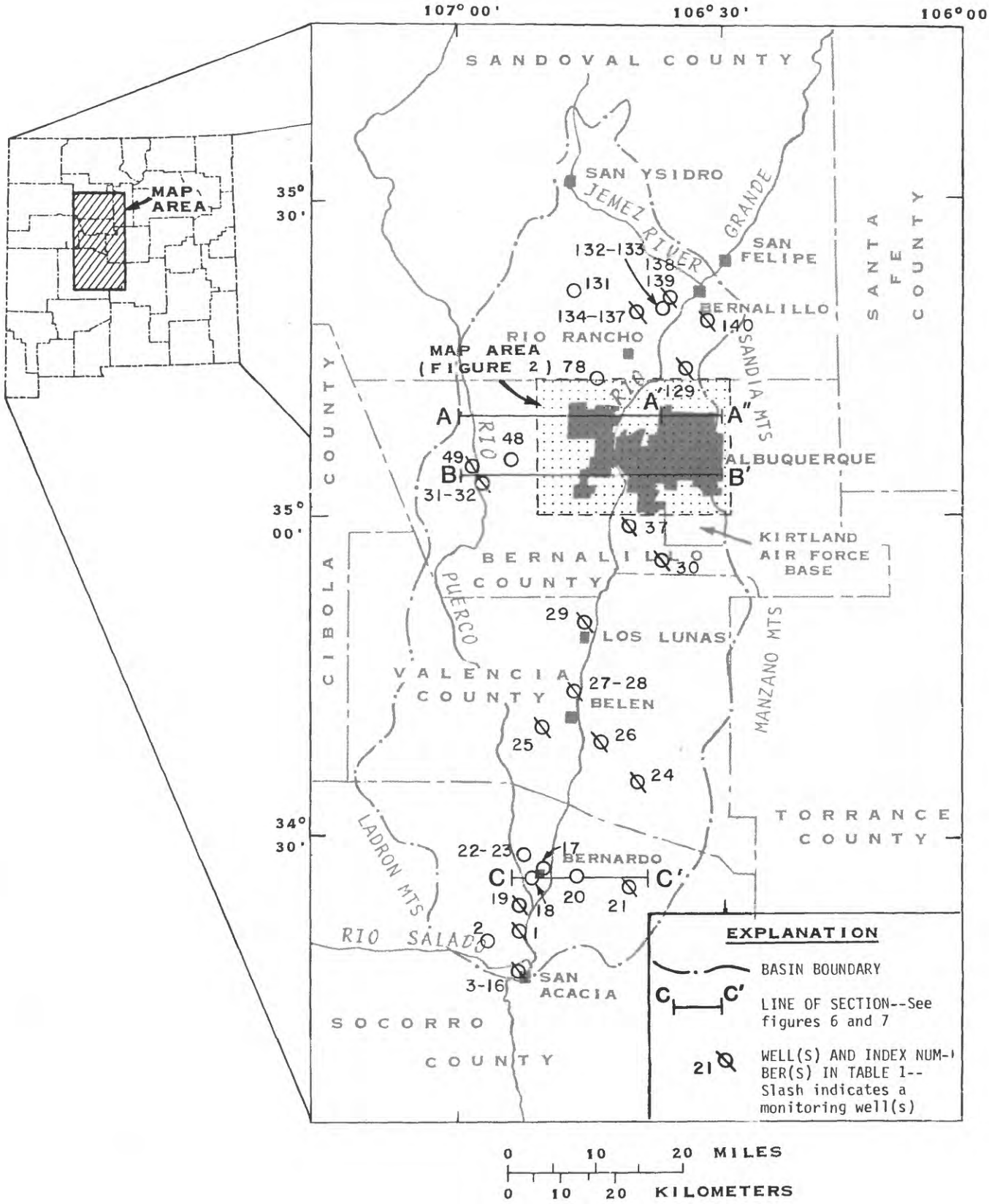


Figure 1.--Location of the Albuquerque-Belen Basin and monitoring wells outside the vicinity of Albuquerque.

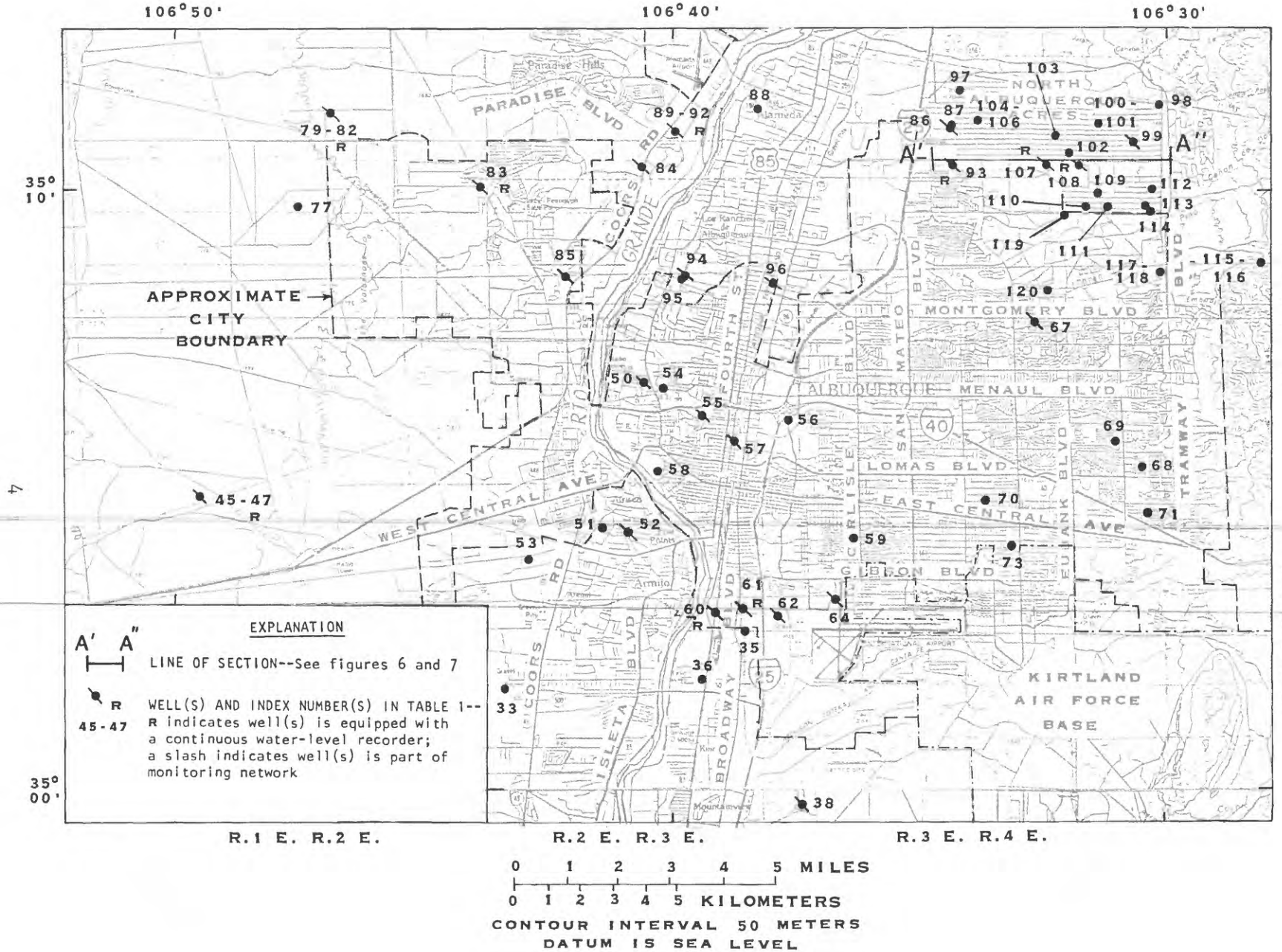


Figure 2.--Location of monitoring wells within and near the city of Albuquerque.

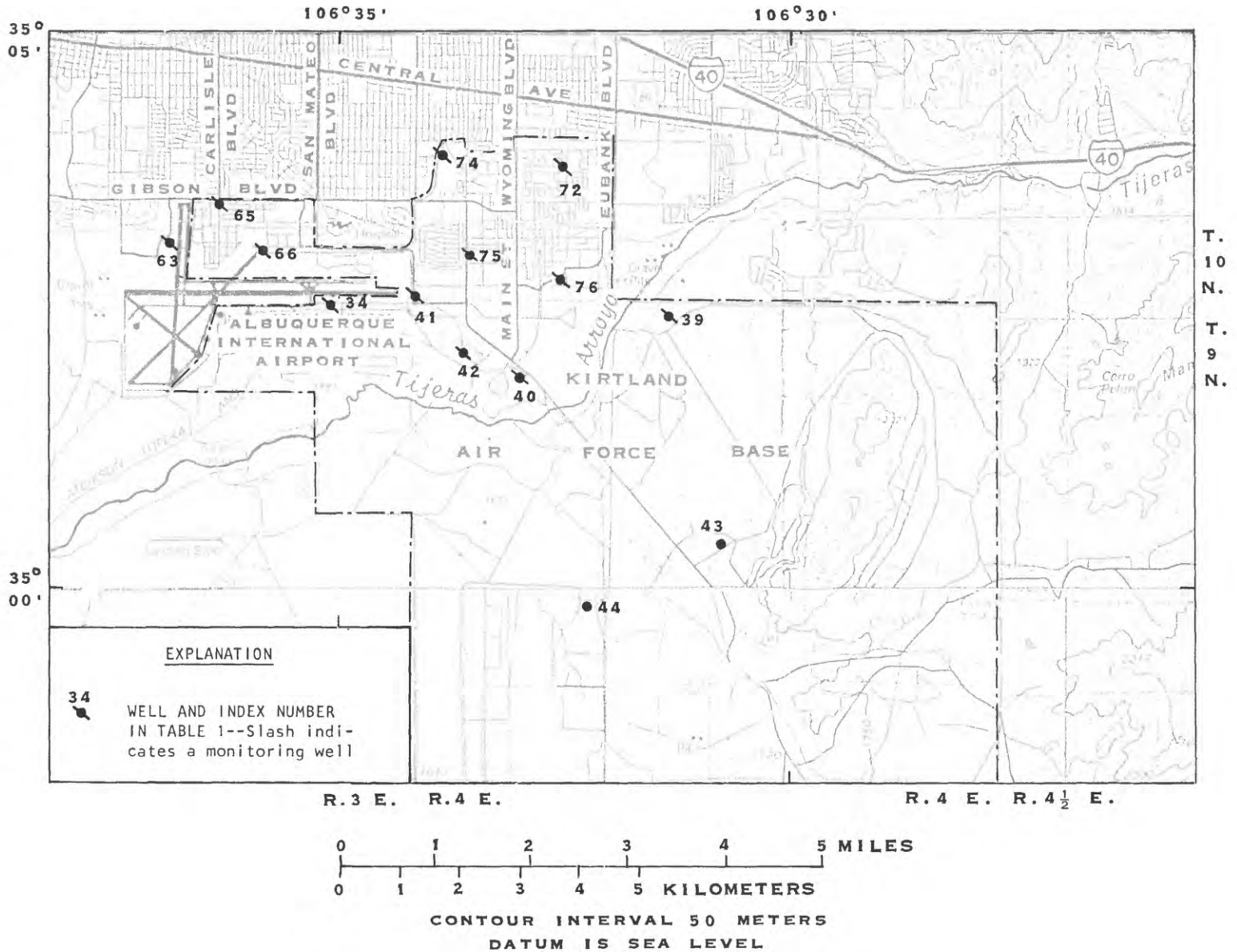


Figure 3.--Location of Kirtland Air Force Base wells.

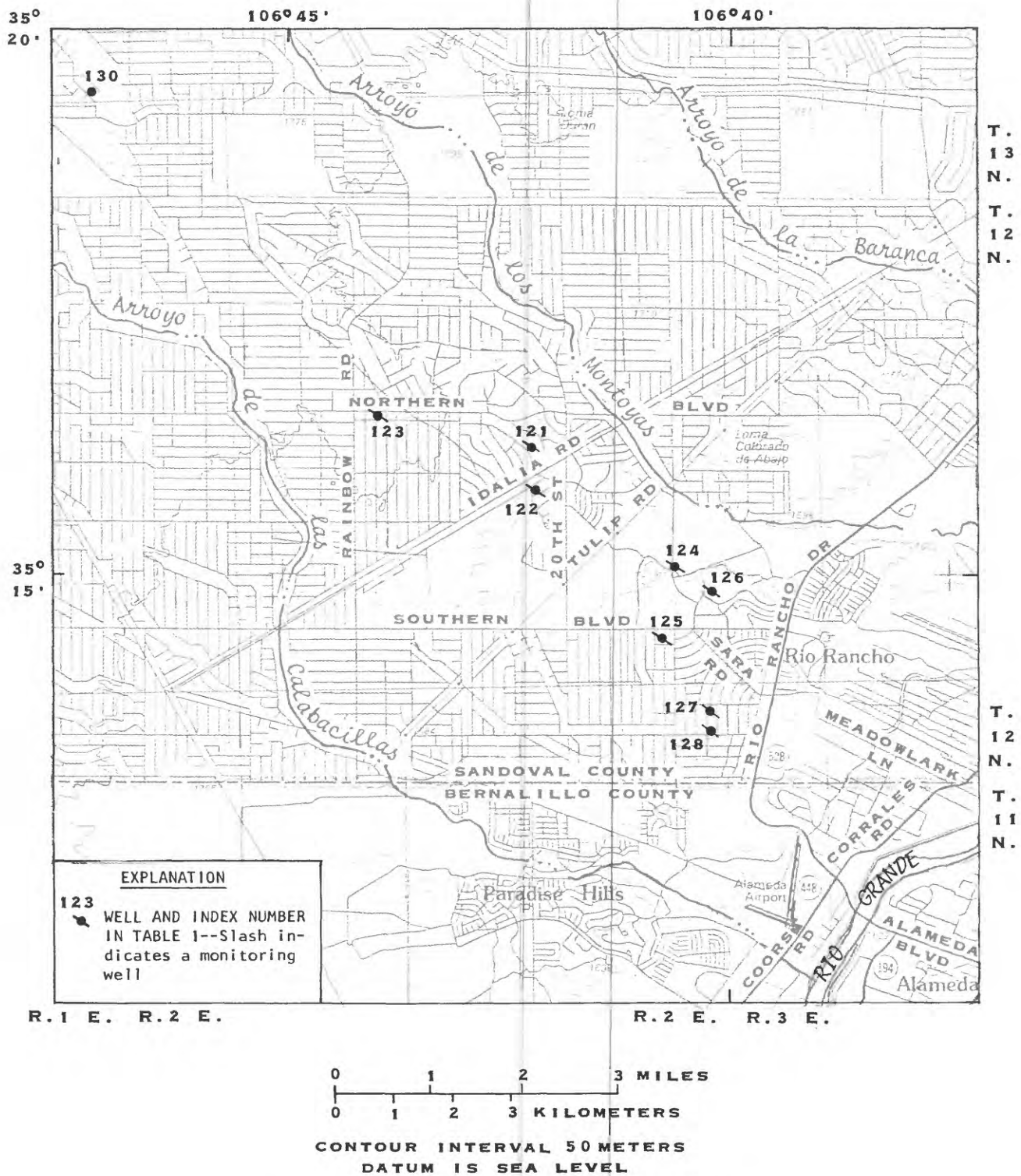


Figure 4.--Location of Rio Rancho wells.

Well-Numbering System

The system of numbering wells in New Mexico is based on the common subdivision of public lands into sections (fig. 5). The well number, in addition to designating the well, locates its position to the nearest 10-acre tract in the land network. This number is divided into four segments. The first segment denotes the township north of the New Mexico base line, the second denotes the range east of the New Mexico principal meridian, and the third denotes the section. The fourth segment of the number, which consists of three digits, denotes the 160-, 40-, and 10-acre tracts, respectively, in which the well is situated. For this purpose, the section is divided into four quarters, numbered 1, 2, 3, and 4, in the normal reading order, for the northwest, northeast, southwest, and southeast quarters. The first digit of the fourth segment gives the quarter section, which is a tract of 160 acres. Similarly, the quarter section is divided into four 40-acre tracts numbered in the same manner, and the second digit denotes the 40-acre tract. Finally, the 40-acre tract is divided into four 10-acre tracts, and the third digit denotes the 10-acre tract. For example, well 10N.03E.32.412 is in the NE¼ of the NW¼ of the SE¼ of section 32, T. 10 N, R. 3 E (fig. 5). Letters A, B, C, etc. are added to the last segment of the well number to designate the second, third, fourth, and succeeding wells in the same 10-acre tract.

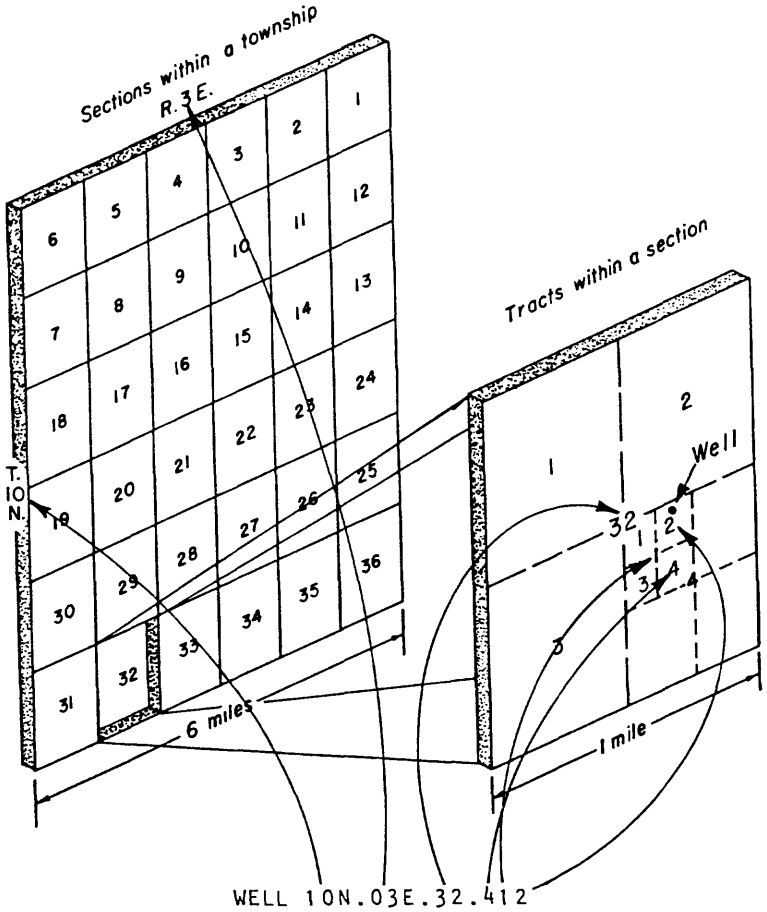


Figure 5.--Method of numbering wells.

METHODS OF STUDY

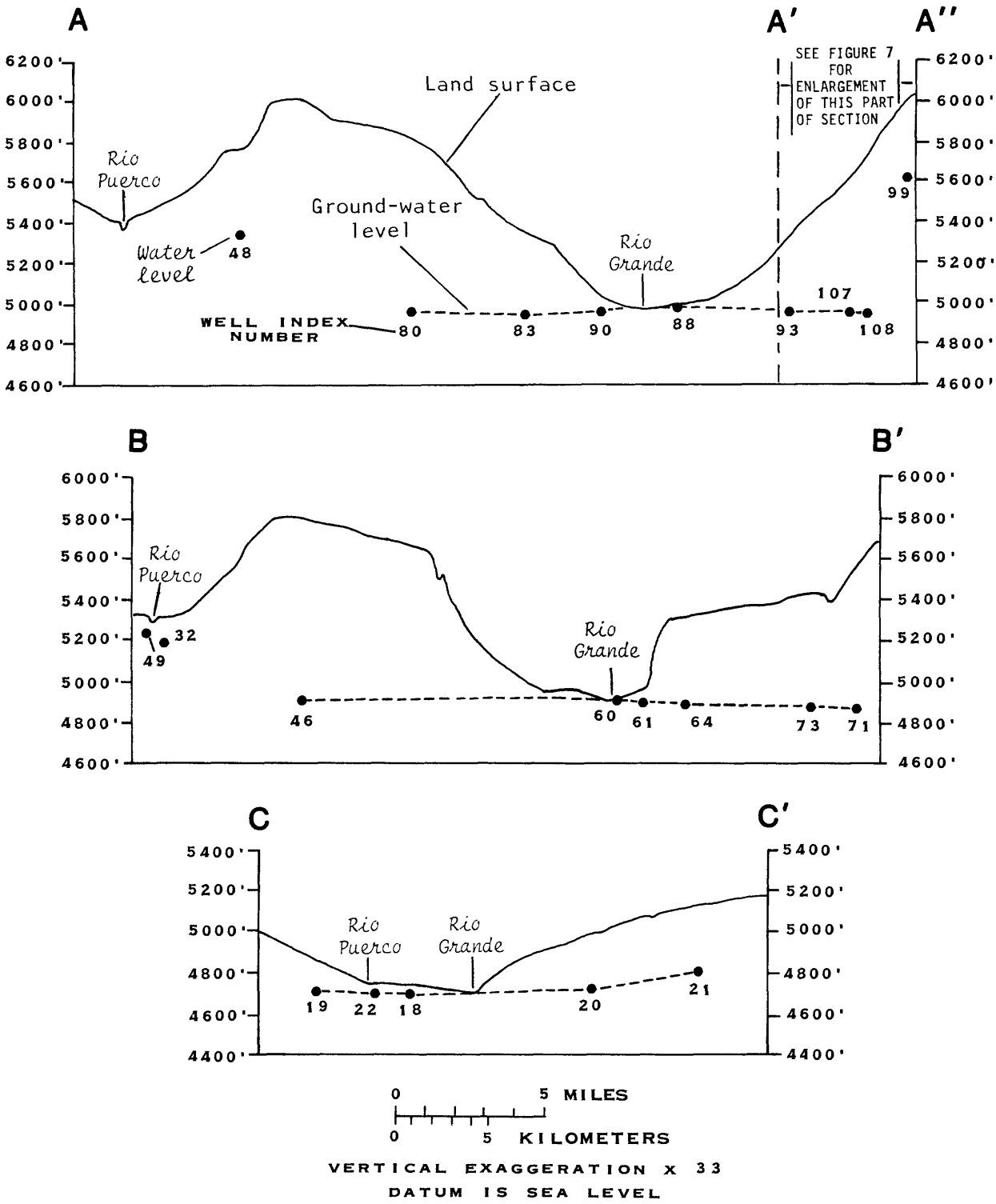
A ground-water monitoring network was established between April 1982 and September 1983. Wells were selected for the network if: (1) They were in an appropriate area and were accessible; (2) well-completion information was available; (3) ground-water levels reflected regional levels rather than localized pumping; and (4) permission could be obtained from well owners to make water-level measurements. Water levels that were less than 800 feet below land surface usually were measured using a steel tape. Water levels deeper than 800 feet usually were measured using an electric tape. Water levels that are referred to as "reported" herein were provided by well owners. The network includes nonpumping municipal wells and observation wells in the vicinity of the city of Albuquerque and domestic, private, or observation wells elsewhere. The original network consisted of 6 wells with continuous water-level recorders and 27 wells where water levels were measured monthly. If no appreciable water-level fluctuation occurred after 6 months to 1 year of data collection, the frequency of water-level measurements was changed to twice a year, once in the winter and once in the summer.

Changes to the network have been necessary since it was established. In November 1984, water-level data collection at three of the six continuous monitoring wells was discontinued because the owner, the City of Albuquerque, needed to put the wells into water-supply production. Monitoring of two of the remaining three wells, Volcano Cliffs 3 and Walker 1, also was discontinued. Monthly measurements are continuing in the Coronado 1 well (index number 93, fig. 2). In addition, pumping equipment was installed in a few privately owned wells that made water-level measurement difficult or impossible; wells have been added to the network to replace most wells that have been discontinued, and new wells occasionally are added to enhance data collection.

DISCUSSION OF WATER-LEVEL DATA

Ground-water levels in wells in the vicinity of the Rio Grande generally approximate river levels (fig. 6). Ground-water levels in wells in the North Albuquerque Acres area and vicinity northeast of Albuquerque (fig. 2) showed a difference in altitude of approximately 620 feet over a horizontal distance of about 1 mile in February and March 1985 (fig. 7).

In continuously monitored wells, ground-water levels generally rose each year from October through February and declined from March through September (figs. 8A-8F). Declines in highest annual water levels were greater from water year 1983 to water year 1984 than from water year 1984 to water year 1985 (fig. 9). The Walker 1 well (index number 108) is furthest east of the Rio Grande along the line of section A-A'-A'' (fig. 1), and showed a water-level decline of 6 feet from water year 1983 to water year 1984, the greatest amount of decline for that period of all continuously monitored wells. During that same period, water levels in the San Jose 9 well (index number 60) declined approximately 0.7 foot (fig. 9).



NOTE: All water levels are projected at right angles to line of section

Figure 6.--Hydrologic sections A-A'-A'', B-B', and C-C' showing land-surface altitude and projected ground-water-level altitudes, water years 1983-85 (lines of section are shown in figure 1).

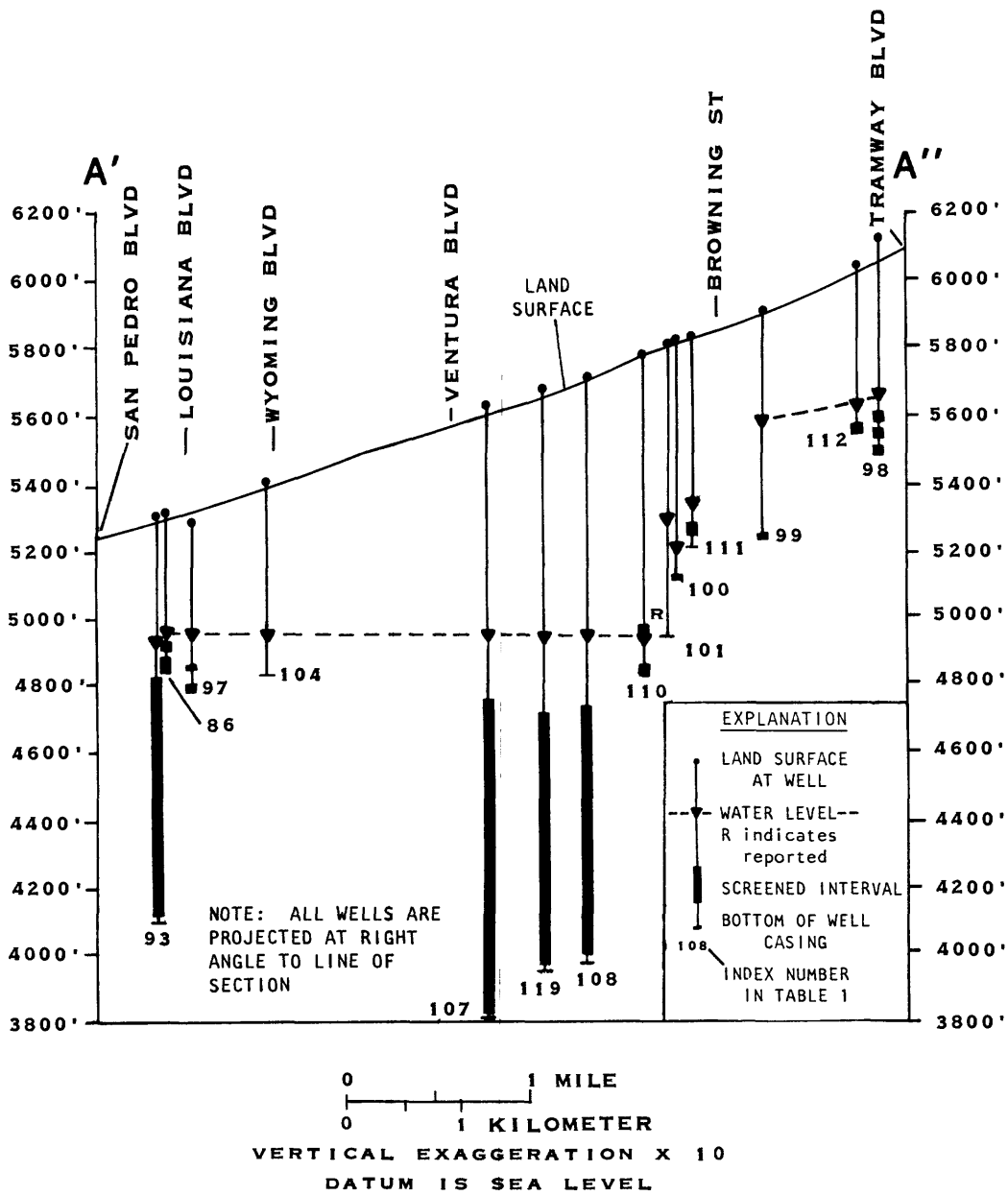


Figure 7.--Hydrologic section A'-A'' along Paseo del Norte Boulevard showing land-surface altitude and projected ground-water-level altitudes, February and March 1985 (line of section is shown in figure 2).

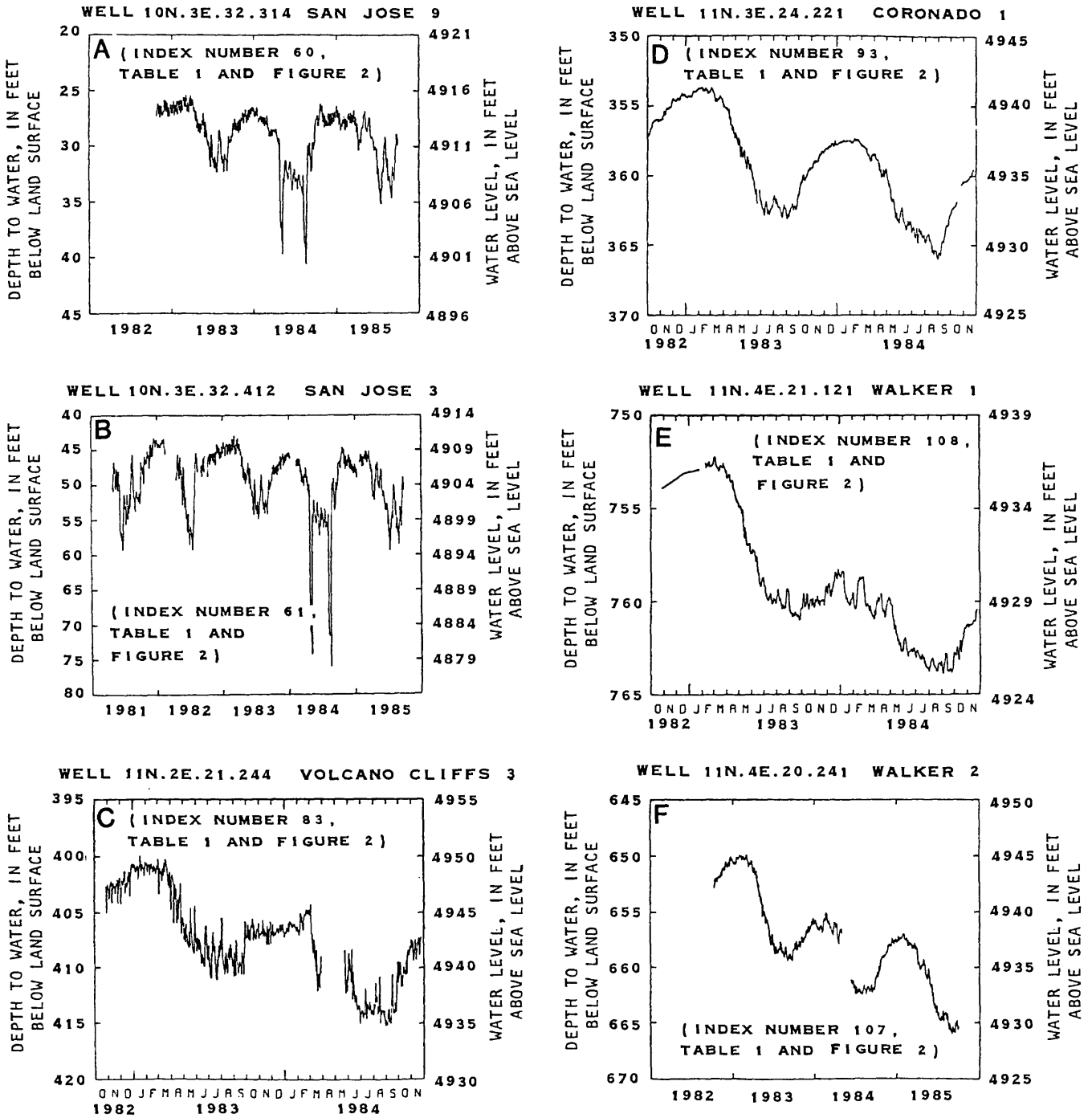


Figure 8.--Hydrographs showing water levels in selected wells.

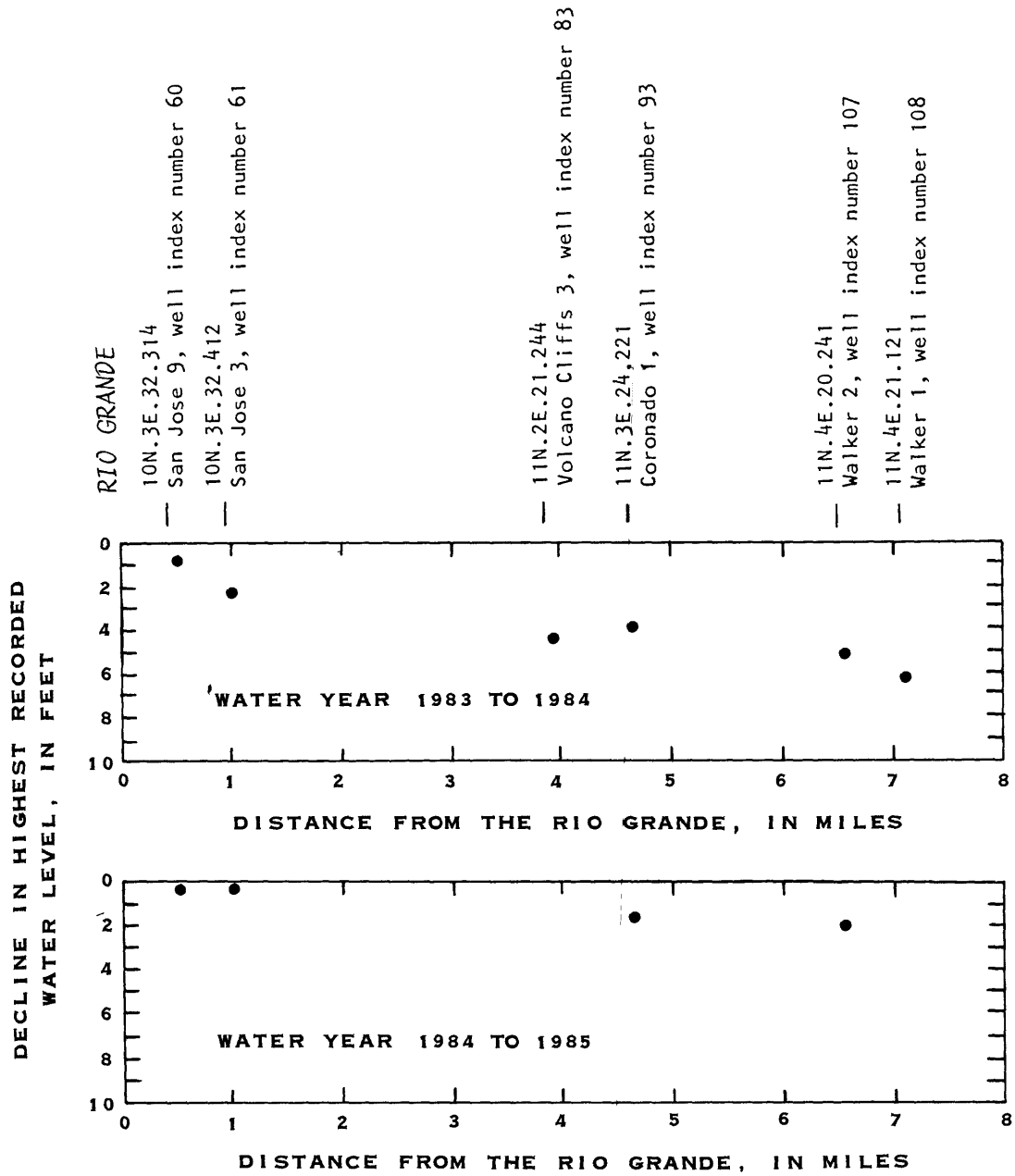


Figure 9.--Decline in highest recorded water levels for monitoring wells from water year 1983 to 1984 and water year 1984 to 1985.

West Mesa wells 1A, 2, and 3, which have multiple completions (fig. 10), showed differences in water levels of as much as approximately 20 feet from the uppermost to the lowest screened interval (figs. 11-20). Water levels reported for wells that are part of Kirtland Air Force Base (fig. 3) or City of Rio Rancho (fig. 4) water systems are shown in figures 21 through 41. Water levels for wells not equipped with continuous recording equipment and that have 12 or more measurements are shown in figures 42 through 75. The number in the lower right corner of each hydrograph is the U.S. Geological Survey Ground-Water Site Inventory (GWSI) well-identification number. GWSI is the Survey's computerized ground-water data-base system. Water levels in wells outside the city of Albuquerque generally declined less than 6 feet from water year 1982 to water year 1985. Miscellaneous water levels and well-completion information are given in table 1 on page 36.

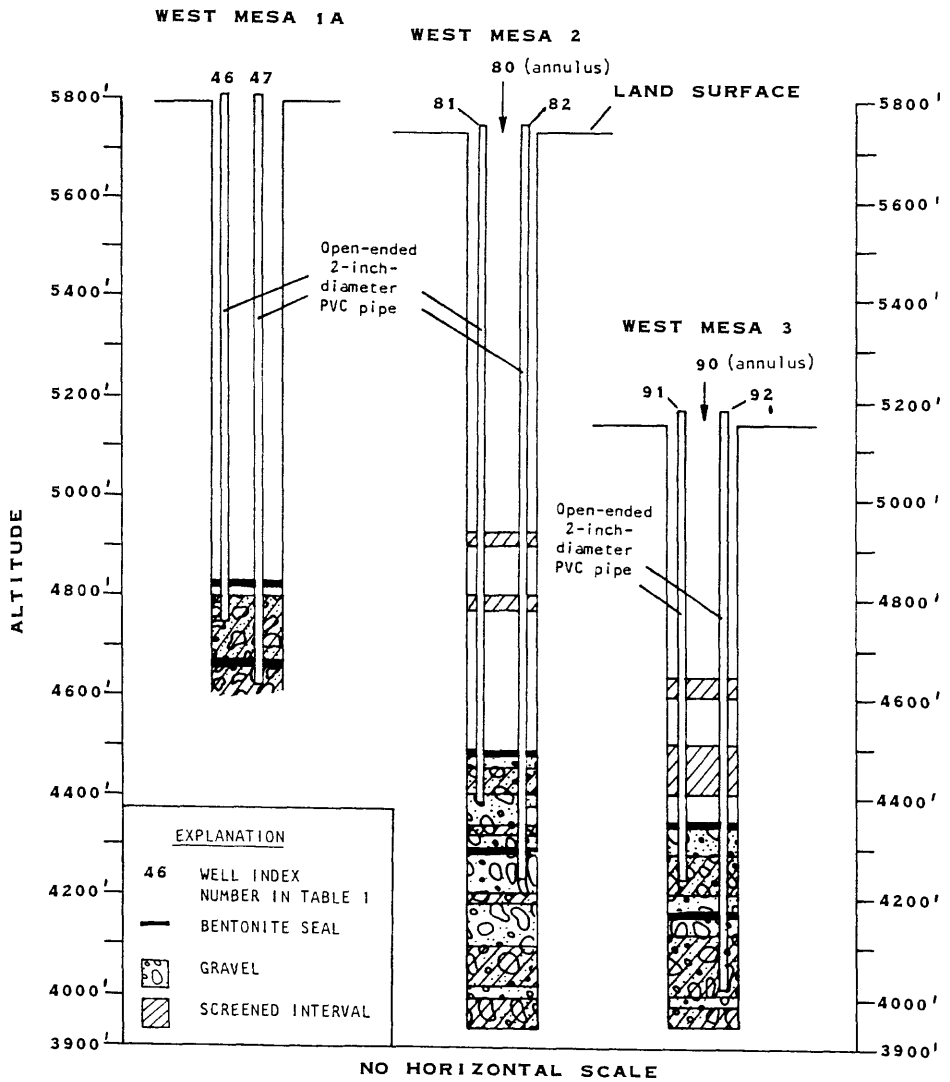


Figure 10.--Well completion for monitoring wells West Mesa 1A, 2, and 3.

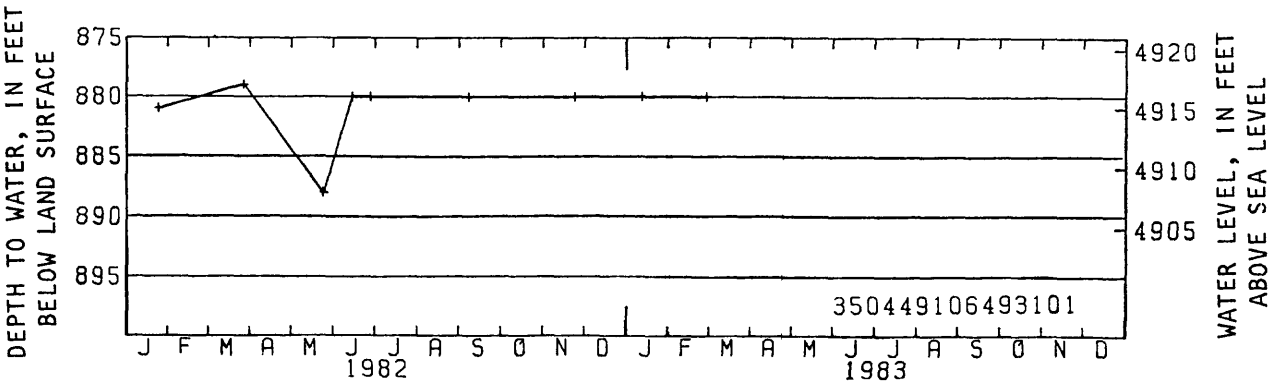


Figure 11.--Water levels for observation well West Mesa 1A, 10N.1E.22.322, prior to installation of piezometers (index number 45, table 1 and figure 2).

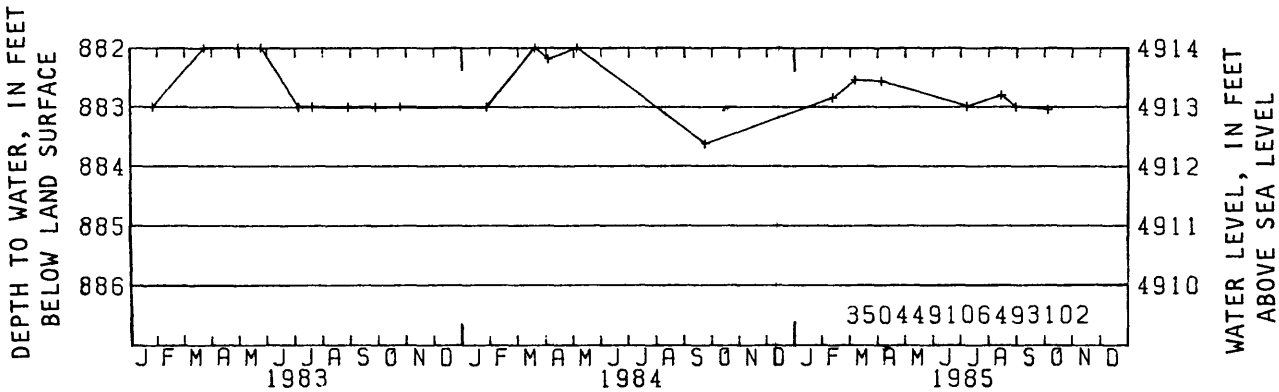


Figure 12.--Water levels for observation well West Mesa 1A, 10N.1E.22.322A, 1,049-foot-deep piezometer (index number 46, table 1 and figure 2).

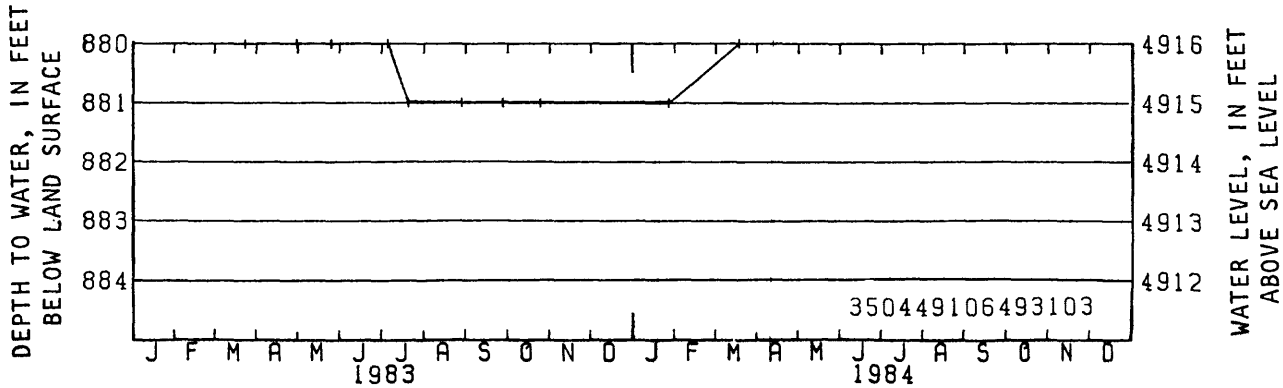


Figure 13.--Water levels for observation well West Mesa 1A, 10N.1E.22.322B, 1,175-foot-deep piezometer (index number 47, table 1 and figure 2).

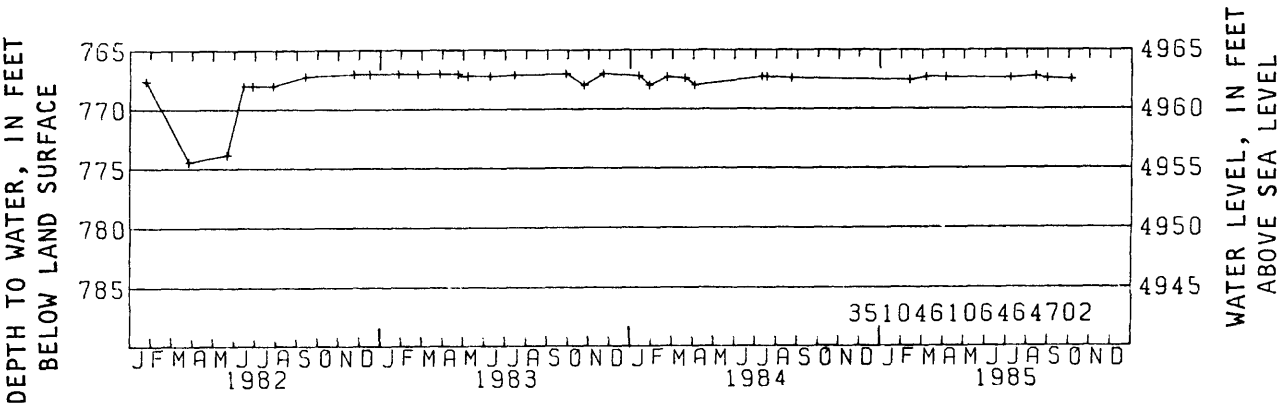


Figure 14.--Water levels for observation well West Mesa 2, 11N.2E.18.313A, annulus (index number 80, table 1 and figure 2).

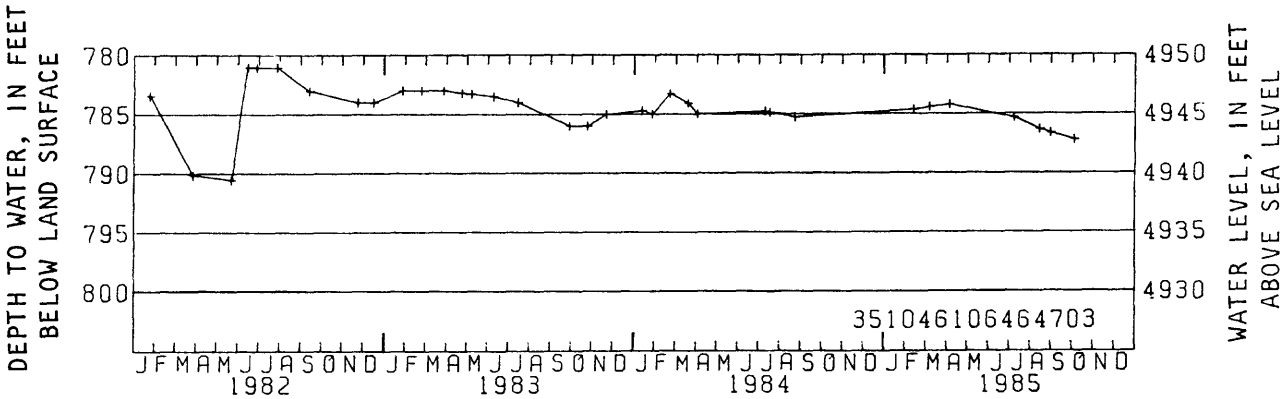


Figure 15.--Water levels for observation well West Mesa 2, 11N.2E.18.313B, 1,350-foot-deep piezometer (index number 81, table 1 and figure 2).

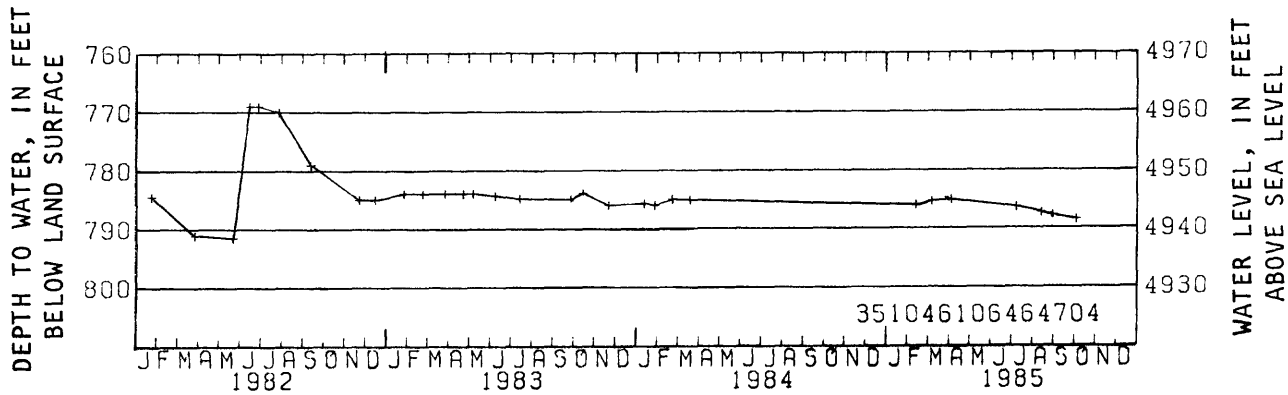


Figure 16.--Water levels for observation well West Mesa 2, 11N.2E.18.313C, 1,500-foot-deep piezometer (index number 82, table 1 and figure 2).

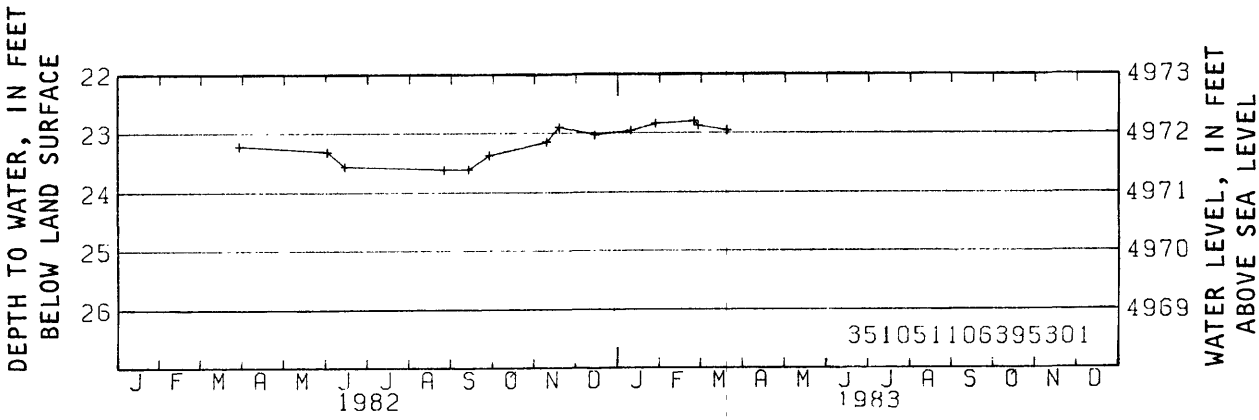


Figure 17.--Water levels for observation well West Mesa 3, 11N.3E.18.411, prior to installation of piezometers (index number 89, table 1 and figure 2).

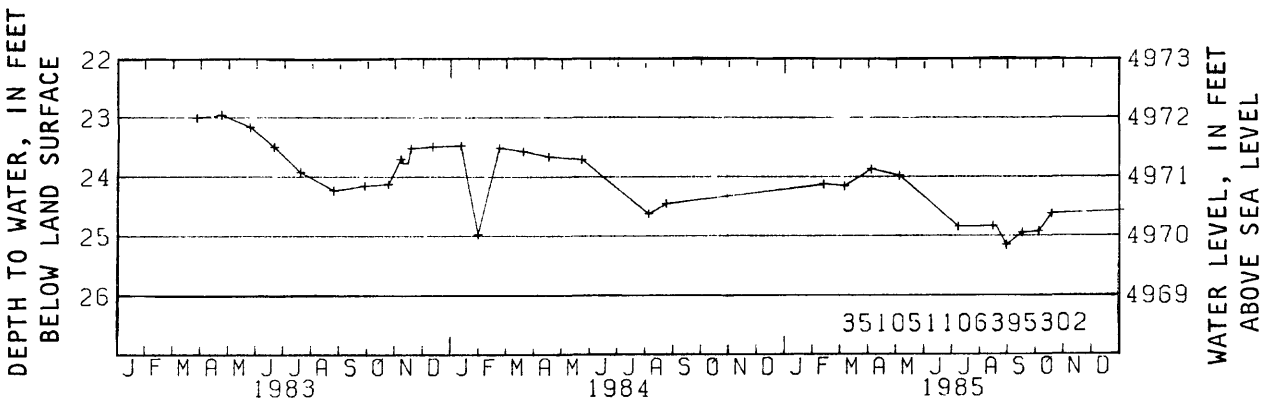


Figure 18.--Water levels for observation well West Mesa 3, 11N.3E.18.411A, annulus (index number 90, table 1 and figure 2).

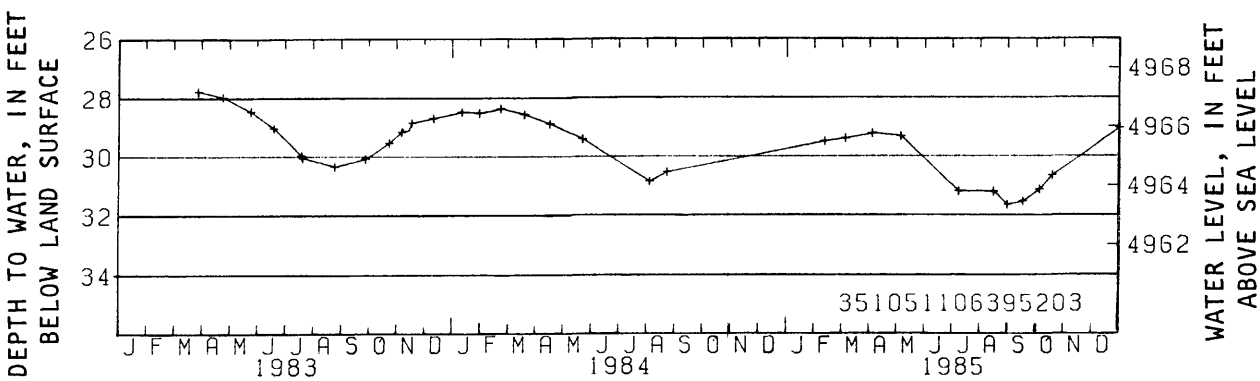


Figure 19.--Water levels for observation well West Mesa 3, 11N.3E.18.411B, 760-foot-deep piezometer (index number 91, table 1 and figure 2).

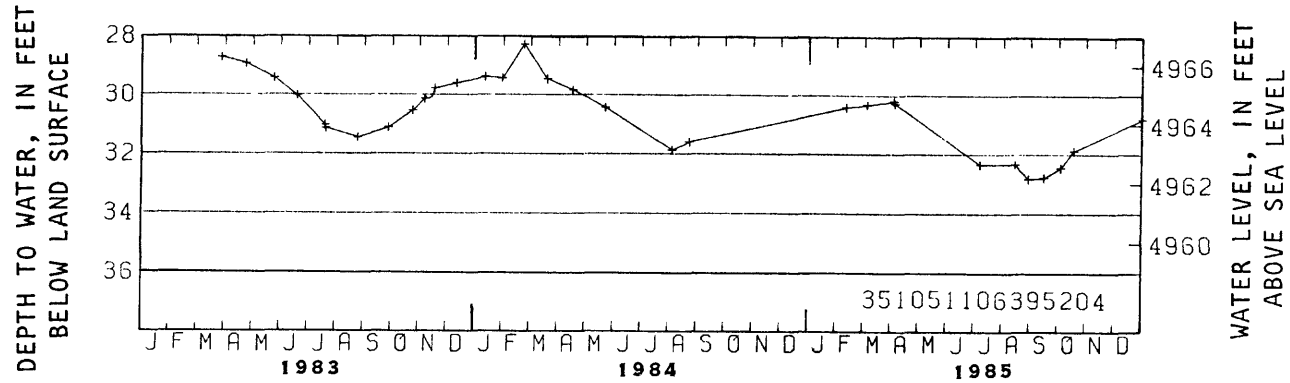


Figure 20.--Water levels for observation well West Mesa 3, 11N.3E.18.411C, 980-foot-deep piezometer (index number 92, table 1 and figure 2).

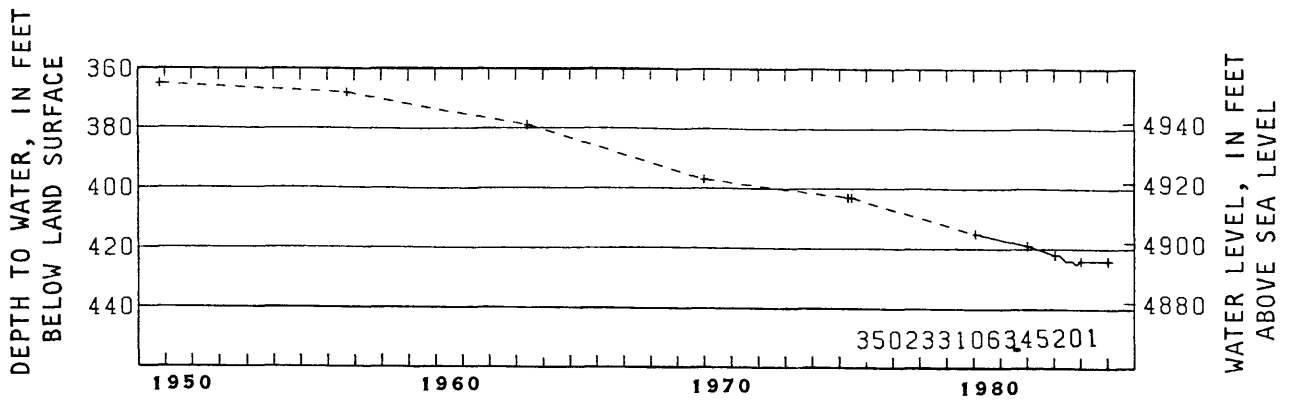


Figure 21.--Reported water levels for well USAF 2, 9N.3E.1.112 (index number 34, table 1 and figure 3).

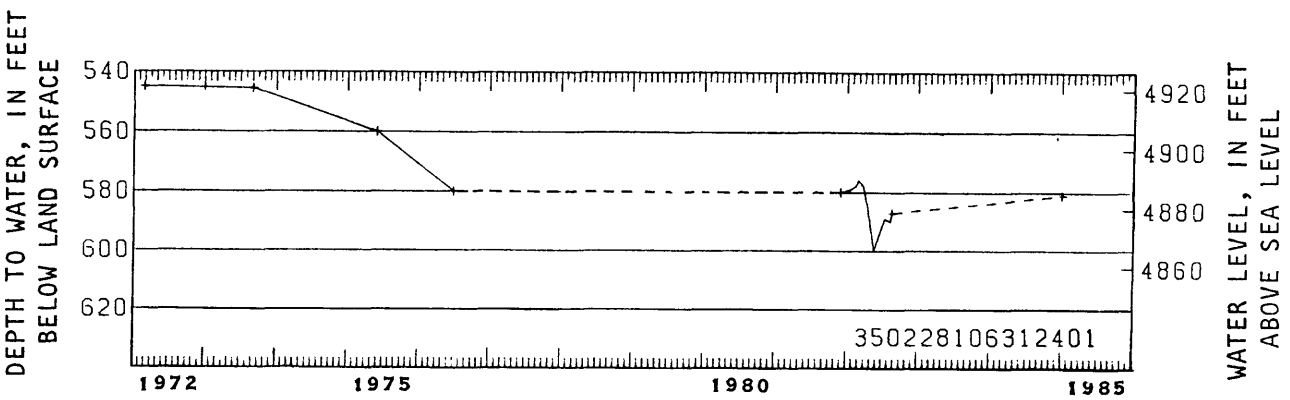


Figure 22.--Reported water levels for well USAF 11, 9N.4E.4.213 (index number 39, table 1 and figure 3).

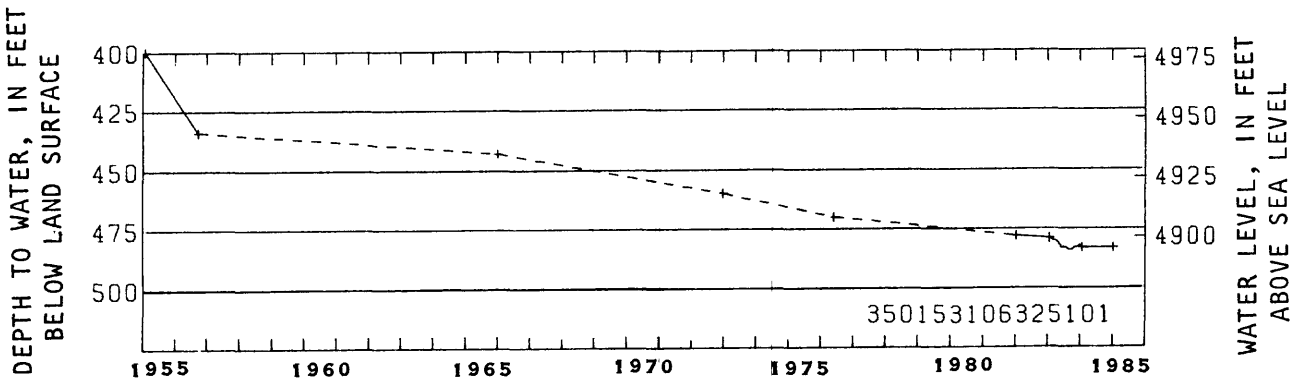


Figure 23.--Reported water levels for well USAF 8, 9N.4E.5.332 (index number 40, table 1 and figure 3).

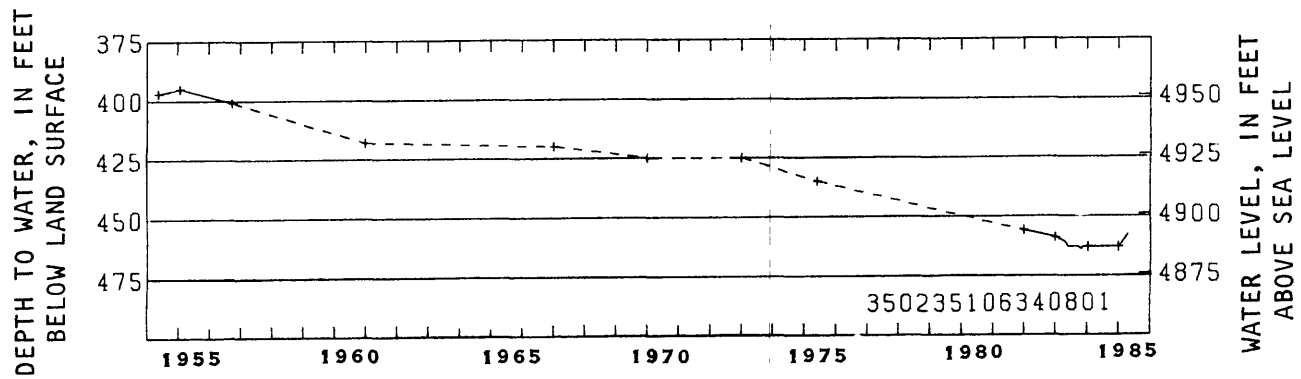


Figure 24.--Reported water levels for well USAF 7, 9N.4E.6.111 (index number 41, table 1 and figure 3).

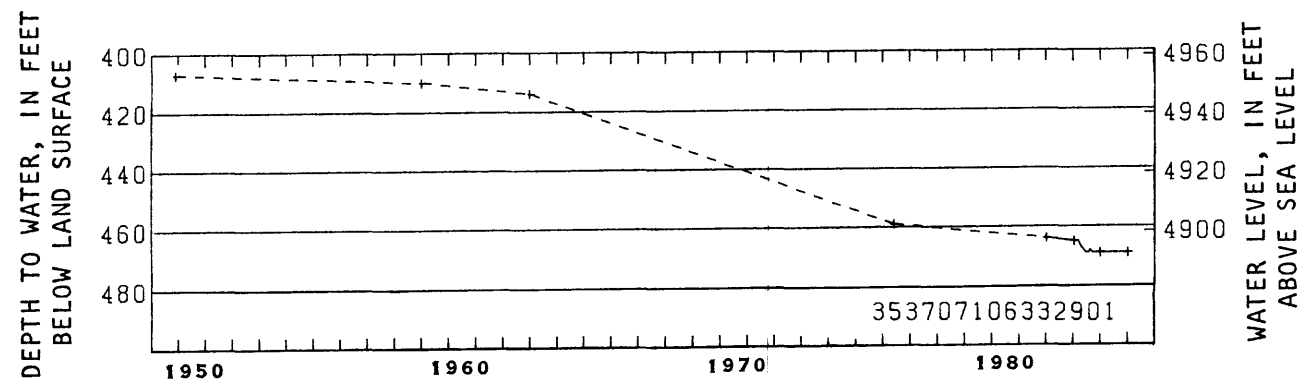


Figure 25.--Reported water levels for well USAF 4, 9N.4E.6.411 (index number 42, table 1 and figure 3).

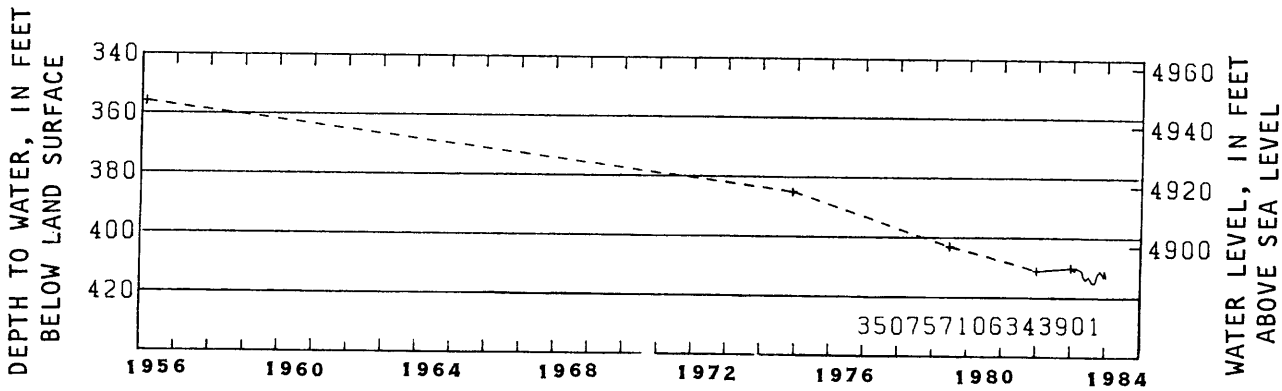


Figure 26.--Reported water levels for well USAF 13, 10N.3E.34.144 (index number 63, table 1 and figure 3).

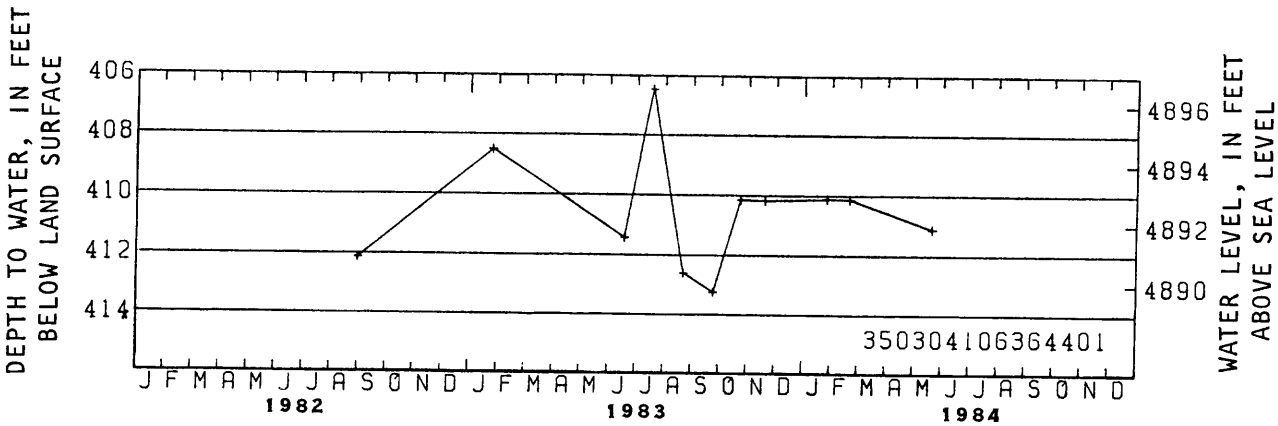


Figure 27.--Reported water levels for well ES-Yale 1, 10N.3E.34.233 (index number 64, table 1 and figure 3).

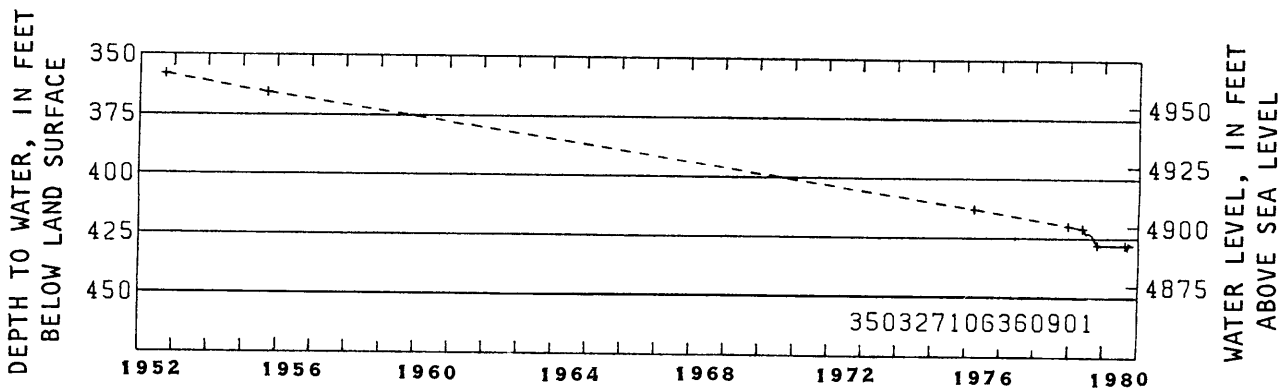


Figure 28.--Reported water levels for well USAF 12, 10N.3E.35.111 (index number 65, table 1 and figure 3).

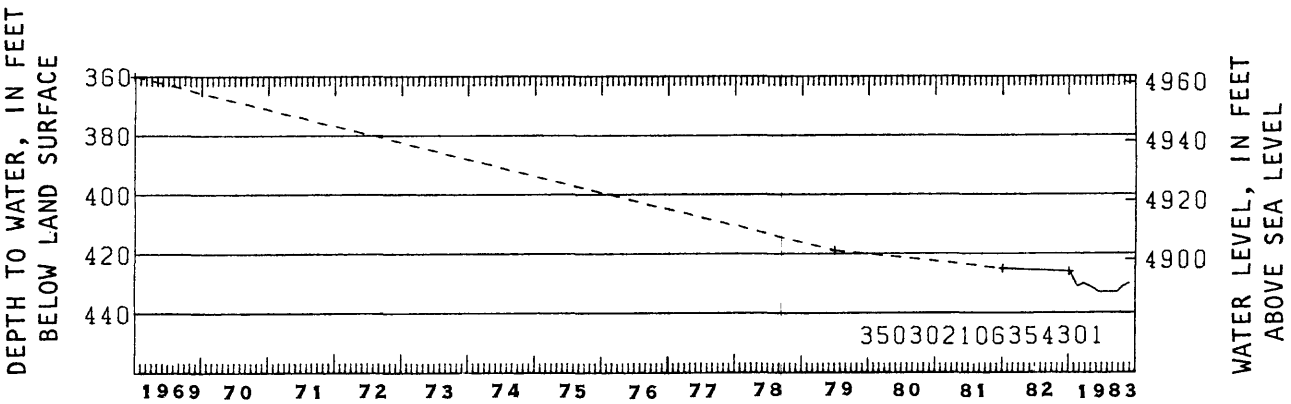


Figure 29.--Reported water levels for well USAF 14, 10N.3E.35.322 (index number 66, table 1 and figure 3).

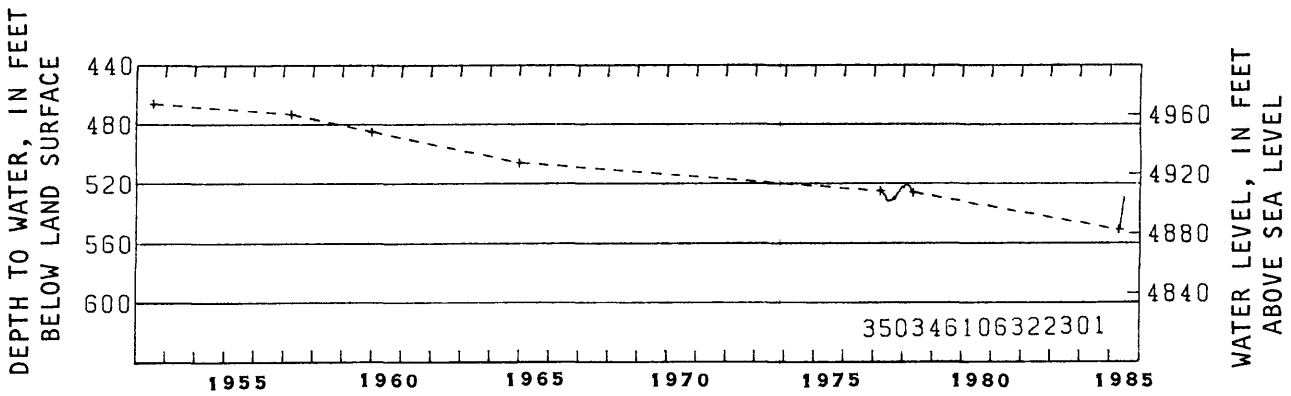


Figure 30.--Reported water levels for well USAF 5, 10N.4E.29.413 (index number 72, table 1 and figure 3).

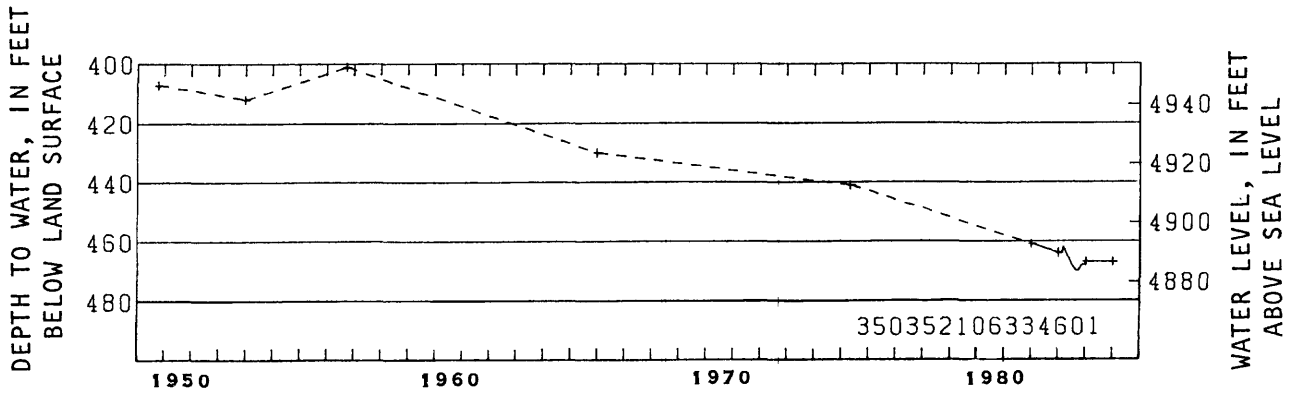


Figure 31.--Reported water levels for well USAF 3, 10N.4E.30.321 (index number 74, table 1 and figure 3).

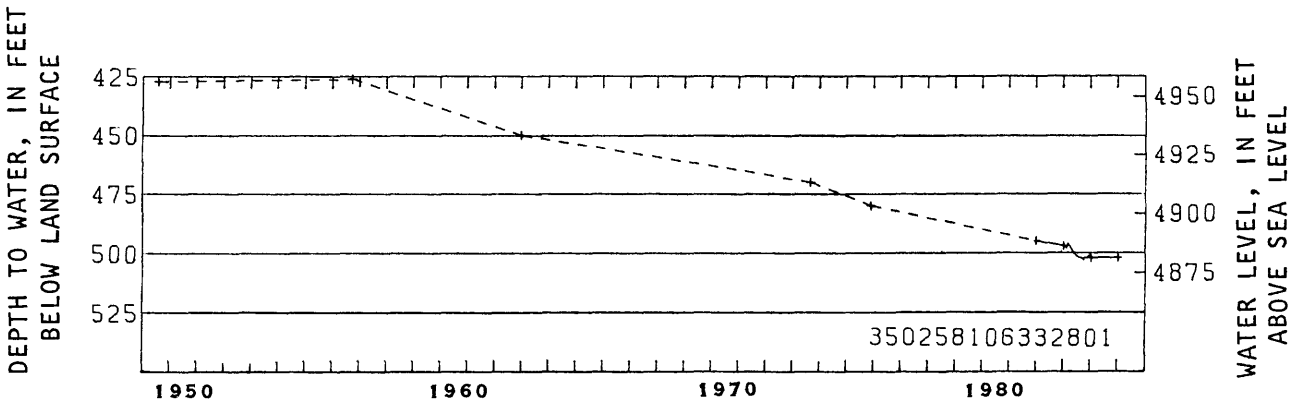


Figure 32.--Reported water levels for well USAF 1, 10N.4E.31.411 (index number 75, table 1 and figure 3).

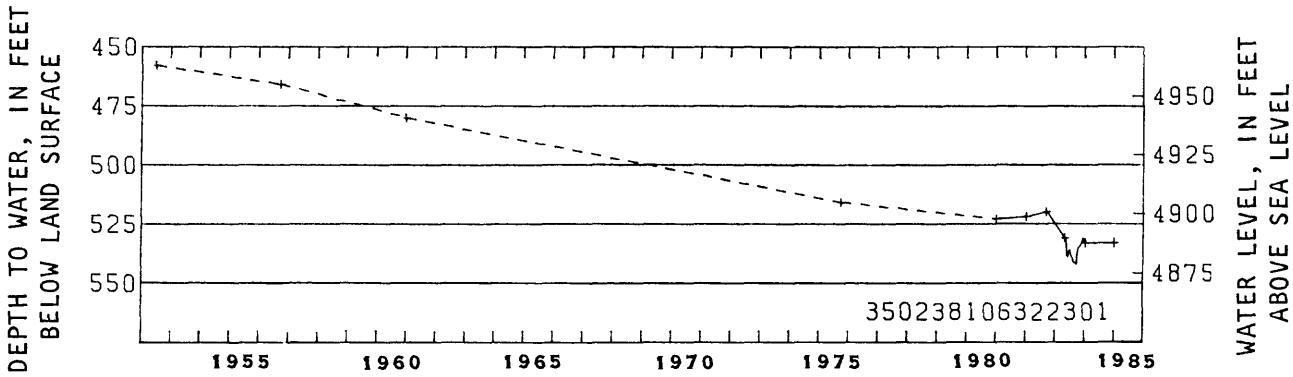


Figure 33.--Reported water levels for well USAF 6, 10N.4E.32.433 (index number 76, table 1 and figure 3).

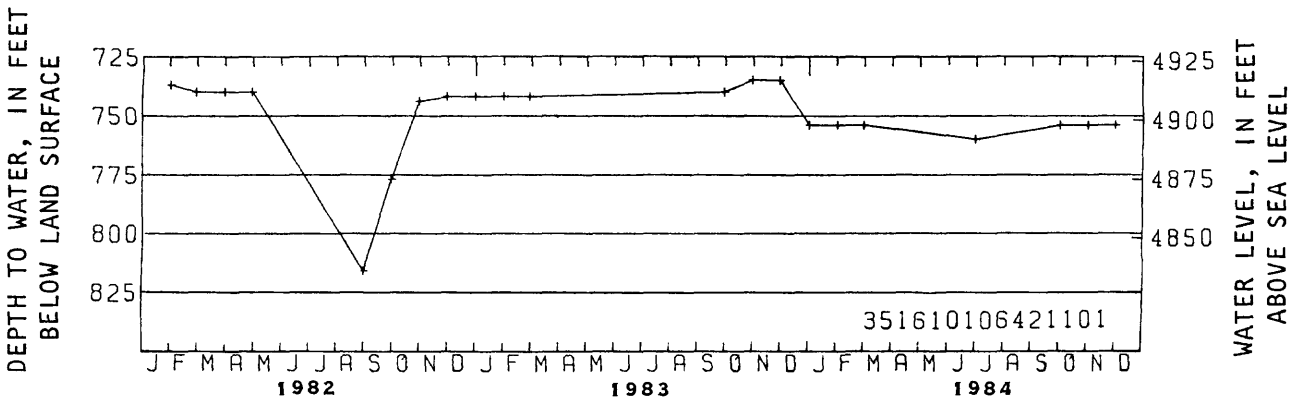


Figure 34.--Reported water levels for well Rio Rancho 7, 12N.2E.14.321 (index number 121, table 1 and figure 4).

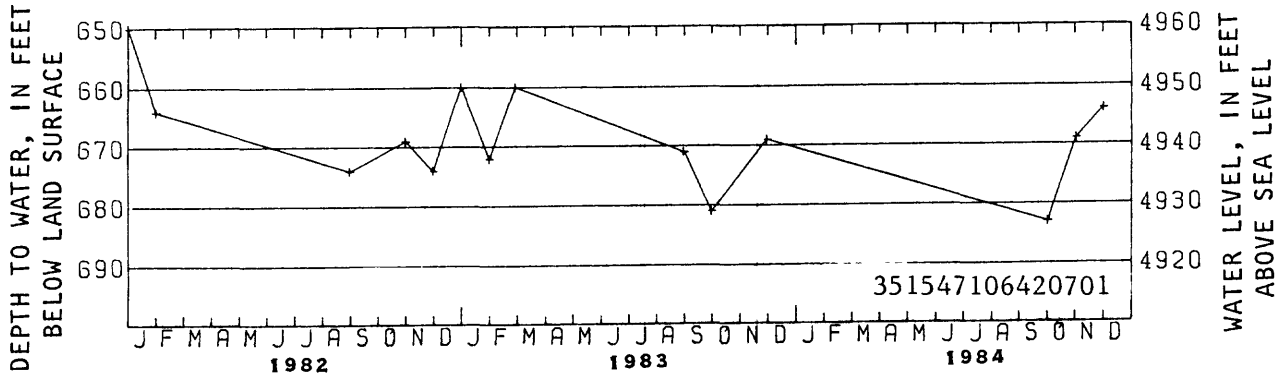


Figure 35.--Reported water levels for well Rio Rancho 6, 12N.2E.14.344 (index number 122, table 1 and figure 4).

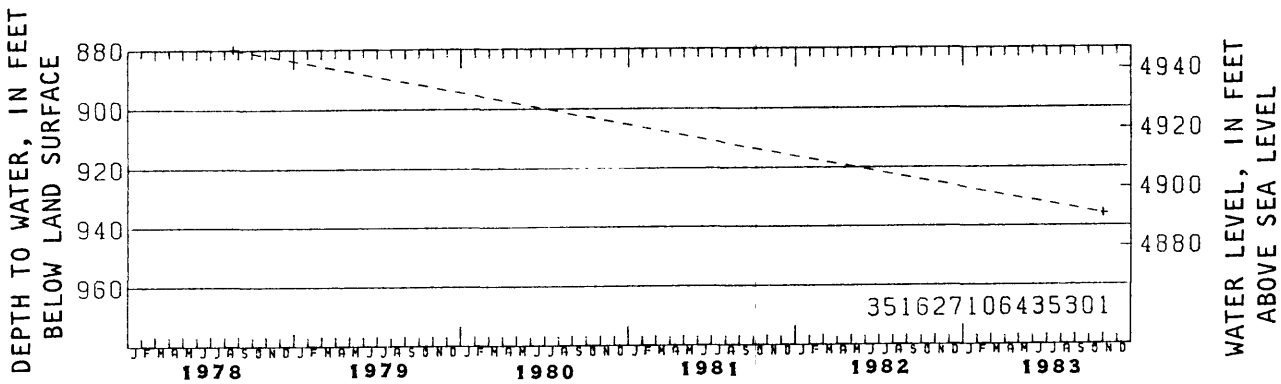


Figure 36.--Reported water levels for well Rio Rancho 8, 12N.2E.16.214 (index number 123, table 1 and figure 4).

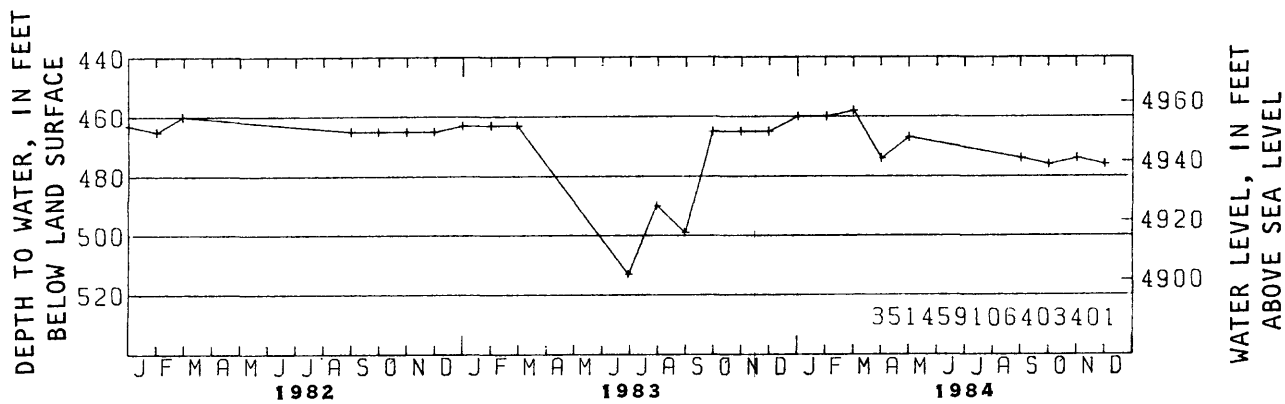


Figure 37.--Reported water levels for well Rio Rancho 4, 12N.2E.24.442 (index number 124, table 1 and figure 4).

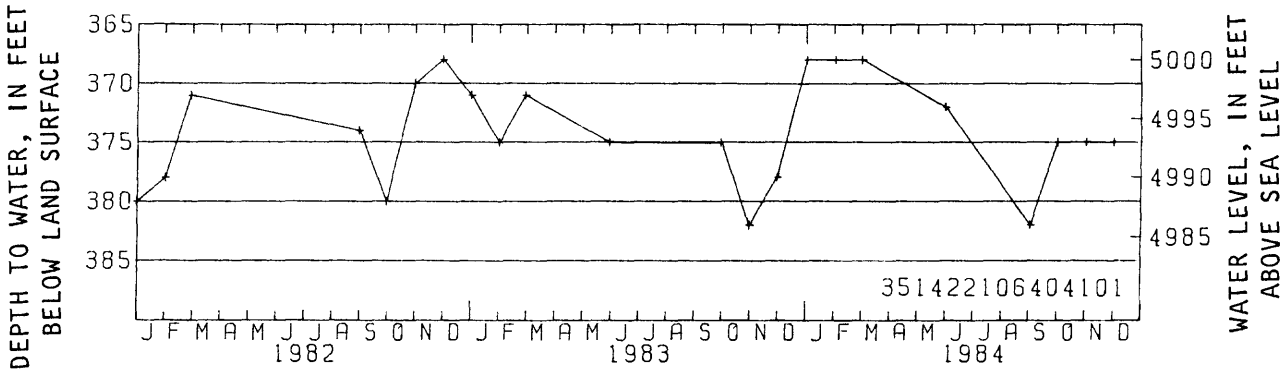


Figure 38.--Reported water levels for well Rio Rancho 3, 12N.2E.25.421 (index number 125, table 1 and figure 4).

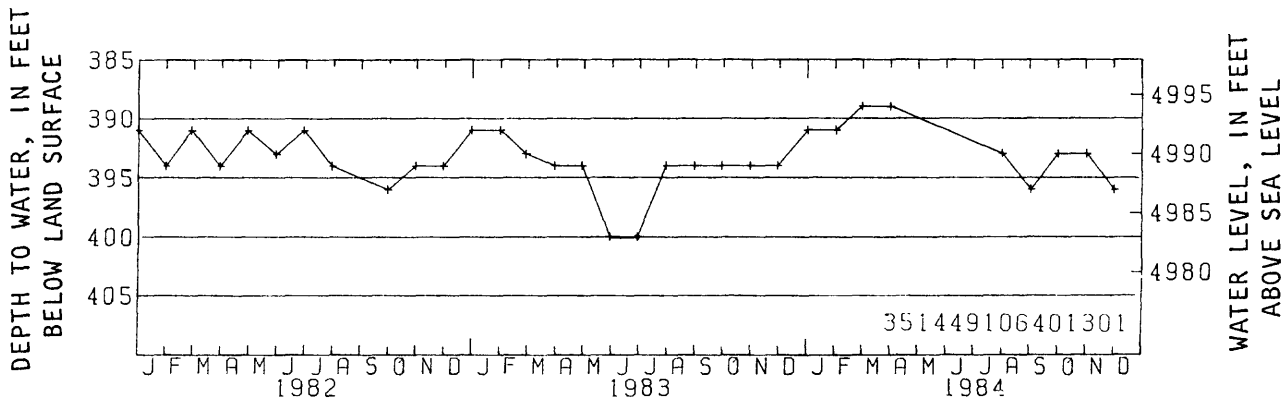


Figure 39.--Reported water levels for well Rio Rancho 5, 12N.3E.30.112 (index number 126, table 1 and figure 4).

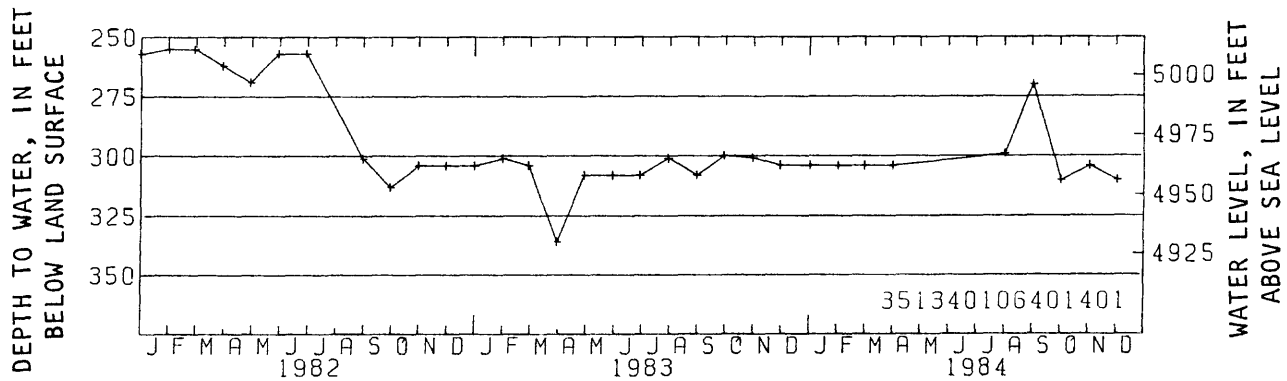


Figure 40.--Reported water levels for well Rio Rancho 2, 12N.3E.31.132 (index number 127, table 1 and figure 4).

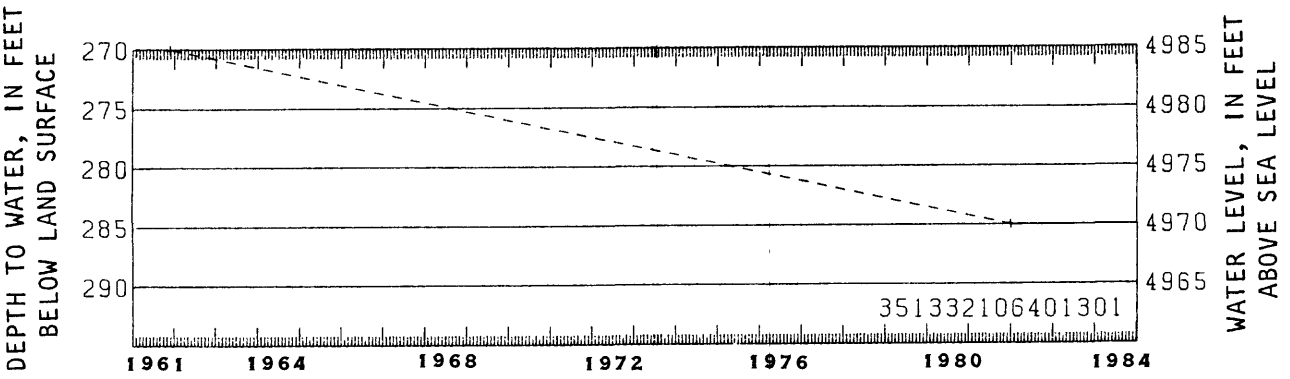


Figure 41.--Reported water levels for well Rio Rancho 1, 12N.3E.31.243 (index number 128, table 1 and figure 4).

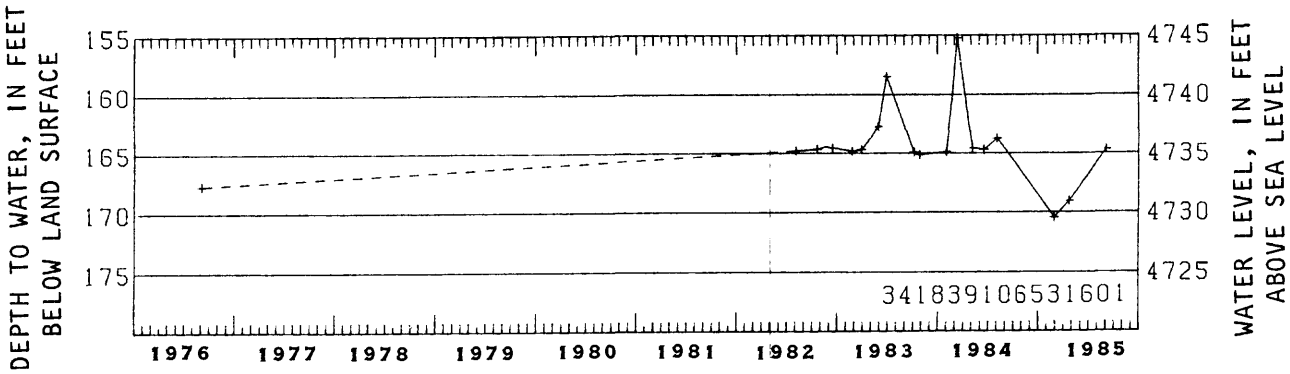


Figure 42.--Water levels for well at rest area, 1N.1W.13.244 (index number 1, table 1 and figure 1).

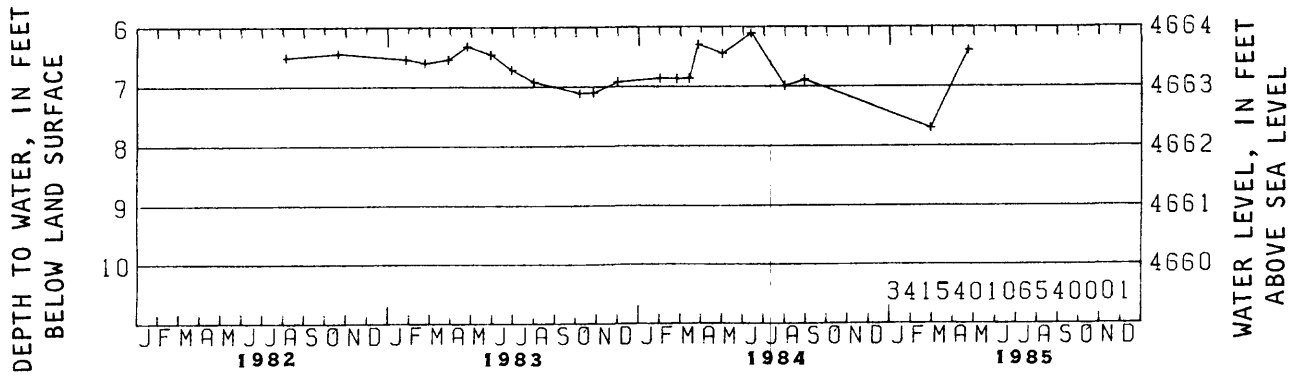


Figure 43.--Water levels for well A1 at piezometer nest, 1N.1W.36.334 (index number 3, table 1 and figure 1).

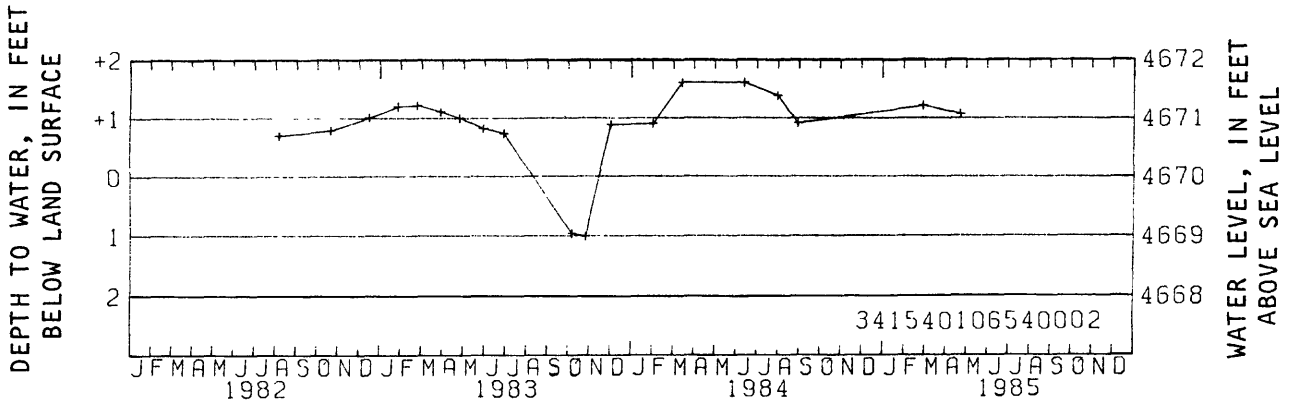


Figure 44.--Water levels for well A2 at piezometer nest, 1N.1W.36.334A (index number 4, table 1 and figure 1).

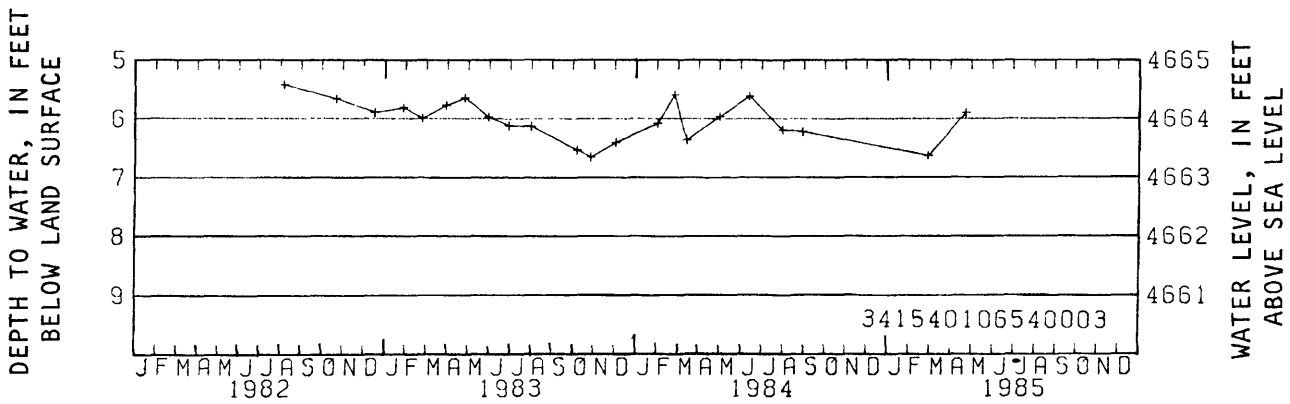


Figure 45.--Water levels for well A3 at piezometer nest, 1N.1W.36.334B (index number 5, table 1 and figure 1).

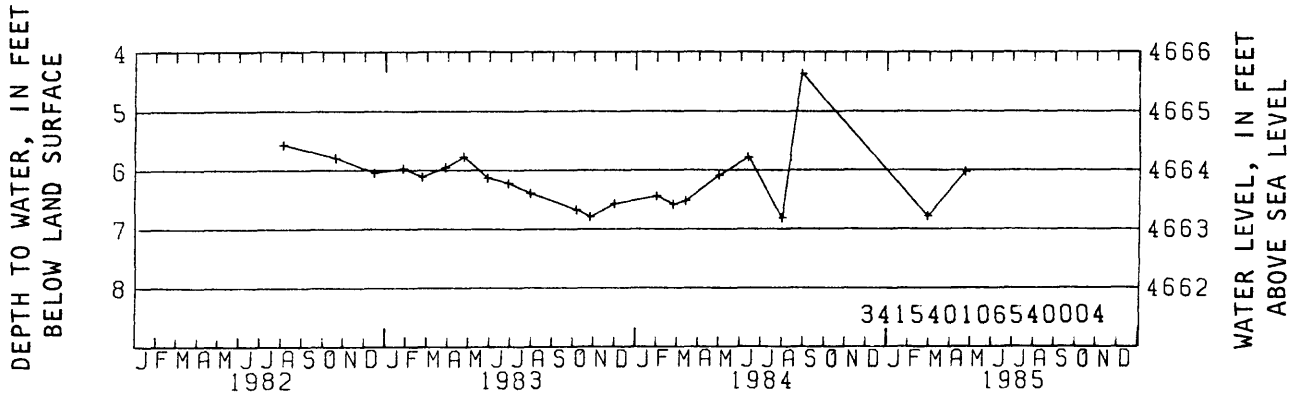


Figure 46.--Water levels for well B1 at piezometer nest, 1N.1W.36.334C (index number 6, table 1 and figure 1).

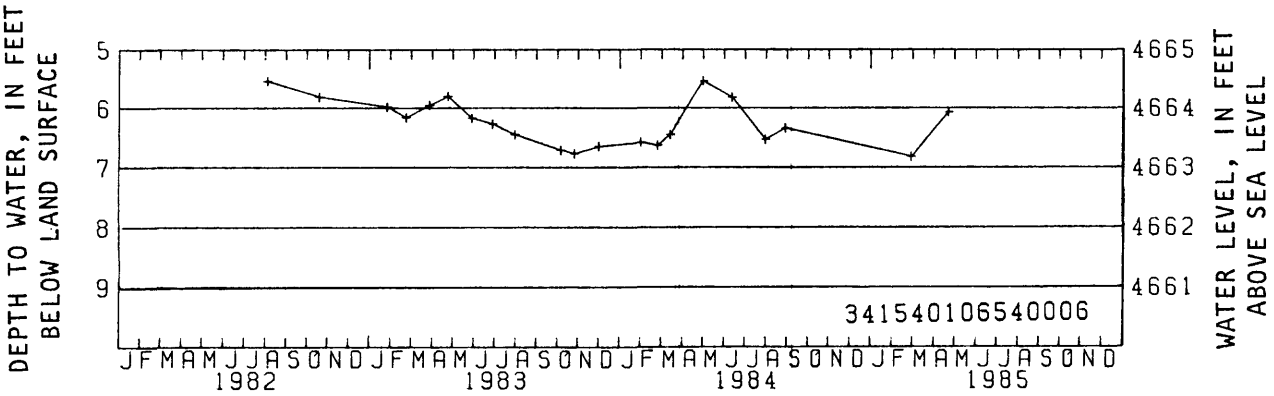


Figure 47.--Water levels for well D1 at piezometer nest, 1N.1W.36.334E (index number 8, table 1 and figure 1).

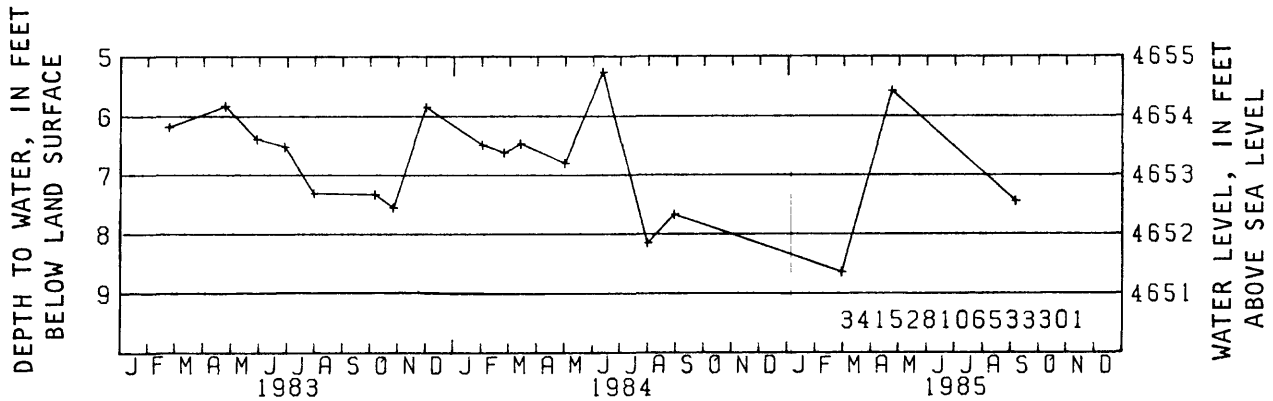


Figure 48.--Water levels for Herkenhoff well, 1S.1W.1.213 (index number 16, table 1 and figure 1).

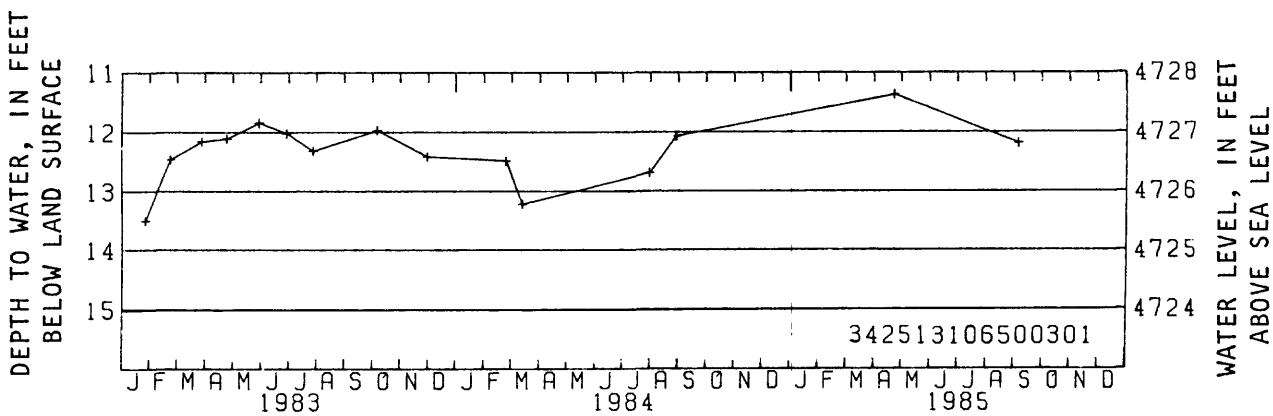


Figure 49.--Water levels for Salas well, 2N.1E.4.444 (index number 18, table 1 and figure 1).

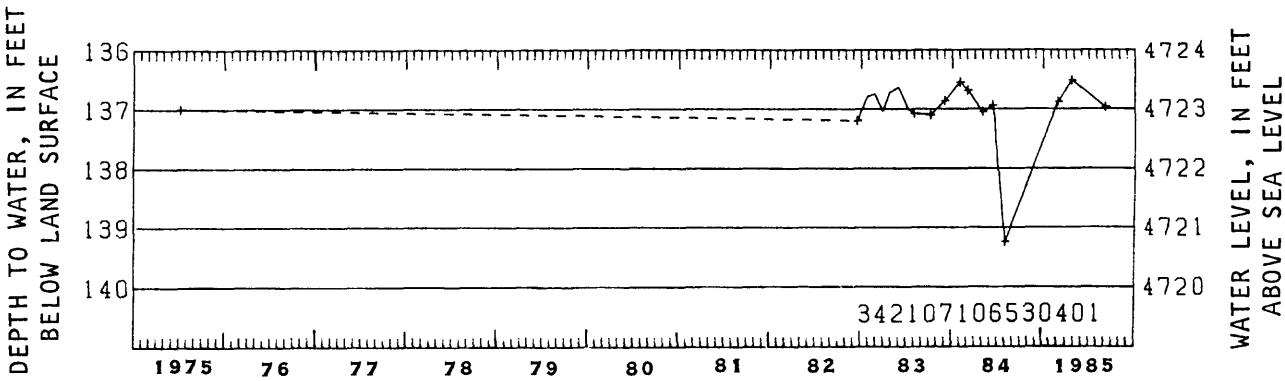


Figure 50.--Water levels for Sevilleta well, 2N.1E.31.313 (index number 19, table 1 and figure 1).

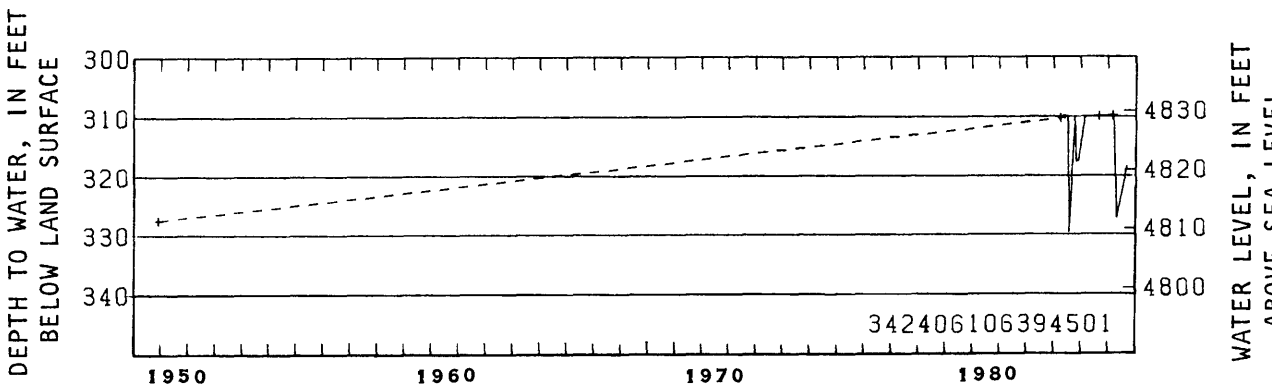


Figure 51.--Water levels for Black well, 2N.3E.18.232 (index number 21, table 1 and figure 1).

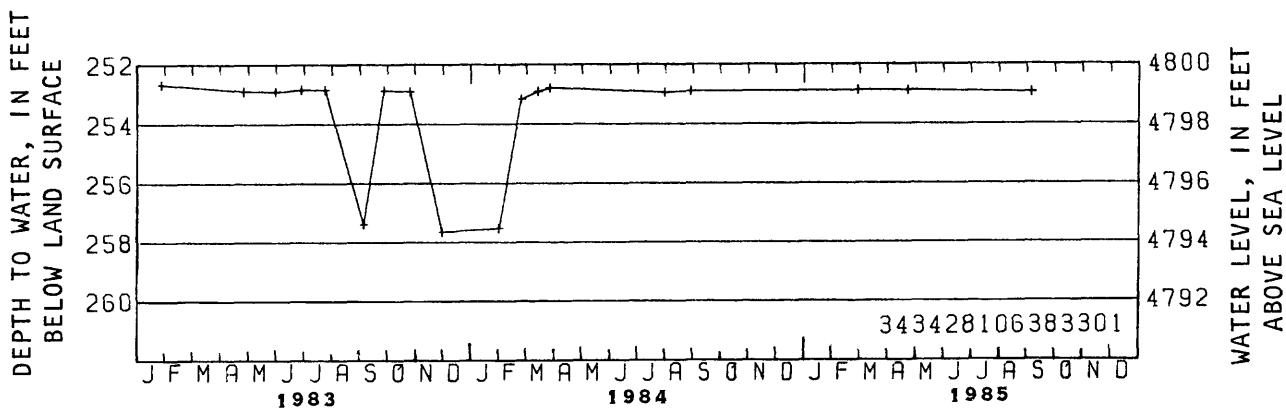


Figure 52.--Water levels for McLaughlin well, 4N.2E.17.244 (index number 24, table 1 and figure 1).

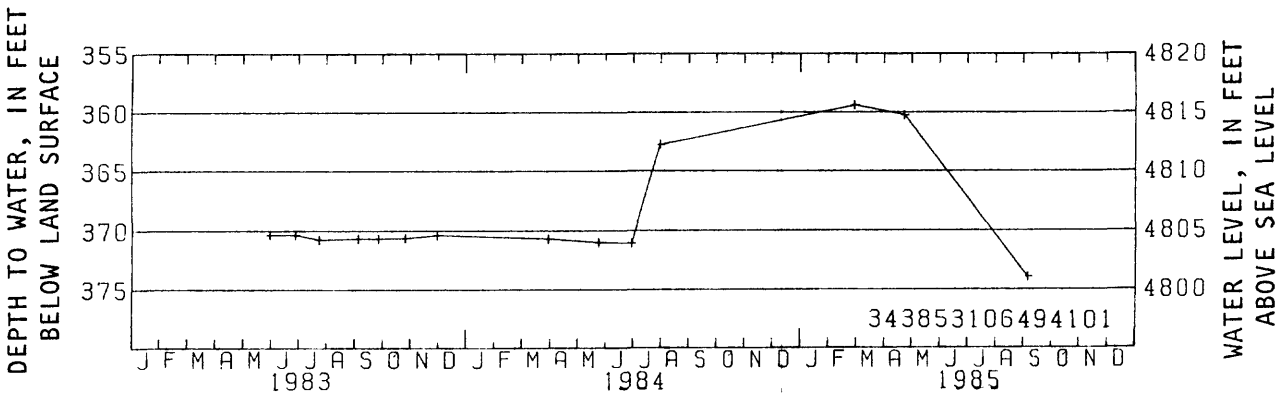


Figure 53.--Water levels for Belen Airport well, 5N.1E.22.141 (index number 25, table 1 and figure 1).

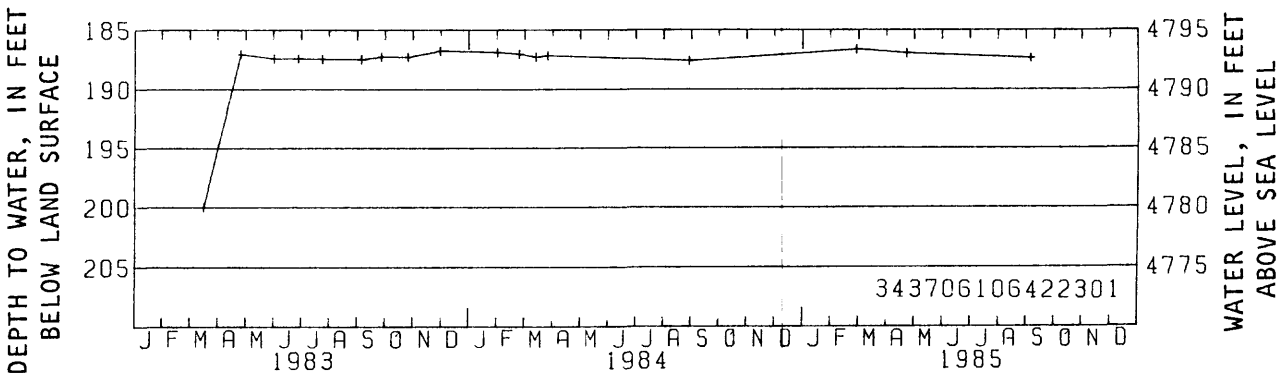


Figure 54.--Water levels for Faust well, 5N.1E.35.143 (index number 26, table 1 and figure 1).

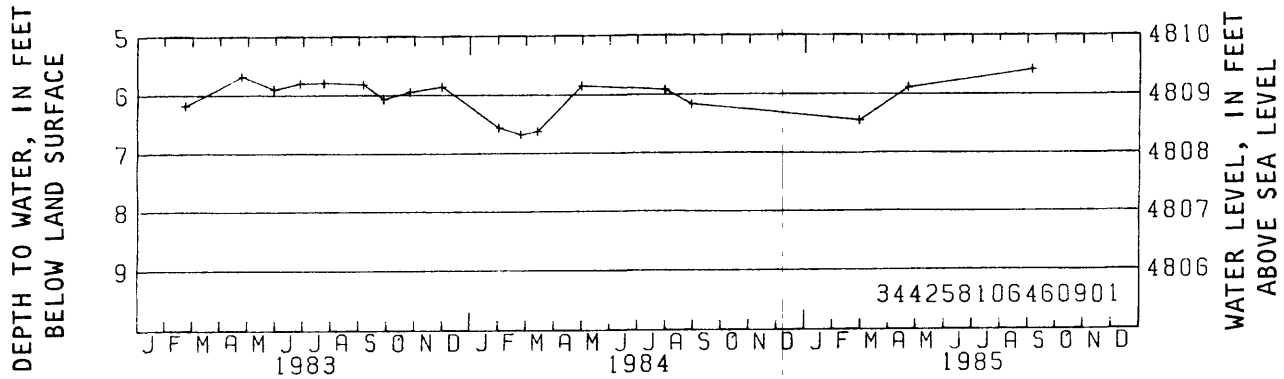


Figure 55.--Water levels for Reynolds 1 well, 6N.2E.30.412 (index number 27, table 1 and figure 1).

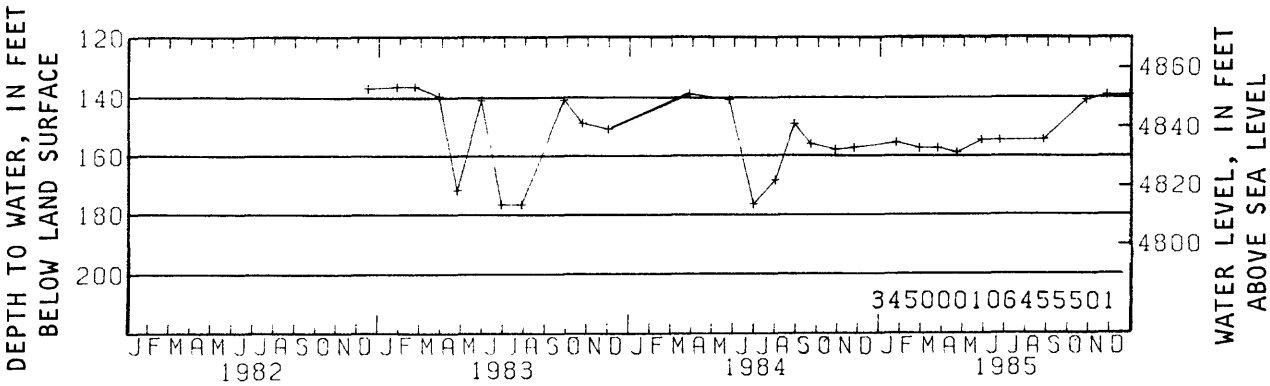


Figure 56.--Water levels for Grasslands 1 well, 7N.2E.18.422 (index number 29, table 1 and figure 1).

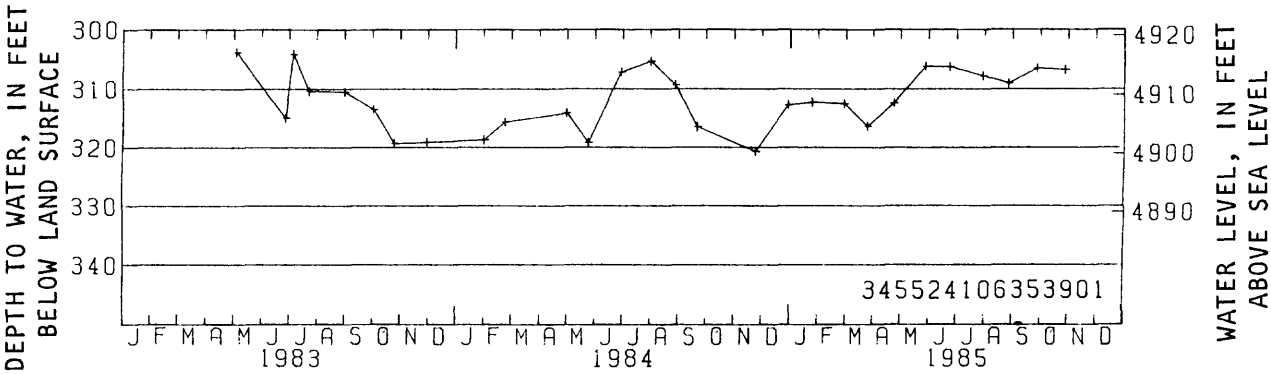


Figure 57.--Water levels for Isleta East 3 well, 8N.3E.14.231 (index number 30, table 1 and figure 1).

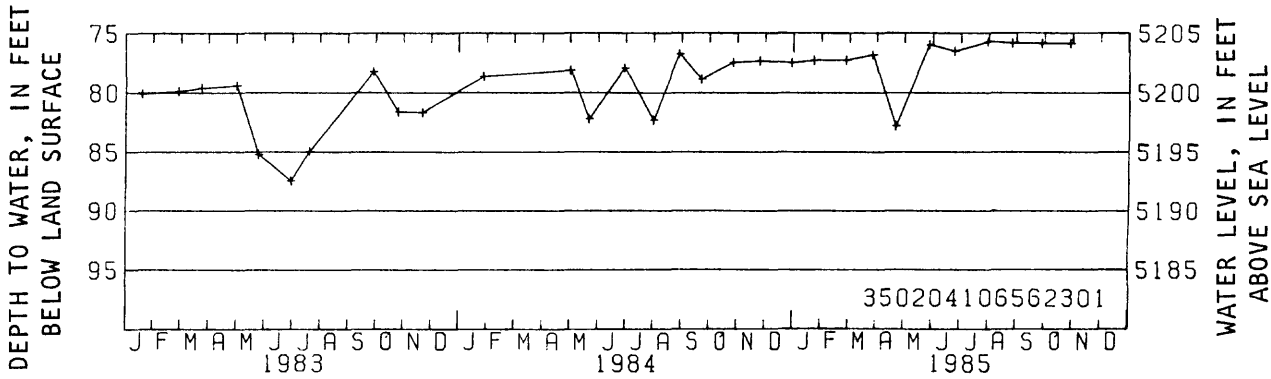


Figure 58.--Water levels for Collier well, 9N.1W.4.424 (index number 32, table 1 and figure 1).

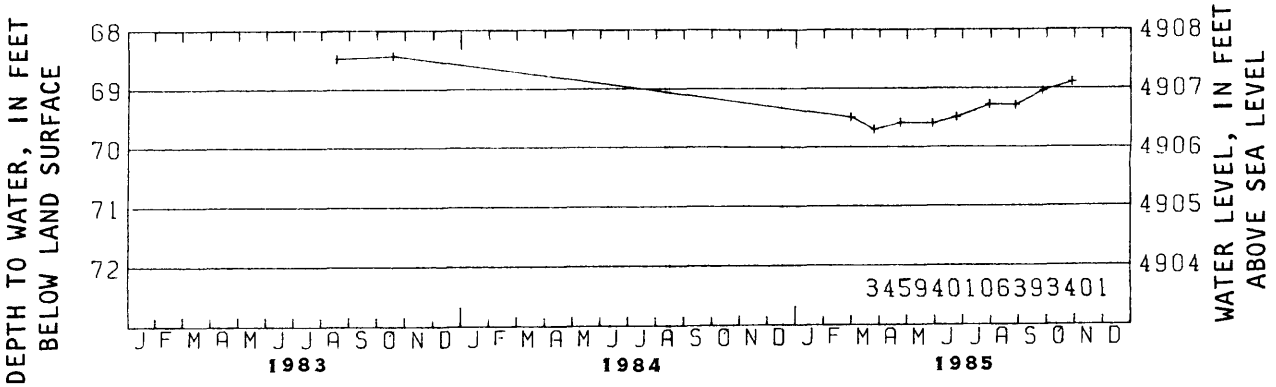


Figure 59.--Water levels for Guzman well, 9N.3E.19.243 (index number 37, table 1 and figure 1).

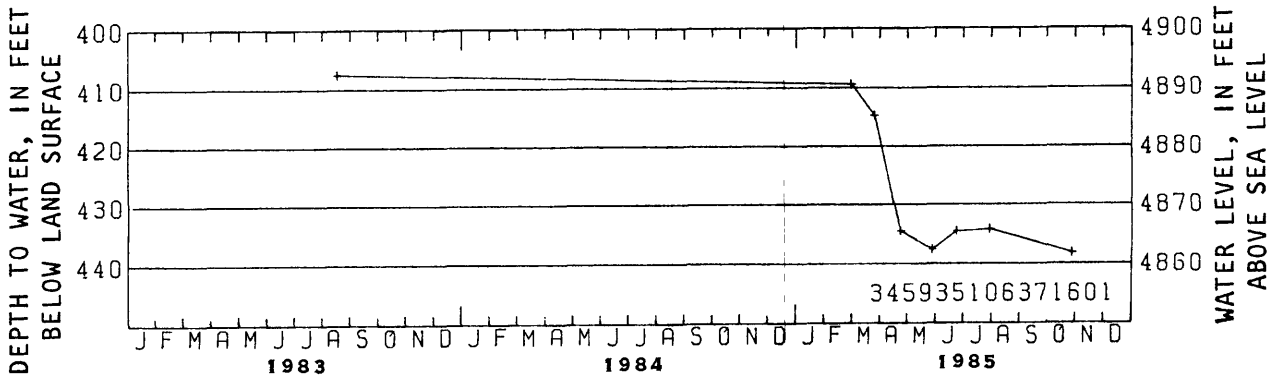


Figure 60.--Water levels for Wastewater Facility well, 9N.3E.22.311 (index number 38, table 1 and figure 2).

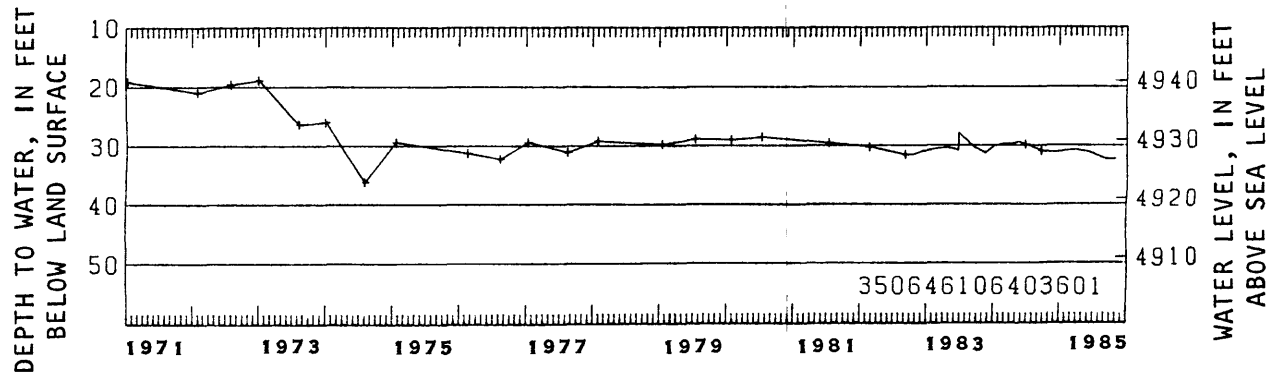


Figure 61.--Water levels for City Observation 4 well, 10N.2E.12.241 (index number 50, table 1 and figure 2).

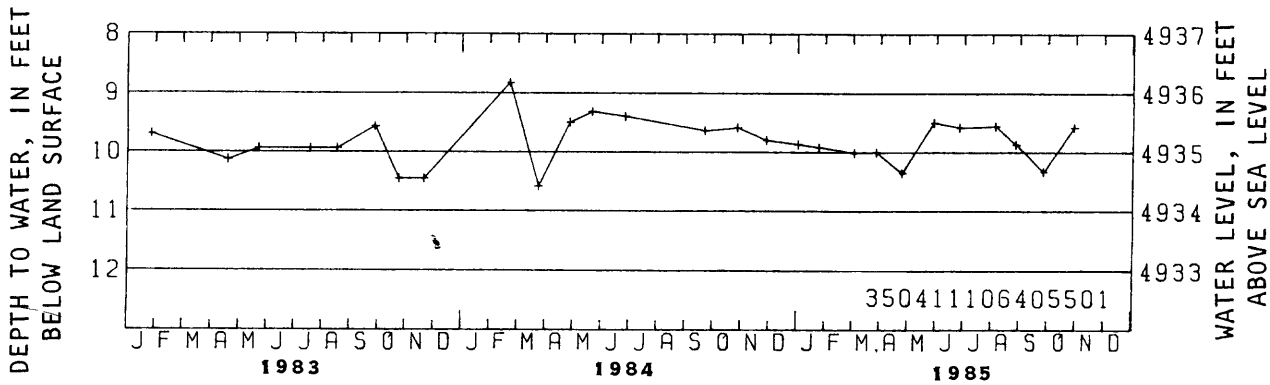


Figure 62.--Water levels for Atrisco 4 well, 10N.2E.25.213 (index number 52, table 1 and figure 2).

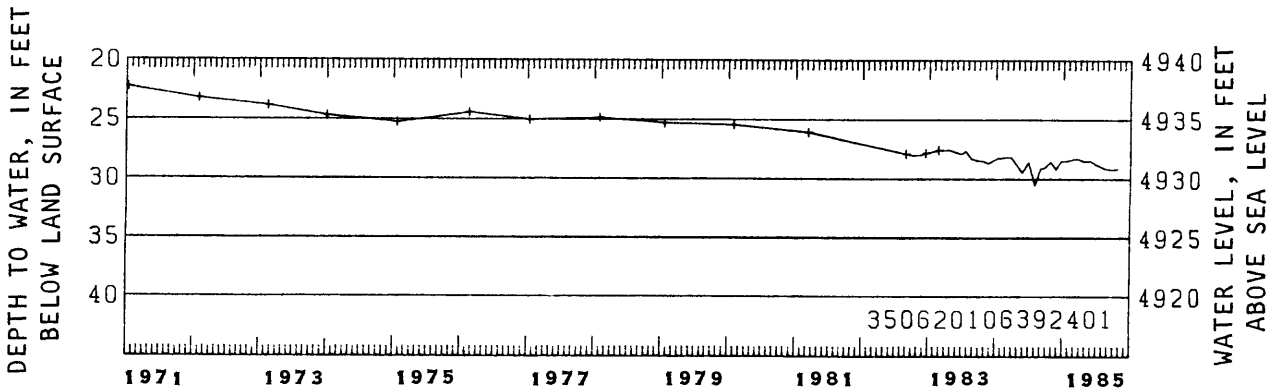


Figure 63.--Water levels for BIA well, 10N.3E.7.434 (index number 55, table 1 and figure 2).

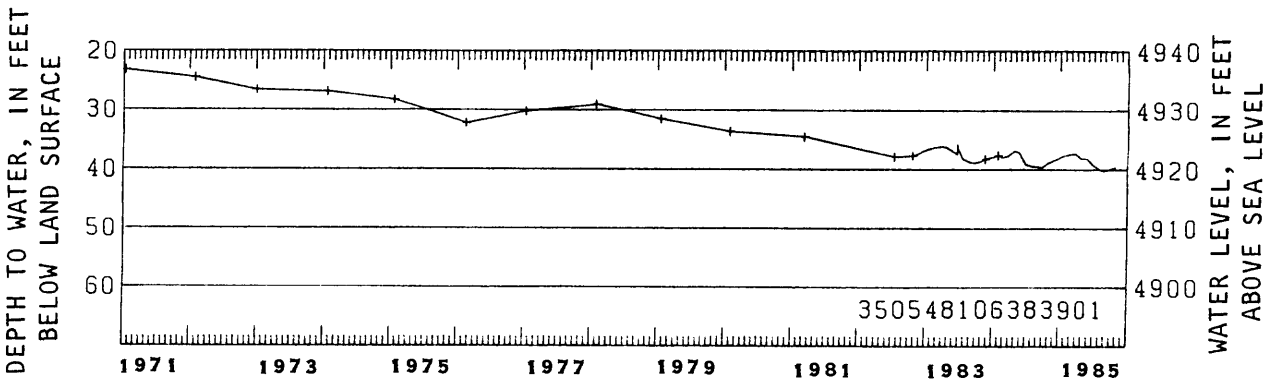


Figure 64.--Water levels for City Observation 1 well, 10N.3E.17.232 (index number 57, table 1 and figure 2).

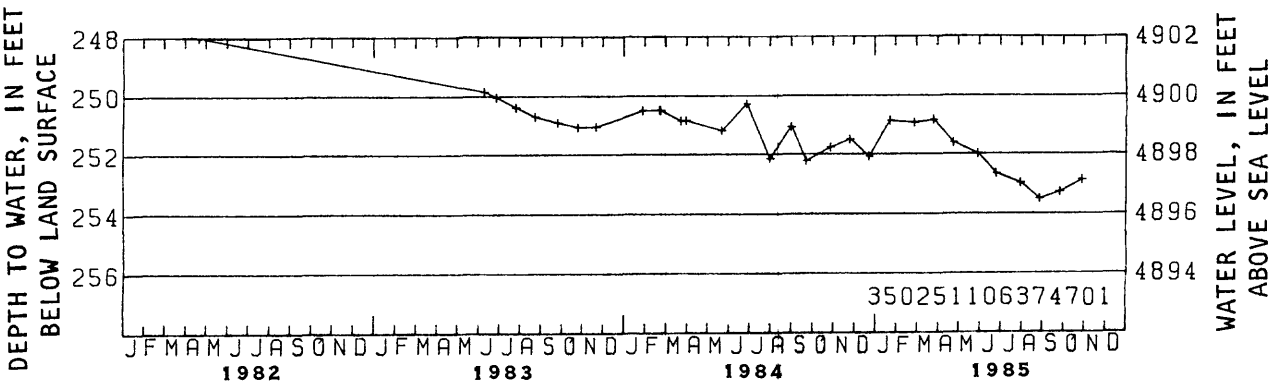


Figure 65.--Water levels for well ES-Yale 2, 10N.3E.33.431 (index number 62, table 1 and figure 2).

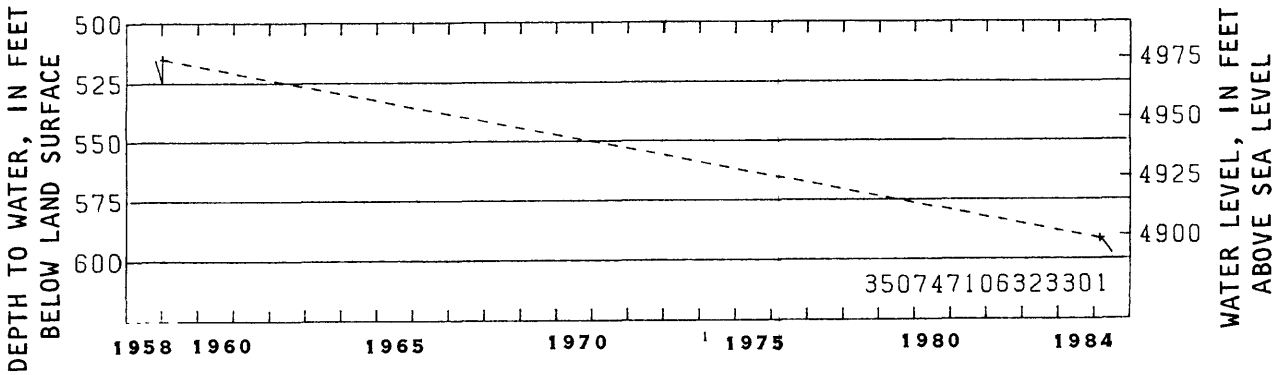


Figure 66.--Water levels for Thomas 2 well, 10N.4E.5.122 (index number 67, table 1 and figure 2).

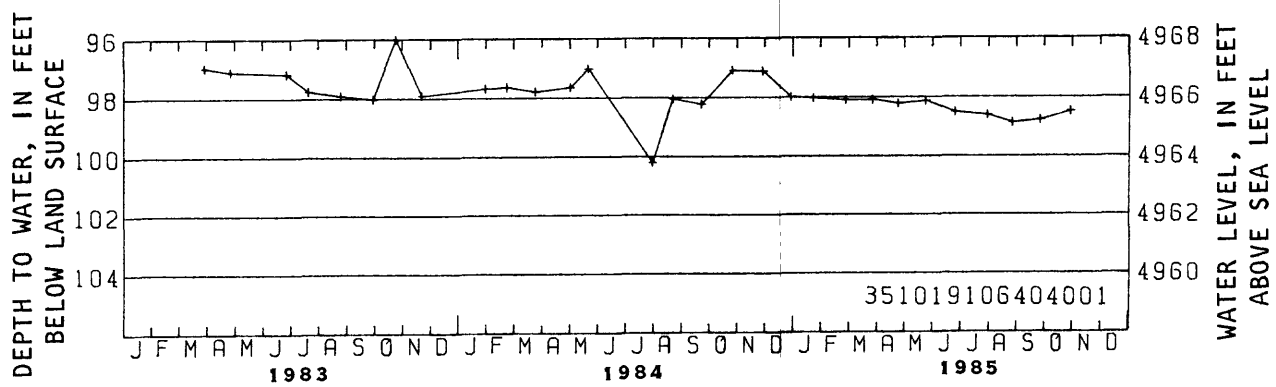


Figure 67.--Water levels for Dr. Nelson well, 11N.2E.24.223 (index number 84, table 1 and figure 2).

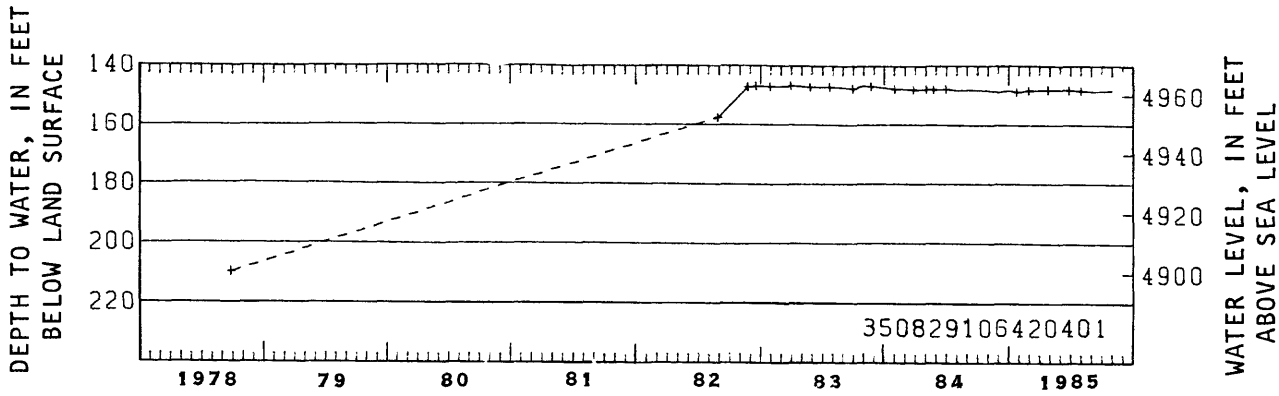


Figure 68.--Water levels for La Luz well, 11N.2E.35.142 (index number 85, table 1 and figure 2).

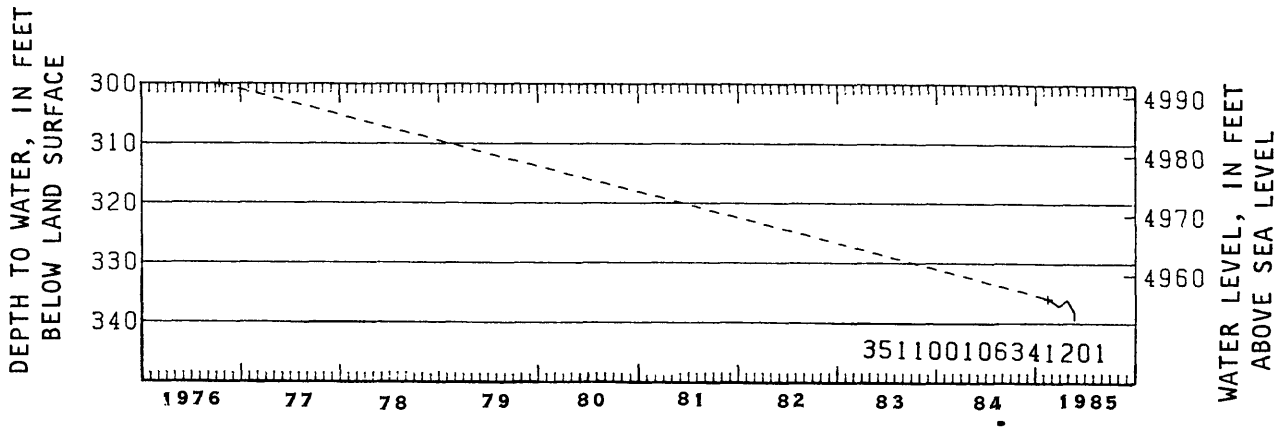


Figure 69.--Water levels for Totter well, 11N.3E.13.242 (index number 86, table 1 and figure 2).

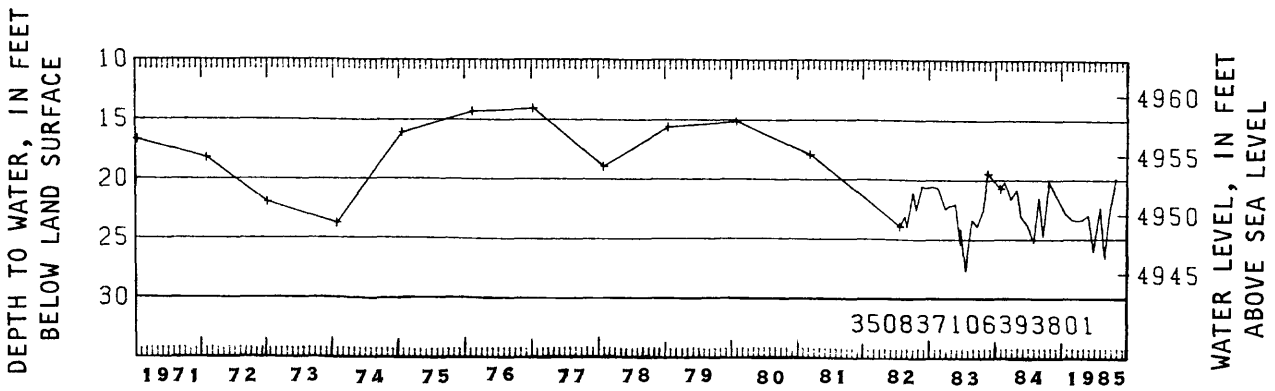


Figure 70.--Water levels for City Observation 3 well, 11N.3E.31.214 (index number 94, table 1 and figure 2).

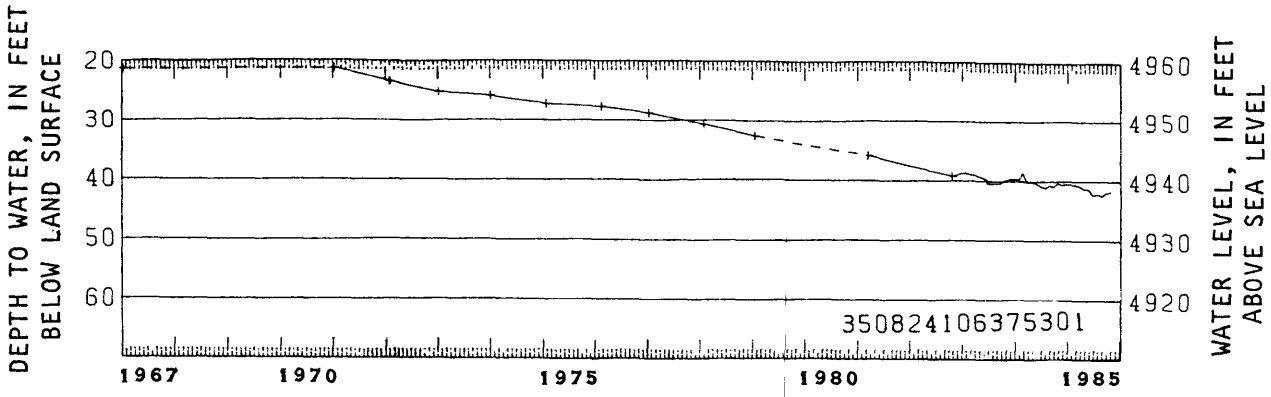


Figure 71.--Water levels for City Observation 2 well, 11N.3E.33.143 (index number 96, table 1 and figure 2).

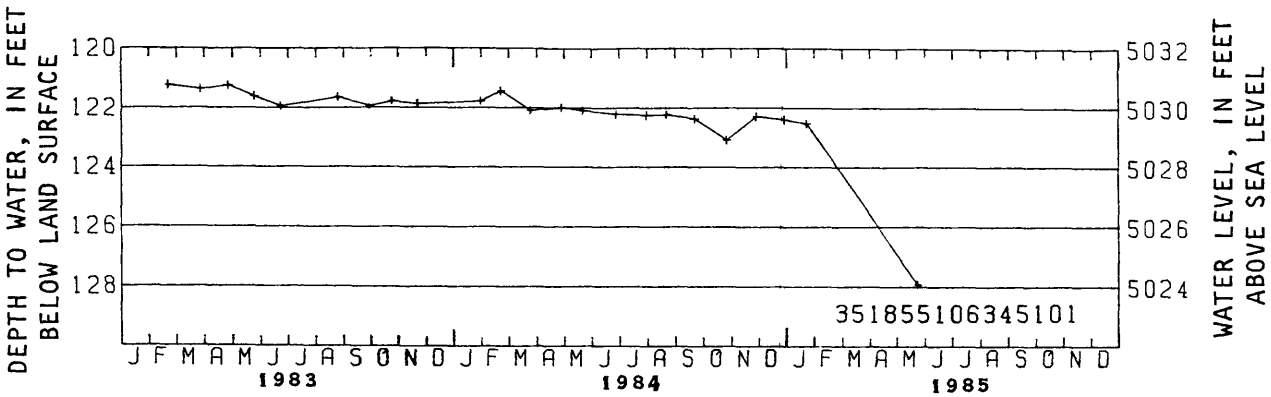


Figure 72.--Water levels for Cunningham well, 13N.3E.36.132 (index number 134, table 1 and figure 1).

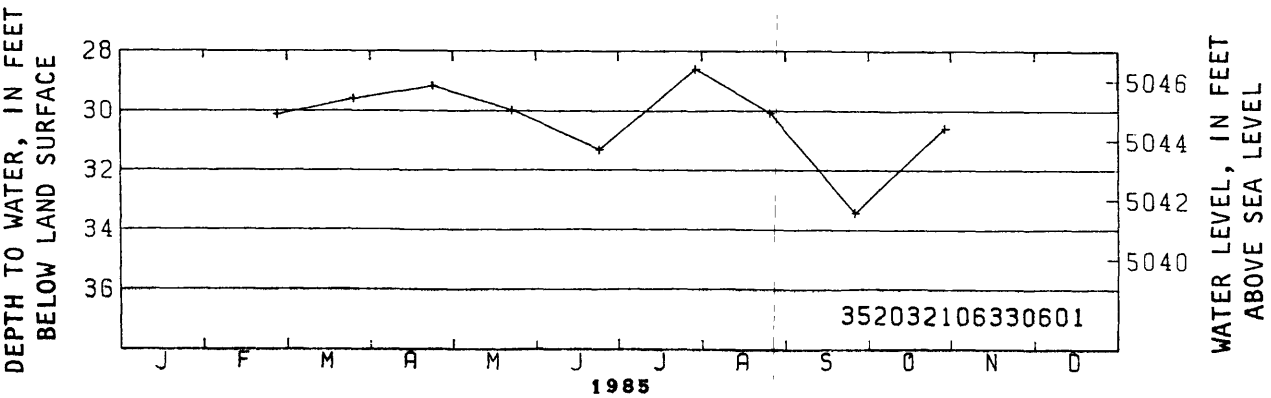


Figure 73.--Water levels for Santa Ana 2 well, 13N.4E.19.243 (index number 138, table 1 and figure 1).

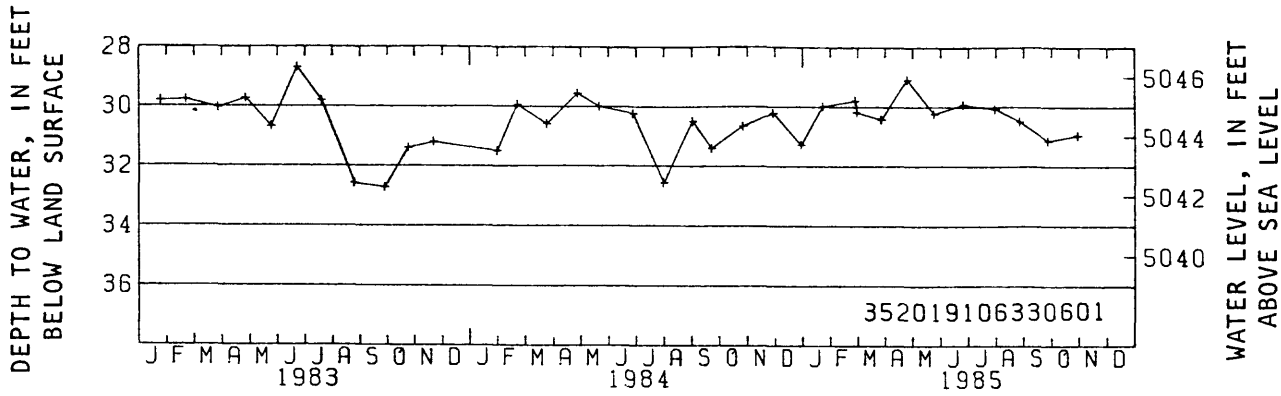


Figure 74.--Water levels for Santa Ana 1 well, 13N.4E.19.421 (index number 139, table 1 and figure 1).

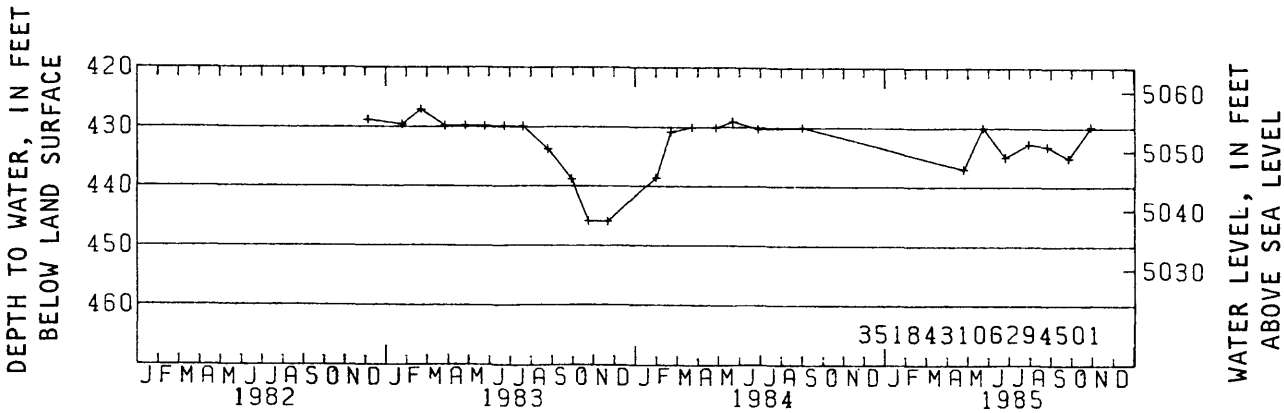


Figure 75.--Water levels for Tierra Mirage well, 13N.4E.34.422 (index number 140, table 1 and figure 1).

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985

[Asterisks indicate hydrograph of water-level data can be found in text; owners: NMIMT = New Mexico Institute of Mining & Technology; BIA = Bureau of Indian Affairs]

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
1	01N.01W.13.244	NM Highway Department	R-area wdml RG-27600	08-23-76	212	173 --	212 --	*	*
2	01N.01W.15.443	La Joya Refuge	Salado 1	--	17.8	--	--	05-29-80 08-06-82 02-07-85	12.52 12.04 9.63
3	01N.01W.36.334	NMIMT	A1	1977	59.0	--	--	*	*
4	01N.01W.36.334A	NMIMT	A2	1977	25.0	--	--	*	*
5	01N.01W.36.334B	NMIMT	A3	1977	62.0	--	--	*	*
6	01N.01W.36.334C	NMIMT	B1	1977	25.0	--	--	*	*
7	01N.01W.36.334D	NMIMT	C1	1977	10.0	--	--	08-06-82 12-16-82 02-24-83 03-30-83 04-26-83	5.27 5.93 6.00 5.83 5.63
8	01N.01W.36.334E	NMIMT	D1	1977	50.0	--	--	*	*
9	01N.01W.36.334F	NMIMT	F1	1977	8.50	--	--	08-06-82	5.59
10	01N.01W.36.334G	NMIMT	F2	1977	8.00	--	--	08-06-82 10-21-82 04-23-85	5.59 5.65 6.39
11	01N.01W.36.334H	NMIMT	G1	1977	24.5	--	--	10-21-82 04-23-85	6.74 6.97

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
12	01N.01W.36.334I	NMIMT	G2	1977	6.20	--	--	08-06-82	4.86
13	01N.01W.36.334J	NMIMT	H1	09-01-82	8.20	--	--	10-21-82	6.02
14	01N.01W.36.334K	NMIMT	H2	1977	100	--	--	--	--
15	01N.01W.36.334L	NMIMT	I1	09-01-82	22.6	--	--	10-21-82	5.91
								04-23-85	6.17
16	01S.01W.01.213	Herkenhoff	--	--	38.0	--	--	*	*
17	02N.01E.03.421	La Joya Refuge	--	1968	--	--	--	03-30-83	2.05
18	02N.01E.04.444	Salas	RG-29508	11-11-77	107	99.0	106	*	*
						--	--		
19	02N.01E.31.313	Sevil Land Grant	RG-26102	07-02-75	223	210	220	*	*
20	02N.03E.05.434	Torres	--	--	--	--	--	10-02-82	258.54
								12-16-82	242.29
								01-27-83	242.10
21	02N.03E.18.232	T D C	Black Well	1940	346	--	--	*	*
22	03N.02E.28.311	Yguado	Domestic	04-01-83	250	--	--	04- -83	220
								04-10-83	216.90
23	03N.02E.29.421	Yguado	Irrigation	--	385	345	385	--	--
24	04N.02E.17.244	McLaughlin	RG-28525	01-10-78	355	335	355	*	*
25	05N.01E.22.141	Belen Airport	--	03-14-83	620	453	483	*	*
			--			570	610		
26	05N.01E.35.143	Faust	RG-39221	03-15-83	375	353	373	*	*
27	06N.02E.30.412	Reynolds	--	1978	135	125	130	*	*

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
28	06N.02E.30.412A	Reynolds	—	10-01-83	300	265	270	02-23-83	6.0
								04-23-85	6.14
								09-05-85	6.55
29	07N.02E.18.422	Webb	Grasslands	06-10-58	407	150	230	*	*
			RG-1436			250	390		
			No. 1			--	--		
30	08N.03E.14.231	Isleta Pueblo	Isleta Ecw. 3	11-22-34	440	—	--	*	*
31	09N.01W.04.414	Texaco	--	--	--	--	--	03-25-83	162.49
								04-22-85	256.50
32	09N.01W.04.424	Hill	--	--	150	--	--	*	*
		Collier	—			--	--		
33	09N.02E.10.123	Romero	Lion Ent.	--	--	--	--	04-21-83	50.69
34	09N.03E.01.112	U.S. Army	Sandia 2	11-01-49	1,000	494	1,000	*	*
		USAF	No. 2			--	--		
35	09N.03E.05.221	Environmental	Environmental	--	—	--	--	05-20-82	71.84
		Services	Services					07-16-82	73.60
								07-21-82	73.24
36	09N.03E.06.444	Transport	--	--	300	--	--	--	--
		Rent & Sales							
37	09N.03E.19.243	Guzman	Chava	1981	125	113	123	*	*
38	09N.03E.22.311	Sewage	--	06-11-64	551	479	515	*	*
		Treatment				539	551		
39	09N.04E.04.213	USAF	No. 11	01-18-72	1,330	670	1,330	*	*

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
40	09N.04E.05.332	U.S. Army	Sandia 8	05-01-54	1,000	454	648	*	*
		USAF	No. 8			672	976		
						548	815		
41	09N.04E.06.111	U.S. Army	Sandia 7	02-25-54	1,010	448	856	*	*
		USAF	No. 7			880	976		
42	09N.04E.06.411	U.S. Army	Sandia 4	1949	1,000	494	1,000	*	*
		USAF	No. 4			--	--		
43	09N.04E.15.311	Manzano Base	No. 9	1948	684	502	684	--	--
44	09N.04E.20.221	U.S. Govt.	No. 10	1959	1,040	--	--	--	--
		Manzano Base				--	--		
45	10N.01E.22.322	City of Albq.	W Mesa 1A	06-25-81	1,180	980	1,120	*	*
			Pre-Pz			1,140	1,180		
46	10N.01E.22.322A	City of Albq.	1049 Ft Pz	06-25-81	1,120	980	1,120	*	*
			West Mesa 1A			--	--		
47	10N.01E.22.322B	City of Albq.	1175 Ft Pz	06-25-81	1,180	1,140	1,180	*	*
48	10N.01W.13.442	El Rincon	--	--	--	--	--	01-22-85	249.48
		Ranch						04-22-85	252.54
49	10N.01W.21.134	Cañoncito	C-T-1	--	117	--	--	01-21-85	60.58
		Indian	C-1			--	--	03-27-85	62.79
		Reservation						05-29-85	59.40
								06-24-85	59.67
								07-30-85	60.56
								08-26-85	59.84
								09-27-85	60.76

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
50	10N.02E.12.241	City of Albq.	City Obs. 4	--	150	140	150	*	*
51	10N.02E.25.111	City of Albq.	Atrisco 5	1980	1,270	255	1,260	--	--
52	10N.02E.25.213	City of Albq.	Atrisco 6	1951	360	--	--	*	*
			Atrisco 4						
53	10N.02E.27.413	Gallegos	--	--	185	--	--	04-21-83	155.96
								02-27-85	157.48
54	10N.03E.07.141	City of Albq.	Duranes 1	11-27-59	924	204	924	12-08-59	21
			RG3205-X-5			--	--	03-25-60	21
								04-04-60	22.08
								03-01-85	28.52
55	10N.03E.07.434	BIA	--	--	35.0	--	--	*	*
56	10N.03E.09.431	City of Albq.	--	--	--	--	--	03-31-83	129.38
57	10N.03E.17.232	City of Albq.	City Obs. 1	1955	149	139	149	*	*
58	10N.03E.19.111	Albq. Country Club	No. 1	06-01-82	340	200	330	07-28-83	11.95
59	10N.03E.27.244	City of Albq.	Burton 1	1955	1,000	452	1,000	1955	368
								07-19-83	432.67
60	10N.03E.32.314	City of Albq.	San Jose 9	1963	765	189	765	*	*
61	10N.03E.32.412	City of Albq.	San Jose 3	03-19-49	503	360	503	*	*
62	10N.03E.33.431	City of Albq.	ES-Yale 2	04-22-82	305	250	300	*	*
63	10N.03E.34.144	Kirtland AFB USAF	KAFB 2 No. 13	1956	1,000	395 601	554 940	*	*
64	10N.03E.34.233	City of Albq.	ES-Yale 1	04-16-82	464	400 457	452 464	*	*

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
65	10N.03E.35.111	Kirtland AFB	KAFB 1	1952	1,030	491	1,000	*	*
		USAF	No. 12			446	625		
						665	740		
						850	1,030		
						488	999		
66	10N.03E.35.322	USAF	No. 14	1969	1,000	380	1,000	*	*
67	10N.04E.05.122	City of Albq.	Thomas 2	10-11-58	1,220	696	1,220	*	*
			RG-2501	--	--				
68	10N.04E.15.314	City of Albq.	Lomas 3	05-16-73	1,600	882	1,590	10-25-73	680
			RG6751-S-2			--	--	02- -81	712.5
69	10N.04E.16.241	City of Albq.	Lomas 4	08-20-73	1,420	813	1,410	04-22-74	647.6
			RG6751-S-3			--	--	02- -81	677.5
								03-01-85	547.79
70	10N.04E.19.322	City of Albq.	RG9302-S-2	01-27-74	1,420	573	1,410	1974	433.7
			Ridgecrest 4			--	--	02- -81	450
								11-16-84	474.0
								03-01-85	455.90
								03-04-85	461.17
71	10N.04E.22.342	City of Albq.	Lomas 1	1962	1,300	700	1,300	09-15-62	647
								10-14-82	704.30
72	10N.04E.29.413	U.S. Army	Sandia 5	06-01-52	1,000	504	1,000	*	*
		USAF	No. 5			--	--		
73	10N.04E.30.243	City of Albq.	RG-9302-S	04-24-74	1,450	621	1,440	11-15-74	472
			Ridgecrest 3			--	--	03-01-85	503.13

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
74	10N.04E.30.321	U.S. Army	Sandia 3	10-01-49	900	452	900	*	*
		USAF	No. 3			--	--		
75	10N.04E.31.411	U.S. Army	Sandia 1	08-01-49	1,200	550	800	*	*
		USAF	No. 1			970	1,200		
76	10N.04E.32.433	U.S. Army	Sandia 6	1952	1,010	502	1,010	*	*
		USAF	No. 6			--	--		
77	11N.01E.24.334	City of Albq.	Double Eagle 2	01-21-85	1,710	1,060	1,230	02-06-85	681.7
			West Mesa 2			1,270	1,280		
						1,320	1,360		
						1,400	1,410		
						1,450	1,490		
						1,550	1,570		
						1,600	1,700		
78	11N.02E.03.221	NM Utilities	Well No. 3	04-01-80	1,360	650	1,350	04-01-80	489
								03-07-85	500.68
79	11N.02E.18.313	City of Albq.	Pre-Piez	11-01-81	1,800	800	830	11-25-81	779
			West Mesa 2			925	955		
						1,270	1,340		
						1,390	1,410		
						1,520	1,540		
						1,630	1,690		
						1,730	1,790		
80	11N.02E.18.313A	City of Albq.	Annulus	--	--	800	830	*	*
			West Mesa 2			925	955		

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
81	11N.02E.18.313B	City of Albq.	1350 Ft Pz	11-01-81	1,410	1,270	1,340	*	*
			West Mesa 2			1,390	1,410		
82	11N.02E.18.313C	City of Albq.	1500 Ft Pz	11-01-81	1,500	1,520	1,540	*	*
			--			1,630	1,690		
			--			1,730	1,790		
83	11N.02E.21.244	City of Albq.	Vol. Cliffs 3	02-01-80	1,320	666	1,310	*	*
84	11N.02E.24.223	Nelson	RG-39201	01-18-83	274	259	274	*	*
85	11N.02E.35.142	Ovenwest	RG-31044	09-20-78	250	230	245	*	*
		Corp.	Lz del Sol			--	--		
86	11N.03E.13.242	Totter	RG-27832	10-11-76	460	380	400	*	*
			--			420	440		
			--			440	460		
87	11N.03E.13.242A	Gore	RG-32719	08-30-79	605	410	428	10-10-79	346
						590	603	02-15-85	339.43
88	11N.03E.16.112	Holley	19	07-01-83	180	--	--	02-27-85	10.05
89	11N.03E.18.411	City of Albq.	West Mesa 3	11-06-81	1,050	350	390	03-31-82	23.22
			Pre-Pz			490	590	01-10-83	22.96
			--			710	790		
						870	990		
						1,010	1,050		
90	11N.03E.18.411A	City of Albq.	Annulus	11-06-81	660	350	390	*	*
			West Mesa 3			490	590		
91	11N.03E.18.411B	City of Albq.	760 Ft Pz	11-06-81	840	710	790	*	*
			West Mesa 3			--	--		

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
92	11N.03E.18.411C	City of Albq.	980 Ft Pz	11-06-81	1,050	870	990	*	*
			West Mesa 3			1,010	1,050		
93	11N.03E.24.221	City of Albq.	RG24057	01-08-74	1,190	479	1,180	*	*
			Tracie 1			--	--		
			Coronado 1			--	--		
94	11N.03E.31.214	City of Albq.	City Obs. 3	1955	152	142	152	*	*
95	11N.03E.31.232	Ranchers Explor.	--	--	--	--	--	01-19-83	17.31
								02-17-83	17.69
								03-31-83	19.28
96	11N.03E.33.143	City of Albq.	City Obs. 2	1955	150	140	150	*	*
97	11N.04E.07.313	U.S. Football Fac.	RG-42921	01-04-85	525	445	455	02-15-85	347.77
						500	520		
98	11N.04E.10.444	Javine	RG-38870	02-08-83	600	500	520	02-21-83	465
						540	560	02-14-85	469.57
						580	600	03-28-85	478.77
99	11N.04E.15.321	Vandermey	--	1984	660	--	--	02-15-85	320.87
								03-28-85	320.99
								04-26-85	321.01
								05-23-85	321.22
								06-25-85	321.10
								08-01-85	321.26
								09-06-85	321.36
100	11N.04E.16.223	Morgan	RG-40851	10-21-83	709	695	705	10-23-83	610
								02-14-85	606.30

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
101	11N.04E.16.241	Benze	--	--	870	--	--	02-14-85	517.76
102	11N.04E.16.343	Santillanes	--	1952	736	--	--	02-19-57	683.50
								02-05-81	685.0
								05-21-85	DRY
103	11N.04E.17.422	Mott	--	08-01-82	580	--	--	08-18-82	533.28
								12-16-82	134.37
104	11N.04E.18.124	Gutierrez	Betania	05-01-85	575	--	--	05-23-85	444.88
				08-01-85	446.98				
				08-27-85	447.70				
105	11N.04E.18.124A	Stark Jim	Stark Bros.	--	695	--	--	--	--
106	11N.04E.18.211	N Albq. Auto Salvage	--	--	1,000	--	--	--	--
107	11N.04E.20.241	City of Albq.	Walker 2	1980	1,780	852	1,770	*	*
108	11N.04E.21.121	City of Albq.	Walker 1	1980	1,720	991	1,710	*	*
109	11N.04E.21.421	Spence	RG-40784	11-25-83	610	535	565	04-26-85	555.98
110	11N.04E.21.432	Mace	RG-41236	03-16-84	945	800	840	03-26-84	830
						920	940		
111	11N.04E.21.442	Kaiser	RG-40628	09-07-83	595	540	570	09-11-83	480
								02-13-85	487.57
								04-26-85	487.28
112	11N.04E.22.243	Warner	RG-26247	07-28-75	490	465	485	08-10-75	396
								02-14-85	421.29

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
113	11N.04E.22.431	Speck	RG-41179	02-01-84	545	515	545	--	--
114	11N.04E.22.432	King	--	1977	500	--	--	02-13-85	348.48
115	11N.04E.25.424	Albq. Academy	--	--	55.0	--	--	05-10-83	10.64
								08-29-84	29.55
								09-13-84	30.08
								08-10-85	20.38
116	11N.04E.25.424A	Albq. Academy	--	09-27-84	57.0	--	--	09-27-84	28.88
								02-21-85	16.49
								08-10-85	20.09
117	11N.04E.27.424	McKay	No. 1	02-22-72	447	439	445	02-22-72	373
			South Well			--	--	02-13-85	372
118	11N.04E.27.424A	McKay	No. 2	1974	525	--	--	05-10-83	63.14
			North Well			--	--	02-13-85	364.50
119	11N.04E.28.111	City of Albq.	Ponderosa 9	03-29-79	1,700	964	1,690	04-28-79	725
			RG6752-S-8			--	--	03-01-85	726.33
120	11N.04E.32.234	City of Albq.	Ponderosa 3	09-20-77	1,600	870	1,590	- -77	596
			RG6752-S-2			--	--	07- -81	670
								03-01-85	622.60
121	12N.02E.14.321	Rio Rancho	No. 7	05-22-74	1,200	898	918	*	*
			RG-6745-S			1,020	1,030		
			--			1,030	1,040		
						1,090	1,130		
						1,140	1,180		

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
122	12N.02E.14.344	Rio Rancho	No. 6	1969	1,020	571	582	*	*
			RG-6745-S			597	617		
			--			627	664		
			--			675	680		
			--			696	702		
			--			731	741		
			--			764	784		
			--			803	829		
			--			840	861		
			--			874	879		
			--			904	910		
			--			942	951		
			--			996	1,000		
123	12N.02E.16.214	Rio Rancho	No. 8	08-03-78	1,620	982	1,600	*	*
			RG-6745-S			--	--		
124	12N.02E.24.442	Rio Rancho	No. 4	09-01-69	990	670	680	*	*
			RG-6745-S			700	715		
			--			750	760		
			--			770	775		
			--			820	835		
			--			860	880		
			--			895	910		
			--			960	990		

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
125	12N.02E.25.421	Rio Rancho	No. 3	12-20-64	823	584	596	*	*
			RG-6745-S			620	634		
			--			654	714		
			--			730	746		
			--			776	800		
			--			810	820		
126	12N.03E.30.112	Rio Rancho	No. 5	1969	980	380	580	*	*
			RG-6745			580	590		
			--			595	605		
			--			640	650		
			--			670	690		
			--			735	750		
			--			762	772		
			--			830	835		
			--			863	873		
			--			897	902		
			--			910	915		
			--			930	940		
			--			955	960		
			--			965	975		
127	12N.03E.31.132	Rio Rancho	No. 2	07-01-63	751	508	751	*	*
			RG-6745-S			--	--		
128	12N.03E.31.243	Rio Rancho	No. 1	11-29-61	350	--	--	*	*
			RG-6745-S			--	--		

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Continued

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
129	12N.04E.32.242	Sandia Pueblo	No. 1	--	628	--	--	01-14-71	575.78
								01-31-72	578.48
								01-22-74	577.60
								01-23-75	579.02
								01-12-77	579.42
								01-28-80	594.50
								03-01-81	597.80
								06-28-85	605.89
								08-05-85	603.48
								09-06-85	606.20
								09-26-85	605.28
130	13N.01E.25.432	Rio Rancho	No. 9	07-10-84	1,540	1,220	1,310	10-31-84	1,082
			RG-26259			1,340	1,360		
			--			1,370	1,390		
			--			1,410	1,520		
131	13N.02E.17.331	King Bros.	Pete Otero	--	1,400	--	--	06-20-80	935.3
								08-30-82	936.6
								11-29-82	936.2
132	13N.03E.25.241	All Tribes Ind. School	--	--	180	--	--	03-29-83	123.33
133	13N.03E.25.241A	All Tribes Ind. School	--	06-01-78	200	150	200	03-29-83	111.55
			RG-14592-S			--	--		
134	13N.03E.36.132	Cunningham	RG-34422	08-18-80	260	345	355	*	*
			Cunningham			--	--		

Table 1. Well-completion information and miscellaneous ground-water levels through water year 1985 - Concluded

Index number	Local number	Owner	Other identifier	Date well constructed	Depth of well (feet below land surface)	Top of open interval (feet below land surface)	Bottom of open interval (feet below land surface)	Water-level date	Water level (feet below land surface)
135	13N.03E.36.132A	San Miguel	--	04-01-85	206	--	--	06-25-85	142.56
								07-30-85	142.72
								08-26-85	142.60
								09-26-85	142.44
136	13N.03E.36.132B	Pierce	--	1985	174	--	--	05-28-85	126.23
137	13N.03E.36.234	Price's Dairy	--	--	--	--	--	02-22-83	89.60
								03-29-83	37.85
138	13N.04E.19.243	Santa Ana Pueblo	No. 2 Sand & Gravel	01-24-84	200	180 --	200 --	*	*
139	13N.04E.19.421	Santa Ana Pueblo	No. 1 --	1968	108	-- --	-- --	*	*
140	13N.04E.34.422	Tierra Mirage	RG-38051	06-07-82	703	693	703	*	*

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U.S. Department of Commerce, Bureau of the Census, 1960, 1960 census of population: V. 1, Characteristics of the population, Chap. A - number of inhabitants, part 33 - New Mexico, U.S. Government Printing Office.

_____1980, 1980 census of population: V. 1, Characteristics of the population, Chap. A - number of inhabitants, part 33 - New Mexico, U.S. Government Printing Office.

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