

TEXAS WATER DEVELOPMENT BOARD

REPORT 114

RECORDS OF WATER LEVELS AND CHEMICAL ANALYSES  
FROM SELECTED WELLS IN PARTS OF THE  
TRANS-PECOS REGION, TEXAS, 1965-68

By

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United States Geological Survey

Prepared by the U.S. Geological Survey  
in cooperation with the  
Texas Water Development Board

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# RECORDS OF WATER LEVELS AND CHEMICAL ANALYSES FROM SELECTED WELLS IN PARTS OF THE TRANS-PECOS REGION, TEXAS, 1965-68

## INTRODUCTION

The study area for this report, which is in the central part of the Trans-Pecos area of Texas, includes parts of Brewster, Culberson, Hudspeth, Jeff Davis, and Presidio Counties (Figure 1). The Salt Basin, an intensively irrigated closed basin within the study area, extends from the Texas-New Mexico State line in the northeast corner of Hudspeth County southeastward through Culberson and Jeff Davis Counties and into northern Presidio County. Irrigation development within the Salt Basin is divided into three general subareas: (1) near Dell City in the northern part of the basin (Figure 2); (2) along Wildhorse Draw, northeast of Van Horn (Figure 5); and (3) in the Lobo Flats-Chispa vicinity south of Van Horn (Figure 7).

The purpose of this report is to present current information on water levels and the chemical quality of water in selected wells in the Trans-Pecos area of Texas (Tables 1 through 7). The locations of these wells are shown in Figures 2, 5, 7, and 9. Most of the data were collected by the U.S. Geological Survey in cooperation with the Texas Water Development Board during the period 1965-68, but some water-level and chemical-quality records extend back to 1946. Much of the data was collected in the heavily developed Salt Basin and is particularly useful in evaluating the effects of large scale ground-water development.

The casing records, logs, well discharges, and drawdowns of the wells listed in Tables 1 through 7 are not included in this report, but are available in the files of the Texas Water Development Board.

## PREVIOUS INVESTIGATIONS

Previous investigations of the ground-water resources of the counties included in this report have been confined to small specific areas. The reports resulting from these investigations that are of particular importance to the collection of basic records are on the following areas: Dell City (Scalapino, 1950); Lobo Flats in Culberson and Jeff Davis Counties (Hood and

Scalapino, 1951); Alpine (Littleton and Audsley, 1957); Marathon (DeCook, 1961); Marfa (Davis, 1961); and the upper and middle Rio Grande basins in Texas (Davis and Leggat, 1965; and Brown, Rogers, and Baker, 1965). Numerous other reports have been published, and many reports covering small areas are in the open files of the U.S. Geological Survey and the Texas Water Development Board. (See Selected References.)

## WELL-NUMBERING SYSTEM

The well-numbering system used in this report, based upon the divisions of latitude and longitude, is the one adopted by the Texas Water Development Board for use throughout the State.

Under this system, each 1-degree quadrangle in the State is given a number consisting of two digits, from 01 to 89. These are the first two digits in the well number. Each 1-degree quadrangle is divided into 7½-minute quadrangles which are given 2-digit numbers from 01 to 64. These are the third and fourth digits of the well number. Each 7½-minute quadrangle is divided into 2½-minute quadrangles given single digit numbers from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2½-minute quadrangle is given a 2-digit number in the order in which it is inventoried, starting with 01. These are the last two digits of the well number.

On the well-location maps in this report (Figures 2, 5, 7, and 9), the 1-degree quadrangles are numbered with large numerals. The 7½-minute quadrangles are numbered in the northwest corners where possible. The 3-digit number shown with the well symbol contains the number of the 2½-minute quadrangle in which the well is located and the number of the well within that quadrangle.

## PUMPAGE DATA

A substantial part of ground water pumped in the area is for irrigation, most of which is in the Salt Basin. On the basis of acreage irrigated, pumping rates, power

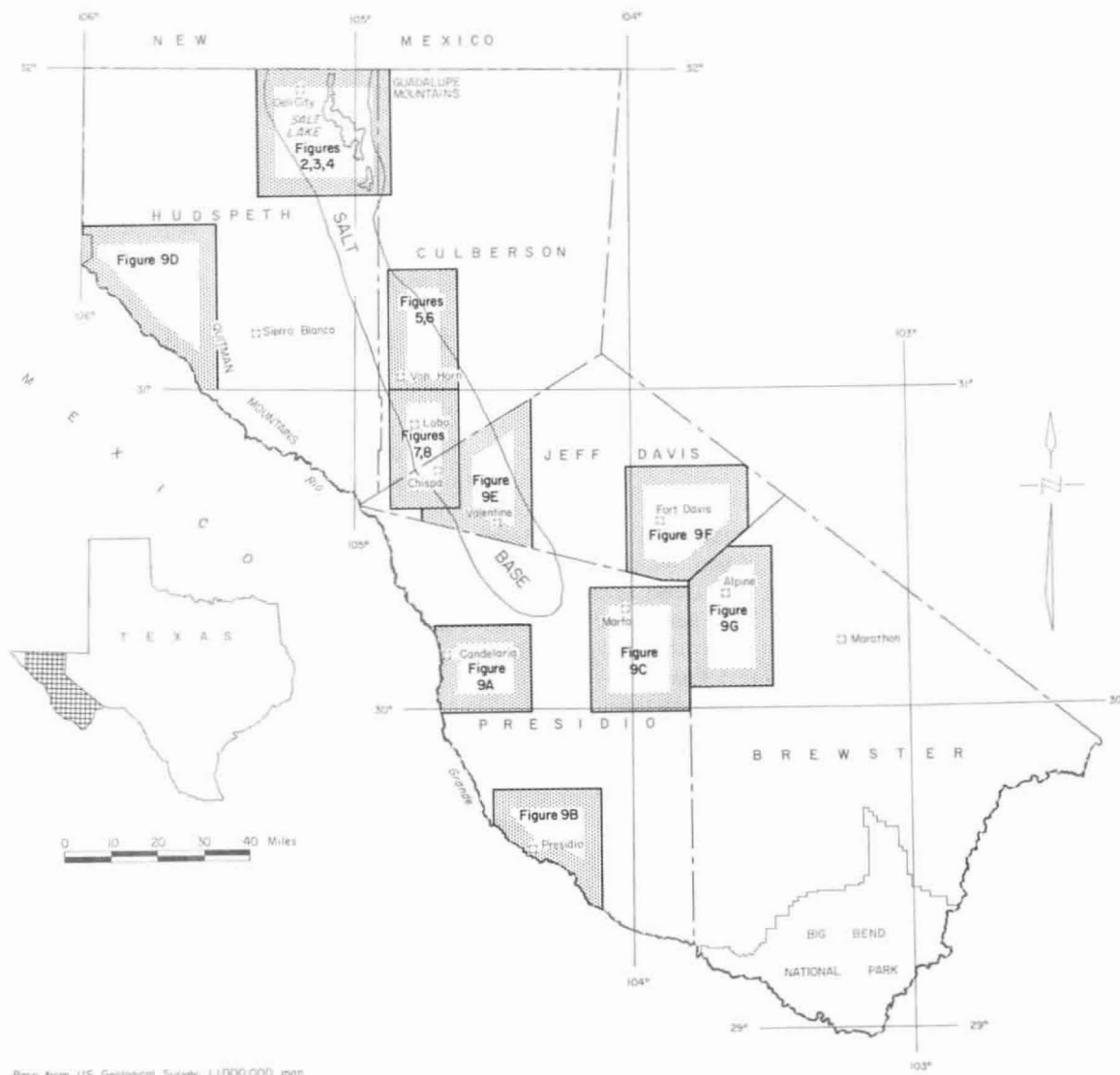


Figure 1.—Index to Maps in This Report.

tests, and records of fuel consumption, about 128,000 acre-feet of water was pumped in the Salt Basin in 1967. Of this amount, 105,000 acre-feet was pumped in the Dell City subarea. The remaining 23,000 acre-feet was equally divided between the Wildhorse Draw and Lobo Flats-Chispa subareas. The water table is shallow and the soil is highly permeable in the Dell City subarea; therefore, a substantial part (perhaps as much as 50 percent) of the 105,000 acre-feet of ground water pumped in 1967 returned to the aquifer.

Available records are inadequate to estimate the amount of water pumped in years previous to 1966. Doubtlessly, the quantity ranged widely, depending mainly on the amount and distribution of rainfall. For example, in 1966 only 60,000 acre-feet of water was pumped in the Dell City subarea because of the above-normal precipitation that occurred in August and September of that year.

## WATER-LEVEL DATA

Water levels have been measured in a network of wells in the study area since at least 1948. A large number of these wells are in the Salt Basin where the ground-water supplies have been intensively developed for irrigation (Figures 2, 5, and 7). In general, the wells were measured in January or February before pumping began for pre-season irrigation. Measurements made at this time of year are more reliable for evaluating the effect of pumping on the volume of water stored in the reservoir. In addition, a continuous record of the changes in water levels in a selected well in each of the three irrigated subareas in the Salt Basin was obtained by automatic water-stage recorders. Records of the daily fluctuations of the water levels in these three wells are not included in this report, but are available in the office of the Texas Water Development Board, Austin, Texas.

The declines in water levels during the period 1955-68 in the irrigated parts of the Salt Basin are shown on Figures 3, 6, and 8. A decline of as much as 90 feet occurred in the northern part of the Lobo Flats-Chispa subarea, where the permeability of the aquifer is low. Pumpage of ground water in the Lobo Flats-Chispa subarea is about equal to that in the Wildhorse Draw subarea. In the Dell City subarea, where pumping of ground water for irrigation is several times greater than in the other two areas, the declines have been relatively small (possibly as much as 25 feet). Water-level declines are minimized largely because of substantial return of irrigation water to the aquifer.

### QUALITY-OF-WATER DATA

The results of the chemical analyses of water collected during the period 1966-68 are shown in Tables 2, 4, and 6, which include the analyses of a few samples collected prior to 1966.

In general, the quality of ground water within the Salt Basin becomes increasingly more mineralized northward. In the Lobo Flats-Chispa subarea, the water is low in dissolved solids but high in percent sodium, a condition that has reduced the permeability of the subsoil.

As the ground water moves northward into Wildhorse Draw, mineralization increases as much as 2 to 4 times. In the Dell City subarea, the ground water is considerably more mineralized than in the rest of the irrigated part of the Salt Basin. The concentration of dissolved solids in the more heavily pumped part of the Dell City subarea now ranges from at least 1,550 mg/l (milligrams per liter) to more than 6,000 mg/l. The water is usable for irrigation, however, largely because of the high permeability of the soils.

Few changes in the chemical quality of the water have occurred since irrigation began, except in the Dell City subarea where much of the water applied to the surface for irrigation returns to the aquifer. The data (Table 2) show that in the vicinity of Dell City, where pumping is heavy and where irrigation first began, the mineralization of the ground water has increased as much as three times since 1948.

The distribution of dissolved solids in ground water in the Dell City subarea is shown in Figure 4, which shows that the more highly mineralized water is in the heavily pumped part of the reservoir, becoming less mineralized toward the Salt Lake. This indicates that the highly mineralized water in and below the Salt Lake has not moved toward the wells in response to pumping.





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Table 1.—Water-Level Measurements in the Dell City Subarea,  
Hudspeth and Culberson Counties—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)				
47-09-801	---	1-26-60	86.37	47-17-317	---	9-12-66	163.32				
		2- 7-61	88.02			1-25-67	165.70				
		2-12-62	88.10			1-22-68	166.06				
		47-14-202	---	2- 8-63	89.84	47-17-501	---	1-23-64	59.17		
				1-23-64	93.68			1-27-65	59.51		
				1-27-65	98.49			2- 9-66	59.27		
				2- 9-66	91.98			1-25-67	58.82		
				9-12-66	96.17	1-22-68	59.40				
				11- 8-66	92.72	47-17-601	3800.	1-26-60	122.15		
				1-25-67	90.68			2- 7-61	116.68		
				1-22-68	92.02			2-12-62	115.88		
47-17-203	---			1-17-58	54.55			2- 8-63	116.88		
				1-26-60	55.32			1-23-64	120.82		
				2- 7-61	55.75			1-27-65	120.40		
		2-12-62	57.30	2- 9-66	120.27						
		2- 8-63	56.81	1-25-67	120.17						
		1-23-64	56.91	1-22-68	120.10						
		1-27-65	58.63	47-18-701	---	5- 8-65	114.08				
		2- 9-66	55.70			9-12-66	130.80				
		9-12-66	54.72			11- 7-66	133.00				
		11- 8-66	55.10			1-22-68	145.70				
		1-25-67	55.97	48-06-201	---	1-23-64	290.48				
1-22-68	58.18	1-27-65	302.80								
47-17-205	---	1-17-58	118.05			2- 8-66	304.20				
		1-26-60	119.40			1-30-67	302.45				
		2-12-62	120.76			1-23-68	304.89				
		2- 8-63	121.37			48-06-601	---	1-23-64	306.28		
		1-23-64	121.91					1-27-65	298.50		
		2- 9-66	122.80			48-06-602	---	1-27-67	225.44		
		1-25-67	122.78					1-23-68	227.77		
		1-22-68	123.50			48-07-101	3800.	8-16-49	182.0-		
		47-17-206	---					2-.....57	64.00	2-21-50	179.23
				1-26-60	76.00			2- 5-51	179.77		
				2- 7-61	76.35			2- 7-52	195.82		
2-12-62	76.95			1-28-53	184.60						
2- 8-63	78.66			1-22-54	187.45						
1-23-64	78.32			1-21-55	187.41						
1-27-65	78.08			1-20-56	188.53						
2- 9-66	78.73			1-25-57	190.23						
9-12-66	78.90			1-15-58	193.22						
11- 8-66	78.15			1-25-60	195.48						
1-25-67	78.03			2- 6-61	195.14						
1-22-68	80.53	2-12-62	196.43								
47-17-206	---	1-26-60	85.95	2- 8-63	197.37						
		2- 7-61	88.28	1-23-64	200.72						
		2- 8-63	90.10	48-07-102	---	1-23-64	198.56				
		1-23-64	95.73			1-27-65	201.35				
		1-27-65	93.52			2- 8-66	205.87				
		2- 9-66	93.45			1-30-67	205.04				
		1-25-67	97.41	1-23-68	208.72						
		1-22-68	99.32	48-07-203	3713.0	3-11-48	87.85				
		47-17-301	3800.			3-22-60	154.1-	8-12-48	90.80		
						47-17-302	3800.	1-17-58	146.85	11- 8-48	88.79
								1-26-60	149.75	2- 3-49	88.23
2- 7-61	149.20							8-12-49	90.67		
2-12-62	150.31							9-22-49	90.65		
2- 8-63	151.51							11-23-49	89.39		
1-23-64	154.09							11- 1-50	91.25		
1-27-65	166.17							2- 5-51	89.39		
2- 9-66	164.54							2- 7-52	93.89		
1-25-67	165.05							1-28-53	94.71		
1-22-68	157.38			1-22-54	98.93						
47-17-304	---	2-09-66	195.98	1-21-55	101.40						
		1-25-67	194.20								
		1-22-68	196.20								

**Table 1.—Water-Level Measurements in the Dell City Subarea,  
Hudspeth and Culberson Counties—Continued**

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)		
48-07-203	37.13.0	1-20-56	102.80	48-07-304	---	2- 8-66	42.69		
		1-25-57	103.63			9-12-66	45.28		
		1-15-58	107.00			11- 8-66	42.76		
		3-22-60	104.92			1-30-67	40.80		
		2- 6-61	104.90			1-22-68	42.88		
		2-12-62	105.43						
		2- 8-63	109.69			48-07-402	---	11-12-48	141.15
		1-23-64	112.00					2- 3-49	140.65
		1-27-65	113.45					11-24-49	141.50
		2- 8-66	112.66					1- 3-50	140.99
		1-30-67	109.96					2-21-50	140.99
		1-23-68	110.76					7-28-50	143.18
								11- 1-50	142.75
48-07-206	---	1-25-60	100.94	2- 5-51	142.02				
		2- 6-61	105.16	2- 7-52	144.02				
		2- 8-63	103.97	1-28-53	146.12				
		1-23-64	107.02	1-22-54	148.80				
		1-27-65	117.85	1-21-55	150.45				
		2- 8-66	121.54	1-20-56	151.78				
		1-30-67	107.32	1-25-57	152.64				
		1-23-68	105.53	1-15-58	155.42				
48-07-207	3711.	5-28-54	102.50	1-26-60	157.16				
		1-25-60	104.64	2- 6-61	159.55				
		2- 6-61	103.01	2-12-62	158.17				
		2-12-62	104.79	2- 8-63	162.18				
		2- 8-63	105.32	1-23-64	162.08				
		1-23-64	107.60	1-27-65	163.40				
		1-27-65	108.15	2- 8-66	163.10				
		2- 8-66	108.15	9- 2-66	169.05				
		9- 2-66	115.50	1-30-67	163.40				
		11- 8-66	109.89	1-23-68	164.60				
		1-30-67	105.37	48-07-403	3734.4	8-12-48	111.15		
		1-23-68	108.05			2- 3-49	109.62		
						11-23-49	110.84		
48-07-210	---	1-30-67	116.37			2- 5-51	111.13		
						2- 7-52	113.14		
						1-28-53	118.48		
48-07-214	---	1-30-67	74.64			1-22-54	118.23		
		1-23-68	78.42	1-21-55	119.45				
48-07-301	3669.3	3-----48	44.60	1-20-56	121.08				
		9-28-48	46.45	1-25-57	121.78				
		2- 3-49	46.15	1-15-58	124.57				
		9-22-49	47.53	1-25-60	126.75				
		1- 3-50	46.54	2- 6-61	126.24				
		2-21-50	46.51	2- 8-63	129.75				
		11- 1-50	50.09	1-23-64	132.10				
		2- 5-51	49.42	1-27-65	133.30				
		2- 7-52	51.20	2- 8-66	133.57				
		1-28-53	53.08	1-30-67	133.51				
		1-22-54	55.81	1-23-68	134.76				
		5-21-54	58.20	48-07-404	---	1-24-54	118.28		
		1-21-55	57.30			1-21-55	119.60		
		1-20-56	58.34			1-20-56	121.05		
		1-16-58	62.29			1-25-57	121.68		
		1-25-60	64.58			1-15-58	124.57		
		2- 6-61	65.08			1-25-60	126.67		
		2-12-62	66.46			2- 6-61	126.65		
		2- 8-63	67.57			2- 8-62	136.19		
		1-23-64	69.80			1-23-64	131.86		
		1-27-65	71.38			1-27-65	133.04		
		2- 8-66	70.95			2- 9-66	137.06		
		9- 2-66	75.30			1-30-67	131.74		
11- 8-66	71.40	1-23-68	132.83						
1-30-67	70.26	48-07-405	3754.98	3-----48	130.30				
1-22-68	71.57			11-12-48	130.45				
48-07-304	---			1-25-60	36.50	2- 3-49	129.92		
				2- 6-61	37.19	9-23-49	133.75		
				2-12-62	40.97	1- 3-50	130.84		
		2- 8-63	39.51	2- 5-51	131.40				
		1-23-64	41.58	2- 7-52	133.22				



**Table 1.—Water-Level Measurements in the Dell City Subarea,  
Hudspeth and Culberson Counties—Continued**

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)		
48-07-606	3650.9	2- 8-63	47.50	48-07-901	---	1-23-64	38.96		
		1-23-64	49.45			1-27-65	40.01		
		1-27-65	50.81			2- 8-66	39.89		
		2- 8-66	55.53			1-30-67	38.12		
		1-30-67	48.88			1-22-68	40.27		
		1-23-68	51.50						
48-07-607	---	1-26-60	35.43	48-07-904	---	1-16-58	39.22		
		2- 6-61	35.27			1-26-60	41.75		
		2-12-62	37.67			2- 6-61	42.13		
		2- 8-63	38.12			2-12-62	43.40		
		1-23-64	40.77			2- 8-63	45.70		
		1-27-65	40.40			1-23-64	46.58		
		2- 8-66	40.74			1-27-65	47.85		
		9- 2-66	43.66			2- 8-66	47.78		
		11- 8-66	39.80			1-23-68	48.03		
		1-30-67	37.01						
		1-22-68	40.00						
48-07-702	---	1-26-60	128.08	48-07-908	3638.8	8-12-48	18.77		
		2- 6-61	126.06			2- 4-49	18.68		
		2- 8-63	118.40			1-28-53	22.68		
		1-27-65	129.20			1-22-54	24.63		
		2- 8-66	120.08			1-21-55	25.83		
		1-30-67	130.56			1-20-56	26.68		
		1-23-68	132.44			1-26-57	28.63		
						1-16-58	30.22		
48-07-703	---	1-22-54	148.70	2- 6-61	33.78				
		1-20-56	153.85	2-12-62	35.86				
		1-15-58	157.43	2- 8-63	34.48				
		1-26-60	159.90	1-23-64	35.56				
		2-12-62	178.74	1-27-65	38.51				
48-07-706	---	1-23-64	110.88	2- 8-66	41.80				
		1-27-65	110.60	1-30-67	34.32				
		2- 8-66	111.32						
		1-27-67	111.74						
48-07-708	---	1-23-68	112.62	48-08-102	---	1-30-67	40.79		
				1-22-68	41.25				
48-07-709	---	1-27-67	122.54	48-08-401	3636.1	11-19-51	14.82		
		1-30-67	182.90			2- 7-52	15.96		
						1-28-53	16.48		
						1-22-54	17.51		
48-07-801	---	1-27-67	122.54	6- 9-54	21.1-				
				1-21-55	18.58				
				1-20-56	19.85				
				1-26-57	20.44				
				1-16-58	21.80				
				1-25-60	23.00				
				2- 6-61	22.76				
				2-12-62	23.48				
				2- 8-63	22.90				
				9-12-66	21.87				
48-07-803	---	11-18-48	38.00	48-15-101	---	1-23-64	253.75		
		2- 3-49	37.50						
		1-26-60	57.24			48-15-201	---	1-26-60	46.99
		2- 7-61	57.70					2- 6-61	47.43
		2-12-62	58.52					2-12-62	49.76
		2- 8-63	61.60					2- 8-63	51.93
		1-23-64	62.46					1-27-65	52.95
		2- 9-66	62.38					2- 9-66	52.24
		1-30-67	60.40					9- 2-66	56.62
		1-23-68	62.36					11- 8-66	52.32
								1-27-67	50.77
		1-23-68	52.22						
48-07-803	---	1-28-53	65.45	48-15-203	---	1-22-54	93.33		
		1-22-54	68.35			1-21-55	94.62		
		1-21-55	70.35			1-20-56	95.72		
		1-20-56	71.83			1-22-56	95.61		
		1-26-57	73.00			1-26-57	97.20		
		1-16-58	76.00			1-16-58	99.82		
		1-26-60	78.75			1-25-60	106.48		
		2- 6-61	78.52			2- 6-61	108.27		
		2-12-62	78.69			2-12-62	104.12		
		2- 8-63	79.19			2- 8-63	112.62		
		1-27-65	83.69						
2- 8-66	82.50								
9- 2-66	86.86								
11- 8-66	83.02								
1-27-67	81.30								
1-22-68	83.12								
48-07-901	---	2- 6-61	35.38						
		2- 8-63	35.72						

Table 1.—Water-Level Measurements in the Dell City Subarea,  
Hudspeth and Culberson Counties—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)
48-15-203	---	1-27-65	111.71	48-15-902	---	2- 8-63	151.30
		2- 8-66	112.75			1-23-64	150.31
		9- 2-66	111.92			1-27-65	153.44
		11- 8-66	102.87			2- 9-66	148.40
		1-27-67	106.26			1-27-67	145.80
48-15-301	---	1-26-60	40.65	48-16-402	---	1-26-60	38.28
		2- 6-61	40.54			2- 7-61	39.30
		2-12-62	40.76			2-12-62	42.71
		2- 8-63	44.60			2- 8-63	40.41
		1-23-64	46.28			1-23-64	41.66
		2- 9-65	45.91			1-27-65	41.67
		1-27-67	44.56			2- 9-66	42.28
		1-23-68	46.66			9-12-66	41.68
48-15-302	---	1-23-64	33.75	48-16-702	---	11- 8-66	40.72
		2- 9-66	34.77			1-27-67	43.73
		9- 2-66	38.38			1-22-68	40.96
		11- 8-66	34.29			1-26-60	57.35
		1-25-67	35.39			2- 7-61	58.29
48-15-802	---	1-22-68	34.39	48-23-201	---	2-12-62	61.70
		12-30-66	399.73			2- 8-63	62.72
		1-30-67	399.38			1-23-64	64.90
		1-22-68	399.81			1-27-65	66.26
48-15-902	---			48-23-201	---	2- 9-66	66.54
		1-26-60	147.00			1-27-67	66.68
		2- 6-61	145.47			1-23-64	418.00
		2-12-62	142.02			1-27-65	429.39

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea

(Analyses are in milligrams per liter except specific conductance and pH.)

Analysts: For samples collected after 1962, Texas State Department of Health.  
For earlier samples, U.S. Geological Survey.

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CAL- CIUM (Ca)	MAGNE- SIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICAR- BONATE (HCO <sub>3</sub> )	SUL- FATE (SO <sub>4</sub> )	CHLO- RIDE (Cl)	NI- TRATE (NO <sub>3</sub> )	DIS- SOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH
47-09-801	Kit Bramlett	--	8-22-66	17	181	73	97	270	465	195	12	1,170	750	1,740	7.5
			8- 7-68	16	164	78	81	282	444	133	12	1,070	732	1,550	7.5
803	Rogers and Wisbrum	--	8- 4-67	16	222	99	156	279	660	256	3.5	1,550	960	2,090	7.2
805	Kit Bramlett	515	6-14-67	18	210	96	124	266	580	249	28	1,440	920	2,040	7.5
901	El Paso Natural Gas	591	8- 7-68	11	159	70	46	279	470	40	.4	930	685	1,300	7.7
17-201	Tom Potter	400	8- 4-67	18	164	73	76	255	464	131	5.0	1,060	710	1,500	7.4
206	Kit Bramlett	750	4-26-63	15	154	69	112	283	454	144	.4	1,230	670	1,600	7.5
			8- 2-66	15	202	104	197	233	710	309	3.5	1,660	930	2,350	7.5
301	G. S. Gill	385	7-26-63	15	148	68	94	298	403	112	--	989	650	1,490	7.6
302	do	377	7-12-66	13	156	66	79	299	396	110	.4	970	660	1,435	7.8
			6-14-67	15	156	66	83	299	411	117	.4	1,000	660	1,450	7.9
317	Diablo Farms	600	8- 4-67	15	148	62	64	285	408	89	.4	930	630	1,340	7.6
			8- 7-68	13	160	67	64	279	402	107	.4	950	677	1,410	7.4
706	do	400	8- 4-67	15	362	90	228	135	1,030	417	16.5	2,230	1,280	2,845	7.2
48-07-101	C & L Ranch	700	6- 2-54	19	324	139	168	193	1,300	145	31	2,220	1,380	2,740	7.7
			7-27-60	--	--	--	--	189	1,360	200	--	--	1,400	2,940	6.9
			7-25-63	15	316	154	243	176	1,380	213	39	2,451	1,420	3,000	7.3
			7-27-66	17	418	137	151	204	1,500	149	16	2,490	1,610	2,850	7.0
			5-16-67	17	356	168	167	201	1,490	160	26	2,490	1,580	2,820	7.2
			3-18-68	16	401	162	235	183	1,700	183	33	2,820	1,670	3,190	7.8
			7-25-63	19	540	171	118	214	1,810	139	--	2,901	2,050	3,220	7.3
102	do	962	7-27-66	18	580	154	75	220	1,740	203	.4	2,880	2,090	3,290	7.5
			5-16-67	19	580	155	143	214	1,920	186	.4	3,110	2,080	3,225	7.6
103	J. D. Payne	1,206	7-25-63	20	428	175	85	216	1,540	91	1.0	2,450	1,790	2,800	7.4
			5-16-67	20	498	137	102	210	1,610	136	15	2,620	1,810	2,830	7.7
			3-18-68	17	474	161	189	212	1,720	224	13.5	2,910	1,850	3,260	7.7

See footnote at end of table.

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH
48-07-104	J. G. Payne	335	7-27-66	13	372	174	280	215	1,450	366	58	2,820	1,650	3,375	7.4
			5-16-67	15	374	197	337	209	1,610	428	83	3,150	1,740	3,750	7.4
			3-18-68	13	395	240	458	95	2,170	366	88	3,780	1,980	4,400	8.0
204	C & L Ranch	--	7- 2-60	18	465	209	255	217	1,370	590	102	3,120	2,020	3,940	7.1
			7-25-63	14	485	268	362	204	1,700	700	80	3,716	2,310	4,700	7.1
			5-16-67	13	540	276	435	195	2,040	730	176	4,310	2,490	4,970	7.3
			4- 9-68	13	550	380	520	190	2,230	680	143	4,510	2,520	5,000	7.2
205	G. S. McConnell	256	8- 6-48	16	213	79	25	260	624	32	2.8	1,120	856	1,470	--
			8- 9-49	--	--	--	--	254	--	35	--	--	--	--	--
			5-20-54	15	285	173	240	232	1,180	312	82	2,400	1,420	3,190	7.5
			3-31-59	16	342	177	268	222	1,250	420	106	2,690	1,580	3,500	7.2
			8- 4-67	14	439	222	437	183	1,780	580	156	3,720	2,010	4,490	7.4
			8- 6-68	12	431	225	432	196	1,900	481	43	3,620	2,000	4,350	7.3
206	James Napier	250	3-31-59	--	--	--	--	227	1,090	320	--	--	1,390	3,070	--
			7-27-66	13	390	248	520	195	1,730	640	230	3,870	2,000	4,780	7.2
			5-16-67	13	460	233	550	177	1,860	660	312	4,180	2,110	4,850	7.1
			8- 6-68	12	459	255	640	172	2,230	594	286	4,560	2,200	5,200	7.1
207	George McConnell	712	7-27-66	16	379	137	151	209	1,360	149	14	2,310	1,510	2,680	7.3
			4- 9-68	16	383	158	124	212	1,400	124	19.5	2,330	1,610	2,690	7.7
209	R. C. Hammer	--	7-26-63	17	280	110	34	201	990	32	1	1,568	1,150	1,850	7.3
			7-27-66	17	280	102	32	203	960	31	.4	1,530	1,120	1,850	7.5
210	Paymaster	--	7-27-66	15	244	105	172	268	800	247	14	1,730	1,040	2,350	7.5
			8- 3-67	14	326	158	267	240	1,180	405	51	2,520	1,470	3,250	7.4
211	O. C. Hively	250	7-27-66	15	294	150	255	251	1,140	341	25	2,350	1,350	2,985	7.4
212	A. M. Stone	--	8- 1-66	12	520	251	440	196	2,150	590	12.5	4,190	2,340	4,695	7.3
			5-21-68	13	570	231	339	205	2,120	540	53	3,970	2,390	4,510	7.5
213	C & L Ranch	300	8- 1-66	13	448	207	280	192	1,400	510	200	3,150	1,970	3,960	7.3
			5-16-67	13	493	233	340	176	1,600	610	270	3,650	2,190	4,570	7.2
			4- 9-68	12	498	227	240	159	1,790	520	210	2,680	2,180	4,290	7.4
301	E. Brownfield	150	8-12-48	16	212	71	56	224	683	28	9.8	1,190	821	1,529	--
			5-25-54	18	276	103	55	226	925	55	8.5	1,550	1,110	1,890	7.4
			3-31-59	17	288	115	90	244	912	158	15	1,720	1,190	2,210	7.2
			7-25-63	14	256	117	70	217	910	81	12	1,570	1,120	1,990	7.3
			8- 6-68	12	318	118	76	214	1,330	88	16.5	2,070	1,280	2,220	7.4
302	Chaves Bros.	--	7-25-60	16	242	86	90	255	656	182	4.7	1,400	958	1,940	6.9

See footnote at end of table.



Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH
48-07-307	List Estate	--	7-25-63	14	380	108	169	227	1,120	426	17	2,405	1,640	3,190	7.4
308	C. Edmond	300	8- 1-66	16	392	205	296	253	1,400	497	17	2,950	1,820	3,725	7.3
			4-26-67	16	400	201	316	216	1,580	510	29	3,160	1,830	3,850	7.7
			4- 9-68	15	384	188	250	249	1,400	447	16.5	2,830	1,730	3,570	7.7
309	List Estate	200	8- 1-66	16	332	124	175	248	860	408	7	2,050	1,340	2,870	7.3
			8- 6-68	12	404	145	197	239	1,200	415	7.5	2,500	1,610	3,150	7.4
401	J. P. Williams	187	8- 9-49	14	254	99	192	236	845	268	8.5	1,800	1,040	2,480	7.5
			5-20-54	18	268	118	266	249	819	462	22	2,100	1,150	3,090	7.6
			7- 2-60	18	345	165	381	217	1,160	630	80	2,890	1,540	3,980	7.4
402	C & L Ranch	275	7-27-66	16	310	119	443	275	880	720	21	2,650	1,260	3,700	7.2
403	Russell Pauly	--	8- 6-68	11	498	271	540	154	2,110	760	154	4,420	2,360	5,170	7.4
405	F. Dodson	230	3-31-59	18	360	161	348	215	1,190	600	66	2,850	1,560	3,890	7.2
			Spring 63	18	192	295	446	216	1,320	740	82	3,200	1,690	4,360	6.9
			7-27-66	16	392	191	396	209	1,260	730	88	3,180	1,770	4,200	7.8
			5-16-67	14	414	211	493	121	1,540	820	170	3,720	1,900	4,640	7.8
			4- 9-68	16	435	219	471	195	1,630	800	110	3,780	1,990	4,710	7.4
406	D. Leatherman	390	3-11-48	18	170	90	99	252	608	118	3.8	1,230	794	1,750	--
411	J. Segulia	--	5-20-54	18	255	131	230	232	889	390	25	2,050	1,170	2,930	7.4
413	D. Leatherman	248	Spring 63	18	216	357	484	199	1,910	590	92	3,769	2,000	4,700	7.0
414	C & L Ranch	680	7-25-63	15	260	117	425	271	770	670	19	2,412	1,130	3,590	7.4
			5-16-67	16	336	117	496	262	1,070	770	34.5	2,970	1,320	4,010	7.7
			4-22-68	15	324	134	481	260	1,120	750	29.5	2,980	1,360	4,050	7.6
415	D. Bennett	420	7-27-66	18	425	134	102	217	1,400	132	.4	2,320	1,610	2,640	7.3
			8- 6-68	17	412	151	154	207	1,480	162	14	2,490	1,650	2,860	7.4
501	C. W. Boyles	220	3-12-48	--	216	86	54	208	695	82	1.2	1,240	892	1,720	--
			8- 5-48	19	189	92	175	150	609	335	1.2	1,490	850	2,460	--
			8- 9-49	15	235	82	246	276	649	392	1.5	1,760	924	2,590	7.2
			3-22-60	16	458	185	448	223	1,450	820	63	3,550	1,900	4,850	6.9
			7-25-63	17	400	200	520	233	1,350	860	34	3,502	1,820	4,800	7.2
			5-16-67	16	404	165	459	243	1,270	830	26	3,290	1,690	4,360	7.5
			4- 9-68	17	358	264	510	138	1,670	890	39	3,820	1,980	4,870	7.8
			502	Frank Gentry	201	3- 3-48	22	144	150	156	280	801	178	1.2	1,590
			7-25-63	16	590	278	481	210	1,690	1,140	78	4,383	2,630	5,650	7.1
			8- 1-66	17	650	290	441	211	1,780	1,190	21	4,500	2,810	5,545	7.1

See footnote at end of table.

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) $\frac{1}{2}$	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH
48-07-502	Frank Gentry	201	8- 3-67	17	660	303	472	215	1,870	1,260	68	4,760	2,900	5,850	7.2
			4- 9-68	17	680	296	480	212	1,910	1,280	43	4,810	2,920	5,950	7.6
505	C. W. Boyles	--	7-27-66	17	333	155	439	250	1,130	770	24	2,990	1,470	4,170	7.2
506	F. Dodson	250	3-12-48	18	190	90	105	248	663	125	1.8	1,320	844	1,780	--
			6- 3-54	18	292	115	190	246	930	302	18	1,990	1,200	2,790	7.9
			7-27-66	13	470	223	406	199	1,480	870	88	3,650	2,090	4,690	7.0
			8- 3-67	15	480	232	447	182	1,560	900	160	3,890	2,160	4,850	7.1
			4- 9-68	18	478	234	476	176	1,750	820	143	4,010	2,160	4,900	7.7
508	C. W. Boyles	240	7-27-66	18	423	182	398	231	1,150	850	56	3,190	1,810	4,300	7.3
			4-14-67	16	530	192	422	194	1,610	770	60	3,700	2,110	4,760	7.7
			4- 9-68	18	455	210	423	146	1,700	730	70	3,680	2,000	4,540	7.8
512	Frank Gentry	187	8- 5-48	19	251	97	89	248	798	130	2.2	1,510	1,030	2,050	--
			8- 9-49	15	250	107	130	253	854	175	3.8	1,660	1,060	2,180	7.3
			5-27-54	18	350	152	228	240	1,040	495	28	2,430	1,500	3,310	7.5
			3-31-59	20	665	297	374	218	1,490	1,320	124	4,400	2,880	6,090	7.0
			7- 2-60	18	630	285	392	205	1,480	1,230	120	4,260	2,740	5,750	6.7
514	Hays Bros.	285	6- 9-54	18	324	138	368	269	851	750	30	2,610	1,380	3,980	7.6
			7- 2-60	19	320	141	461	264	976	790	33	2,870	1,380	4,180	7.4
			7-25-63	16	329	153	464	255	980	810	38	2,911	1,450	4,200	7.3
			7-27-66	15	339	148	407	260	940	800	21	2,800	1,460	3,900	7.3
			8- 3-67	16	357	143	431	357	1,050	800	24	2,950	1,480	4,070	7.3
4- 9-68	17	452	203	510	190	1,470	1,010	42	3,800	1,970	4,930	7.7			
515	A. L. Gentry	280	8- 1-66	16	510	227	271	224	1,490	680	36	3,340	2,200	4,125	7.3
			8- 3-67	16	550	232	324	222	1,610	780	40	3,660	2,330	4,500	7.1
517	S. L. Hays	330	8- 1-66	12	413	272	520	193	2,110	600	84	4,110	2,150	4,700	7.2
			4- 9-68	13	610	137	447	192	2,070	469	75	3,920	2,090	4,460	7.6
518	John Gentry	283	4-14-67	17	780	292	223	216	1,530	1,270	51	4,280	3,150	5,590	7.5
			4- 9-68	16	750	334	265	55	1,830	1,300	49	4,570	3,240	5,690	7.8
520	J. A. Burgin	--	8- 3-67	13	454	294	610	178	2,370	700	156	4,690	2,350	5,500	7.3
521	Ernest Guinn	--	8- 3-67	16	590	234	228	218	1,630	720	65	3,590	2,440	4,340	7.0
			4- 9-68	87	600	241	253	211	1,780	640	44.5	3,760	2,500	4,340	7.6
601	J. R. Speights	260	3-25-60	15	228	77	204	278	592	345	4.8	1,600	886	2,420	7.0
			7-26-63	14	232	94	228	275	620	380	4	1,710	970	2,510	7.3
			4-26-67	14	280	85	224	272	700	410	5.3	1,860	1,050	2,570	7.6
			4-22-68	13	290	104	225	270	830	431	1	2,030	1,150	2,790	7.4

See footnote at end of table.

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CAL-CIUM (Ca)	MAGNE-SIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICAR-BONATE (HCO <sub>3</sub> )	SUL-FATE (SO <sub>4</sub> )	CHLO-RIDE (Cl)	NI-TRATE (NO <sub>3</sub> )	DIS-SOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	pH
48-07-603	Martha Foreman	200	3-11-48	22	242	100	115	268	867	100	2.5	1,580	1,020	2,030	--
			6-22-54	20	280	96	100	270	771	211	3	1,610	1,090	2,200	7.2
			8- 1-66	13	463	33	254	267	940	421	14	2,270	1,290	2,960	7.7
604	James Napier	300	8- 5-48	23	229	95	98	254	738	140	1.8	1,450	962	1,970	--
			5-27-54	--	--	--	--	274	--	152	--	--	930	1,920	7.7
			3-31-59	17	235	86	188	278	604	345	4	1,620	940	2,340	7.0
			7- 2-60	24	289	122	111	245	712	358	7.1	1,740	1,220	2,520	6.8
605	Clay Dyer	300	7-27-66	17	357	151	129	243	910	437	5	2,130	1,510	2,870	7.3
			8- 3-67	16	428	156	121	232	950	520	7.0	2,310	1,710	3,100	7.2
			5-21-68	16	466	148	123	231	1,040	494	5	2,410	1,770	3,230	7.2
606	C & L Ranch	3,700±	7-26-63	14	368	220	338	259	1,230	670	42	3,009	1,820	4,000	7.2
607	Sarah Jarvis	--	8- 1-66	20	326	140	111	242	830	405	.4	1,950	1,390	2,610	7.4
			6-14-67	20	344	131	120	243	870	415	.4	2,020	1,400	2,690	7.2
			5-21-68	15	350	137	121	238	910	415	3.5	2,070	1,440	2,750	7.6
608	E. W. Bullard	--	6-22-54	17	217	114	153	158	785	269	14	1,650	1,010	2,330	7.9
			7-25-60	18	308	162	299	262	1,090	505	28	2,540	1,430	3,470	6.8
			7-25-63	14	291	139	272	261	980	437	15	2,278	1,300	3,190	7.4
			8- 1-66	16	318	179	291	251	1,210	469	21	2,630	1,530	3,500	7.2
			4-26-67	15	324	132	286	259	1,060	450	21	2,420	1,350	3,100	7.6
			8- 7-68	15	354	156	243	251	1,210	417	20	2,540	1,520	3,300	7.2
611	C & L Ranch	250	7-26-63	14	372	234	353	255	1,250	730	42	3,111	1,890	4,250	7.4
			8- 3-67	15	422	222	320	256	1,390	720	41.5	3,260	1,970	4,140	7.1
			5- 2-68	13	442	215	323	256	1,440	680	42	3,280	1,990	4,180	7.6
612	W. Chandler	250	8- 4-48	18	237	86	44	262	724	50	2.5	1,290	945	1,710	--
			7- 2-60	16	295	106	72	259	648	294	6.8	1,570	1,170	2,200	6.8
			7-25-63	14	368	156	144	234	1,040	410	12	2,261	1,560	3,000	7.3
618	Clay Dyer	--	7-25-63	17	330	140	121	240	790	410	--	1,928	1,400	2,750	7.2
619	J. Speights	--	7-25-63	14	235	90	228	276	600	283	3	1,690	960	2,520	7.4
			8- 1-66	16	253	91	202	276	640	388	1.5	1,730	1,010	2,520	7.2
620	Santiago Chacon	300	8- 1-66	18	252	100	127	256	630	288	.4	1,540	1,040	2,170	7.0
			8- 3-67	18	276	117	166	255	750	373	5.0	1,830	1,170	2,540	7.3
			4- 9-68	17	367	187	304	72	1,280	720	7.0	2,920	1,690	3,880	8.0
621	Price's Dairy	225	8- 1-66	13	320	126	176	253	970	348	7	2,090	1,320	2,745	7.4
			4-26-67	16	300	110	161	253	880	315	5.8	1,910	1,200	2,500	7.4
			5-21-68	13	291	107	163	254	870	312	5.0	1,890	1,170	2,490	7.5

See footnote at end of table.

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K ) <sup>1/2</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
48-07-622	List Estate	404	8- 1-66	15	286	121	184	256	860	341	2.5	1,940	1,210	2,650	7.3
			8- 3-67	15	325	97	181	250	900	358	7.5	2,010	1,210	2,625	7.2
			8- 6-68	12	290	105	174	255	854	308	2.5	1,870	1,160	2,510	7.5
623	E. Harrall	225	8- 1-66	16	233	99	195	273	640	368	.4	1,690	990	2,395	7.4
701	C & L Ranch	400	6- 3-54	18	226	76	364	305	545	598	4.6	1,980	876	3,140	7.5
			7- 2-60	18	265	109	440	286	728	715	13	2,430	1,110	3,710	7.2
			7-26-63	15	279	126	488	273	890	750	8	2,692	1,210	2,930	7.4
702	C. Sullins	--	7-27-66	15	339	150	460	265	1,060	790	19	2,920	1,417	4,040	7.3
			8- 3-67	16	386	143	479	249	1,160	870	25	3,200	1,550	4,360	7.2
			4-22-68	15	356	172	540	101	1,400	870	30	3,440	1,600	4,590	7.9
703	C & L Ranch	500	8- 1-66	16	229	90	362	301	580	610	.4	2,040	950	3,080	7.2
			7-24-67	17	266	67	354	295	620	620	.4	2,090	940	3,120	7.4
			8- 6-68	16	245	79	339	299	590	590	.4	2,010	940	3,050	7.2
704	do	350	6- 8-54	18	268	111	452	288	799	730	18	2,540	1,120	3,830	7.4
			3-25-60	16	302	130	500	272	984	770	31	2,870	1,290	4,200	7.3
			7-26-63	17	297	134	497	266	980	760	15	2,835	1,290	4,090	7.3
			5-16-67	16	356	143	530	256	1,210	810	24	3,220	1,480	4,300	7.4
			4-22-68	15	362	161	530	201	1,350	830	28.5	3,380	1,560	4,450	7.8
706	do	835	7-25-63	14	225	85	328	290	590	530	2	1,923	910	2,950	7.3
			7-27-66	16	287	104	396	276	780	660	8	2,390	1,150	3,465	7.4
			5-16-67	16	297	106	428	278	850	710	9	2,560	1,180	3,640	7.4
			4- 9-68	17	273	101	398	161	820	650	7	2,350	1,100	3,500	7.8
709	do	750	5-16-67	16	308	94	472	279	900	730	19.5	2,680	1,160	3,750	7.8
			4-22-68	15	311	127	493	271	1,030	760	28	2,900	1,300	3,980	7.7
801	R. Merrill	250	7-27-66	16	520	278	990	233	2,140	1,610	32	5,700	2,440	6,790	7.1
			4-26-67	16	530	275	950	229	2,000	1,540	25	5,450	2,450	7,160	7.5
			8- 6-68	16	541	339	1,090	232	2,350	1,790	37.5	6,280	2,740	7,620	7.2
803	G. J. Collier	278	7-25-63	14	408	239	900	225	1,770	1,260	46	4,756	2,000	6,250	7.5
			6-13-67	16	484	259	1,060	201	2,140	1,430	73	5,600	2,280	6,910	7.4
			4-22-68	15	500	199	820	123	2,110	1,120	42	4,870	2,080	6,240	7.9
805	do	278	7-27-66	16	448	252	920	204	1,880	1,370	60	5,050	2,160	6,550	7.3
807	N. R. Hays	--	6-24-54	18	336	149	540	273	1,030	930	27	3,160	1,450	4,670	7.3
			6-25-63	17	350	162	570	244	1,170	860	23	3,276	1,540	4,640	7.2
			4-26-67	17	414	173	510	237	1,380	890	30	3,530	1,750	4,660	7.8
			8- 6-68	17	375	159	498	245	1,300	780	23.5	3,270	1,590	4,350	7.1

See footnote at end of table.

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) 1/	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
48-07-808	C & L Ranch	904	5-16-67	16	248	68	335	295	570	560	3.5	1,950	900	2,900	7.7
			8-6-68	16	238	75	311	294	580	540	.4	1,910	910	2,900	7.3
901	Santiago Chacon	300	7-2-60	19	230	86	155	270	616	273	5.2	1,520	928	2,170	6.9
			7-25-63	15	228	94	164	264	600	303	4	1,536	960	2,250	7.5
			4-26-67	16	282	71	161	244	670	316	4.0	1,640	1,000	2,250	7.6
			5-21-68	15	215	87	160	95	700	320	3.5	1,550	900	2,200	7.8
902	J. W. Green	180	7-27-66	16	414	179	550	248	1,310	1,020	14	3,630	1,770	4,850	7.4
			8-3-67	15	404	154	660	255	1,480	940	14	3,790	1,640	4,480	7.2
			4-9-68	15	433	172	560	228	1,400	1,000	11.5	3,710	1,790	4,860	7.7
904	J. Lutrick	250	8-3-67	16	426	189	650	250	1,470	1,140	17	4,030	1,840	5,350	7.1
			8-7-68	15	392	190	630	264	1,350	1,030	15.5	3,750	1,760	5,000	7.3
907	Wilbur Lee	235	7-25-60	19	518	188	666	223	1,340	1,360	22	4,220	2,070	5,980	6.7
			7-25-63	18	550	235	770	212	1,710	1,430	21	4,842	2,350	6,450	7.3
909	Marial Balch	219	8-1-66	16	415	163	580	251	1,290	1,020	14	3,620	1,710	4,845	7.3
			4-26-67	16	496	197	690	246	1,570	1,260	16.5	4,370	2,050	5,860	7.4
08-401	L. Gallegos	250	7-25-63	18	550	231	435	203	2,040	640	22	4,037	2,310	4,850	7.4
			8-6-68	17	478	221	318	200	1,810	494	18	3,460	2,100	4,110	7.8
403	Buck Walden	252	8-3-67	20	317	111	208	254	950	368	.4	2,100	1,250	2,700	7.2
15-101	C & L Ranch	4,797	6-8-54	19	248	89	305	292	670	510	1	1,990	985	2,920	7.4
			7-2-60	18	255	84	339	285	696	512	5	2,050	982	3,070	6.8
			7-26-63	15	260	100	361	277	740	550	5	2,169	1,060	3,200	7.3
			8-1-66	16	270	97	349	278	770	560	8	2,210	1,080	3,150	7.4
			7-24-67	17	288	89	335	279	780	580	9	2,240	1,090	3,200	7.4
202	J. D. Lee	295	2-27-54	20	--	--	274	238	554	458	0	--	780	2,760	7.8
			7-2-60	20	230	72	339	298	556	535	5	1,910	870	2,980	7.1
203	Guy McCoy	325	5-21-54	18	200	85	267	301	520	450	2.8	1,690	848	2,680	7.4
			8-1-66	16	246	86	316	292	640	540	.4	1,990	970	2,855	7.4
			4-26-67	16	260	75	301	293	620	530	.4	1,950	960	2,910	7.5
			5-21-68	15	222	75	345	211	660	520	2.5	1,950	860	2,820	7.6
204	S. W. Magee	--	3-25-60	16	395	194	779	273	1,180	1,430	18	4,150	1,780	6,160	7.1
			7-25-63	15	355	184	730	265	1,180	1,180	13	3,786	1,640	5,400	7.1
			8-1-66	16	353	172	620	271	1,120	1,060	10	3,490	1,590	4,800	7.7
			8-3-67	14	400	192	780	267	1,400	1,300	19.5	4,240	1,790	5,690	7.1
			4-22-68	17	165	254	590	150	1,250	1,000	13.5	3,360	1,460	4,660	7.9
205	--	--	7-25-63	15	233	80	331	292	620	540	3	1,972	910	3,000	7.3

See footnote at end of table.

Table 2.--Chemical Analyses of Water From Selected Wells, Dell City Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
48-15-206	Brown and Kelly	168	8- 3-67	15	420	200	790	265	1,560	1,300	18.5	4,440	1,870	5,910	7.3
			4-22-68	17	343	176	670	73	1,330	1,120	9	3,700	1,580	5,090	8.0
301	Jess Berry	320	7-25-63	14	224	90	328	270	610	520	3	1,923	930	2,900	7.2
			7-27-66	15	252	87	312	287	660	540	3	2,010	990	3,000	7.4
			4-26-67	16	280	81	326	293	720	550	7	2,130	1,030	3,110	7.8
302	Jean Lutrick	633	7-27-63	14	242	95	316	281	600	560	3	1,967	1,000	2,990	7.4
			8- 3-67	15	292	85	311	281	660	640	5	2,150	1,080	3,160	7.3
303	Roscoe and Ross	1,044	4-26-67	24	400	163	620	264	1,190	1,150	11	3,690	1,670	5,160	7.5
304	Hart Gaba	134	8- 3-67	16	332	112	402	273	970	700	8	2,680	1,290	3,695	7.2
			5-21-68	15	305	120	365	282	870	630	5.5	2,450	1,250	3,500	7.7
305	do	278	8- 3-67	18	680	258	940	177	1,970	1,750	25	5,730	2,750	7,830	7.0
			5-21-68	16	466	166	550	244	1,170	1,170	10	3,670	1,850	5,080	7.6
801	H. McLaughlin	450	12- 9-48	13	292	156	147	202	1,510	142	1.8	2,460	1,620	2,950	--
901	C. E. Nelson	250	7-26-60	18	234	77	266	272	612	432	12	1,780	900	2,670	6.8
902	do	250	7-25-63	14	220	90	272	267	600	436	9	1,775	920	2,650	7.3
16-501	Jack Stallings	70	7-27-60	24	645	427	1,480	232	2,830	2,450	--	7,970	3,370	10,500	7.2
701	B. Ravousett	122	7-26-60	20	270	126	443	264	1,010	590	68	2,660	1,190	3,750	6.8
			7-25-63	15	249	110	353	267	820	510	21	2,214	1,070	3,210	7.4
23-201	Moes Diaz	500	7-26-63	14	122	57	90	134	425	85	34	892	540	1,350	7.4
			8- 2-66	10	134	67	181	139	471	91	27	950	610	1,360	7.5
			8- 4-67	10	147	58	87	146	479	96	33	990	610	1,395	7.5
			8- 7-68	10	143	59	80	142	486	85	31	970	600	1,470	7.2

<sup>1/</sup> This column shows sodium plus potassium calculated as sodium for those analyses performed by the U.S. Geological Survey, and shows only sodium for those analyses performed by the Texas State Department of Health.

Table 3.—Water-Level Measurements in the Wildhorse Draw Subarea,  
Culberson County—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)		
47-43-301	3780.	1-21-54	223.54	47-51-403	3730.	1-23-65	211.52		
		1-22-55	224.58			2-16-66	192.86		
		1-19-56	225.67			1-19-67	192.40		
		1-27-60	229.80	1-16-68	193.55	47-51-501	3700.	5-11-50	151.56
		2- 7-61	230.76	1-27-53	156.86				
		2-10-62	232.12	1-21-54	154.03				
		2- 6-63	233.51	1-22-55	154.03				
		1-24-64	234.45	1-23-56	156.22				
		1-23-65	235.24	1-27-57	156.59				
		11- 9-66	236.52	1-15-58	158.03				
		1-19-67	235.43	1-28-60	159.60				
		1-16-68	240.80	2-10-62	165.10				
		1-29-53	154.02	2- 6-63	164.83				
1-21-54	154.03	1-24-64	166.32						
1-22-55	154.23	1-23-65	164.42						
1-19-56	153.90	2-16-66	165.48						
1-27-60	154.20	1-19-67	164.63	47-51-704	3720.	1-27-53	179.05		
2- 7-61	154.39	1-21-54	180.01						
2-10-62	154.28	1-22-55	181.86						
2- 6-63	153.31	1-28-60	197.10						
1-24-64	154.59	2- 7-61	176.20						
1-23-65	154.66	2- 6-63	196.90						
2-16-66	155.08	2-16-66	200.60						
11- 9-66	154.70	1-19-67	197.33						
1-19-67	154.53	1-16-68	205.12			47-51-706	---	4-28-66	209.72
1-16-68	155.00	6- 8-66	208.48						
1-29-53	131.31	7-11-66	205.28						
1-21-54	131.07	8-10-66	212.04						
1-22-55	131.91	9-14-66	205.38						
1-23-56	131.96	10-28-66	202.91						
1-27-60	134.70	11-30-66	202.30						
2- 7-61	136.57	1-19-67	200.03						
2-10-62	142.95	2-28-67	207.31						
2- 6-63	162.23	4-14-67	210.57						
1-24-64	171.31	6-14-67	207.53						
1-23-65	140.58	8- 9-67	212.48						
2-16-66	139.44	9-29-67	209.58	47-51-708	---			1-19-67	236.87
1-19-67	137.98	1-16-68	248.70						
1-17-68	140.02	47-51-709	---			1-19-67	214.37		
1-29-53	137.72					1-16-68	211.05		
1-21-54	138.92					47-51-801	3705.	1-27-53	167.05
1-22-55	138.05	1-21-54	165.66						
1-23-56	138.24	1-22-55	166.38						
1-27-60	138.92	1-23-56	168.00						
2- 7-61	142.12	1-27-57	169.30						
2-10-62	138.91	1-15-58	170.43						
1- 6-63	139.69	1-27-60	172.70						
1-23-65	139.51	2- 8-61	173.94						
2-16-66	139.06	2- 6-63	184.87						
1-19-67	137.80	1-23-65	180.12						
1-16-68	139.80	2-16-66	182.70						
47-51-401	3840.	1-29-53	207.77	1-19-67	184.06				
		1-21-54	209.38	1-16-68	185.09	47-51-802	3720.	1-27-53	187.35
		1-22-55	210.06	1-21-54	176.03				
		1-19-56	211.24	1-22-55	176.77				
		1-27-60	215.86	1-23-56	178.11				
		2- 7-61	216.30	1-27-57	178.10				
		2- 6-63	220.09	1-15-58	179.93				
1-27-53	177.78	1-26-60	181.80						
1-21-54	179.15	2- 8-61	183.70						
1-22-55	179.56	2-10-62	191.98						
1-23-56	180.97								
1-27-57	182.54								
1-27-60	183.75								
2- 8-61	187.67								
2-10-62	198.18								
2- 6-63	193.84								
1-24-64	196.27								

**Table 3.—Water-Level Measurements in the Wildhorse Draw Subarea,  
Culberson County—Continued**

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)		
47-51-802	3720.	2- 6-63	189.92	47-59-101	3760.	2-10-62	228.19		
		1-23-65	189.60			1-24-64	229.65		
		2-16-66	190.32			1-27-65	229.09		
		1-19-67	189.25			2-16-66	228.90		
47-51-803	3715.	1-27-53	171.84			1-18-67	228.27		
		1-21-54	173.34			1-17-68	229.13		
		1-22-55	174.14	47-59-104	3775.	1-27-53	221.27		
		1-23-56	175.36			1-24-54	223.45		
		1-27-57	176.82			1-22-55	223.38		
		1-15-58	178.21			1-23-56	225.22		
		1-26-60	180.00			1-27-57	226.70		
		2- 8-61	181.32			1-26-60	229.48		
		2-10-62	186.40			2- 9-61	230.95		
		2- 6-63	186.56			2-10-62	235.11		
		1-24-64	186.73			1- 6-63	235.78		
		1-23-65	178.09			1-24-64	236.18		
		2-16-66	190.10			1-27-65	242.64		
		9- 1-66	188.30			1-16-66	236.35		
11- 7-66	186.96	1-18-67	241.80						
1-18-67	186.80	1-17-68	242.60						
1-16-68	187.92								
47-51-804	3720.	1-27-53	178.84	47-59-106	3745.	1-27-53	198.35		
		1-21-54	179.47			1-21-54	199.53		
		1-22-55	180.18			1-22-55	200.22		
		1-23-56	181.52			1-23-56	201.65		
		1-27-57	182.86			1-15-58	204.61		
		1-15-58	185.13			1-26-60	209.15		
		1-26-60	187.35			2- 8-61	208.26		
		2- 8-61	188.25			2-10-62	203.04		
		2-10-62	208.27			2- 6-63	214.07		
		2- 6-63	201.36			1-24-64	214.25		
		1-24-64	198.03			1-27-65	214.86		
		1-23-65	199.80			2-16-66	214.00		
		1-19-67	196.10			9- 1-66	213.70		
		1-16-68	208.35			11- 7-66	213.88		
		1-18-67	213.64						
		1-16-68	214.85						
47-51-806	---	1-19-67	217.15	47-59-201	3765.	1-24-54	221.39		
		1-16-68	215.69			1-22-55	222.72		
47-51-902	3745.	1-29-53	199.9-			1-23-56	223.37		
		1-21-54	200.63			1-28-57	224.73		
		1-22-55	201.55			1-27-60	232.47		
		1-23-56	202.84			2- 9-61	228.35		
		1-27-57	204.36			2- 6-63	232.46		
		1-15-58	205.20			1-24-64	237.32		
		1-27-60	214.64			1-27-65	247.68		
		2- 8-61	216.42			2-16-66	238.90		
		2-10-62	218.20			1-18-67	241.20		
		2- 6-63	220.80			1-17-68	242.95		
		1-24-64	221.71			47-59-203	3775.	5-11-50	218.91
		1-27-65	222.78					1-27-53	219.34
		2-16-66	220.98	1-21-54	222.28				
		1-18-67	239.04	1-20-55	223.00				
1-16-68	228.57	1-23-56	224.21						
47-58-902	3900.	2- 7-61	333.56	1-28-57	227.80				
		2-10-62	328.56	1-15-58	231.46				
		2- 8-63	335.59	1-27-60	233.32				
		1-24-64	339.47	2- 9-61	230.94				
		1-27-65	337.54	2- 9-62	231.99				
		2-16-66	338.90	2- 6-63	233.10				
		1-18-67	339.12	1-24-64	234.09				
		1-16-68	339.67	1-27-65	247.90				
47-59-101	3760.	1-29-53	212.96	2-16-66	235.60				
		1-24-54	213.73	9-14-66	237.32				
		1-22-55	214.30	11- 66	235.68				
		1-23-56	215.77	1-18-67	246.38				
		1-27-57	217.30	1-17-68	236.92				
		1-26-60	220.77	47-59-205	3760.	1-27-60	227.37		
		2- 9-61	222.00			2- 9-61	229.15		



**Table 3.—Water-Level Measurements in the Wildhorse Draw Subarea,  
Culberson County—Continued**

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)		
47-59-205	3760.	2-10-62	238.17	47-59-301	3765.	1-27-60	231.55		
		2- 6-63	242.95			2- 9-61	230.55		
		1-24-64	232.47			2-10-62	233.44		
		1-27-65	233.90			2- 6-63	238.03		
47-59-206	---	3- 3-51	230.96			1-24-64	233.49		
		3- 8-52	231.64			1-27-65	235.16		
		2- 6-63	245.26			2-16-66	235.76		
		1-24-64	246.59			9- 1-66	236.40		
		1-27-65	247.14			11- 8-66	235.66		
		2-16-66	247.76			1-18-67	235.84		
		1-18-67	245.88			1-16-68	236.34		
47-59-208	---	1-17-68	248.92			47-59-302	3780.	1-22-55	238.90
		1-19-67	218.08					2- 9-61	246.18
		1-16-68	219.00	2-10-62	253.09				
47-59-301	3765.	3- 3-51	218.34	2- 6-63	251.--				
		3- 8-52	219.90	1-24-64	250.32				
		1-27-53	226.33	1-27-65	250.60				
		1-21-54	223.11	2-16-66	252.60				
		1-22-55	224.18	9-14-66	251.90				
		1-23-56	225.80	11- 8-66	251.10				
				1-18-67	253.28				
				1-16-68	252.63				

Table 4.--Chemical Analyses of Water From Selected Wells, Wildhorse Draw Subarea

(Analyses are in milligrams per liter except specific conductance and pH.)

Analysts: For samples collected after 1962, Texas State Department of Health.  
For earlier samples, U.S. Geological Survey.

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
47-51-402	Joe Hoover	--	8-10-66	17	52	34	230	306	265	164	6	920	270	1,480	7.5
			7-18-67	17	53	33	212	300	261	160	9	890	270	1,420	7.6
			8-13-68	18	52	34	219	299	279	153	5.5	910	269	1,440	7.5
701	do	--	7-18-67	27	30	11	271	249	263	153	25	900	122	1,350	7.5
			4-30-68	24	31	13	270	229	270	154	18	900	131	1,450	8.3
702	do	1,045	8-10-66	25	19	13	346	277	386	131	42	1,100	101	1,720	7.7
			7-18-67	26	26	10	362	277	432	141	39	1,170	106	1,740	7.2
704	do	450	8-10-66	27	37	21	272	255	221	237	3.5	950	181	1,530	7.6
			7-18-67	29	41	21	288	254	228	250	8	990	188	1,600	7.6
			8-13-68	24	44	18	279	254	217	239	2.5	950	185	1,600	7.5
705	do	525	8- 9-54	30	22	12	214	269	152	130	5.5	711	104	1,160	7.8
			8-10-66	25	26	15	226	262	154	156	3	740	126	1,280	7.5
			7-18-67	29	31	13	221	259	146	162	6	740	129	1,200	7.6
			4-30-68	24	38	18	226	240	210	169	2	810	169	1,340	7.4
707	Jess Tabor	500	8-10-66	27	16	6	202	255	131	104	3.5	620	64	995	7.2
			7-18-67	29	16	5	201	246	138	107	7	630	60	998	7.7
			4-30-68	30	15	8	198	243	145	94	5	620	69	1,003	8.0
708	Joe Hoover	600	7-18-67	22	16	13	388	482	352	127	22	1,180	95	1,740	7.4
712	V. Schneider	--	7-18-67	29	27	9	247	235	190	167	4	790	104	1,250	7.2
802	J. Beasley	414	8- 9-54	32	24	14	209	323	136	108	7.2	713	118	1,140	7.8
			8-10-66	27	73	45	304	255	310	345	1.5	1,230	368	1,980	7.4
			8-13-68	24	64	35	286	285	265	285	5	1,110	304	1,800	7.6
804	Joe Hoover	450	8- 9-54	32	56	35	230	272	231	232	5	986	284	1,600	7.7
			8-10-66	26	91	54	291	254	312	394	2.5	1,300	447	2,350	7.6
			7-18-67	31	94	51	301	254	316	402	4	1,330	445	2,130	7.7
			8-13-68	26	78	64	297	255	330	391	.4	1,310	459	2,150	7.4
806	M. O. Webb	--	8-10-66	26	116	56	236	251	299	373	2.5	1,230	520	2,040	7.4
			7-18-67	29	102	58	237	257	265	356	4	1,180	495	2,000	7.5
			8-13-68	24	115	62	240	256	353	369	2.5	1,290	542	2,070	7.5
902	Jess Connely	500±	8-10-66	29	42	10	385	198	434	231	20	1,250	148	1,955	7.4
			7-18-67	33	44	9	382	196	415	242	24	1,250	148	1,960	7.5

See footnote at end of table.

Table 4.--Chemical Analyses of Water From Selected Wells, Wildhorse Draw Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
47-51-902	Jess Connely	500±	8-13-68	26	46	10	379	177	491	231	25	1,300	156	1,990	7.6
59-101	Robert Durrill	625	8-10-54	31	19	8.5	194	290	157	70	6.3	651	82	1,020	7.8
			8-10-66	18	22	9	194	255	120	116	1.5	610	94	1,005	7.3
			7-18-67	29	28	2	187	242	115	113	6	600	80	980	7.8
			4-30-68	32	21	8	179	238	130	105	4	600	84	995	8.0
102	Perkins & Co.	542	8-10-66	20	67	33	169	285	180	166	5	780	304	1,255	7.7
			7-18-67	20	84	36	168	279	209	197	7	860	360	1,380	7.5
			8-13-68	20	52	29	160	278	171	136	5.5	710	252	1,150	7.8
104	Robert Durrill	660	8-10-54	31	18	7	188	236	119	116	5.8	619	74	985	7.9
			8-10-66	27	21	9	194	287	160	76	2.5	630	89	1,005	7.9
			7-18-67	29	25	7	200	289	163	77	7	650	90	1,010	7.7
			4-30-68	30	22	9	194	288	185	66	5	660	92	1,015	8.0
106	A. F. Walker	500	7-18-67	29	28	6	214	245	129	149	5	680	96	1,135	7.5
108	Tom Burchell	--	8-10-66	28	32	13	189	246	137	142	3.5	670	134	1,082	7.3
			7-18-67	29	39	9	197	246	139	147	3.5	690	133	1,102	7.2
			4-30-68	24	34	12	186	248	134	143	2	660	135	1,108	7.5
109	Perkins & Co.	--	8-10-66	22	34	15	178	282	116	125	1.5	630	146	1,070	7.3
201	P. S. Hall	500	4-30-68	18	104	54	287	259	393	355	2	1,340	483	2,060	7.8
203	do	550	8- 9-54	19	111	66	296	288	405	388	4.8	1,510	548	2,350	7.5
			8-10-66	17	121	65	309	284	398	410	1.5	1,460	570	2,500	7.3
			7-18-67	18	128	63	309	287	448	415	4	1,530	580	2,350	7.3
			8-13-68	18	123	69	290	284	424	402	2	1,470	590	2,350	7.5
207	do	550	8-10-66	17	110	59	272	290	327	354	.4	1,280	520	2,060	7.4
			8-13-68	17	112	29	265	272	363	355	2.5	1,310	520	2,100	7.8
208	John Connely	406	7-18-67	30	60	27	235	248	178	263	5	920	261	1,590	7.6
			4-30-68	26	62	29	252	249	242	269	2	1,000	276	1,620	7.9
210	P. S. Hall	--	7-18-67	24	105	50	267	266	345	342	5.5	1,270	466	1,980	7.4
212	Paul Teas	387	7-18-67	18	144	76	360	281	469	520	3.5	1,730	670	2,750	7.4
302	D. L. Brewster	500	8-10-54	18	140	90	438	293	592	570	2.5	--	720	3,160	7.4
			8-10-66	16	150	84	402	284	570	560	.4	1,920	720	2,890	7.6
			7-18-67	15	154	79	411	288	590	560	3.5	1,960	710	2,940	7.4
			4-30-68	13	148	84	420	288	650	540	.4	2,000	716	2,940	7.8
303	P. Ness Smith	500	8-10-54	18	116	71	325	289	444	430	4.5	1,640	582	2,520	8.0

See footnote at end of table.

Table 4.--Chemical Analyses of Water From Selected Wells, Wildhorse Draw Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
47-59-303	P. Ness Smith	500	8-10-66	16	149	77	368	283	530	510	0.4	1,790	690	2,700	7.4
			4-30-68	13	128	83	376	255	560	500	.4	1,790	660	2,690	8.0
305	Joe Hoover	--	8-10-66	18	153	87	423	292	590	570	.4	1,990	740	2,990	7.4
			7-18-67	33	152	83	416	284	550	570	3.5	1,950	720	3,000	7.5
306	D. Brewster	500	8-10-66	17	153	91	403	289	600	560	.4	1,970	760	2,950	7.4
			7-18-67	15	162	81	416	289	590	570	.4	1,980	740	2,980	7.6
			4-30-68	16	154	90	410	288	630	560	.4	2,000	750	2,990	7.7

<sup>1/</sup> This column shows sodium plus potassium calculated as sodium for those analyses performed by the U.S. Geological Survey, and shows only sodium for those analyses performed by the Texas State Department of Health.

Table 5.—Water-Level Measurements in the Lobo Flats-Chispa Subarea,  
Culberson and Jeff Davis Counties—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)		
51-02-903	3947.6	5- 3-50	138.4-	51-02-912	3952.4	1-27-60	180.05		
		2-28-51	102.4-			2-10-61	183.90		
		1-26-53	125.77			2- 9-62	198.99		
		1-23-54	127.86			2- 7-63	202.65		
		1-23-55	132.70			1-24-64	194.55		
		1-24-56	139.52			1-23-65	226.12		
		1-28-57	151.01			2-17-66	210.65		
		1-16-58	155.23			1-17-67	219.24		
		1-27-60	172.45						
		2-10-61	175.60			51-03-701	3960.7	1-28-57	162.05
		2- 9-62	190.7-					1-16-58	170.90
		2- 7-63	195.9-					1-27-60	182.05
		1-24-64	191.07					2-10-61	184.32
		1-23-65	219.85					2- 9-62	195.27
		2-17-66	205.48					2- 7-63	205.08
		1-17-67	217.77					1-24-64	209.40
		1-16-68	223.52					1-23-65	224.84
								2-17-66	224.63
								1-17-67	230.94
		1-15-68	229.16						
51-02-904	3933.8	5- 3-50	137.70	51-03-702	3959.6	1-16-58	162.60		
		2- 8-51	133.52			1-27-60	179.80		
		3- 8-52	139.55			2-10-61	182.05		
		1-23-54	150.43			2- 9-62	196.54		
		1-23-55	152.79			2- 7-63	203.05		
		1-24-56	156.69			1-24-64	206.90		
		1-28-57	158.33			1-23-65	219.95		
		1-16-58	162.69			2-17-66	216.70		
		1-27-60	167.75			1-17-67	220.64		
		2-10-61	168.60						
		2- 9-62	190.57			51-10-307	3955.3	1-28-57	156.72
		2- 7-63	194.6-					1-16-58	160.59
		4-19-66	237.07					1-27-60	170.20
		6- 8-66	232.48					2- 7-63	198.10
		7-11-66	211.93					1-24-64	194.--
		8-11-66	234.71					1-23-65	213.0-
		9-14-66	208.26					1-17-67	217.50
		10-28-66	212.18					1-16-68	218.25
		12- 8-66	214.37						
1-17-67	213.35	51-10-309	3985.76	6-21-49	105.--				
2-28-67	212.16			11-17-50	121.72				
4-14-67	218.04			2- 9-51	116.58				
6-14-67	238.07			3- 7-52	126.81				
8- 9-67	238.46			1-23-54	147.48				
9-29-67	213.50			1-23-55	152.22				
				1-24-56	160.14				
				1-29-57	168.20				
				1-16-58	176.44				
				1-27-60	187.10				
51-02-906	3936.6	6-22-49	132.24	2-10-61	191.10				
		5- 3-50	139.31	2-10-62	201.67				
		6- 2-50	150.99	2- 7-63	207.89				
		2- 8-51	144.44	1-24-64	214.28				
		1-26-53	147.91	2-17-66	222.75				
		1-23-54	152.34	1-17-67	220.39				
		1-23-55	154.89						
		1-24-56	158.54	51-10-323	3971.3	1-23-54	141.78		
		1-28-57	163.57			1-23-55	146.57		
		1-16-58	168.93			1-24-56	155.08		
		1-27-60	180.10			1-29-57	163.58		
		2-10-61	180.50			1-16-58	171.71		
		2- 9-62	198.65			1-27-60	184.35		
		2- 7-63	194.76			2-10-61	186.60		
		1-24-64	198.71			2-10-62	203.50		
		1-23-65	206.78			1-24-64	209.23		
		2-17-66	209.77			1-23-65	225.49		
		1-17-67	220.65	2-17-66	223.65				
		1-15-68	214.72	9- 1-66	231.10				
51-02-911	3955.66	1-24-56	164.3-	11- 8-66	226.17				
		1-28-57	170.26	1-17-67	223.78				
		1-16-58	177.19	1-15-68	227.19				
		1-27-60	195.80						
		2-10-61	187.40	51-10-324	---	1-17-67	202.23		
		2- 9-62	205.50			1-15-68	203.07		
		2- 7-63	198.94						
		1-24-64	201.52						
		1-23-65	211.82						
		2-17-66	222.03						
1-15-68	230.90								

**Table 5.—Water-Level Measurements in the Lobo Flats-Chispa Subarea,  
Culberson and Jeff Davis Counties—Continued**

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)
51-10-601	4010.2	10-15-49	95.--	51-10-902	4046.3	6-11-50	129.80
		11-17-50	99.72			2-28-51	117.42
		2-28-51	97.34			1-26-53	132.62
		1-26-53	115.06			1-23-54	135.07
		1-23-54	121.10			1-23-55	138.70
		1-23-55	124.03			1-24-56	142.40
		1-24-56	129.86			1-29-57	147.78
		1-29-57	136.68			1-17-58	151.25
		1-17-58	142.14			1-27-60	155.10
		1-27-60	146.20			2-10-61	155.50
		2-10-61	149.21			2-10-62	170.20
		2-10-62	154.39			2- 7-63	157.27
		2- 7-63	157.61			1-24-64	150.15
		1-24-64	162.34			1-27-65	173.30
		1-23-65	170.18			2-17-66	170.55
		2-17-66	167.00			1-17-67	170.23
		1-17-67	165.29				
1-15-68	167.93						
51-10-603	4037.7	2-28-51	116.08	51-11-101	3985.1	6-22-49	79.74
		1-24-54	134.9-			5-10-50	86.81
		1-24-56	143.95			2- 9-51	90.90
		1-29-57	150.80			3- 7-52	99.12
		1-17-58	155.36			1-26-53	108.13
		1-27-60	160.70			1-23-54	115.00
		2-10-61	159.18			1-23-55	118.22
		2-10-62	179.4-			1-24-56	124.46
		2- 7-63	175.4-			1-29-57	131.30
		1-24-64	170.60			1-16-58	136.66
		1-27-65	172.10			1-27-60	144.20
		2-17-66	175.93			2-10-61	146.69
		9-14-66	178.76			2-10-62	151.55
		11- 8-66	175.55			2- 7-63	157.34
		1-17-67	175.08			1-24-64	160.90
		1-15-68	176.20			1-23-65	179.80
						2-17-66	172.62
		9-14-66	178.40				
		1-17-67	177.66				
		1-15-68	182.42				
51-10-604	3987.3	1-15-46	86.--	51-11-102	4001.5	9-15-49	95.0-
		5- 2-50	92.52			5- 4-50	105.56
		2-28-51	88.5-			6- 1-50	102.59
		1-26-53	111.55			2- 9-51	103.41
		1-23-54	120.69			2-10-61	161.15
		1-23-55	125.87			2- 7-63	171.11
		1-24-56	133.65			1-24-64	174.26
		1-29-57	143.20			1-23-65	184.32
		1-17-58	147.73			2-17-66	185.60
		1-27-60	156.90			1-17-67	184.70
		2-10-61	160.53			1-15-68	187.78
		1-24-64	176.75				
		2-17-66	178.38				
		9-14-66	185.97				
		11- 8-66	182.15				
		1-17-67	182.27				
		1-15-68	184.23				
51-10-608	4015.	2-10-61	131.86	51-11-103	3985.1	2-10-61	190.46
		5-17-61	141.05			1-24-64	214.79
		1-24-64	155.36			1-23-65	254.57
		1-23-65	149.80			2-17-66	229.02
		2-17-66	148.43			9-14-66	232.43
		1-17-67	149.05			11- 8-66	231.93
		1-15-68	155.12			1-17-67	229.42
		1-15-68	242.02				
51-10-901	4046.3	1-26-53	133.60	51-11-106	---	11- 8-66	186.07
		1-23-54	136.54			1-17-67	182.26
		1-23-55	140.42			1-15-68	184.30
		1-24-56	143.95				
		1-29-57	148.61				
		1-17-58	153.10				
		1-27-60	172.10				
2-10-61	157.00						
1-27-65	168.90						
2-17-66	171.07						
1-17-67	168.09						
1-15-68	174.15						
51-11-401	4022.1	4-15-49	114.--	51-11-401	4022.1	4-15-49	114.--
		11-17-50	116.20			11-17-50	116.20
		2-28-51	113.80			2-28-51	113.80
		1-26-53	129.31			1-26-53	129.31
		1-23-54	134.98			1-23-54	134.98
		1-23-55	137.82			1-23-55	137.82
		1-24-56	143.06			1-24-56	143.06
		1-29-57	149.51			1-29-57	149.51
		1-17-58	155.98			1-17-58	155.98
		1-27-60	157.20			1-27-60	157.20
2-10-61	161.74	2-10-61	161.74				

**Table 5.—Water-Level Measurements in the Lobo Flats-Chispa Subarea,  
Culberson and Jeff Davis Counties—Continued**

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)
51-11-401	4022.1	2-10-62	164.58	51-19-104	4090.5	1-27-60	166.70
		2- 7-63	167.03			2-10-61	169.28
		1-24-64	172.18			2-10-62	182.48
		1-23-65	184.14			1-24-64	191.00
		2-17-66	186.78			2-17-66	183.95
		1-17-67	174.18			1-12-67	189.50
		1-15-68	177.75			1-15-68	198.70
51-11-403	4036.0	6-22-49	105.78	51-19-105	4095.	4-18-50	154.0-
		2-28-51	115.02			5- 2-50	141.14
		1-26-53	129.32			5-10-50	141.18
		1-23-54	134.62			2- 9-51	142.56
		1-23-55	137.13			3- 7-52	147.73
		1-24-56	141.73			1-27-53	155.09
		2-10-62	158.98			1-23-54	156.22
		2- 7-63	161.25			1-24-55	159.93
		1-24-64	163.32			1-19-56	161.65
		1-23-65	167.90			1-29-57	167.95
		2-17-66	167.50			1-17-58	174.70
		1-17-67	168.39			1-27-60	172.45
		51-11-701	4050.			2-10-61	161.07
1-24-64	154.02			3- 7-52	161.25		
1-27-65	150.96			1-27-53	165.57		
2-17-66	151.92			1-24-54	169.57		
1-17-67	153.29			1-23-55	172.34		
1-15-68	154.13			1-19-56	175.20		
51-19-101	4086.1	4-18-50	134.0-	51-19-301	4141.4	6-13-50	197.29
		5- 2-50	134.49			2-28-51	198.48
		2-28-51	137.66			1-27-53	206.63
		3- 7-52	141.50			1-24-54	210.55
		1-26-53	147.85			1-23-55	213.25
		1-23-54	148.60			1-19-56	216.09
		1-24-55	152.35			1-29-57	219.26
		1-19-56	153.82			1-17-58	222.27
		1-29-57	159.46			2-10-61	228.32
		1-17-58	164.35			2-10-62	230.82
		1-27-60	165.25			1-24-64	234.68
		2-10-61	168.42			1-27-65	237.00
		2-10-62	170.29			1-12-67	198.46
		2- 7-63	175.10			1-15-68	199.94
		1-24-64	176.60				
1-27-65	176.10						
2-17-66	176.32						
1-12-67	177.24						
1-15-68	177.22						
51-19-104	4090.5	5- 2-50	136.35			1-27-66	238.30
		5-10-50	136.51			1-12-67	239.45
		2-28-51	137.07				
		1-23-54	151.64				
		1-24-55	154.42				
		1-19-56	156.07				
		1-29-57	162.47				
		1-17-58	168.98				

Table 6.--Chemical Analyses of Water From Selected Wells, Lobo Flats-Chispa Subarea

(Analyses are in milligrams per liter except specific conductance and pH.)

Analysts: For samples collected after 1962, Texas State Department of Health.  
For earlier samples, U.S. Geological Survey.

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CAL- CIUM (Ca)	MAGNE- SIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICAR- BONATE (HCO <sub>3</sub> )	SUL- FATE (SO <sub>4</sub> )	CHLO- RIDE (Cl)	NI- TRATE (NO <sub>3</sub> )	DIS- SOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
51-02-901	W. P. Sauer	380	5- 5-50	65	--	--	88	211	48	16	5.8	363	57	506	7.9
			7-19-67	56	21	4	89	201	58	27	5	361	67	530	7.2
903	Grover Neely	421	7-19-67	60	27	3	88	249	41	16	3	362	82	521	7.3
			4-29-68	51	15	4	88	215	48	11	.4	325	53	481	7.4
907	Dee Wilson	407	6-14-67	38	18	3	87	212	49	17	4	322	57	481	7.3
			4-29-68	49	16	4	86	211	48	12	4	325	56	486	8.3
909	do	400	6-22-49	64	9.5	3.1	97	210	45	17	6	354	36	399	8.0
			6-14-67	52	18	2	95	210	53	20	4	349	52	496	7.2
			4-29-68	57	13	3	87	184	58	15	5	335	46	444	8.5
03-701	do	600	8-11-66	62	16	5	86	214	48	17	3	344	61	485	7.5
			7-19-67	65	19	3	86	212	44	17	5	345	60	490	7.5
			4-29-68	64	16	4	86	192	49	13	5	339	58	490	8.5
702	do	463	7-19-67	38	18	4	87	214	50	18	7	329	63	494	7.5
10-303	George Turner	403	5-13-60	58	13	4.2	86	201	48	18	5.3	337	50	485	7.5
			7-19-67	56	16	3	91	204	50	18	5.5	342	51	484	7.7
305	J. H. Harper	325	8-11-66	60	21	5	99	199	78	25	5	393	75	560	7.7
			7-19-67	60	23	3	99	192	82	26	16	405	70	564	7.6
			4-29-68	64	24	5	93	206	85	20	2	396	82	576	7.5
307	A. P. George	--	8-11-66	60	105	20	206	204	236	254	13	1,000	346	1,730	7.5
			7-19-67	49	121	18	228	201	387	219	16.5	1,140	378	1,750	7.5
322	Ted Brewster	385	8-11-66	60	17	6	83	216	43	17	1.5	336	68	490	7.3
			4-29-68	53	16	4	84	207	48	12	.4	321	54	480	7.3
323	Dee Wilson	--	8-13-68	58	17	5	89	199	72	18	5	364	65	520	7.9
325	Ted Brewster	--	8-11-66	56	32	5	93	214	80	28	3.5	405	101	607	7.6
			8-13-68	56	15	4	83	207	48	13	2.5	325	57	479	7.5
327	George Turner	400	6-14-67	57	14	3	92	204	49	17	.4	334	47	472	7.4
601	C. E. Ratton	375	5- 4-50	64	--	--	87	205	44	16	5.1	353	56	489	7.9
			8-11-66	60	14	6	86	205	45	16	11	341	60	479	7.4
			4-29-68	53	16	4	86	211	48	13	2.5	329	56	492	8.2

See footnote at end of table.



Table 6.--Chemical Analyses of Water From Selected Wells, Lobo Flats-Chispa Subarea--Continued

WELL	OWNER	DEPTH OF WELL (FT)	DATE OF COLLECTION	SILICA (SiO <sub>2</sub> )	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM AND POTASSIUM (Na + K) <sup>1/2</sup>	BICARBONATE (HCO <sub>3</sub> )	SULFATE (SO <sub>4</sub> )	CHLORIDE (Cl)	NITRATE (NO <sub>3</sub> )	DISSOLVED SOLIDS	TOTAL HARDNESS AS CaCO <sub>3</sub>	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH
51-10-603	Jack Lacy	--	6-14-67	38	13	4	90	226	49	16	.4	323	48	497	7.0
			4-29-68	57	13	4	86	209	49	12	2.5	328	48	475	7.8
604	W. L. Stratton	368	8-11-66	56	18	5	98	196	71	27	5	378	65	553	7.5
609	Jack Lacy	--	8-11-66	60	22	7	106	209	110	17	2.5	430	82	613	7.3
			4-29-68	53	22	5	128	209	110	13	.4	436	77	619	7.6
611	J. M. Huber	--	7-19-67	62	25	5	94	195	76	35	8	403	83	585	7.8
			8-13-68	53	25	6	93	194	82	32	3.5	392	87	595	7.8
612	T. Griffin	340	6-14-67	58	15	5	99	194	95	20	.4	389	60	550	7.2
614	J. Johnson	355	7-19-67	58	16	3	86	209	43	15	6	332	54	470	7.4
			8-13-68	53	13	4	83	203	45	14	3.5	317	48	465	7.8
901	T. F. Griffin	400	7-19-67	31	18	1	156	229	142	33	.4	497	50	765	7.2
11-101	C. L. Bell	411	8-11-66	60	21	5	94	198	72	23	7	381	72	555	7.6
			7-19-67	56	23	4	95	194	80	27	7	389	76	576	7.5
			8-13-68	56	21	5	99	198	95	25	.4	400	74	580	7.2
104	W. B. Sauer	--	8-11-66	60	22	4	91	220	50	21	2.5	361	72	516	7.4
			7-19-67	60	21	2	88	209	43	21	6	350	62	506	7.5
			8-13-68	58	18	5	87	209	56	16	5.5	350	64	505	7.8
404	G. Turner	417	8-11-66	60	58	20	129	193	263	47	.4	670	229	983	7.0
			7-19-67	60	67	14	132	178	276	55	12.5	710	225	1,000	7.2
			4-29-68	62	57	19	121	173	255	45	8.5	650	219	975	7.8
19-104	Raymond Reed	480	8-11-66	18	9	3	58	161	13	7	.4	188	37	300	7.5
301	J. H. Eudy	480	7-19-67	53	2	11	85	205	37	13	4	308	51	440	7.3

<sup>1/2</sup>This column shows sodium plus potassium calculated as sodium for those analyses performed by the U.S. Geological Survey, and shows only sodium for those analyses performed by the Texas State Department of Health.



Table 7.—Water-Level Measurements in Small Areas—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)
<b>A. Wells Near Candelaria, Presidio County</b>				48-41-202	---	12-14-64	13.13
51-51-803	---	1-30-57	12.49			2-10-66	15.07
		2-27-58	12.70			12-28-66	11.68
		4-22-61	4.10			1-12-68	12.12
		2-13-62	8.59	48-41-601	---	3- 9-53	25.84
		2- 5-63	6.87			1-19-54	25.74
		1-28-64	4.28			1-30-55	27.11
		1-26-65	7.48			1-31-56	16.42
		3- 2-66	7.36			1-21-57	29.87
		1-10-67	4.44			1-28-58	31.20
		1-18-68	5.60			1-19-59	30.39
51-51-902	---	1-30-57	49.90			1-29-60	29.15
		2-27-58	49.75			2-23-61	26.88
		4-22-61	49.2-			12- 4-61	26.60
		2-13-62	50.50			12-13-62	25.98
		2- 5-63	50.81			12-11-63	26.20
		1-28-64	50.24			12-14-64	28.05
		1-26-65	50.44			2-10-66	30.27
		1-10-66	50.47			12-28-66	28.98
		3- 2-66	50.78			1-12-68	28.85
		1-10-67	50.47	48-42-701	---	3- 9-53	12.41
1-18-68	50.86			1-19-54	14.48		
74-06-901	---	8-11-54	131.62			1-30-55	18.67
		1-25-55	131.53			1-31-56	23.24
		1-23-56	131.14			1-21-57	27.28
		1-31-57	131.33			1-28-58	26.94
		1-22-58	130.87			1-19-59	22.79
		2-12-61	131.10			2-23-61	10.18
		2- 5-63	130.81			12- 4-61	13.58
		1-27-64	130.70			12-13-62	9.36
		1-26-65	130.85			12-11-63	15.20
		3- 3-66	131.07			12-14-64	31.04
		1-11-67	130.83			2-10-66	29.94
		1-18-68	130.75			12-28-66	25.80
						1-12-68	27.50
<b>B. Wells Near Presidio, Presidio County</b>				48-51-802	---	3- 9-53	10.78
74-30-406	---	3- 2-66	15.90			1-19-54	10.60
		1-10-67	14.48			1-31-55	11.25
		1-18-68	15.53			1-31-56	12.08
74-39-502	---					1-21-57	14.33
		3- 2-66	10.55			1-28-58	15.39
		1-10-67	8.70			1-19-59	10.20
		1-18-68	9.35			2-23-61	7.12
						12- 4-61	8.18
<b>C. Wells Near Marfa, Presidio County</b>						12-13-62	7.86
51-56-902	4338.	2-28-58	28.58			12-11-63	10.45
		2- 5-63	31.27			12-14-64	13.21
		1-27-64	32.47			2-10-66	12.33
		1-26-65	35.70			12-28-66	10.82
		3- 3-66	32.71			1-12-68	11.37
		1-11-67	29.56	48-60-401	---	3- 9-53	7.68
1-18-68	32.44			1-19-54	7.47		
<b>D. Wells in Southwest Hudspeth County</b>						1-31-55	8.27
48-41-202	---					1-31-56	8.59
		3- 9-53	9.65			1-21-57	10.74
		1-19-54	10.17			1-28-58	10.89
		1-30-55	14.00			1-19-59	5.78
		1-31-56	15.13			12- 4-61	12.22
		1-21-57	16.29			12-13-62	10.50
		1-28-58	18.11			12-11-63	11.57
		1-19-59	14.33			12-14-64	15.67
		1-29-60	10.72			2-10-66	15.83
		2-23-61	9.13			12-28-66	12.73
		12- 4-61	9.40			1-12-68	13.42
		12-13-62	9.66	<b>E. Wells Near Valentine, Jeff Davis County</b>			
				51-27-301	---	1-24-55	109.35
				2-17-56	108.51		





Table 7.—Water-Level Measurements in Small Areas—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)
<b>G. Wells Near Alpine, Brewster County—Continued</b>				52-43-202	4659.91	1-27-64	141.29
52-43-201	4509.69	11- 1-57	75.50	52-43-204	4629.00	1-25-65	142.31
		12- 2-57	74.40			3- 2-66	143.75
		1-10-58	72.83			1-19-55	81.89
		2-14-58	71.92			7-17-55	82.08
		3-18-58	71.73			8- 1-55	81.95
		4-21-58	71.62			9- 1-55	86.50
		5-19-58	72.12			10- 3-55	86.33
		6-16-58	72.47			11- 1-55	86.15
		7-15-58	73.15			12- 1-55	85.66
		8-19-58	75.05			6- 5-56	85.12
		9-16-58	72.44			7- 2-56	86.19
		11- 7-58	66.98			8- 1-56	87.75
		12- 8-58	65.03			9- 1-56	89.33
		1- 7-59	63.23			10- 1-56	89.20
		2- 6-59	62.75			11- 1-56	88.24
		3- 6-59	63.12			11-30-56	87.08
		4- 6-59	63.39			12-31-56	86.34
		5- 6-59	64.29			2- 1-57	85.81
		6- 5-59	65.90			2-28-57	85.34
		7- 6-59	67.40			3-29-57	85.06
		8- 3-59	67.72			5- 1-57	85.70
3- 2-66	80.64	6- 2-57	86.49				
1-11-67	81.08	7- 8-57	88.58				
1- 4-68	77.05	8- 6-57	88.52				
52-43-202	4659.91	8-16-48	141.40	9- 3-57	88.01		
		8-30-55	142.35	10- 1-57	88.08		
		10- 3-55	141.31	11- 1-57	87.34		
		11- 1-55	141.05	12- 2-57	86.67		
		12- 1-55	141.15	1-10-58	85.87		
		1- 2-56	141.47	2-14-58	85.18		
		3- 4-56	141.94	3-18-58	83.35		
		6- 5-56	142.26	4-07-58	86.25		
		7- 2-56	142.39	4- 8-58	167.15		
		8- 1-56	142.66	4- 9-58	177.44		
		9- 1-56	142.97	4-14-58	222.72		
		10- 1-56	143.17	4-21-58	211.72		
		11- 1-56	143.13	4-28-58	212.89		
		11-30-56	143.20	5-19-58	251.70		
		12-31-56	143.36	5-20-58	251.89		
		2- 1-57	143.47	6-16-58	259.15		
		2-28-57	143.54	7-15-58	270.50		
		3-29-57	143.42	8-19-58	272.74		
		5- 1-57	143.00	9-16-58	266.27		
		6- 3-57	142.67	11- 7-58	96.76		
		7- 6-57	142.85	12- 8-58	89.17		
		8- 6-57	143.28	1- 7-59	86.47		
		9- 3-57	143.57	2- 6-59	84.98		
		10- 1-57	143.73	3- 6-59	84.41		
		11- 1-57	144.19	4- 6-59	165.30		
		12- 2-57	144.18	5- 6-59	192.15		
		1- 9-58	144.33	6- 5-59	201.28		
		2-14-58	144.58	7- 6-59	195.00		
		3-18-58	143.70	8- 3-59	199.00		
		4-21-58	144.15	52-43-304	4401.89		
		5-19-58	143.77	2-16-55	83.72		
		6-16-58	143.54	2-20-55	49.62		
		7-15-58	143.37	2-23-55	45.70		
		8-19-58	142.78	2-24-55	44.83		
		9-16-58	141.27	2-25-55	43.94		
		11- 7-58	140.53	2-26-55	43.23		
		12- 8-58	138.15	2-28-55	42.03		
		1- 7-59	136.01	3- 2-55	40.96		
		2- 6-59	134.99	3- 4-55	40.10		
		3- 6-59	135.15	3- 6-55	39.47		
		4- 6-59	136.15	3- 7-55	39.10		
		5- 6-59	137.31	3- 8-55	38.80		
		6- 5-59	138.78	5-27-55	53.60		
		7- 6-59	139.70	6-20-55	84.89		
		8- 3-59	139.9-	8- 1-55	38.66		
		2- 5-63	140.25	9- 1-55	29.33		
				10- 3-55	23.08		

Table 7.—Water-Level Measurements in Small Areas—Continued

WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)	WELL	ELEVATION OF LAND SURFACE	DATE	DEPTH TO WATER (FT)
<b>G. Wells Near Alpine, Brewster County—Continued</b>				52-43-601	4580.95	4-11-55	22.25
52-43-304	4401.89	11- 1-55	22.68			6-20-55	23.21
		11-30-55	22.50			8- 1-55	21.66
		1- 2-56	22.14			9- 1-55	21.73
		3- 3-56	18.14			10- 3-55	22.22
		6- 5-56	17.90			11- 1-55	22.50
		7- 2-56	19.29			11-30-55	21.86
		8- 1-56	17.29			1- 2-56	21.21
		10- 1-56	17.26			3- 4-56	21.70
		11- 1-56	17.07			6- 5-56	23.28
		11-30-56	17.56			7- 2-56	23.95
		12-31-56	17.32			8- 1-56	24.25
		2- 1-57	17.62			9- 1-56	24.69
		2-28-57	15.48			10- 1-56	24.48
		3-29-57	15.74			11- 1-56	23.81
		5- 1-57	16.54			11-30-56	24.15
		6- 1-57	17.18			12-31-56	24.03
		8- 7-57	17.80			2- 1-57	24.11
		10- 1-57	22.81			2-28-57	22.55
		11- 1-57	18.48			3-29-57	22.30
		3-17-58	32.11			5- 1-57	23.31
		4-21-58	25.79			6- 3-57	22.99
		5-14-58	24.69			7- 6-57	24.17
		6-16-58	20.64			8- 7-57	22.93
		8-19-58	15.36			9- 3-57	23.54
		9-16-58	13.68			10- 1-57	24.06
		11- 7-58	12.99			11- 1-57	24.44
		12- 8-58	13.55			12- 2-57	23.83
		1- 7-59	13.80			1- 9-58	23.46
		2- 6-59	13.99			2-14-58	22.61
		3- 6-59	14.19			3-18-58	22.37
		4- 6-59	64.62			4-21-58	22.39
		5- 6-59	14.42			5-19-58	22.77
		6- 5-59	48.13			6-16-58	22.80
		7- 6-59	15.87			7-15-58	21.20
		8- 3-59	52.4-			8-19-58	20.23
		1-15-61	18.00			9-16-58	19.97
		1-15-62	21.00			11- 7-58	18.89
		2- 5-63	15.40			12- 8-58	18.39
		1-27-64	14.69			1- 7-59	18.11
		3- 2-66	22.32			2- 6-59	17.76
		1- 4-68	14.10			3- 6-59	18.11
52-43-601	4580.95	2-17-55	21.80			4- 6-59	19.72
		2-21-55	21.80			5- 6-59	20.17
		2-28-55	21.84			6- 5-59	20.30
		3- 7-55	21.91			7- 6-59	20.44
		3-14-55	21.99			8- 3-59	20.55
		3-21-55	22.04			2- 5-63	19.94
		3-28-55	22.20			1-26-64	19.60
		4- 4-55	22.21			1-25-65	24.60
						3- 2-66	27.30
						1-11-67	20.13
						1- 5-68	21.53

