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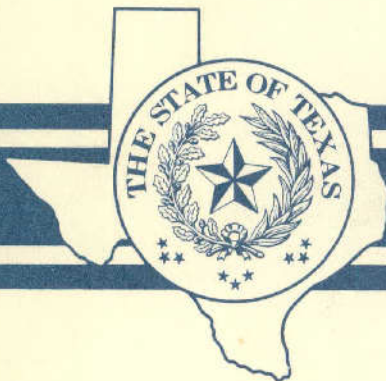
Public Supply Ground-Water Use in Western Texas

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Texas Water Development Board



TEXAS WATER DEVELOPMENT BOARD

REPORT 311

**PUBLIC SUPPLY GROUND-WATER
USE IN WESTERN TEXAS**

By

John B. Ashworth
and
Phillip L. Nordstrom

January 1989

TEXAS WATER DEVELOPMENT BOARD

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ABSTRACT

This report contains an inventory of public-supply ground-water systems in 18 counties in West Texas, and includes information on both currently used and abandoned wells belonging to 24 cities and 25 other water-supply entities. The

data include a description of each well, along with a measured water level when available. A chemical water-quality analysis is included for selected wells. The 1985 annual ground-water pumpage is also given for each entity.

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PUBLIC SUPPLY GROUND-WATER

USE IN WESTERN TEXAS

INTRODUCTION

West Texas is known for its arid condition, resulting in scarce surface-water supplies. People living in this area have searched for and developed ground-water sources, aquifers, to provide their water supply. This report lists the major entities supplying ground-water for public supply use in an area of West Texas encompassing 18 counties. The entities include municipalities, municipal water and utility districts, water supply districts and corporations, water control and improvement districts, and public park systems. This report was prepared to aid these entities in operating their water supplies and planning to meet future needs and to provide information to the public concerning their water supplies. Producers supplying ground-water for only a small number of people, such as for mobile home parks, are not included.

Data contained in this report were obtained during 1986 and 1987, and represent the most current status of each system. Well information was provided by owners and managers of the water systems and was correlated with well data available in several Texas Water Development Board reports. The data include water-level measurements, if possible, made during the inventory period.

Water samples were collected from many of the wells for chemical analysis. Analyses are available for most wells, but only a representative few for each system, usually the most recent, are included in this report. Additional analyses and precise well locations can be obtained from the Board by referencing the wells by their state well number.

SELECTED REFERENCES

The last survey of public supply wells in West Texas was published in 1949 by the Texas Board of Water Engineers, publication M-216, and is titled "*Public Water Supplies in Western Texas*" by W. L. Broadhurst and others. Since this report, the following bulletins published by the Board contain infor-

mation on public supply wells that are identified by numbers other than the current state well-numbering system and are therefore cross-referenced in the remarks column of the records of wells tables for ease of identification.

<u>TBWE BULLETIN</u>	<u>TITLE AND YEAR</u>	<u>AUTHOR</u>
B5210	Ground-Water Resources of Ector County, Texas; 1952	D.B. Knowles
B5604	Ground-Water Resources of the Crane Sandhills, Crane County, Texas; 1956	G.H. Shafer
B5712	Ground-Water Geology of the Alpine Area, Brewster, Jeff Davis, and Presidio Counties, Texas; 1957	R.T. Littleton
B5916	Geology and Ground-Water Resources of Winkler County, Texas; 1959	Sergio Garza
B6106	Geology and Ground-Water Resources of Pecos County, Texas, v.1 and v.2; 1961	C.A. Armstrong
B6110	Ground-Water Reconnaissance of the Marfa Area, Presidio County, Texas; 1961	M.E. Davis
B6214	Geology and Ground-Water Resources of Reeves County, Texas, v.1 and v.2; 1962	William Ogilbee

TABLE 1.-- SELECTED 1985 GROUND-WATER PUMPAGE FOR PUBLIC SUPPLY USE

COUNTY	PRODUCER	GROUND WATER IN GALLONS	REMARKS
Brewster	City of Alpine	475,119,000	Supplies City of Marathon.
	Big Bend National Park	24,839,667	
	Marathon Water and Sewer Service Corp.	20,615,247	
Crane	City of Crane	411,772,400	
Culberson	City of Kent	--	All water from "Oak Spring" in Jeff Davis County. Also sold 36,337,000 gallons to City of Sierra Blanca through the Hespeth County WCID No. 1.
	City of Van Horn	190,256,900	
Ector	Colorado River MWD	165,712,900	All sold to City of Odessa. City of Odessa also purchased 4.7 billion gallons of surface water from CRMWD.
El Paso	City of Anthony	163,479,000	Also purchased 6.4 billion gallons of surface water from El Paso WID No. 1.
	Biggs Army Airfield	131,816,000	
	Fort Bliss	1,392,624,000	
	City of El Paso	26,867,392,503	
	El Paso County Water Authority	202,121,000	
	El Paso County WCID #4	226,301,100	Supplies City of Fabens.
	El Paso WCID	49,126,000	Supplies City of Westway.
	Homestead MUD #1	38,194,000	
	Homestead MUD #2	--	
	Hueco Tanks State Park	1,077,400	
Tornillo WSC	31,462,385	Supplies City of Tornillo.	

TABLE 1.-- SELECTED 1985 GROUND-WATER PUMPAGE FOR PUBLIC SUPPLY USE - (CONTINUED)

COUNTY	PRODUCER	GROUND WATER IN GALLONS	REMARKS
Hudspeth	City of Dell City	11,773,627	Supplies City of Fort Hancock. Water purchased from City of Van Horn.
	Esperanza FWSO #1	2,629,970	
	Fort Hancock WCID	15,855,000	
	Hudspeth County WCID #1	0	
Irion	Barnhart Water System	8,829,121	Supplies City of Barnhart.
	City of Mertzon	35,636,320	
Jeff Davis	Davis Mountain State Park	5,999,800	Supplies City of Fort Davis
	Fort Davis WSC	53,462,000	
	City of Valentine	10,092,400	
Midland	Midland Air Terminal Water System	132,984,000	Supplies City of Midland. Includes pumpage from Davis Field in Martin County. Also purchased 4.2 billion gallons of surface water from CRMWD.
	City of Midland	3,690,455,000	
Pecos	City of Fort Stockton	923,871,000	Wells leased from Pecos County. Wells leased from J.T. Lynch
	City of Imperial	23,303,892	
	City of Iraan	158,438,900	
	Pecos County WCID #1	53,153,889	
	Sheffield WSC	31,312,200	Supplies City of Sheffield.
Presidio	City of Marfa	328,592,000	Supplies City of Presidio.
	Presidio WSC	112,870,000	
Reagan	Reagan County WSD	276,673,841	Supplies City of Big Lake.
	City of Texon	1,761,530	

TABLE 1.--SELECTED 1985 GROUND-WATER PUMPAGE FOR PUBLIC SUPPLY USE - (CONTINUED)

COUNTY	PRODUCER	GROUND WATER IN GALLONS	REMARKS
Reeves	City of Balmorhea	0	Also used 81.2 million gallons of surface water from Lake Balmorhea. Includes pumpage in Jeff Davis County. Also purchased 17.6 million gallons of surface water from the City of Toyah.
	Madera Valley WSC	94,016	
	City of Pecos	1,072,990,000	
Sterling	City of Sterling City	100,110,240	
Tom Green	Concho Rural Water Corp.	19,745,100	Carlsbad FWD #1 Deer Valley System. Water Valley System. Grape Creek Community. North Concho Lake Estates. Christoval/Tom Green County FWS #2 Dove Creek/Tom Green FWS #3
		36,706,500	
		1,982,900	
		36,767,200	
		31,039,600	
		25,662,000	
Upton	City of McCamey Upton County	200,331,000	Pumped from Pecos County. Supplies City of Rankin.
		92,559,100	
Ward	Colorado River MWD	2,323,931,706	2,229.3 mg sold to City of Odessa. 18.9 mg sold to City of Pyote. 55.6 mg sold to West Texas Childrens Home. 20.1 mg sold to Industries in Ward County.
		81,732,400	
		953,928,000	
		420,191	
		73,123,300	
		City of Grandfalls	
City of Monahans	953,928,000		
Monahans Sandhills State Park	420,191		
City of Wickett	73,123,300		
Winkler	City of Kermit City of Wink	951,250,000	
		87,558,900	

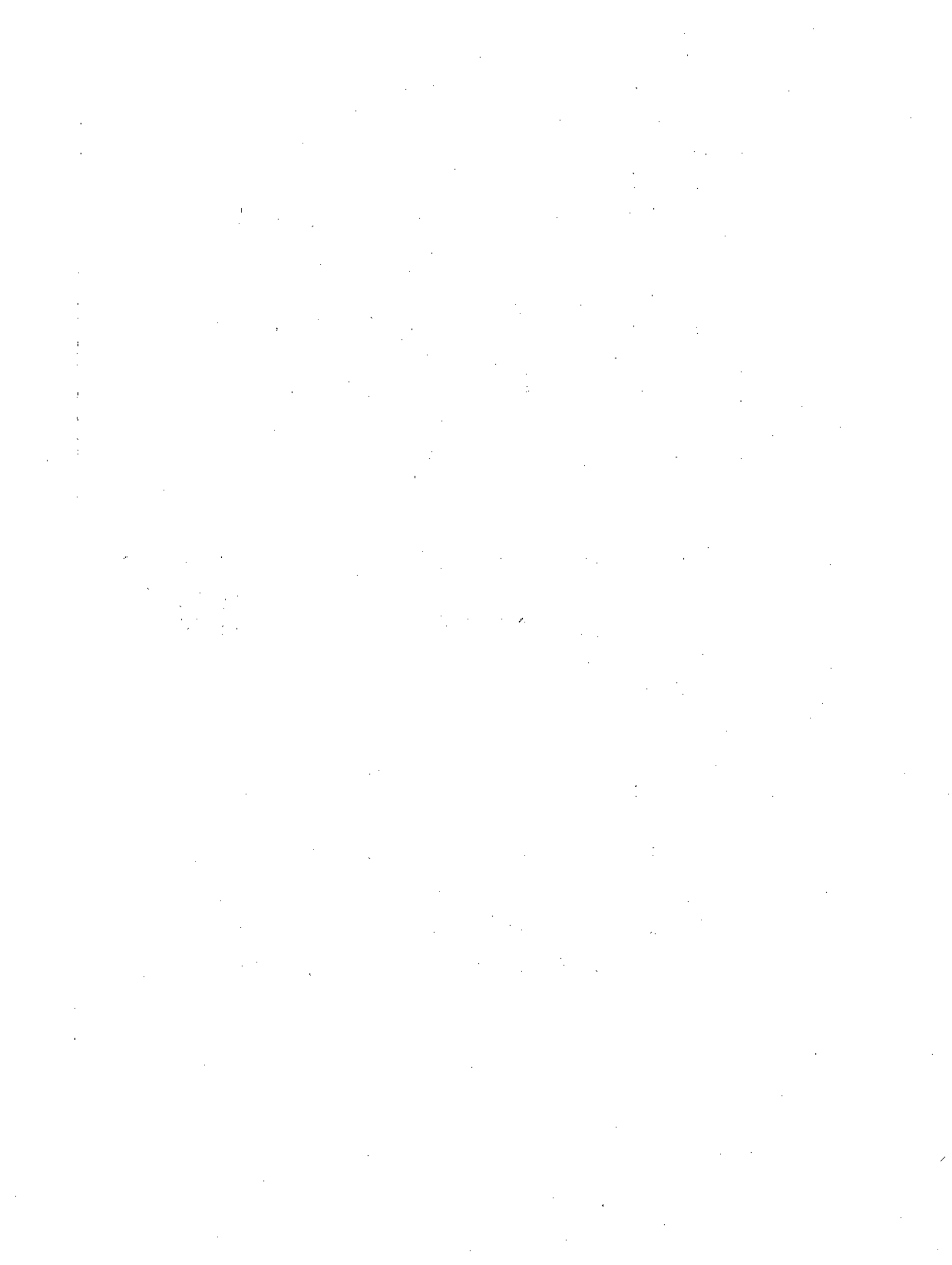


TABLE 2.-- RECORDS OF WELLS AND SPRINGS WITH
SELECTED CHEMICAL ANALYSES

BREWSTER COUNTY
Record of Wells - City of Alpine

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Musquiz No. 6	52-35-104	30-29-21 103-44-58	--	1972	540	Tertiary Volcanics & Alluvium	4,390	--	--	--	--	S,40	Well located in Jeff Davis County. Reported yield 325 gpm.
* Musquiz No. 7	52-34-301	30-29-30 103-45-02	--	1972	408	do	4,415	--	--	--	--	S,50	Well located in Jeff Davis County. Reported yield 325 gpm.
* Musquiz No. 8	52-35-106	30-29-04 103-44-33	--	1972	350	do	4,375	--	--	--	--	S,15	Well located in Jeff Davis County. Reported yield 120 gpm.
Musquiz No. 9	52-35-107	30-29-00 103-44-54	--	1972	400	do	4,395	--	--	--	--	S,15	Well located in Jeff Davis County.
Musquiz No. 10	52-34-302	30-29-39 103-45-07	Spruill Bros. Drilling Co.	11-24-84	450	do	4,410	105	11-12-84	16 10 3/4	50 400	S	Well located in Jeff Davis County. Slotted from 150 to 220 and 300 to 380 feet. Reported yield 500 gpm.
Musquiz No. 11	52-34-303	30-29-52 103-45-09	do	11-30-84	400	do	4,410	120	11-30-84	16 10 3/4	54 400	N	Well located in Jeff Davis County. Slotted from 160 to 220 and 280 to 380 feet. Reported yield 225 gpm with 45 feet drawdown.
Meriwether No. 1	52-35-402	30-27-14 103-42-58	--	--	--	do	4,435	--	--	--	--	S,7 1/2	Reported yield 40 gpm.
* Meriwether No. 2	52-35-401	30-27-00 103-43-18	Frank Galyon	07-17-60	485	do	4,483	120.0	05-25-70	12 8	50 485	S,10	Depth of well measured at 372 feet in 1970. Slotted from 100 to 485 feet. Reported yield 80 gpm.
* Golf Course Well	52-43-312	30-21-54 109-39-37	P.W. Gooden	12-50	350	do	4,450	70.5	01-06-55	10	350	S,5	Well D-22 in TBWE Bull. 5712. Reported yield 135 gpm.
* East Well	52-43-308	30-21-39 103-38-40	--	1927	580	do	4,495	32	07-29-48	--	--	S,25	Well D-42 in TBWE Bull. 5712. Reported yield 75 gpm.
Railroad Well	52-43-307	30-21-35 103-38-58	--	1923	320	do	4,510	76.0	02-03-55	9 7	-- 211	S,15	Well D-41 in TBWE Bull. 5712. Reported present depth 313 feet. Reported yield 50 gpm.

See footnotes at end of table.

Record of Wells - City Alpine (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)			
* Lower Hill Well	52-43-310	30-21-04 103-39-40	Anton Hess	05-24	443	Tertiary Volcanics	4,640	165	08-48	10 8 6	-- -- 443	S,30	Well D-50 in TBWE Bull. 5712. Deepened from 385 to 443 in December 1949. Reported yield 215 gpm.	
Upper Hill Well	52-43-311	30-21-02 103-39-41	--	1929	703	do	4,656	--	--	10	325	S,30	Well D-51 in TBWE Bull. 5712. Reported yield 210 gpm with 10 feet drawdown.	
* Roberts No. 1	52-35-704	30-22-58 103-43-42	Paul Gooden	04-57	451	Tertiary Volcanics & Alluvium	4,618	96.0 97.4	04-17-57 07-06-59	10 3/4	360	S,7 1/2	Well C-72 in TBWE Bull. 5712. Perforated from 111 to 360 feet. Reported yield 55 gpm.	
Roberts No. 2	52-35-705	30-22-49 103-44-02	do	05-30-57	400	do	4,650	78.9 149.6	05-22-57 12-19-73	10 3/4	352	S,15	Well C-73 in TBWE Bull. 5712. Perforated from 22 to 352 feet. Reported yield 162 gpm with 133 feet drawdown.	
Roberts No. 3	52-35-706	30-22-55 103-44-17	do	07-30-54	400	do	4,650	83.7 165.3	08-06-57 12-03-73	13 5/8 10 3/4	144 377	S,15	Well C-74 in TBWE Bull. 5712. Perforated from 94 to 377 feet. Reported yield 45 gpm.	
Roberts No. 4	52-35-702	30-22-34 103-44-34	M.B. Virdehl	07-10-71	798	do	4,720	--	--	14	83	S,20	Reported yield 98 gpm.	
* Roberts No. 5	52-35-703	30-23-04 103-44-52	Big "3" Machine & Supply	05-06-77	905	do	4,700	95	05-17-77	10 3/4	850	S,25	Slotted from 100 to 850 feet. Reported yield 160 gpm.	
Miles Well	52-35-707	30-23-02 103-44-03	Herbert Pruett	1925	212	do	4,650	18.6 77.2	08-02-48 02-10-55	--	--	S,5	Well C-19 in TBWE Bull. 5712. Reported yield 43 gpm.	
Gardner Well	52-35-708	30-23-24 103-43-58	C. Watson	01-59	390	do	4,678	119.4	02-27-59	7	204	S,10	Reported yield 145 gpm with 6 feet drawdown.	
* Cartwright Well	52-35-709	30-23-10 103-43-08	Nolland Schuler	03-58	400	do	4,575	108.8 97.7	03-28-58 02-11-86	16 13 3/8 10 3/4	-- -- 400	S,15	Reported yield 175 gpm with 128 feet drawdown.	

See footnotes at end of table.

Record of Wells - City of Alpine (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Daugherty Well	52-35-710	30-23-06 103-43-08	Continental Geophysical	07-23-65	345	Tertiary Volcanic & Alluvium	4,580	196	05-25-70	8 5/8	190	S,15	Depth of well measured at 331 feet in 1970.
Terry No. 2	52-43-110	30-21-48 103-42-46	Noland Schuler	07-54	540	do	4,628	82.2	01-19-55	8 5/8	540	S,15	Well C-38 in TBWE Bull. 5712. Reported yield 31 gpm.
Moss Well	52-43-309	30-21-02 103-39-03	Charles Watson	05-50	600	do	4,560	--	--	8	260	--	Well D-53 in TBWE Bull. 5712. Reported yield 22 gpm. No longer used by city.
Funk Well	52-43-208	30-22-29 103-40-23	do	10-49	500	do	4,465	--	--	12 1/2 10 8	71 297 368	--	Well C-36 in TBWE Bull. 5712. Reported yield 35 gpm. No longer used by city.
* Parker Well	52-35-801	30-22-32 103-40-03	do	02-49	300	do	4,447	191.5	02-14-55	12 10 8	57 138 300	--	Well D-9 in TBWE Bull. 5712. Reported yield 35 gpm. No longer used by city.
Kokernot No. 2	52-35-901	30-22-43 103-39-23	Paul Gooden	08-54	280	do	4,395	83.7 13.7	02-16-55 02-11-86	12 1/2	276	S	Well D-13 in TBWE Bull. 5712. No longer used by city. Historical observation well.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Alpine
(Jeff Davis County)

State Well Number	52-34-301	52-35-104	52-35-106
Date of Collection	03/10/87	10/29/73	10/29/73
Temperature-°F	70		
Temperature-°C			
Silica	46.0		
Calcium	59.0	47.0	48.0
Magnesium	8.0	6.0	5.0
Sodium	23.0	30.0	15.0
Potassium	4.0		
Manganese		.1	.1
Boron			
Carbonate	.0	.0	.0
Bicarbonate	243.0	217.0	165.0
Sulfate	17.0	14.0	18.0
Chloride	10.0	11.0	13.0
Fluoride	.9	2.1	.9
Nitrate	.7	2.5	7.0
Iron		1.2	.4
pH	7.8	7.7	7.6
* Dissolved Solids	288.0	220.5	188.4
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	199.0	178.0	135.0
Total Hard CaCO ₃	179.0	143.0	143.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

City of Alpine
(Brewster County)

State Well Number	52-35-401	52-35-703	52-35-704	52-35-709
Date of Collection	09/28/66	07/01/76	03/10/87	06/07/85
Temperature-°F			68	76
Temperature-°C				
Silica			46.0	49.0
Calcium	53.0	36.0	46.0	36.0
Magnesium	5.0	3.0	3.0	2.0
Sodium	9.0	21.0	26.0	30.0
Potassium			3.0	2.0
Manganese	.1			
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	189.0	157.0	183.0	148.0
Sulfate	7.0	3.0	21.0	13.0
Chloride	6.0	11.0	7.0	8.0
Fluoride	.7	2.3	1.8	2.0
Nitrate	1.5	5.6	.4	19.3
Iron	.4			
pH	8.0		7.9	8.3
* Dissolved Solids	175.6	159.1	244.1	234.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	155.0	131.0	150.0	121.0
Total Hard CaCO ₃	152.0	102.0	127.0	100.0

State Well Number	52-35-801	52-43-308	52-43-310	52-43-312
Date of Collection	02/05/75	03/10/87	03/10/87	03/10/87
Temperature-°F		70	70	69
Temperature-°C				
Silica		45.0	52.0	54.0
Calcium	64.0	63.0	64.0	97.0
Magnesium	7.	11.0	10.0	14.0
Sodium	33.0	59.0	35.0	54.0
Potassium		2.0	2.0	2.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	264.0	299.0	251.0	349.0
Sulfate	21.0	36.0	30.0	57.0
Chloride	13.0	31.0	22.0	44.0
Fluoride	2.4	1.4	1.0	1.0
Nitrate	7.0	6.9	18.9	21.5
Iron				
pH	7.2	8.1	7.9	7.9
* Dissolved Solids	277.2	402.3	358.3	516.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	216.0	245.0	206.0	286.0
Total Hard CaCO ₃	186.0	205.0	205.0	302.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

BREWSTER COUNTY

Record of Wells - Big Bend National Park

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/} OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	AND HORSE-POWER	
Castolon Station	73-52-901	29-08-00 103-30-54	--	Old	20	Rio Grande Alluvium	2,135	--	--	--	--	S	Hand dug. To be abandoned.	
* Cottonwood No. 1	73-52-902	29-08-18 103-31-24	--	1984	40	do	2,135	--	--	6	--	S, 1 1/2	--	
Cottonwood No. 2	73-52-905	29-08-19 103-31-28	J.D. Killingsworth	06-27-85	95	do	2,128	20	07-01-85	14 6	10 68	S, 3/4	Reported yield 30 gpm with 0 feet draw-down in 1985.	
* Cottonwood No. 3	73-52-906	29-08-22 103-31-21	--	--	138	do	2,145	--	--	8	--	S	--	
* Oak Spring	73-46-701	29-16-55 103-20-10	--	--	--	Tertiary Volcanics	4,080	--	--	--	--	Flows	Supplies water for Chisos Basin area. Reported flow 180 gpm.	
* Barker House Well	72-49-502	29-11-33 102-56-33	--	--	40	Alluvium	1,838	--	--	--	--	S	--	
Rio Grande Village Spring No. 1	72-49-501	29-10-55 102-57-07	--	--	--	Cretaceous	1,860	--	--	--	--	Flows	Supplies water to rare Garbusia minnow pond. 96 F.	
* Rio Grande Village Spring No. 4	72-49-503	29-10-54 102-57-10	--	--	--	do	1,850	--	--	--	--	Flows	96 F.	
* Panther Junction No. 4	73-47-401	29-19-11 103-12-42	--	--	210	Alluvium	3,880	182 151	08-28-79 02-25-85	6	210	S, 1/2	Supplies water to the park headquarters complex. Reported yield 18 gpm.	
* K-Bar No. 2	73-47-504	29-18-25 103-10-55	--	1948	155	Alluvium	3,495	85 116	08-28-79 11-30-84	6	90	S, 1/2	Supplies water to the park headquarters complex. Reported yield 8 gpm.	
* K-Bar No. 5	73-47-505	29-18-08 103-10-39	C.W. Watson	03-69	108	do	3,465	54	08-28-79	5	--	S, 1/2	Supplies water to the park headquarters complex. Reported yield 18 gpm.	
Well I-7	73-47-501	29-19-42 103-11-55	Boyd & Sons	07-67	600	do	3,645	--	--	6	149	N	Abandoned in 1982.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Big Bend National Park
(Brewster County)

State Well Number	72-49-502	72-49-503	73-46-701	73-47-401
Date of Collection	04/28/87	04/28/87	04/28/87	04/28/87
Temperature-°F	88	96	68	75
Temperature-°C				
Silica	23.0	24.0	1.0	37.0
Calcium	126.0	124.0	48.0	41.0
Magnesium	35.0	37.0	2.0	3.0
Sodium	99.0	96.0	29.0	17.0
Potassium	6.0	6.0	1.0	1.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	270.0	267.0	149.0	145.0
Sulfate	354.0	346.0	45.0	21.0
Chloride	66.0	66.0	8.0	6.0
Fluoride	1.9	1.8	2.9	1.4
Nitrate	1.5	1.8	5.4	2.0
Iron				
pH	8.0	7.6	7.9	7.9
* Dissolved Solids	845.2	833.9	215.5	200.7
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	221.0	219.0	122.0	119.0
Total Hard CaCO ₃	459.0	462.0	130.0	115.0

State Well Number	73-47-504	73-47-505	73-52-902	73-52-906
Date of Collection	04/28/87	04/28/87	04/28/87	04/28/87
Temperature-°F	76	77	74	77
Temperature-°C				
Silica	28.0	28.0	34.0	55.0
Calcium	52.0	54.0	166.0	35.0
Magnesium	5.0	5.0	22.0	4.0
Sodium	30.0	33.0	182.0	302.0
Potassium	1.0	1.0	6.0	3.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	190.0	196.0	249.0	510.0
Sulfate	33.0	44.0	480.0	253.0
Chloride	11.0	10.0	146.0	61.0
Fluoride	2.0	2.2	.7	4.1
Nitrate	6.0	5.7	.0	3.7
Iron				
pH	7.8	7.8	7.9	8.2
* Dissolved Solids	261.4	279.2	1,159.2	971.6
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	156.0	161.0	204.0	418.0
Total Hard CaCO ₃	149.0	155.0	505.0	107.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

BREWSTER COUNTY

Record of Wells - Marathon Water and Sewer Service Corp. (City of Marathon)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
* Well No. 1	52-55-104	30-12-47 103-14-17	M.B. Virde11	01-08-69	468	Marathon Limestone	4,120	--	--	10 3/4 8 5/8	-- 467	S,7 1/2	Screened from 270 to 282 and 455 to 467 feet. Reported yield 85 gpm.	
Well No. 2	52-55-105	30-12-47 103-14-13	H.H. Virde11	10-08-74	346	do	4,120	125	10-08-74	5 9/16	346	S,3	Standby well. Slotted from 340 to 346 feet. Reported yield 55 gpm.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Marathon Water and Sewer Service Corp.
(Brewster County)

State Well Number	52-55-104
Date of Collection	03/09/87
Temperature-°F	
Temperature-°C	
Silica	18.0
Calcium	94.0
Magnesium	29.0
Sodium	76.0
Potassium	2.0
Manganese	
Boron	
Carbonate	.0
Bicarbonate	307.0
Sulfate	85.0
Chloride	125.0
Fluoride	1.3
Nitrate	13.3
Iron	
pH	8.0
* Dissolved Solids	594.5
Phenol. Alk. CaCO ₃	.0
Total Alk. CaCO ₃	252.0
Total Hard CaCO ₃	356.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

CRANE COUNTY

Record of Wells - City of Crane (City Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE-POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	45-28-901	31-31-07 102-30-51	Damron Drilling Co.	--	80+	Alluvium	2,645	58.8	07-22-87	10	--	S	Well B-52 in TB&E Bull. 5604.
Well No. 2	45-28-902	31-31-11 102-30-31	do	--	80+	do	2,648	56.5	07-22-87	10	--	S	Well B-53 in TB&E Bull. 5604.
Well No. 3	45-28-903	31-31-16 102-30-14	do	--	80+	do	2,650	56.9	07-22-87	10	--	S	Well B-54 in TB&E Bull. 5604.
* Well No. 4	45-29-706	31-31-20 102-29-55	do	--	85+	do	2,651	--	--	10	--	S	Well C-65 in TB&E Bull. 5604.
* Well No. 5	45-29-707	31-31-04 102-29-50	do	--	80+	do	2,646	--	--	10	--	S	Well C-66 in TB&E Bull. 5604.
Well No. 6	45-29-703	31-30-46 102-28-40	do	--	80+	do	2,639	--	--	10 6	--	S	Well C-71 in TB&E Bull. 5604.
Well No. 7	45-29-704	31-30-30 102-28-35	do	--	80+	do	2,634	56.4	07-22-87	10 6	--	S	Well C-70 in TB&E Bull. 5604.
* Well No. 8	45-29-705	31-30-13 102-28-31	do	--	80+	do	2,626	--	--	10 6	--	S	Well C-69 in TB&E Bull. 5604.
Well No. 1-A	45-28-907	31-30-20 102-30-37	Wayne Bower	1953	85	do	2,626	51.3	07-22-87	10 7	20 85	S	Well B-60 in TB&E Bull. 5604.
Well No. 2-A	45-28-908	31-30-24 102-30-18	do	1953	81	do	2,628	48.1	07-22-87	10 7	20 81	S	Well B-59 in TB&E Bull. 5604.
Well No. 4-A	45-28-906	31-30-44 102-30-46	do	1953	80	do	2,636	51.4	07-22-87	10 7	20 80	S	Well B-57 in TB&E Bull. 5604. Slotted from 45 to 80 feet.
Well No. 5-A	45-28-905	31-30-48 102-30-27	do	1954	80	do	2,637	54.6	07-22-87	10 7	20 80	S	Well B-56 in TB&E Bull. 5604.
Well No. 6-A	45-28-904	31-30-53 102-30-07	do	1954	83	do	2,640	68.5	07-22-87	10 7	20 83	S	Well B-55 in TB&E Bull. 5604. Slotted from 50 to 78 feet.

See footnotes at end of table.

CRANE COUNTY

Record of Wells - City of Crane (Frost Tubb Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/:		CASING		b/:		REMARKS
								WATER LEVEL DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE-POWER		
Well No. 1	45-35-504	31-27-01 102-40-10	Layne Texas	1958	166	Alluvium	2,519	119.6	07-23-87	8 5/8	166	S,5	Reported yield 35 gpm in 1985.	
Well No. 2	45-35-505	31-27-16 102-40-22	do	1958	150	do	2,520	--	--	10 5/8	150	S	Reported yield 40 gpm in 1985.	
* Well No. 3	45-35-202	31-27-37 102-40-27	do	1958	155	do	2,528	108.8	07-23-87	10 5/8	155	S,5	Reported yield 42 gpm.	
Well No. 4	45-35-203	31-27-52 102-40-21	do	1958	147	do	2,527	--	--	8 5/8	--	S,10	Reported yield 75 gpm.	
Well No. 5	45-35-204	31-28-08 102-40-26	do	--	157	do	2,525	--	--	10 5/8	157	S,10	Reported yield 70 gpm.	
Well No. 6	45-35-205	31-27-31 102-40-07	do	1958	174	do	2,524	139.7	07-23-87	10 5/8	--	S	Reported yield 79 gpm in 1985.	
Well No. 7	45-33-301	31-27-47 102-39-49	do	07-27-59	157	do	2,525	--	--	10 5/8	156	S,7 1/2	Screened from 81 to 156 feet. Reported yield 80 gpm in 1985.	
Well No. 8	45-35-302	31-27-36 102-39-43	do	--	166	do	2,517	--	--	10 5/8	--	S,7 1/2	Reported yield 79 gpm in 1985.	
Well No. 9	45-35-603	31-27-20 102-39-56	do	1958	180	do	2,519	--	--	10 5/8	--	S, 7 1/2	Reported yield 70 gpm in 1985.	
Well No. 10	45-35-303	31-27-49 102-39-29	do	--	136	do	2,529	--	--	10 5/8	--	S,3	Originally drilled to 146 feet. Reported yield 36 gpm in 1983.	
Well No. 12	45-35-304	31-27-33 102-39-20	do	1958	128	do	2,518	--	--	10 5/8	--	S,3	Reported yield 27 gpm in 1985.	
* Well No. 14	45-35-206	31-27-44 102-40-14	Dixon Pump & Drilling Co.	09-08-76	165	do	2,524	--	--	16 8 5/8	17 165	S,5	Perforated from 87 to 155 feet. Reported yield 75 gpm with 51 feet drawdown in 1976.	
* Well No. 15	45-35-313	31-27-34 102-39-55	do	09-05-76	168	do	2,525	--	--	16 8 5/8	12 163	S,10	Perforated from 97 to 163 feet. Reported yield 200 gpm with 36 feet drawdown in 1976.	

See footnotes at end of table.

CRANE COUNTY

Record of Wells - City of Crane (Frost Tubb Field)
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
* Well No. 16	45-35-506	31-27-16 102-40-05	Dixon Pump & Drilling Co.	09-11-76	190	Alluvium	2,521	--	--	16 8 5/8	14 190	S	Slotted from 71 to 180 feet. Reported yield 108 gpm with 54 feet drawdown in 1976.
Well No. 17	45-35-605	31-27-25 102-39-37	do	12-09-76	164	do	2,519	--	--	20 8 5/8	18 164	S,5	Perforated from 93 to 159 feet. Reported yield 40 gpm in 1985.
Well No. 18	45-35-606	31-27-15 102-39-47	do	01-21-77	168	do	2,519	--	--	20 8 5/8	18 168	S,5	Perforated from 92 to 168 feet. Reported yield 80 gpm with 65 feet drawdown in 1977.
Well No. 19	45-35-607	31-27-03 102-39-50	do	12-19-76	160	do	2,515	--	--	20 8 5/8	12 160	S,2	Perforated from 88 to 154 feet. Reported yield 40 gpm with 50 feet drawdown in 1976.
Well No. 20	45-35-508	31-26-57 102-40-18	Loftis Co.	03-25-82	146	do	2,511	--	--	7	145	S,5	Screened from 86 to 146 feet. Reported yield 40 gpm with 37 feet drawdown in 1982.
* Well No. 21	45-35-208	31-27-53 102-40-37	Dixon Pump & Drilling Co.	07-19-82	137	do	2,526	--	--	6	137	S,5	Screened from 74 to 134 feet. Reported yield 51 gpm with 15 feet drawdown in 1982.
Well No. 22	45-35-314	31-27-31 102-38-33	do	07-21-82	104	do	2,533	61.1	08-30-87	6	104	N	Temporarily without pump. Screened from 41 to 101 feet. Reported yield 34 gpm with 33 feet drawdown in 1982.
Well No. 23	45-35-209	31-28-39 102-40-41	do	07-27-82	134	do	2,542	61.2	08-11-87	6	134	S,5	Screened from 71 to 131 feet. Reported yield 71 gpm with 22 feet drawdown in 1982.
Well No. 24	45-35-210	31-28-23 102-40-40	do	08-24-82	143	do	2,532	--	--	6	143	S,5	Screened from 80 to 140 feet.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels in feet and tenths.

b/ S, submersible; N, none

WATER QUALITY ANALYSES

City of Crane
(Crane County)

State Well Number	45-29-705	45-29-706	45-29-707	45-35-202
Date of Collection	07/22/87	07/22/87	07/22/87	07/23/87
Temperature-°F	70	70	70	73
Temperature-°C				
Silica	54.0	54.0	54.0	39.0
Calcium	80.0	122.0	87.0	38.0
Magnesium	10.0	17.0	12.0	6.0
Sodium	26.0	32.0	24.0	7.0
Potassium	4.0	5.0	4.0	3.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	183.0	149.0	168.0	96.0
Sulfate	90.0	236.0	119.0	11.0
Chloride	43.0	57.0	41.0	32.0
Fluoride	.6	.6	.6	.3
Nitrate	6.6	8.7	6.4	6.7
Iron				
pH	8.0	7.8	8.0	7.9
* Dissolved Solids	404.2	605.5	430.6	190.2
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	150.0	122.0	138.0	79.0
Total Hard CaCO ₃	243.0	378.0	268.0	121.0

State Well Number	45-35-206	45-35-208	45-35-313	45-35-506
Date of Collection	07/23/87	07/23/87	07/23/87	07/23/87
Temperature-°F	71	70	70	71
Temperature-°C				
Silica	41.0	34.0	38.0	39.0
Calcium	37.0	47.0	81.0	25.0
Magnesium	5.0	5.0	10.0	3.0
Sodium	11.0	8.0	25.0	9.0
Potassium	3.0	3.0	4.0	2.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	99.0	96.0	99.0	94.0
Sulfate	13.0	17.0	20.0	15.0
Chloride	30.0	41.0	142.0	3.0
Fluoride	.4	.2	.2	.4
Nitrate	7.5	9.0	6.0	4.8
Iron				
pH	8.0	7.9	7.7	7.8
* Dissolved Solids	196.6	211.4	374.9	147.4
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	81.0	79.0	81.0	77.0
Total Hard CaCO ₃	114.0	139.0	244.0	78.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

CULBERSON COUNTY

Record of Wells - City of Kent

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Oak Spring	51-08-106	30-59-52 102-05-44	---	---	---	Tertiary Volcanics & Alluvium	4974	--	--	--	--	Flow	Spring owned by Long X Cattle Company. Spring located in Jeff Davis County

* For chemical analysis see following table.

WATER QUALITY ANALYSES

City of Kent
(Jeff Davis County)

State Well Number	51-08-106
Date of Collection	04/27/87
Temperature-°F	65
Temperature-°C	
Silica	41.0
Calcium	21.0
Magnesium	2.0
Sodium	12.0
Potassium	1.0
Manganese	
Boron	
Carbonate	.0
Bicarbonate	85.0
Sulfate	8.0
Chloride	4.0
Fluoride	.4
Nitrate	3.1
Iron	
pH	7.5
* Dissolved Solids	134.3
Phenol. Alk. CaCO_3	.0
Total Alk. CaCO_3	70.0
Total Hard CaCO_3	60.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

CULBERSON COUNTY

Record of Wells - City of Van Horn

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 1, Office Well	47-58-503	31-02-37 104-49-55	--	1931	602	Salt Bolson	4,055	490.0 504.8	05-44 10-04-73	12	602	S	Slotted from 524 to 589 feet. Reported yield 172 gpm with 23 feet drawdown in 1973.
Well No. 2, Thrift Well	47-58-506	31-02-45 104-49-55	Big "3" Machine and Supply Co.	1973	808	do	4,058	503	06-23-73	14	798	T,100	Slotted from 481 to 541, 556 to 617, 632 to 692, and 707 to 798 feet. Reported yield 442 gpm with 27 feet drawdown after pumping 8 days in 1973.
Old Well No. 2	47-58-504	31-02-45 104-49-55	Layne Texas	1948	625	do	4,058	490 505.6	08-48 10-03-73	12 3/4 10 3/4	496 588	N	Abandoned in 1972. Slotted from 497 to 588 feet. Reported yield 130 gpm in 1972.
* Well No. 3, Courthouse Well	47-58-502	31-02-34 104-49-30	R.A. Foster	1970	603	do	4,045	--	--	24 12 3/4	50 603	T,100	Slotted from 503 to 603 feet. Reported yield 450 gpm with 85 feet drawdown after pumping 24 hours in 1970.
Old Well No. 3	47-58-501	31-02-34 104-49-30	L.W. Stratton	05-17-58	600	do	4,055	472.5 473	05-17-53 05-58	18 12 3/4	488 600	N	Abandoned in 1970. Perforated from 488 to 593 feet. Reported yield 500 gpm.
* Well No. 4, Sanchez Well	47-58-505	31-02-35 104-49-25	Dixon Pump & Equipment Co.	1964	775	do	4,033	474 477.8	1964 12-18-72	18 12 3/4 10 3/4	350 627 704	N	Abandoned. Slotted from 525 to 704 feet. Reported yield 500 gpm with 2.5 feet drawdown after pumping 40 minutes in 1973.
* Airport Well, No. 1	47-58-608	31-03-55 104-47-29	R.L. Guffey	12-79	1,065	do	3,955	--	--	12 3/4	1,010	T	Supplies water to Sierra Blanca through Hudspeth County WCID No. 1. Perforated from 610 to 1,010 feet. Reported yield 800 gpm.
Airport Well, No. 2	47-58-601	31-03-30 104-47-28	R.L. Guffey	05-80	1,015	do	3,955	--	--	12 3/4	1,000	T	Supplies water to Sierra Blanca through Hudspeth County WCID No. 1. Perforated from 600 to 1,000 feet. Reported yield 750 gpm.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Van Horn
(Culberson County)

State Well Number	47-58-502	47-58-503	47-58-505	47-58-608
Date of Collection	07/21/87	07/21/87	01/11/65	07/23/80
Temperature-°F	80	80		
Temperature-°C				
Silica	35.0	36.0		32.0
Calcium	18.0	18.0	19.0	15.0
Magnesium	6.0	7.0	7.0	8.0
Sodium	115.0	118.0	122.0	130.0
Potassium	6.0	7.0		7.2
Manganese			.1	
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	254.0	253.0	255.0	268.0
Sulfate	79.0	78.0	81.0	89.0
Chloride	23.0	23.0	21.0	24.0
Fluoride	2.3	2.3	3.1	.4
Nitrate	8.5	10.4	8.0	8.9
Iron				
pH	8.3	8.3	8.0	8.2
* Dissolved Solids	417.7	424.1	386.6	446.6
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	208.0	207.0	209.0	220.0
Total Hard CaCO ₃	71.0	73.0	75.0	71.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

ECTOR COUNTY

Record of Wells - Colorado River Municipal Water District - (City of Odessa Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	45-05-924	31-52-44 102-24-02	Hines Water Well Co.	01-44	145	Antlers Sand	2,935	68.8	08-26-87	10	68	T	Well F-47 in TBWE Bull. 5210. Reported yield 50 gpm in 1962.
Well No. 2	45-05-925	31-52-47 102-23-51	do	02-44	150	do	2,936	--	--	10	69	N	Well F-46 in TBWE Bull. 5210. Temporarily unused.
* Well No. 3	45-05-926	31-52-49 102-23-40	do	03-44	156	do	2,938	--	--	10	69	S	Well F-45 in TBWE Bull. 5210.
* Well No. 4	45-05-904	31-52-52 102-23-29	do	03-44	148	do	2,935	--	--	10	69	S	Well F-42 in TBWE Bull. 5210.
Well No. 9	45-05-905	31-53-05 102-23-44	do	03-44	148	do	2,936	67.0	08-27-87	10	70	N	Well F-51 in TBWE Bull. 5210. Temporarily unused.
Well No. 10	45-05-901	31-53-05 102-23-33	do	03-44	156	do	2,940	--	--	10 7	60 156	N	Well F-52 in TBWE Bull. 5210. Temporarily unused. Slotted from 56 to 156 feet.
* Well No. 11	45-05-906	31-53-08 102-23-22	do	01-45	150	do	2,937	--	--	10 3/4	68	S	Well F-53 in TBWE Bull. 5210.
Well No. 12	45-05-907	31-53-10 102-23-11	do	03-44	155	do	2,942	--	--	7	--	N	Well F-54 in TBWE Bull. 5210. Temporarily unused.
Well No. 15	45-05-922	31-53-14 102-23-42	do	05-45	180	do	2,938	79.4	08-27-87	15 10	40 180	N	Well F-55 in TBWE Bull. 5210. Temporarily unused. Slotted from 90 to 180 feet.
* Well No. 16	45-05-914	31-53-22 102-23-46	do	1945	150	do	2,943	--	--	15 10 3/4	32 150	T,15	Well F-56 in TBWE Bull. 5210.
Well No. 17	45-05-917	31-53-32 102-23-49	do	06-45	165	do	2,947	90.3	08-27-87	10	40	N	Well F-57 in TBWE Bull. 5210.
Well No. 18	45-05-915	31-54-33 102-23-49	do	06-45	175	do	2,940	61.3	08-27-87	10	175	T,10	Well F-64 in TBWE Bull. 5210. Slotted from 83 to 175 feet.
Well No. 19	45-05-916	31-53-39 102-23-26	do	08-45	155	do	2,951	87.5	08-27-87	10	155	N	Well F-58 in TBWE Bull. 5210. Temporarily unused. Slotted from 65 to 155 feet.

See footnotes at end of table.

Record of Wells - Colorado River Municipal Water District -
(City of Odessa Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 20	45-05-923	31-53-55 102-23-42	Hines Water Well Co.	08-45	175	Antlers Sand	2,948	--	--	15 10	30 175	N	Well F-59 in TBWE Bull. 5210. Temporarily unused.
Well No. 21	45-05-913	31-54-12 102-23-41	do	01-46	160	do	2,937	--	--	15 10	30 160	T,15	Well F-62 in TBWE Bull. 5210. Slotted from 100 to 160 feet.
* Well No. 22	45-05-618	31-55-12 102-24-44	Bethel and Matthews	12-45	164	do	2,954	--	--	16 10	24 164	N	Well F-88 in TBWE Bull. 5210. Unused. Slotted from 64 to 164 feet.
Well No. 22A	45-05-631	31-55-12 102-24-47	--	--	--	do	2,954	--	--	--	--	S	--
* Well No. 23	45-05-920	31-54-50 102-24-37	Bethel and Matthews	01-46	156	do	2,952	--	--	16 10	21 156	N	Well F-77 in TBWE Bull. 5210. Destroyed. Slotted from 76 to 156 feet.
Well No. 23A	45-05-939	31-54-51 102-24-36	--	--	--	do	2,952	--	--	--	--	S	--
Well No. 24	45-05-908	31-54-58 102-24-29	Bethel and Matthews	01-46	156	do	2,949	105.8	08-28-87	16 10	15 156	N	Well F-80 in TBWE Bull. 5210. Temporarily unused. Slotted from 86 to 156 feet.
* Well No. 25	45-05-910	31-54-57 102-24-16	do	02-46	164	do	2,948	--	--	16 10	-- 164	S	Well F-81 in TBWE Bull. 5210. Slotted from 64 to 164 feet.
Well No. 26	45-05-604	31-55-10 102-24-22	do	02-46	174	do	2,951	105.4	08-28-87	16 10 3/4	8 174	N	Well F-84 in TBWE Bull. 5210. Temporarily unused. Slotted from 74 to 174 feet.
Well No. 27	45-05-911	31-54-57 102-24-41	do	02-46	158	do	2,953	89.0	08-28-87	16 10 3/4	12 158	N	Well F-79 in TBWE Bull. 5210. Temporarily unused. Slotted from 58 to 158 feet.
* Well No. 28	45-05-903	31-53-53 102-23-52	do	05-46	150	do	2,949	--	--	15 10	19 150	S	Well F-60 in TBWE Bull. 5210. Slotted from 80 to 150 feet.
* Well No. 29	45-05-921	31-54-24 102-23-50	do	05-46	150	do	2,939	97.7	08-27-87	16 10	20 150	S	Well F-63 in TBWE Bull. 5210. Slotted from 70 to 150 feet.
Well No. 29A	45-05-938	31-54-23 102-23-50	--	--	--	do	2,939	97.7	08-27-87	--	--	S	--
Well No. 30	45-05-518	31-55-11 102-25-02	Bethel and Matthews	11-46	160	do	2,955	--	--	-- 10 3/4	18 160	T,15	Well F-89 in TBWE Bull. 5210.

See footnotes at end of table.

Record of Wells - Colorado River Municipal Water District -
(City of Odessa Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/:		CASING		b/:		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
* Well No. 31	45-05-606	31-55-01 102-24-59	Bethel and Matthews	12-46	160	Antlers Sand	2,953	--	--	10 3/4	20 160	T,15	Well F-90 in TBWE Bull. 5210.	
Well No. 32	45-05-509	31-55-08 102-25-18	do	12-46	160	do	2,962	--	--	10 3/4	21 160	N	Well F-92 in TBWE Bull. 5210. Destroyed.	
Well No. 33	45-05-809	31-54-58 102-25-15	do	12-46	147	do	2,953	--	--	15 1/2 10 3/4	20 147	N	Well F-91 in TBWE Bull. 5210. Abandoned. Slotted from 67 to 147 feet.	
Well No. 34	45-05-517	31-55-05 102-25-32	do	01-47	150	do	2,964	--	--	15 1/2 10 3/4	17 150	N	Well F-93 in TBWE Bull. 5210. Abandoned. Slotted from 80 to 150 feet.	
* Well No. 36	45-05-619	31-55-19 102-24-23	do	01-47	180	do	2,956	--	--	15 1/2 10 3/4	17 180	S,7 1/2	Well F-86 in TBWE Bull. 5210. Slotted from 80 to 180 feet.	
Well No. 37	45-05-620	31-55-12 102-24-32	do	01-47	166	do	2,954	103.9	08-28-87	15 1/2 10 3/4	17 166	N	Well F-87 in TBWE Bull. 5210. Abandoned. Slotted from 66 to 166 feet.	
Well No. 41	45-05-912	31-54-30 102-24-12	do	04-48	170	do	2,955	--	--	15 10 3/4	20 170	T,20	Well F-73 in TBWE Bull. 5210. Unused. Slotted from 70 to 170 feet.	
Well No. 42	45-05-909	31-54-42 102-24-16	do	05-48	170	do	2,951	--	--	16 10 3/4	20 170	N	Well F-72 in TBWE Bull. 5210. Abandoned. Slotted from 70 to 170 feet.	
Well No. 43	45-05-918	31-54-43 102-24-01	do	05-48	130	do	2,947	68.2	08-27-87	16 10 3/4	20 130	T,15	Well F-71 in TBWE Bull. 5210. Slotted from 60 to 130 feet.	
* Well No. 44	45-05-919	31-54-58 102-24-06	do	06-48	175	do	2,948	--	--	16 10 3/4	12 175	T,15	Well F-82 in TBWE Bull. 5210. Slotted from 75 to 175 feet.	
* Well No. 45	45-05-607	31-55-10 102-24-13	do	06-48	180	do	2,952	--	--	16 10 3/4	20 180	S	Well F-83 in TBWE Bull. 5210. Slotted from 80 to 180 feet.	
* Well No. 46	45-05-603	31-55-19 102-23-57	do	06-48	180	do	2,956	--	--	16 10 3/4	10 180	T,25	Well F-85 in TBWE Bull. 5210. Slotted from 80 to 180 feet.	
Well No. 55	45-05-609	31-55-30 102-24-42	do	1949	175	do	2,962	--	--	16	20	N	Well F-154 in TBWE Bull. 5210.	
Well No. 57	45-05-617	31-55-53 102-24-38	--	--	--	do	2,987	--	--	--	--	--	--	

See footnotes at end of table.

Record of Wells - Colorado River Municipal Water District -
(City of Odessa Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/:		CASING		b/:		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
Well No. 58	45-05-508	31-56-42 102-25-35	Bethel and Matthews	1949	191	Artlers Sand	2,996	--	--	16	20	T	Well F-134 in TBWE Bull. 5210.	
Well No. 59	45-05-610	31-55-37 102-24-10	do	1949	189	do	2,967	115.1	08-28-87	16	20	T,15	Well F-155 in TBWE Bull. 5210. Temporarily unused.	
Well No. 60	45-05-611	31-55-47 102-24-30	do	1949	185	do	2,966	--	--	16	20	T,20	Well F-150 in TBWE Bull. 5210. Temporarily unused.	
* Well No. 61	45-05-615	31-55-42 102-24-59	do	1949	182	do	2,967	--	--	16	20	T,25	Well F-151 in TBWE Bull. 5210.	
Well No. 62	45-05-612	31-56-13 102-24-37	do	1949	190	do	2,971	--	--	16 10 1/4	20 190	T,25	Well F-143 in TBWE Bull. 5210.	
Well No. 63	45-05-613	31-56-04 102-24-16	do	1949	195	do	2,976	--	--	16 10 1/4	20 195	T,20	Well F-149 in TBWE Bull. 5210.	
Well No. 64	45-05-614	31-56-37 102-24-45	do	1949	195	do	2,987	112.4	08-28-87	10 1/4	195	N	Well F-136 in TBWE Bull. 5210. Temporarily unused.	
Well No. 66	45-05-616	31-56-21 102-24-59	do	1949	196	do	2,989	--	--	16 10 1/4	20 --	N	Well F-141 in TBWE Bull. 5210. Temporarily unused.	
Well No. 67	45-05-510	31-55-29 102-25-30	do	1949	165	do	2,972	--	--	16 10 1/4	29 --	N	Well F-152 in TBWE Bull. 5210. Abandoned.	
Well No. 68	45-05-505	31-55-43 102-25-55	do	1949	165	do	2,984	--	--	16	20	N	Well F-146 in TBWE Bull. 5210. Abandoned.	
Well No. 69	45-05-507	31-55-24 102-25-12	do	1949	164	do	2,964	--	--	16 10 1/4	20 --	N	Well F-153 in TBWE Bull. 5210. Abandoned.	
Well No. 70	45-05-511	31-55-58 102-25-39	do	1949	170	do	2,987	115.6	08-28-87	16 10 1/4	20 --	N	Well F-145 in TBWE Bull. 5210. Temporarily unused.	
* Well No. 71	45-05-515	31-56-47 102-25-07	do	1949	205	do	2,993	--	--	16 10 1/4	20 --	T,15	Well F-135 in TBWE Bull. 5210.	

See footnotes at end of table.

Record of Wells - Colorado River Municipal Water District -
(City of Odessa Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 72	45-05-506	31-56-05 102-25-09	Bethel and Matthews	1949	182	do	2,980	--	--	16 10 1/4	20 --	T	Well F-144 in TBWE Bull. 5210.
Well No. 73	45-05-512	31-56-09 102-25-59	do	1949	168	do	2,997	--	--	16 10 1/4	20 --	N	Well F-139 in TBWE Bull. 5210. Temporarily unused.
Well No. 74	45-05-501	31-56-10 102-25-17	do	1949	180	do	2,985	--	--	16 10 1/4	20 --	N	Well F-140 in TBWE Bull. 5210. Temporarily unused.
Well No. 75	45-05-514	31-56-30 102-25-11	do	1949	200	do	2,995	--	--	16 10 1/4	20 200	S	Well F-137 in TBWE Bull. 5210.
Well No. 77	45-05-516	31-56-34 102-26-06	do	1949	185	do	3,001	109.6	08-28-87	16 10 1/4	20 --	T, 7 1/2	Well F-133 in TBWE Bull. 5210. Temporarily unused.
Well No. 78	45-05-504	31-55-52 102-25-18	do	1949	170	do	2,976	--	--	16 10 1/4	20 170	N	Well F-147 in TBWE Bull. 5210. Temporarily unused.
Well No. 79	45-05-605	31-57-04 102-24-32	--	--	--	do	2,990	--	--	--	--	N	Temporarily unused.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Colorado River Municipal Water District - (City of Odessa Field)
(Ector County)

State Well Number	45-05-515	45-05-603	45-05-606	45-05-607
Date of Collection	08/29/87	08/28/87	08/28/87	08/28/87
Temperature-°F	71	71	69	70
Temperature-°C				
Silica	32.0	36.0	33.0	35.0
Calcium	65.0	80.0	79.0	110.0
Magnesium	9.0	12.0	11.0	16.0
Sodium	42.0	49.0	56.0	110.0
Potassium	3.0	4.0	4.0	4.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	198.0	184.0	209.0	193.0
Sulfate	64.0	80.0	73.0	188.0
Chloride	36.0	76.0	72.0	144.0
Fluoride	1.3	1.4	1.0	1.1
Nitrate	17.3	20.5	26.3	34.3
Iron				
pH	8.3	8.0	8.0	7.9
* Dissolved Solids	366.9	449.4	458.1	737.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	162.0	151.0	171.0	158.0
Total Hard CaCO ₃	200.0	252.0	244.0	342.0

State Well Number	45-05-615	45-05-618	45-05-619	45-05-903
Date of Collection	08/28/87	08/28/87	08/28/87	08/28/87
Temperature-°F	70	69	70	70
Temperature-°C				
Silica	30.0	30.0	32.0	30.0
Calcium	62.0	77.0	69.0	183.0
Magnesium	9.0	11.0	10.0	27.0
Sodium	50.0	57.0	52.0	199.0
Potassium	3.0	4.0	3.0	6.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	185.0	182.0	192.0	159.0
Sulfate	70.0	80.0	64.0	139.0
Chloride	42.0	76.0	62.0	509.0
Fluoride	1.1	1.0	1.1	1.0
Nitrate	21.8	34.0	23.3	21.5
Iron				
pH	8.2	8.0	8.2	7.9
* Dissolved Solids	379.9	459.5	410.8	1,193.7
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	152.0	149.0	157.0	130.0
Total Hard CaCO ₃	193.0	238.0	213.0	570.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

Colorado River Municipal Water District - (City of Odessa Field)
(Ector County)

State Well Number	45-05-904	45-05-906	45-05-910	45-05-914
Date of Collection	08/27/87	08/27/87	08/28/87	08/27/87
Temperature-°F	71	70	69	72
Temperature-°C				
Silica	43.0	38.0	32.0	29.0
Calcium	159.0	130.0	123.0	238.0
Magnesium	37.0	23.0	21.0	49.0
Sodium	208.0	111.0	106.0	607.0
Potassium	6.0	5.0	5.0	9.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	206.0	196.0	174.0	155.0
Sulfate	372.0	239.0	127.0	258.0
Chloride	298.0	165.0	230.0	1,207.0
Fluoride	1.4	1.1	1.6	.9
Nitrate	29.3	28.7	31.2	31.9
Iron				
pH	8.0	8.0	7.9	7.8
* Dissolved Solids	1,255.0	837.1	762.3	2,506.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	169.0	161.0	143.0	127.0
Total Hard CaCO ₃	552.0	419.0	396.0	799.0

State Well Number	45-05-919	45-05-920	45-05-921	45-05-926
Date of Collection	08/28/87	08/28/87	08/27/87	08/27/87
Temperature-°F	71	69	70	69
Temperature-°C				
Silica	32.0	37.0	34.0	47.0
Calcium	87.0	75.0	87.0	164.0
Magnesium	11.0	9.0	16.0	47.0
Sodium	67.0	45.0	37.0	320.0
Potassium	4.0	3.0	5.0	5.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	188.0	217.0	212.0	171.0
Sulfate	114.0	68.0	99.0	324.0
Chloride	87.0	49.0	58.0	580.0
Fluoride	1.1	1.4	1.6	1.8
Nitrate	28.4	19.9	18.7	6.1
Iron				
pH	7.9	8.0	7.9	8.0
* Dissolved Solids	523.9	413.9	460.6	1,579.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	154.0	178.0	174.0	140.0
Total Hard CaCO ₃	266.0	228.0	285.0	606.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - City of Anthony

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								WATER LEVEL DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 1	49-04-101	31-59-54 106-35-22	Layne Texas Co.	09-54	277	Mesilla Bolson	3,860	84.6 87.4	01-13-76 01-04-80	10	277	N	Screened at 4 intervals between 145 and 265 feet. Reported yield 350 gpm with 37.5 feet drawdown.
* Well No. 2	49-04-102	31-59-54 106-35-23	do	11-54	260	do	3,850	78.5	12-05-86	10	260	N	Screened from 147 to 170, 221 to 226, and 239 to 254 feet.
* Well No. 3	49-04-149	31-59-48 106-36-22	Wheeler Cass	08-05-73	705	do	3,790	33.3 32.6	01-16-78 12-05-86	30 24	340 600	T	Slotted from 340 to 600 feet.
Well No. 4	49-04-174	31-59-32 106-36-36	Cole Drilling Co.	03-84	625	do	3,787	23.9	01-23-85	24 12	355 625	T	Screened from 355 to 615 feet. Reported yield 750 gpm with 58 feet drawdown in 1984.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured levels given in feet and tenths.

b/ T, turbine; N, none.

WATER QUALITY ANALYSES

City of Anthony
(El Paso County)

State Well Number	49-04-101	49-04-102	49-04-149	49-04-149
Date of Collection	08/28/68	09/16/66	04/08/75	09/01/84
Temperature-°F				
Temperature-°C				33
Silica				36.0
Calcium	68.0	62.0	18.0	30.0
Magnesium	22.0	29.0	1.0	1.0
Sodium	221.0	203.0	114.0	140.0
Potassium		32.0		4.0
Manganese	.1	.1		
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	174.0	157.0	134.0	126.0
Sulfate	163.0	159.0	114.0	140.0
Chloride	320.0	332.0	52.0	100.0
Fluoride	.9	1.0	1.1	.6
Nitrate	2.0	3.0	.4	.4
Iron	.5	.1	.1	
pH	7.9	7.8	8.2	8.0
* Dissolved Solids	883.0	898.3	434.0	514.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	143.0	129.0	110.0	103.0
Total Hard CaCO ₃	262.0	272.0	49.0	79.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - Department of the Army

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	AND HORSE-POWER	
Fort Bliss-1	49-13-509	31-48-56 106-26-01	T.F. Hawkins	07-13	657	Hueco Bolson	3,884	200.8	07-27-13	12 10	200 657	N	Perforated from 195 to 655 feet. Plugged.	
Fort Bliss-2	49-13-508	31-48-56 106-26-01	do	1913	652	do	3,884	198.3 238.6	1913 01-05-54	10	652	N	Slotted from 200 to 652 feet. Plugged.	
Fort Bliss-3	49-13-510	31-48-56 106-26-01	do	1917	600	do	3,884	227	1917	12	600	N	Plugged.	
Fort Bliss-4	49-13-507	31-48-56 106-26-01	Layne Texas Co.	1917	600	do	3,884	226	1917	12	600	N	Reported yield 500 gpm with 76 feet drawdown. Plugged.	
* Fort Bliss-5	49-13-504	31-48-51 106-25-40	do	05-31	785	do	3,877	204 217.1	03-32 05-22-39	24 12	351 776	T,125	Screened from 290 to 322, 436 to 468, 502 to 523, 533 to 565, 571 to 598, 621 to 663, and 705 to 768 feet.	
Fort Bliss-6	49-13-505	31-48-54 106-25-20	do	06-37	800	do	3,876	203.9 277.0	12-23-37 12-19-86	24 12	347 784	N	Screened at 9 intervals between 314 and 781 feet.	
* Fort Bliss-6A	49-13-520	31-48-53 106-25-23	do	05-69	806	do	3,876	--	--	24 16	298 806	T,125	Screened from 313 to 806 feet.	
* Fort Bliss-7	49-13-606	31-48-54 106-24-57	do	05-41	800	do	3,883	254.0	06-10-65	20 12	345 778	T,150	Screened from 304 to 773 feet. Reported yield 1,250 gpm with 49 feet drawdown in 1941.	
Fort Bliss-9	49-13-503	31-48-53 106-25-58	do	07-42	916	do	3,900	230.8 241.5	08-42 07-22-60	24 18 12	235 321 916	T,150	Reported yield 870 gpm with 65 feet drawdown in 1942.	
* Fort Bliss-9A	49-13-524	31-48-15 106-26-06	Western Well and Pump Co.	12-83	1,056	do	3,880	283.2	12-19-86	16	1,045	T	Screened at 14 intervals between 400 and 1,035 feet. Reported yield 1,200 gpm with 97 feet drawdown in 1983.	
Fort Bliss-10	49-13-304	31-51-32 106-24-20	Bassett Drilling Co.	06-53	812	do	3,897	220.0	03-22-54	24 16	219 810	N	Screened from 306 to 506, 552 to 572, 617 to 637, and 696 to 756 feet. Reported yield 1,200 gpm with 47 feet drawdown in 1953.	

See footnotes at end of table.

Record of Wells - Department of the Army - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
* Fort Bliss-10A	49-13-307	31-51-32 106-24-19	J. Alvis	08-67	812	Huaco Bolson	3,897	254.5 284.4	09-23-67 12-19-86	24 16	320 800	T	Slotted from 330 to 800 feet.
Fort Bliss-11	49-13-302	31-52-11 106-24-19	Bassett Drilling Co.	06-53	812	do	3,899	222.8 233.8	03-22-54 05-20-64	24 16	249 810	N	
Fort Bliss-11A	49-13-311	31-52-11 106-24-19	Layne Texas Co.	09-73	815	do	3,890	267.0 281.8	01-18-79 12-29-86	24 16	320 812	T	Reported yield 1,007 gpm with 39.7 feet drawdown in 1973.
* Fort Bliss-12A	49-13-303	31-52-11 106-23-22	Harold Doty	02-56	799	do	3,910	--	--	26 16	200 780	T	
* Fort Bliss-13A	49-13-305	31-51-33 106-23-20	Bassett Drilling Co.	1953	816	do	3,905	229.8 290.1	03-22-54 01-02-86	24 16	230 814	T	
* Fort Bliss-14	49-05-904	31-53-03 106-23-22	Texas Water Well	09-58	834	do	3,920	293.6 303.2	11-26-78 12-30-86	--	--	T	Screened from 260 to 815 feet. Reported yield 1,100 gpm with 68 feet drawdown in 1958.
* Fort Bliss-15	49-06-701	31-53-05 106-22-20	Layne Texas Co.	11-59	819	do	3,944	305.8 321.2	01-18-79 12-29-86	24 16	--	T	Reported yield 1,571 gpm with 71 feet drawdown in 1959.
* Fort Bliss-16	49-14-101	31-52-14 106-22-21	do	08-59	819	do	3,940	321.3 322.8	01-18-80 12-19-86	24 16	238 819	T,150	Reported yield 1,645 gpm with 74 feet drawdown in 1959.
BIGGS-1	49-13-602	31-49-49 106-23-05	do	04-51	780	do	3,921	256.2	03-23-54	24 16 10	250 406 769	N	Screened at 10 intervals between 406 and 766 feet. Reported yield 1,000 gpm with 33 feet drawdown in 1951.
* BIGGS-1A	49-13-615	31-49-49 106-23-05	do	04-67	800	do	3,921	316.2 325.4	12-28-81 12-22-86	24 16	320 800	T	Screened from 380 to 798 feet.

See footnotes at end of table.

Record of Wells - Department of the Army - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
BIGGS-2	49-13-616	31-49-50 106-23-35	do	06-51	775	Hueco Bolson	3,910	260	07-06-51	24 16 10	250 400 775	N	Screened at 8 intervals between 299 and 762 feet. Reported yield 1,266 gpm with 49 feet drawdown in 1951.
BIGGS-2A	49-13-603	31-49-48 106-23-35	do	08-61	775	do	3,914	270	08-23-61	24 16 10	300 315 770	N	Screened at 5 intervals between 315 and 760 feet. Reported yield 1,200 gpm with 58 feet drawdown in 1961.
* BIGGS-2B	49-13-628	31-49-40 106-23-37	Western Well & Pump Co.	09-83	1,035	do	3,913	315.8	01-02-86	26 16	300 1,035	T	Screened at 9 intervals between 340 and 1,030 feet. Reported yield 600 gpm with 70 feet drawdown in 1983.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine; N, none.

WATER QUALITY ANALYSES

Department of the Army
(El Paso County)

State Well Number	49-05-904	49-06-701	49-13-303	49-13-305
Date of Collection	08/18/87	08/18/87	08/18/87	08/18/87
Temperature-°F				
Temperature-°C	21	19	22	
Silica	38.0	24.0	33.0	22.0
Calcium	23.0	28.0	19.0	21.0
Magnesium	7.0	7.0	6.0	6.0
Sodium	72.0	89.0	74.0	79.0
Potassium	9.5	6.6	9.5	10.2
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	149.0	124.0	162.0	162.0
Sulfate	44.0	28.0	46.0	53.0
Chloride	50.0	112.0	40.0	47.0
Fluoride	.8	.8	1.0	.9
Nitrate	8.4	9.1	8.8	8.0
Iron				
pH	8.1		8.1	8.2
* Dissolved Solids	325.9	365.5	316.9	326.8
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	122.0	102.0	133.0	133.0
Total Hard CaCO ₃	86.0	98.0	72.0	76.0

State Well Number	49-13-307	49-13-504	49-13-520	49-13-524
Date of Collection	08/18/87	08/24/83	08/24/83	12/06/83
Temperature-°F				
Temperature-°C	22	25		
Silica	18.0	36.0	31.0	29.0
Calcium	28.0	62.0	50.0	38.0
Magnesium	7.0	22.0	15.0	6.0
Sodium	114.0	52.0	51.0	72.0
Potassium	9.6	5.5	4.8	4.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	199.0	195.0	183.0	221.0
Sulfate	83.0	65.0	49.0	52.0
Chloride	70.0	90.0	62.0	35.0
Fluoride	1.3	.8	1.3	.5
Nitrate	9.8	18.6	14.6	5.3
Iron				
pH	7.8	7.8	7.9	7.9
* Dissolved Solids	438.5	447.8	368.7	350.5
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	163.0	160.0	150.0	181.0
Total Hard CaCO ₃	100.0	85.0	190.0	119.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

Department of the Army
(El Paso County)

State Well Number	49-13-606	49-13-615	49-13-628	49-14-101
Date of Collection	08/18/87	06/10/83	09/01/84	08/18/87
Temperature-°F				
Temperature-°C	19		25	
Silica	17.0	31.0	31.0	25.0
Calcium	46.0	26.0	19.0	27.0
Magnesium	13.0	9.0	6.0	6.0
Sodium	76.0	83.0	96.0	91.0
Potassium	5.4	10.0	9.2	8.5
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	188.0	171.0	178.0	142.0
Sulfate	59.0	91.0	65.0	36.0
Chloride	88.0	41.0	48.0	104.0
Fluoride	1.1	.8	1.1	.8
Nitrate	9.9	2.3	8.0	8.4
Iron				
pH	8.0	8.1	7.8	8.2
* Dissolved Solids	407.8	378.2	370.8	376.5
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	154.0	140.0	146.0	116.0
Total Hard CaCO ₃	168.0	100.0	72.0	92.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - City of El Paso

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 3A	49-13-810	31-46-53 106-25-31	City of El Paso	01-64	751	Hueco Bolson	3,782	135.3 217.3	03-30-64 12-09-86	24 18	558 751	T,100	Slotted from 562 to 751 feet. Drawdown 75.9 feet pumping 1,200 gpm.
Well No. 4	49-13-804	31-46-52 106-26-12	P.D. Wynne	01-24	882	do	3,741	82 173.7	01-18-24 12-09-86	24 13	200 882	T,100	Slotted from 465 to 882 feet.
Well No. 9A	49-13-833	31-46-19 106-27-12	City of El Paso	10-20-77	960	do	3,699	107.4 156.2	12-20-77 12-08-86	24 16	396 960	T	Perforated from 462 to 960 feet.
Well No. 10A	49-13-711	31-45-05 106-28-51	do	01-68	641	do	3,714	35.4 158.1	04-30-68 06-18-86	24 18	100 641	T,100	Slotted from 300 to 641 feet. Pumping level 180.6 feet at 1,160 gpm on 01-18-74.
* Well No. 14A	49-13-727	31-46-13 106-27-37	do	12-15-81	960	do	3,700	135.1 159.3	12-28-81 12-15-86	20 12	350 960	T	Slotted from 481 to 561, 593 to 673, and 806 to 960 feet. Drawdown 30.7 feet pumping 870 gpm on 01-20-82.
* Well No. 15A	49-13-626	31-49-33 106-24-17	do	01-10-79	1,120	do	3,900	293.2 307.8	01-10-79 01-06-87	24 16	325 1,120	T	Slotted from 517 to 758, 798 to 879, and 919 to 1,120 feet.
Well No. 16A	49-13-625	31-49-34 106-23-44	do	01-77	1,026	do	3,914	309.3 322.3	01-20-81 01-06-87	24 16	320 1,026	T	Slotted from 370 to 810, 862 to 912, and 978 to 1,026 feet.
Well No. 17	49-13-702	31-45-42 106-28-28	Layne Texas Co.	1938	720	do	3,708	36.7 154.7	02-02-39 06-18-86	24 12	295 713	T,50	Slotted from 294 to 717 feet. Plugged back from 851 feet.
Well No. 18A	49-13-830	31-46-08 106-26-10	City of El Paso	08-75	788	do	3,700	88.6 142.3	09-22-75 06-30-86	20 12	520 788	T,150	Screened from 530 to 788 feet. Plugged back from 970 feet.
Well No. 19A	49-13-629	31-49-06 106-24-19	do	01-85	865	do	3,906	317.7	12-15-86	24 16	350 865	S	Screened from 509 to 709, 772 to 812, and 845 to 865 feet.
* Well No. 20A	49-13-218	31-50-25 106-25-39	do	10-86	879	do	3,873	--	--	26 16	270 879	T	Screened in 4 intervals between 319 and 879 feet.
Well No. 21	49-13-203	31-51-20 106-25-19	Layne Texas Co.	07-04-41	860	do	3,880	50.1 236.3	06-25-41 01-11-67	24 16 13	236 396 860	T,150	Screened from 236 to 854 feet. Drawdown 51 feet pumping 1,585 gpm when drilled.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 22	49-13-610	31-47-53 106-23-42	Layne Texas Co.	02-51	754	Huaco Bolson	3,928	267.4 315.7	03-06-54 12-23-86	24 18 12	300 378 754	T,200	Slotted from 289 to 378 and 381 to 752 feet. Reported yield 1,200 gpm.
Well No. 23	49-13-202	31-52-13 106-25-24	do	09-52	917	do	3,885	211.0 270.2	02-09-54 12-19-77	24 16	315 917	T,150	Slotted from 300 to 812 feet. Drawdown 71 feet pumping 1,396 gpm on 02-10-54.
* Well No. 24	49-05-804	31-53-05 106-25-20	do	11-52	790	do	3,908	223.6 294.0	01-15-53 01-06-87	24 18 12	240 411 790	T,200	Slotted from 301 to 708 feet.
Well No. 25	49-05-803	31-53-53 106-25-22	do	12-52	832	do	3,958	258.5 337.5	01-15-83 12-20-85	24 18 12	293 428 832	T,200	Slotted from 318 to 830 feet. Drawdown 55 feet pumping 1,337 gpm on 02-12-54.
Well No. 26	49-05-802	31-54-44 106-25-23	do	03-53	830	do	3,972	288 355.7	03-25-53 01-05-87	24 18 12	350 467 830	T,200	Slotted from 360 to 820 feet.
* Well No. 27	49-05-902	31-54-00 106-26-34	City of El Paso	10-55	836	do	3,936	248.8 311.5	11-14-55 12-17-82	24 18 12	298 459 836	T,200	Slotted from 360 to 833 feet. Drawdown 71.5 feet pumping 1,350 gpm on 12-11-58.
Well No. 28	49-05-901	31-54-46 106-24-26	do	12-55	727	do	3,942	256.7 306.6	07-30-56 01-18-79	24 18 12	291 447 727	T,200	Slotted from 348 to 727 feet. Drawdown 75 feet pumping 1,300 gpm on 12-16-58.
* Well No. 29A	49-05-615	31-55-39 106-24-23	do	09-17-81	920	do	3,956	322.7	03-04-82	24 16	335 920	T	Screened from 557 to 697, 717 to 797, and 836 to 920 feet.
Well No. 30A	49-13-627	31-47-39 106-24-03	do	10-80	1,021	do	3,919	324.5	12-09-83	24 16	503 1,021	T	Slotted from 539 to 740 and 860 to 1,021 feet.
* Well No. 31	49-05-501	31-55-40 106-25-29	Layne Texas Co.	05-25-57	840	do	4,003	312.9 334.9	12-29-65 12-30-85	24 18 12	290 498 730	T,200	Screened from 319 to 730 feet. Drawdown 77 feet pumping 1,001 gpm on 12-22-56.
Well No. 32	49-05-603	31-56-31 106-24-28	City of El Paso	10-57	657	do	3,987	289.7 349.5	11-15-57 12-18-85	24 18 12	326 506 657	T,200	Slotted from 335 to 657 feet.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
Well No. 33	49-05-801	31-54-50 106-26-24	City of El Paso	1957	1,126	Hueco Bolson	4,090	402.9 476.7	01-06-59 12-20-85	24 18 12	356 799 1,126	T,250	Slotted from 418 to 1,126 feet. Drawdown 44 feet pumping 1,610 gpm on 11-18-57.
Well No. 34	49-05-604	31-56-37 106-23-27	do	01-58	802	do	3,973	276.2 322.7	02-13-58 01-07-80	24 18 12	281 500 802	T,300	Slotted from 330 to 802 feet. Drawdown 23 feet pumping 1,304 gpm on 02-13-58.
Well No. 35	49-05-602	31-57-25 106-23-25	do	03-58	699	do	4,009	308.5 355.2	05-02-58 01-07-87	24 18 12	335 502 699	T,200	Slotted from 354 to 699 feet. Drawdown 61 feet pumping 1,500 gpm on 05-06-58.
Well No. 36	49-05-601	31-57-25 106-24-24	do	05-58	690	do	3,999	299.0 348.1	07-07-58 01-07-87	24 18 12	335 500 690	T,200	Slotted from 350 to 690 feet. Drawdown 51 feet pumping 1,303 gpm on 07-22-58.
Well No. 37	49-13-608	31-48-12 106-24-12	do	02-59	896	do	3,912	254.9 313.4	04-02-59 12-23-86	24 18 12	272 503 896	T,200	Slotted from 282 to 896 feet. Drawdown 62 feet pumping 1,835 gpm on 04-02-59.
* Well No. 38	49-14-701	31-47-01 106-21-39	do	05-59	722	do	3,952	295.8 360.9	05-14-59 12-12-86	24 18 12	334 342 722	T,200	Slotted from 342 to 722 feet. Drawdown 66 feet pumping 1,480 gpm on 05-15-59.
* Well No. 39	49-13-511	31-49-37 106-25-17	do	08-59	753	do	3,872	233.6 262.6	10-01-59 01-06-87	24 18 12	245 512 753	T,200	Slotted from 255 to 753 feet. Drawdown 128.5 feet pumping 1,815 gpm on 10-06-59.
Well No. 40	49-05-607	31-55-39 106-23-26	do	10-59	826	do	3,929	244.2 300.6	11-17-59 01-05-87	24 18 12	295 505 826	T,300	Slotted from 308 to 826 feet. Drawdown 47 feet pumping 1,500 gpm on 11-17-59.
* Well No. 41	49-05-204	31-58-17 106-25-27	do	12-59	515	do	4,044	331.6 372.9	01-05-60 01-12-87	24 18	345 515	T,200	Slotted from 359 to 515 feet.
* Well No. 42	49-05-301	31-58-16 106-24-30	do	04-58	671	do	4,018	316.4 358.0	06-13-60 12-18-85	24 18 12	314 505 671	T,250	Slotted from 320 to 671 feet. Drawdown 37 feet pumping 1,600 gpm on 06-16-60.
Well No. 43	49-05-503	31-56-31 106-25-25	do	11-63	570	do	4,029	349.2 395.0	12-06-63 01-12-87	24 18	329 570	T,150	Slotted from 360 to 570 feet. Drawdown 94 feet pumping 700 gpm.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/:		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
Well No. 44	49-05-605	31-56-30 106-22-38	City of El Paso	07-60	770	Hueco Bolson	3,989	300.7 337.5	08-12-60 01-05-87	24 18 12	305 543 769	T,250	Slotted from 324 to 769 feet. Drawdown 62 feet pumping 2,000 gpm on 08-13-60.
* Well No. 45	49-14-401	31-47-51 106-22-05	do	08-60	830	do	3,955	292.9 361.1	11-28-60 12-19-86	24 18 12	311 510 830	T,250	Slotted from 323 to 830 feet. Drawdown 85 feet pumping 1,400 gpm when completed.
Well No. 46	49-14-402	31-47-49 106-21-06	do	09-10-60	746	do	3,947	281.0 353.3	11-18-60 12-19-86	24 18 12	312 556 745	T,250	Slotted from 319 to 745 feet. Drawdown 54 feet pumping 1,200 on 11-18-60.
Well No. 47	49-14-413	31-47-55 106-20-30	do	10-70	600	do	3,972	322.4 363.6	01-73 12-15-86	24 16	336 600	T,100	Slotted from 390 to 600 feet. Reported yield 700 gpm.
Well No. 48	49-14-706	31-47-01 106-20-50	do	01-61	635	do	3,949	281.4 339.8	01-23-61 12-12-86	24 18 12	280 500 635	T,250	Slotted from 299 to 635 feet. Drawdown 73 feet pumping 1,000 gpm on 01-23-61.
* Well No. 49	49-13-914	31-46-46 106-23-01	do	04-61	838	do	3,934	289.4 334.6	06-23-61 12-15-86	24 18 12	386 536 838	T,250	Slotted from 398 to 838 feet. Drawdown 61 feet pumping 1,600 gpm when drilled.
Well No. 50	49-14-707	31-46-30 106-22-30	do	05-61	747	do	3,920	291.1 340.8	06-19-61 12-12-86	24 18 12	375 520 747	T,250	Slotted from 383 to 747 feet. Drawdown 62 feet pumping 1,400 gpm on 06-19-61.
Well No. 51	49-05-903	31-54-52 106-23-46	do	03-63	1,050	do	3,912	248.3 289.2	07-01-63 01-05-87	24 18 12	260 500 1,037	T,200	Slotted from 269 to 1,037 feet. Drawdown 44.7 feet pumping 1,400 gpm on 06-28-63.
Well No. 52	49-05-504	31-55-48 106-26-33	do	12-61	1,152	do	4,130	470.2 512.2	01-70 01-06-86	24 18 12	472 802 1,152	T,200	Slotted from 481 to 1,152 feet.
Well No. 55	49-13-217	31-51-45 106-25-19	do	07-83	1,160	do	3,889	270.1	12-19-85	24 16	277 1,160	T	Screened at 7 intervals between 348 and 1,160 feet.
* Well No. 56	49-06-402	31-57-27 106-22-25	do	10-63	670	do	4,023	326.5 358.6	10-30-63 01-07-87	24 18 12	300 549 670	T,250	Slotted from 550 to 670 feet. Drawdown 69 feet pumping 1,600 gpm on 10-31-63.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 57	49-06-101	31-58-18 106-21-30	City of El Paso	01-65	894	Hueco Bolson	4,023	320.9 343.6	03-16-65 01-06-75	24 18	324 551	T	Slotted from 336 to 551 feet. Drawdown 60 feet pumping 1,000 gpm when drilled.
Well No. 59	49-06-401	31-57-25 106-21-40	do	03-65	451	do	4,001	311.1 331.4	05-11-65 01-07-87	24 18	328 451	N	Slotted from 348 to 451 feet.
Well No. 61	49-05-306	31-58-58 106-23-59	do	05-65	603	do	4,054	364.0 378.6	08-05-65 01-12-87	24 18	370 603	T	Slotted from 391 to 603 feet. Drawdown 77.5 feet pumping 1,200 gpm on 08-06-65.
* Well No. 62	49-05-906	31-54-50 106-22-47	do	02-66	950	do	3,925	252.3 295.4	03-16-66 01-05-87	24 18 12	270 698 950	T	Slotted from 330 to 950 feet. Drawdown 46 feet pumping 1,800 gpm on 03-17-66.
Well No. 63	49-14-406	31-47-50 106-21-37	do	11-66	791	do	3,953	303.3 358.3	01-23-67 12-19-86	24 18	335 791	T,200	Slotted from 400 to 791 feet. Drawdown 82.2 feet pumping 1,400 gpm on 01-24-67.
Well No. 64	49-14-709	31-47-12 106-22-16	do	10-67	814	do	3,940	320.4 365.7	10-17-67 12-19-86	24 18	327 810	T,200	Slotted from 350 to 810 feet.
Well No. 65	49-14-714	31-45-25 106-20-14	do	08-67	480	do	3,941	278.3 315.2	09-11-67 12-09-86	18 12	287 480	T,100	Slotted from 343 to 480 feet.
* Well No. 66	49-13-617	31-47-36 106-22-53	do	10-67	930	do	3,940	314.2 352.6	05-21-68 01-08-87	24 18	345 930	N	Slotted from 431 to 930 feet.
Well No. 67	49-13-710	31-45-14 106-29-32	do	12-67	730	do	3,706	43.2 161.6	04-09-68 12-04-86	24 18	506 730	T,75	Slotted from 505 to 730 feet. Drawdown 78.7 feet pumping 1,400 gpm on 02-08-68.
Well No. 68	49-14-715	31-45-58 106-20-44	do	02-69	545	do	3,940	293.1 331.2	03-07-69 01-06-87	24 16	301 545	T,100	Slotted from 368 to 545 feet.
Well No. 69	49-14-718	31-45-33 106-20-46	do	04-69	540	do	3,880	234.0 275.8	01-71 12-09-86	24 16	250 540	T,100	Slotted from 377 to 540 feet.
Well No. 70	49-14-716	31-46-15 106-20-17	do	11-69	561	do	3,955	315.5 346.6	11-05-69 12-09-86	24 16	300 560	T,100	Slotted from 360 to 560 feet.
* Well No. 71	49-14-717	31-47-06 106-20-10	do	12-69	555	do	3,958	309.4 343.6	01-71 12-09-86	24 16	330 555	T,150	Slotted from 410 to 555 feet.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
Well No. 72	49-14-414	31-47-52 106-20-41	City of El Paso	10-70	700	Huaco Bolson	3,955	307.3 349.8	01-73 12-15-86	24 16 12	329 574 700	T,100	Slotted from 342 to 700 feet.	
Well No. 73	49-22-122	31-43-18 106-21-03	do	11-71	360	do	3,682	25.0 41.8	11-15-71 12-08-86	24 16	180 360	T,75	Slotted from 200 to 360 feet.	
Well No. 74	49-14-415	31-49-30 106-22-42	do	07-72	960	do	3,938	303.3 351.6	01-73 01-06-87	24 16	322 960	T,300	Slotted from 468 to 782, 816 to 886, and 920 to 960 feet.	
Well No. 75	49-13-622	31-49-09 106-22-38	do	09-72	1,060	do	3,935	297.0 324.8	01-73 12-15-80	24 16	330 1,059	T,300	Slotted from 468 to 621 and 701 to 1,059 feet.	
* Well No. 76	49-13-623	31-49-10 106-23-14	do	11-72	1,199	do	3,935	292.1 323.5	01-73 12-06-83	24 16	285 1,199	T,300	Slotted from 589 to 1,199 feet.	
Well No. 77	49-13-624	31-49-10 106-23-42	do	08-73	1,024	do	3,910	301.2 303.3	08-73 12-16-76	24 18 16	302 350 1,024	T	Slotted from 350 to 1,024 feet. Draw- down 62 feet pumping 2,005 gpm on 08-28-73.	
Well No. 78	49-14-416	31-49-47 106-21-50	do	09-73	950	do	3,944	314.3 335.8	10-11-73 01-09-79	24 16	310 950	T	Slotted from 536 to 950 feet. Drawdown 89 feet pumping 2,000 gpm when drilled.	
Well No. 79	49-14-104	31-50-03 106-21-28	do	10-73	942	do	3,945	298.6	01-07-74	24 16	333 942	T	Slotted from 382 to 422, 465 to 505, and 527 to 942 feet.	
* Well No. 80	49-14-105	31-50-18 106-21-06	do	1974	960	do	3,933	275.5 292.2	01-20-75 01-09-80	24 16	322 960	T	Slotted from 468 to 782, 816 to 887, and 922 to 960 feet. Drawdown 70 feet pumping 1,750 gpm when drilled.	
* Well No. 81	49-13-831	31-46-26 106-26-42	do	10-75	872	do	3,695	84.7 125.9	12-09-76 12-07-83	20 12	456 872	T	Screened from 503 to 872 feet.	
Well No. 82	49-21-309	31-44-31 106-22-36	do	01-76	510	do	3,685	53.0 84.9	11-11-77 03-20-85	20 12	310 510	T	Screened from 364 to 510 feet.	
Well No. 83	49-22-124	31-42-53 106-21-57	do	11-75	460	do	3,674	22.7 29.0	11-08-77 12-14-82	20 12	302 460	T	Screened from 339 to 460 feet. Drawdown 61 feet pumping 700 gpm on 02-29-75.	
Well No. 84	49-22-125	31-44-33 106-21-40	do	03-09-77	434	do	3,684	47.4 55.2	04-19-77 12-15-82	20 12	154 252	T	Slotted from 182 to 434 feet. Drawdown 44.5 feet pumping 900 gpm on 04-19-77.	

See Footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								WATER LEVEL DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
Well No. 85	49-22-126	31-44-34 106-21-00	City of El Paso	05-77	560	Hueco Bolson	3,720	69.4 93.4	03-03-78 12-23-85	20 12	161 560	T	Slotted from 212 to 560 feet.	
Well No. 86	49-13-726	31-45-19 106-28-23	do	04-17-78	855	do	3,706	141.8 154.1	05-16-78 07-25-84	24 16	470 855	T	Screened from 530 to 855 feet. Drawdown 39.3 feet pumping 1,070 gpm on 05-16-78.	
Well No. 87	49-22-127	31-44-06 106-22-12	do	09-78	499	do	3,685	54.9 55.8	10-19-78 12-14-82	20 12	321 499	T	Slotted from 329 to 499 feet. Drawdown 52.7 feet pumping 823 gpm on 10-19-78.	
Well No. 88	49-22-128	31-43-46 106-20-45	do	11-01-78	421	do	3,680	30.0 49.6	01-03-79 12-08-86	20 12	198 421	T	Slotted from 224 to 421 feet. Drawdown 55 feet pumping 1,000 gpm on 12-19-78.	
Well No. 89	49-13-834	31-45-47 106-26-23	do	02-01-78	866	do	3,700	102.2 117.3	03-06-78 12-14-82	24 16	240 866	T	Slotted from 362 to 866 feet. Drawdown 52 feet pumping 1,493 gpm on 03-06-78.	
* Well No. 90	49-14-417	31-48-15 106-21-05	do	03-30-79	800	do	3,941	319.7 325.0	12-23-79 11-23-81	24 16	330 800	T	Screened from 397 to 438, 478 to 558, and 599 to 800 feet. Drawdown 54 feet pumping 1,400 gpm on 07-09-79.	
Well No. 91	49-14-418	31-48-15 106-21-37	do	08-79	970	do	3,938	320.1 325.8	12-24-79 10-23-81	24 16	354 970	T	Screened from 406 to 446, 527 to 648, and 688 to 970 feet. Drawdown 50 feet pumping 1,000 gpm on 10-01-79.	
Well No. 92	49-14-419	31-48-39 106-21-06	do	11-79	846	do	3,940	289.2 336.5	01-04-80 12-13-83	24 16	384 846	T	Screened from 523 to 846 feet.	
Well No. 93	49-14-420	31-49-03 106-21-04	do	02-80	900	do	3,945	322.1	03-13-80	24 16	358 900	T	Screened from 489 to 600, 686 to 807, and 850 to 900 feet. Drawdown 58.4 feet pumping 1,250 gpm on 03-13-80.	
Well No. 94	49-14-421	31-49-09 106-21-04	do	04-80	880	do	3,939	--	--	24 16	307 880	T	Slotted from 429 to 469, 512 to 673, and 759 to 880 feet.	
Well No. 95	49-14-422	31-49-53 106-21-04	do	08-80	870	do	3,932	296.8 311.0	11-16-81 01-06-87	24 16	315 870	T	Screened from 428 to 488, 528 to 680, 720 to 750, and 790 to 870 feet.	
* Well No. 96	49-14-804	31-45-45 106-17-49	do	02-81	575	do	3,994	337.2 342.8	03-16-81 12-09-86	24 16	351 575	T	Screened from 420 to 575 feet. Drawdown 48 feet pumping 930 gpm on 03-16-81.	
Well No. 97	49-14-423	31-48-16 106-20-41	do	11-83	661	do	3,962	361.3	12-15-86	24 16	370 661	T	Screened from 462 to 503, 523 to 585, and 600 to 661 feet. Drawdown 62.8 feet pumping 1,200 gpm on 12-14-83.	

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
Well No. 98	49-14-424	31-48-42 106-20-37	City of El Paso	12-83	658	Hueco Bolson	3,964	351.4	12-15-86	24 16	360 658	T	Slotted from 434 to 554, 570 to 590, and 618 to 658 feet.
Well No. 101	49-04-415	31-55-38 106-36-15	George McKenzie	07-51	122	Rio Grande Alluvium	3,771	5.8 6.9	01-10-52 12-04-86	24	122	T	Slotted from 52 to 62 and 72 to 122 feet. Reported yield 810 gpm.
* Well No. 102	49-04-412	31-55-57 106-36-19	Layne Texas Co.	04-52	160	do	3,770	3.5 8.3	04-18-52 12-04-86	24 16	47 160	T	Slotted from 59 to 121 and 140 to 160 feet. Measured yield 1,260 gpm on 10-16-52.
Well No. 103	49-04-406	31-56-20 106-36-21	do	03-52	152	do	3,771	5.6 8.3	04-18-52 12-04-86	30 16	5 150	T	Slotted from 63 to 150 feet. Drawdown 60 feet pumping 1,250 gpm on 04-18-52.
Well No. 104	49-04-403	31-56-18 106-36-57	do	04-52	155	do	3,771	5.5 9.5	04-18-52 12-04-86	30 16	5 155	T	Slotted from 76-155 feet.
Well No. 105	49-04-420	31-55-58 106-37-00	do	04-52	155	do	3,771	6.5 13.7	04-18-52 12-04-86	30 16	5 155	T	Slotted from 73 to 150 feet. Measured yield 860 gpm.
Well No. 106	49-04-413	31-55-21 106-36-35	do	04-52	160	do	3,765	2.9 7.1	04-25-52 12-05-86	30 16	5 155	T	Slotted from 76 to 155 feet.
Well No. 107	49-04-414	31-55-23 106-36-23	B. Greenwood	1955	200	do	3,765	8.4 7.5	01-13-56 12-05-86	38 18	38 200	T	Slotted from 64 to 200 feet. Measured yield 1,270 gpm on 05-29-56.
Well No. 108	49-04-411	31-55-56 106-36-44	do	06-55	194	do	3,767	10.7 9.9	01-13-56 12-04-86	38 18	39 194	T	Slotted from 62 to 194 feet. Drawdown 16.9 feet pumping 580 gpm on 12-07-55.
Well No. 109	49-04-409	31-56-07 106-37-00	do	01-55	156	do	3,770	10.7 9.6	06-03-55 12-04-86	20 18	38 156	T	Slotted from 37 to 156 feet.
Well No. 110	49-04-405	31-56-16 106-36-43	do	06-55	170	do	3,766	7.1 8.0	01-13-56 12-04-86	38 18	36 170	T	Slotted from 53 to 170 feet.
Well No. 111	49-04-408	31-55-53 106-37-11	do	07-55	200	do	3,771	12.1 10.5	01-13-56 12-05-86	38 18	32 200	T	Slotted from 61 to 200 feet.
Well No. 112	49-04-407	31-55-55 106-37-20	do	07-55	200	do	3,772	15.1 9.7	01-13-56 12-05-86	18	200	T	Screened from 62 to 200 feet. Measured yield 1,270 gpm on 05-29-56.
Well No. 114	49-04-112	31-59-22 106-36-26	City of El Paso	01-60	260	do	3,791	25.4 23.1	11-28-66 12-05-86	24 18	80 260	N	Screened from 90 to 260 feet.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 115	49-04-423	31-57-08 106-36-23	City of El Paso	05-64	200	Rio Grande Alluvium	3,778	15.1 9.0	10-21-64 07-01-86	24 18	77 200	T,30	Slotted from 98 to 200 feet.
Well No. 116	49-04-424	31-56-41 106-36-22	do	05-64	221	do	3,777	15.2 15.4	10-21-64 12-04-86	24 18	77 221	T,30	Slotted from 97 to 221 feet. Yield 825 gpm.
Well No. 117	49-04-426	31-56-43 106-36-43	do	04-64	219	do	3,772	10.6 6.8	10-21-64 07-01-86	24 18	59 219	T,50	Slotted from 78 to 219 feet. Drawdown 92 feet pumping 1,200 gpm.
Well No. 118	49-04-428	31-55-21 106-36-16	do	04-64	210	do	3,764	8.2 3.6	10-21-64 12-04-86	24 18	25 210	T,60	Slotted from 63 to 210 feet. Drawdown 99.7 feet pumping 1,065 gpm on 10-21-64.
* Well No. 201	49-04-402	31-56-58 106-36-44	do	1956	1,060	Mesilla Bolson	3,775	41.1 30.2	01-72 01-13-87	24 18 12	578 511 1,060	T,150	Slotted from 536 to 1,060 gpm. Drawdown 91 feet pumping 2,498 gpm on 01-21-57.
Well No. 202	49-04-106	31-57-34 106-36-44	do	11-56	1,090	do	3,774	2.6 48.7	06-11-57 12-26-85	24 18 12	576 544 1,090	T,150	Slotted from 544 to 1,090 feet. Drawdown 96.5 feet pumping 2,050 gpm on 06-15-57.
* Well No. 203	49-04-104	31-57-58 106-36-57	do	12-56	1,150	do	3,780	27.4 30.7	08-05-57 01-13-87	24 18 12	646 500 1,150	T,150	Screened from 650 to 1,150 feet. Drawdown 100 feet pumping 2,500 gpm on 08-12-57.
Well No. 204	49-04-105	31-58-07 106-36-29	do	12-56	950	do	3,778	40.4 32.6	05-26-58 01-13-87	24 18 12	535 440 950	T,150	Screened from 544 to 950 feet. Drawdown 103.8 feet pumping 2,020 gpm on 05-28-58.
Well No. 205	49-04-401	31-57-17 106-36-22	do	06-58	900	do	3,780	45.8 34.4	08-18-58 01-13-87	18 12	400 900	T,150	Screened from 510 to 900 feet. Drawdown 75 feet pumping 2,150 gpm on 08-09-53.
Well No. 206	49-04-113	31-58-17 106-37-06	do	03-60	1,206	do	3,783	48.1 31.1	05-02-60 01-13-87	24 18 12	624 630 1,200	T,300	Screened from 630 to 1,200 feet. Drawdown 92.5 feet pumping 2,090 gpm on 05-02-60.
* Well No. 301	49-04-107	31-57-33 106-36-45	do	08-57	550	do	3,779	14.6 53.7	01-26-57 11-30-83	24 18	260 550	T,200	Screened from 285 to 550 feet.
Well No. 302	49-04-410	31-55-57 106-36-45	do	02-61	461	do	3,770	12.2 10.3	03-08-61 12-26-85	24 18	241 452	T,125	Screened from 258 to 452 feet. Drawdown 75.2 feet pumping 1,200 gpm on 03-08-61.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 303	49-04-421	31-55-51 106-37-22	City of El Paso	08-61	550	Mesilla Bolson	3,771	8.6 15.5	09-11-61 12-05-86	24 18	346 550	T,150	Screened from 356 to 550 feet. Drawdown 87 feet pumping 1,600 gpm on 09-11-61. Originally drilled to 1,102 feet.
Well No. 304	49-04-422	31-57-20 106-36-22	do	02-63	400	do	3,773	22.1 31.7	03-06-63 12-05-86	24 18	150 400	T,300	Screened from 198 to 400 feet. Drawdown 151.7 feet pumping 2,500 gpm on 03-07-63.
Well No. 305	49-04-404	31-56-19 106-37-05	do	08-64	405	do	3,772	25.8 17.7	08-24-64 12-05-86	24 18	213 404	T,100	Slotted from 220 to 404 feet. Drawdown 85.6 feet pumping 1,600 gpm on 08-24-64.
Well No. 306	49-04-427	31-57-03 106-36-43	do	06-64	467	do	3,775	39.3 28.4	06-17-64 12-05-86	24 18	220 461	T,150	Slotted from 230 to 461 feet. Drawdown 117.6 feet pumping 1,800 gpm on 06-17-64.
Well No. 307	49-04-425	31-56-52 106-36-23	do	10-64	447	do	3,774	40.2 34.9	10-06-64 12-05-86	24 18	232 440	T,125	Screened from 242 to 440 feet. Drawdown 95.7 feet pumping 1,500 gpm on 10-06-64.
Well No. 308	49-04-116	31-57-58 106-37-00	do	07-64	279	do	3,779	9.7 10.3	01-22-74 01-13-87	24 18	161 277	T,100	Screened from 169 to 277 feet. Drawdown 110.5 feet pumping 1,225 gpm on 07-14-64.
Well No. 309	49-04-110	31-58-19 106-37-07	do	09-64	527	do	3,783	17.3 23.8	01-22-74 01-13-87	24 18	200 506	T,200	Screened from 209 to 506 feet. Drawdown 103.7 feet pumping 2,100 gpm on 09-17-64.
Well No. 401	49-13-902	31-46-32 106-24-42	Layne Texas Co.	11-46	704	Huaco Bolson	3,780	112.7 194.2	01-19-59 12-09-86	14 8	541 704	T,60	Screened from 546 to 576 and 597 to 704 feet. Yield 575 gpm.
* Well No. 402	49-13-912	31-45-22 106-22-53	do	06-47	477	do	3,692	34.5 90.7	01-08-59 12-09-86	14 8	252 477	T,40	Screened from 265 to 308, 351 to 372, and 394 to 477 feet. Pumping level 81.9 feet at 605 gpm on 07-01-58.
Well No. 403	49-22-103	31-43-54 106-20-30	do	02-47	386	do	3,719	56.7 88.4	01-19-59 12-24-86	14 8	230 383	T,25	Screened from 242 to 309 and 339 to 383 feet. Drawdown 51 feet pumping 580 gpm.
Well No. 404A	49-22-216	31-43-10 106-19-08	City of El Paso	11-84	348	do	3,720	68.5	12-23-86	24 12	70 348	T	Screened from 152 to 274 and 328 to 348 feet.
Well No. 405A	49-14-724	31-45-02 106-21-23	do	04-87	506	do	3,755	--	--	20 12	362 506	T	Screened from 426 to 506 feet.
Well No. 406A	49-14-722	31-45-21 106-21-09	do	10-81	610	do	3,830	209.2	12-01-81	20 12	335 610	T	Slotted from 347 to 467, 496 to 556, and 589 to 610 feet. Drawdown 32.9 feet pumping 770 gpm on 11-30-81.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 407	49-14-704	31-45-37 106-21-36	El Paso Drilling Co.	02-54	610	Hueco Bolson	3,824	170.1 210.4	01-19-59 12-18-80	20 12	247 610	T,75	Screened at 6 intervals between 256 and 604 feet. Pumping level 206.8 feet on 07-02-58.
Well No. 408	49-13-823	31-45-15 106-25-13	Layne Texas Co.	10-54	770	do	3,696	32.8 124.7	04-30-56 12-27-85	20 12	418 760	T,150	Screened at 7 intervals between 430 and 760 feet. Drawdown 26 feet pumping 600 gpm when drilled.
* Well No. 408A	49-13-824	31-45-16 106-25-13	City of El Paso	03-67	250	do	3,698	17.3 44.9	03-30-67 12-09-86	24 12	34 250	T	Screened from 75 to 250 feet. Drawdown 59.2 feet pumping 800 gpm on 03-30-67.
Well No. 409	49-14-702	31-46-05 106-21-34	Layne Texas Co.	09-55	655	do	3,965	310.3 340.5	05-30-56 12-08-76	20 12	354 655	T,100	Screened from 385 to 570 and 600 to 650 feet. Drawdown 22 feet pumping 700 gpm on 05-30-56.
Well No. 410	49-14-703	31-45-56 106-22-07	do	06-56	762	do	3,872	210.1 257.0	01-08-59 12-20-82	20 12	318 762	T,100	Screened at 8 intervals between 330 to 750 feet. Drawdown 44 feet pumping 1,034 gpm in 1956.
Well No. 411	49-14-705	31-46-33 106-21-39	do	11-56	670	do	3,958	318.8 257.0	11-23-56 12-20-82	20 12	350 670	T,150	Screened at 7 intervals between 360 and 660 feet. Yield 740 gpm on 07-01-58.
* Well No. 412A	49-22-134	31-44-55 106-20-23	City of El Paso	08-83	370	do	3,808	180.4	10-28-83	20 12	204 370	T	Screened from 250 to 370 feet. Drawdown 37.3 feet pumping 510 gpm on 10-28-83.
* Well No. 413	49-21-301	31-44-48 106-24-10	Layne Texas Co.	07-57	692	do	3,689	24.4 100.7	01-08-59 12-17-85	20 12	440 692	T,100	Screened from 452 to 682 feet. Pumping level 69.6 feet at 815 gpm on 07-02-58.
Well No. 414	49-22-408	31-42-12 106-21-20	City of El Paso	01-80	530	do	3,668	27.6	12-16-83	20 12	318 530	T	Screened from 346 to 469 and 509 to 530 feet. Drawdown 61.4 feet pumping 725 gpm on 02-06-80.
Well No. 415	49-22-129	31-44-32 106-20-28	do	01-81	350	do	3,757	111.6 128.3	12-18-81 12-08-86	24 12	173 350	T	Screened from 191 to 211 and 230 to 350 feet.
Well No. 416	49-22-130	31-42-33 106-21-33	do	02-82	555	do	3,673	38.9	12-08-86	20 12	376 555	T	Screened from 413 to 555 feet. Drawdown 91.3 feet pumping 750 gpm on 03-11-82.
Well No. 417	49-22-131	31-42-42 106-21-56	do	04-82	555	do	3,673	43.5	04-27-82	20 12	355 555	T	Screened from 373 to 555 feet. Drawdown 59.8 feet pumping 700 gpm on 04-05-82.

See footnotes at end of table.

Record of Wells - City of El Paso - Continued

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
Well No. 418	49-22-139	31-43-18 106-22-14	City of El Paso	05-85	460	Hueco Bolson	3,680	71.2	05-22-85	20 12	360 460	T	Screened from 358 to 460 feet. Yield 850 gpm.
Well No. 419	49-22-132	31-43-41 106-22-13	do	05-82	500	do	3,683	56.8	06-28-82	20 12	365 500	T	Screened from 378 to 500 feet. Drawdown 66.6 feet pumping 600 gpm on 06-28-82.
Well No. 420	49-21-310	31-44-03 106-22-53	do	09-82	632	do	3,685	71.0	10-11-82	20 12	420 632	T	Screened from 448 to 568 and 610 to 632 feet. Drawdown 44.3 feet pumping 800 gpm on 10-11-82.
Well No. 421	49-22-133	31-44-10 106-22-35	do	01-83	564	do	3,685	64.0	02-17-83	24 12	370 564	T	Screened from 424 to 564 feet. Drawdown 34.2 feet pumping 700 gpm on 02-18-83.
Well No. 422	49-21-311	31-44-53 106-22-34	do	02-83	567	do	3,688	78.1	04-13-83	36 20 12	43 365 567	T	Screened from 377 to 567 feet. Drawdown 41.3 feet pumping 800 gpm on 04-13-83.
Well No. 503	49-14-425	31-48-16 106-20-08	do	10-85	611	do	3,974	362.9	01-08-87	24 16	360 611	T	Screened from 410 to 611 feet.
* Well No. 504	49-14-426	31-48-43 106-20-09	do	11-85	570	do	3,972	354.6	01-08-87	24 16	352 570	T	Screened from 412 to 570 feet.
Well No. 505	49-14-427	31-49-11 106-20-11	do	02-86	570	do	3,972	--	--	24 16	360 570	T	Screened from 399 to 520 and 550 to 570 feet.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of El Paso
(El Paso County)

State Well Number	49-04-104	49-04-107	49-04-402	49-04-412
Date of Collection	07/15/58	08/28/87	08/07/87	08/14/86
Temperature-°F				
Temperature-°C			22	
Silica	28.0	30.0	39.0	19.0
Calcium	5.0	20.0	8.0	80.0
Magnesium	1.0	4.0	1.0	15.0
Sodium	78.0	111.0	105.0	145.0
Potassium	.5	2.8	1.6	4.5
Manganese				
Boron	.1			
Carbonate	.0	5.0	13.0	.0
Bicarbonate	71.0	90.0	49.0	216.0
Sulfate	69.0	123.0	93.0	241.0
Chloride	38.0	68.0	63.0	103.0
Fluoride	1.0	.6	1.8	.6
Nitrate	.0	.0	.0	4.4
Iron	.0			
pH		8.3	9.1	8.0
* Dissolved Solids	255.6	408.7	349.5	718.7
Phenol. Alk. CaCO ₃	.0	4.0	11.0	.0
Total Alk. CaCO ₃	58.0	82.0	62.0	177.0
Total Hard CaCO ₃	14.0	65.0	26.0	260.0

State Well Number	49-05-204	49-05-301	49-05-501	49-05-615
Date of Collection	08/12/87	05/06/86	08/12/87	01/14/86
Temperature-°F				
Temperature-°C			19	19
Silica	32.0	33.0	23.0	27.0
Calcium	33.0	31.0	36.0	32.0
Magnesium	9.0	6.0	14.0	11.0
Sodium	123.0	82.0	108.0	120.0
Potassium	9.7	6.4	3.6	6.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	161.0	134.0	216.0	154.0
Sulfate	73.0	48.0	68.0	75.0
Chloride	136.0	86.0	90.0	133.0
Fluoride	1.0	.6	1.5	.8
Nitrate	5.4	7.8	6.0	4.0
Iron				
pH	8.1	7.8	7.8	7.9
* Dissolved Solids	501.3	366.7	456.3	484.5
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	132.0	110.0	177.0	126.0
Total Hard CaCO ₃	118.0	104.0	147.0	126.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

City of El Paso
(El Paso County)

State Well Number	49-05-804	49-05-902	49-05-906	49-06-101
Date of Collection	05/14/87	06/16/87	08/11/87	04/22/85
Temperature-°F				
Temperature-°C		22	20	
Silica	33.0	20.0	28.0	
Calcium	52.0	33.0	24.0	95.0
Magnesium	12.0	9.0	8.0	9.0
Sodium	66.0	125.0	72.0	250.0
Potassium	2.6	8.4	6.7	
Manganese				
Boron				
Carbonate	.0	.0	1.0	.0
Bicarbonate	187.0	179.0	118.0	73.0
Sulfate	62.0	82.0	30.0	167.0
Chloride	62.0	109.0	82.0	385.0
Fluoride	1.6	1.2	.8	.1
Nitrate	9.0	6.4	9.4	
Iron				
pH	7.8	8.1	8.3	7.8
* Dissolved Solids	392.1	482.0	319.9	942.0
Phenol. Alk. CaCO ₃	.0	.0	1.0	.0
Total Alk. CaCO ₃	153.0	147.0	98.0	60.0
Total Hard CaCO ₃	180.0	118.0	94.0	274.0

State Well Number	49-06-402	49-13-218	49-13-511	49-13-617
Date of Collection	05/06/86	03/10/87	06/04/85	05/26/87
Temperature-°F				
Temperature-°C		24	26	
Silica	33.0	22.0	29.0	35.0
Calcium	49.0	44.0	75.0	32.0
Magnesium	10.0	13.0	24.0	8.0
Sodium	149.0	38.0	66.0	139.0
Potassium	6.3	4.7	7.1	11.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	90.0	162.0	179.0	190.0
Sulfate	29.0	44.0	122.0	91.0
Chloride	266.0	44.0	98.0	112.0
Fluoride	.5	1.1	1.0	1.1
Nitrate	8.5	9.7	15.5	7.8
Iron				
pH		7.8	7.7	8.0
* Dissolved Solids	595.6	300.2	525.6	530.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	74.0	133.0	147.0	156.0
Total Hard CaCO ₃	164.0	162.0	287.0	113.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

City of El Paso
(El Paso County)

State Well Number	49-13-623	49-13-626	49-13-727	49-13-824
Date of Collection	06/24/87	05/19/87	05/06/87	08/14/85
Temperature-°F				
Temperature-°C	18		23	25
Silica	25.0	39.0	32.0	37.0
Calcium	18.0	40.0	37.0	100.0
Magnesium	8.0	9.0	10.0	26.0
Sodium	81.0	163.0	206.0	188.0
Potassium	9.2	11.0	3.5	12.0
Manganese				
Boron				
Carbonate	1.0	.0	.0	.0
Bicarbonate	151.0	161.0	176.0	305.0
Sulfate	51.0	75.0	110.0	315.0
Chloride	50.0	206.0	220.0	155.0
Fluoride	.8	1.0	.8	.4
Nitrate	6.4	.0	.0	.4
Iron				
pH	8.3	8.1	8.0	8.2
* Dissolved Solids	324.6	623.2	705.8	983.8
Phenol. Alk. CaCO ₃	1.0	.0	.0	.0
Total Alk. CaCO ₃	125.0	132.0	144.0	250.0
Total Hard CaCO ₃	76.0	136.0	132.0	360.0
State Well Number	49-13-831	49-13-912	49-13-914	49-14-105
Date of Collection	05/07/87	09/20/48	05/11/87	07/22/87
Temperature-°F				
Temperature-°C			24	
Silica	22.0	28.0	21.0	40.0
Calcium	47.0	26.0	74.0	30.0
Magnesium	11.0	10.0	21.0	8.0
Sodium	165.0	122.0	143.0	108.0
Potassium	6.5	7.2	19.0	8.2
Manganese				
Boron		.4		
Carbonate	.0	.0	.0	1.0
Bicarbonate	145.0	164.0	160.0	122.0
Sulfate	69.0	88.0	150.0	37.0
Chloride	244.0	107.0	224.0	149.0
Fluoride	.7	.8	.6	.8
Nitrate	.0	1.2	7.5	10.2
Iron		.2		
pH	7.9	7.8	8.0	8.3
* Dissolved Solids	636.5	471.4	738.8	452.2
Phenol. Alk. CaCO ₃	.0	.0	.0	1.0
Total Alk. CaCO ₃	119.0	134.0	131.0	102.0
Total Hard CaCO ₃	163.0	106.0	270.0	106.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

City of El Paso
(El Paso County)

State Well Number	49-14-401	49-14-417	49-14-426	49-14-701
Date of Collection	05/28/87	06/09/87	12/03/85	08/18/87
Temperature-°F				
Temperature-°C				
Silica	32.0	22.0	29.0	24.0
Calcium	19.0	35.0	24.0	27.0
Magnesium	7.0	8.0	12.0	4.0
Sodium	71.0	134.0	152.0	108.0
Potassium	8.7	10.2	7.6	8.3
Manganese				
Boron				
Carbonate	1.0	.0	.0	1.0
Bicarbonate	160.0	127.0	120.0	141.0
Sulfate	53.0	53.0	50.0	63.0
Chloride	34.0	183.0	208.0	97.0
Fluoride	.6	.6	.7	.6
Nitrate	6.9	4.7	4.4	4.8
Iron				
pH	8.3	8.3	7.9	
* Dissolved Solids	311.9	513.0	546.7	407.0
Phenol. Alk. CaCO ₃	1.0	.0	.0	1.0
Total Alk. CaCO ₃	133.0	104.0	98.0	118.0
Total Hard CaCO ₃	78.0	122.0	110.0	82.0

State Well Number	49-14-717	49-14-804	49-21-301	49-22-134
Date of Collection	05/22/87	05/14/86	03/18/87	02/26/87
Temperature-°F				
Temperature-°C		27		
Silica	38.0	34.0	32.0	25.0
Calcium	23.0	58.0	64.0	31.0
Magnesium	7.0	15.0	19.0	9.0
Sodium	133.0	291.0	204.0	237.0
Potassium	8.2	9.2	8.9	6.8
Manganese				
Boron				
Carbonate	2.0	.0	.0	3.0
Bicarbonate	151.0	113.0	140.0	126.0
Sulfate	75.0	189.0	82.0	93.0
Chloride	119.0	405.0	340.0	305.0
Fluoride	.7	.6	.7	.8
Nitrate	6.4	4.0	6.8	.0
Iron				
pH	8.3	8.0	7.9	8.3
* Dissolved Solids	486.5	1,061.4	826.2	772.6
Phenol. Alk. CaCO ₃	2.0	.0	.0	3.0
Total Alk. CaCO ₃	128.0	93.0	115.0	108.0
Total Hard CaCO ₃	88.0	208.0	240.0	114.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - El Paso County Water Authority

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE-POWER ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)			
* IH10 1A	49-22-623	31-41-07 106-15-50	Cole Drilling Co.	1980	400	Hueco Bolson	3,745	96	06-80	16	400	T,150	Slotted from 240 to 390 feet. Reported yield 780 gpm.	
Wheeler 1A	49-22-622	31-41-49 106-16-37	do	1977	220	do	3,755	100	1977	16	220	T,125	Screened from 100 to 200 feet. Reported yield 1,350 gpm with 81 feet drawdown in 1977.	
Wheeler 2	49-22-617	31-41-40 106-15-24	do	1974	217	do	3,755	99	1974	12	217	T,125	Screened from 100 to 200 feet. Measured yield 930 gpm.	
Wheeler 3	49-22-619	31-41-31 106-16-15	do	09-74	233	do	3,750	94	09-74	12	233	N	Screened from 131 to 223 feet.	
Wheeler 4	49-22-620	31-41-22 106-16-05	do	10-74	233	do	3,740	86.1	10-74	12	233	T	Screened from 131 to 223 feet. Reported yield 1,000 gpm with 65 feet drawdown in 1974.	
* Wheeler 5	49-22-621	31-41-42 106-16-30	Wheeler Drilling Co.	01-75	250	do	3,750	--	--	12	250	T	Screened from 140 to 240 feet.	
* Well No. 1-32	49-23-504	31-41-13 106-10-16	do	1958	530	do	4,016	--	--	14	530	T,75	Slotted from 470 to 530 feet. Reported yield 180 gpm.	
* Well No. 3-32	49-23-506	31-41-02 106-10-19	do	1961	495	do	4,015	--	--	12	495	T,75	Slotted from 445 to 495 feet. Reported yield 230 gpm.	
* Well No. 1-36	49-24-405	31-41-03 106-06-10	--	1961	515	do	4,018	--	--	--	--	S,30		
* Well No. 4-36	49-24-408	31-41-09 106-06-15	--	07-61	535	do	4,020	--	--	12	530	T,75	Reported yield 143 gpm.	
* Well No. 6-36	49-24-410	31-41-17 106-06-26	--	10-61	550	do	4,018	--	--	12	550	T,75	Reported yield 160 gpm.	
Well No. 7-36	49-24-411	31-41-01 106-06-11	Wheeler Drilling Co.	08-68	500	do	4,017	--	--	--	--	S,15	Reported yield 80 gpm.	
Well No. 11-36	49-24-415	31-41-49 106-06-19	do	04-69	595	do	4,035	392	05-05-69	36 12	30 595	--	Slotted from 400 to 495 feet. Reported yield 157 gpm.	

See footnotes at end of table.

Record of Wells - El Paso County Water Authority - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 12-36	49-24-416	31-41-48 106-06-26	Layne Texas Co.	10-73	630	Hueco Bolson	4,037	417	11-12-73	20 10	30 630	T	Screened from 442 to 454, 506 to 530, and 586 to 610 feet. Reported yield 100 gpm with 37 feet drawdown.
Well No. 3-37	49-24-404	31-40-40 106-06-21	do	03-74	602	do	4,016	400	06-27-74	20 10	31 600	T	Screened from 446 to 476, 494 to 524 and 550 to 581 feet. Reported yield 128 gpm with 52 feet drawdown.

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

El Paso County Water Authority
(El Paso County)

State Well Number	49-22-621	49-22-623	49-23-504	49-23-506
Date of Collection	06/05/81	08/07/80	03/20/67	05/07/81
Temperature-°F				
Temperature-°C				
Silica	31.0			40.0
Calcium	65.0	59.0	24.0	39.0
Magnesium	19.0	14.0	10.0	9.0
Sodium	380.0	194.0	256.0	323.0
Potassium	10.0			
Manganese			.1	.1
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	111.0	268.0	165.0	139.0
Sulfate	360.0	172.0	126.0	213.0
Chloride	420.0	171.0	296.0	350.0
Fluoride	.8	.8	1.1	1.0
Nitrate	2.0	.1	.1	7.5
Iron			.4	.2
pH	8.0	8.3	8.0	8.3
* Dissolved Solids	1,342.4	742.7	880.0	1,051.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	91.0	220.0	135.0	114.0
Total Hard CaCO ₃	240.0	205.0	102.0	134.0

State Well Number	49-24-405	49-24-408	49-24-410	49-24-416
Date of Collection	03/06/61	06/16/72	07/16/72	05/07/81
Temperature-°F				
Temperature-°C				
Silica	10.0			35.0
Calcium	36.0	34.0	29.0	18.0
Magnesium	5.0	12.0	10.0	5.0
Sodium	120.0	142.0	138.0	149.0
Potassium	5.0			
Manganese		.1	.1	
Boron				
Carbonate	.0	.0	.0	2.0
Bicarbonate	108.0	170.0	181.0	148.0
Sulfate	151.0	151.0	123.0	120.0
Chloride	94.0	93.0	80.0	85.0
Fluoride		.9	1.1	.7
Nitrate		29.0	32.0	21.7
Iron		.1	.1	.3
pH	7.0	7.5	7.6	8.4
* Dissolved Solids	474.1	545.6	502.2	509.5
Phenol. Alk. CaCO ₃	.0	.0	.0	2.0
Total Alk. CaCO ₃	88.0	139.0	148.0	125.0
Total Hard CaCO ₃	111.0	135.0	115.0	64.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - El Paso County Water
Control and Improvement District No. 4 (Fabens)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
* Well No. 1 Tower	49-31-910	31-30-01 106-09-15	Bud Bean	1942	310	Hueco Bolson	3,630	34	01-55	10	310	T	
Well No. 2 Golf Course	49-31-911	31-30-04 106-09-04	do	1939	315	do	3,630	35	01-55	6	315	N	Perforated from 190 to 315 feet. Reported yield 150 gpm with 31 feet drawdown.
Well No. 3 Golf Course	49-31-902	31-30-40 106-08-57	do	1939	315	do	3,630	35	01-55	6	315	N	Perforated from 160 to 315 feet.
* Well No. 6	49-31-908	31-30-34 106-09-00	Big "3" Machine & Supply	07-73	353	do	3,635	58	08-08-73	20 12	142 353	T,40	Slotted from 176 to 343 feet. Reported yield 800 gpm with 37 feet drawdown in 1973.
* Well No. 7	49-31-915	31-30-06 106-08-31	Cook Drilling Co.	01-78	433	do	3,640	55	01-78	20 12	208 433	T,40	Slotted from 208 to 433 feet. Reported yield 800 gpm with 25 feet drawdown.
Well No. 1 Railroad	49-39-303	31-29-47 106-09-06	Layne Texas Co.	07-41	328	do	3,620	32	01-55	10	328	N	Perforated from 289 to 328 feet. Reported yield 225 gpm with 88 feet drawdown in 1941.
* Well No. 2 Railroad	49-39-304	31-29-52 106-09-02	do	12-43	350	do	3,620	32	01-55	12 10	250 350	N	Perforated from 264 to 286 and 321 to 343 feet. Reported yield 150 gpm with 60 feet drawdown.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine; N, none.

WATER QUALITY ANALYSES

El Paso County WCID No. 4 (Fabens)
(El Paso County)

State Well Number	49-31-908	49-31-910	49-31-915	49-39-304
Date of Collection	12/31/76	01/02/69	02/11/78	12/31/76
Temperature-°F				
Temperature-°C				
Silica				
Calcium	75.0	39.0	70.0	38.0
Magnesium	13.0	8.0	10.0	9.0
Sodium	109.0	174.0	139.0	198.0
Potassium				
Manganese	.2		.1	.1
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	210.0	227.0	267.0	223.0
Sulfate	130.0	117.0	145.0	124.0
Chloride	117.0	152.0	105.0	181.0
Fluoride	.5	.7	.5	.4
Nitrate	.4	.4	4.0	.4
Iron	.3	.3	.1	.5
pH	8.1	8.0	7.9	8.2
* Dissolved Solids	548.7	720.0	736.0	661.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	172.0	186.0	219.0	183.0
Total Hard CaCO ₃	238.0	131.0	218.0	131.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - El Paso Water Control and Improvement District (Westway)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	49-04-207	31-57-45 106-33-45	--	--	--	Mesilla Bolson	4,065	--	--	--	--	S	--
* Well No. 2	49-04-202	31-57-41 106-34-29	Wheeler Cass	09-60	410	do	3,980	208.8	10-26-60	24 12	90 490	T	Screened from 220 to 410 feet. Reported yield 750 gpm with 100 feet drawdown.
* Well No. 3	49-04-507	31-57-26 106-34-44	Cook Drilling Co.	11-77	510	do	3,950	201.4	07-20-78	20 12	180 510	S,25	Slotted from 360 to 510 feet.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine.

WATER QUALITY ANALYSES

El Paso County WCID (Westway)
(El Paso County)

State Well Number	49-04-202	49-04-507
Date of Collection	10/16/72	07/17/86
Temperature-°F		
Temperature-°C		
Silica	32.0	
Calcium	66.0	90.0
Magnesium	39.0	42.0
Sodium	155.0	179.0
Potassium		
Manganese		.2
Boron		
Carbonate	.0	.0
Bicarbonate	192.0	226.0
Sulfate	246.0	213.0
Chloride	185.0	274.0
Fluoride	1.9	2.2
Nitrate	.4	.0
Iron		87.1
pH	7.6	7.9
* Dissolved Solids	819.7	998.7
Phenol. Alk. CaCO ₃	.0	.0
Total Alk. CaCO ₃	157.0	185.0
Total Hard CaCO ₃	323.0	397.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - Homestead Municipal Utility District No. 1

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
* Well No. 1	49-15-510	31-48-41 106-10-45	Lucas Drilling	11-81	480	Hueco Bolson	4,050	364	11-81	8	480	S	Screened from 435 to 445 and 458 to 468 feet.	
Well No. 2	49-15-511	31-48-38 106-10-54	Aqua Drilling Co.	06-82	500	do	4,045	366	06-20-82	8	500	S,3	Screened from 435 to 455 and 475 to 485 feet.	
Well No. 3	49-15-512	31-49-00 106-10-42	do	09-82	505	do	4,065	355	09-19-82	6	505	S	Slotted from 425 to 505 feet.	
* Well No. 4	49-15-513	31-48-46 106-10-18	do	09-82	500	do	4,066	380	09-28-82	6	500	S	Screened from 382 to 392 and 417 to 496 feet.	
* Well No. 5	49-15-514	31-49-02 106-10-18	do	05-83	505	do	4,067	395	05-17-83	6	505	S	Slotted from 415 to 505 feet.	
* Well No. 6	49-15-607	31-48-36 106-09-56	Cole Drilling Co.	03-84	605	do	4,067	410	03-28-84	8	605	S	Screened from 531 to 591 feet.	
Well No. 8	49-15-520	31-48-27 106-10-58	do	11-86	752	do	4,045	365	10-31-86	12	752	S	Slotted from 472 to 742 feet.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

Homestead Municipal Utility District No. 1
(El Paso County)

State Well Number	49-15-510	49-15-513	49-15-514	49-15-607
Date of Collection	09/03/86	03/02/87	08/26/83	05/02/84
Temperature-°F				
Temperature-°C				24
Silica				32.0
Calcium	7.0	3.0	3.0	12.0
Magnesium	1.0	1.0	1.0	.0
Sodium	139.0	99.0	100.0	186.0
Potassium				1.4
Manganese	.0	.0		
Boron				
Carbonate	.0	5.0	.0	.0
Bicarbonate	134.0	144.0	155.0	115.0
Sulfate	129.0	45.0	54.0	100.0
Chloride	55.0	29.0	28.0	163.0
Fluoride	1.4	1.0	1.1	.9
Nitrate	6.6	7.2	3.9	4.0
Iron	.4	.0		
pH	8.1	8.7	8.2	7.9
* Dissolved Solids	405.2	261.1	268.0	555.8
Phenol. Alk. CaCO ₃	.0	4.0	.0	.0
Total Alk. CaCO ₃	110.0	126.0	127.0	94.0
Total Hard CaCO ₃	20.0	7.0	9.0	31.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - Homestead Municipal Utility District No. 2

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	49-15-609	31-48-07 106-09-21	Cole Drilling Co.	05-86	633	Hueco Bolson	4,073	428	05-07-86	12	633	S	Screened from 470 to 550 and 595 to 625 feet. Reported yield 140 gpm with 26 feet drawdown in 1986.
Well No. 2	49-15-610	31-47-57 106-09-33	do	08-86	630	do	4,069	428	08-25-86	10	630	S	Slotted from 462 to 622. Reported yield 50 gpm with 51 feet drawdown in 1986.

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible.

EL PASO COUNTY

Record of Wells - Hueco Tanks State Park

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	49-08-602	31-55-23 106-02-18	Puckitt Drilling Co.	04-21-71	600	Hueco Bolson	4,542	369	04-21-71	5 1/2	600	N	Abandoned. Reported yield 3 gpm with 181 feet drawdown after pumping 1 hour in 1971.
* Well No. 2	49-08-603	31-55-31 106-02-23	do	04-27-71	450	do	4,538	322 365.0 345.0	05-06-71 06-75 03-78	5 1/2	450	S,2	Reported yield 18 gpm with 96 feet drawdown after pumping 3 hours in 1971.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Hueco Tanks State Park
(El Paso County)

State Well Number	49-08-603	49-08-603	49-08-603	49-08-603
Date of Collection	09/27/72	10/06/74	07/07/82	07/23/87
Temperature-°F				75
Temperature-°C			26	
Silica			24.0	31.0
Calcium	92.0	86.0	84.0	80.0
Magnesium	10.0	6.0	5.0	8.0
Sodium	44.0	16.0	21.0	16.0
Potassium		11.0		
Manganese		.1		
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	266.0	253.0	259.0	254.0
Sulfate	66.0	37.0	20.0	36.0
Chloride	43.0	14.0	30.0	9.0
Fluoride	.2	.3	.8	.3
Nitrate	21.0	24.0	31.0	25.7
Iron		.0		
pH	7.7	7.4	7.7	8.0
* Dissolved Solids	407.0	318.8	343.2	339.9
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	218.0	207.0	212.0	208.0
Total Hard CaCO ₃	271.0	240.0	230.0	232.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

EL PASO COUNTY

Record of Wells - Tornillo Water Supply Corp.

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
* Well No. 1	49-40-502	31-26-40 106-04-50	Schieffer	1965	257	Hueco Bolson	3,621	59.0	08-73	8	257	5	Screened from 242 to 257 feet.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

Tornillo Water Supply Corp.
(El Paso County)

State Well Number	49-40-502	49-40-502	49-40-502	49-40-502
Date of Collection	04/07/71	08/21/72	03/12/74	02/02/75
Temperature-°F				
Temperature-°C				
Silica				
Calcium	35.0	37.0	41.0	44.0
Magnesium	10.0	11.0	10.0	9.0
Sodium	188.0	198.0	204.0	208.0
Potassium				
Manganese		.1	.1	
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	311.0	296.0	289.0	288.0
Sulfate	154.0	174.0	173.0	184.0
Chloride	92.0	109.0	127.0	136.0
Fluoride	1.2	.8	.9	1.6
Nitrate	.4	.4	.4	1.4
Iron		.1	.0	
pH	8.0	7.9	7.8	7.5
* Dissolved Solids	633.5	675.9	698.5	728.6
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	255.0	243.0	237.0	236.0
Total Hard CaCO ₃	129.0	137.0	145.0	147.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

HUDSPETH COUNTY

Record of Wells - City of Dell City

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/} OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
North Well	48-07-522	31-56-38 105-12-01	--	06-60	785	Bone Spring Limestone	3,701	132.3	02-24-87	16	--	S,35	--	
* Elias Well	48-07-523	31-56-13 105-12-01	--	1948	240	do	3,698	116.3	01-18-83	16	220	T,20	--	
New Well	48-07-219	31-59-33 105-11-02	John Campbell	05-25-86	605	do	3,705	122	05-26-86	14	319	N		For Future use.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Dell City
(Hudspeth County)

State Well Number	48-07-523
Date of Collection	01/23/76
Temperature-°F	
Temperature-°C	
Silica	
Calcium	330.0
Magnesium	157.0
Sodium	235.0
Potassium	
Manganese	.1
Boron	
Carbonate	.0
Bicarbonate	215.0
Sulfate	1,170.0
Chloride	367.0
Fluoride	1.7
Nitrate	43.0
Iron	.2
pH	7.7
* Dissolved Solids	2,409.6
Phenol. Alk. CaCO ₃	.0
Total Alk. CaCO ₃	176.0
Total Hard CaCO ₃	1,470.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

HUDSPETH COUNTY

Record of Wells - Esperanza Fresh Water Supply District No. 1

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
* Well No. 1	48-50-306	31-14-32 105-47-23	Cole Drilling	1977	110	Huaco Bolson	3,580	--	--	4	110	S, 1/2	Screened from 100 to 100 feet. Reported yield 6 to 8 gpm in 1987.	
* Well No. 2	48-50-307	31-14-30 105-47-23	do	1979	110	--	3,580	--	--	4	110	S, 1/2	--	
Well No. 3	48-50-308	31-14-28 105-47-22	do	1980	110	--	3,575	--	--	4	110	S, 1/2	--	
Well No. 4	48-50-309	31-14-31 105-47-21	do	1983	110	--	3,580	--	--	4	110	S, 1/2	--	
Well No. 5	48-50-310	31-14-38 105-47-22	do	1985	130	--	3,590	--	--	6	130	S, 1/2	Screened from 120 to 130 feet. Reported yield 8 to 10 gpm in 1987.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

Esperanza Fresh Water Supply District No. 1
(Hudspeth County)

State Well Number	48-50-306	48-50-307
Date of Collection	07/22/87	07/22/87
Temperature-°F	76	76
Temperature-°C		
Silica	44.0	40.0
Calcium	31.0	28.0
Magnesium	9.0	8.0
Sodium	198.0	187.0
Potassium	3.0	3.0
Manganese		
Boron		
Carbonate	.0	.0
Bicarbonate	305.0	290.0
Sulfate	167.0	161.0
Chloride	82.0	69.0
Fluoride	4.0	3.2
Nitrate	10.7	15.7
Iron		
pH	8.2	8.2
* Dissolved Solids	698.7	657.5
Phenol. Alk. CaCO ₃	.0	.0
Total Alk. CaCO ₃	250.0	238.0
Total Hard CaCO ₃	113.0	103.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

HUDSPETH COUNTY

Record of Wells - Fort Hancock Water Control and Improvement District

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
New Well	48-42-406	31-18-57 105-51-30	B & G Drilling and Pump Co.	08-23-83	60	Hueco Bolson	3,610	6	08-23-83	16	660	S, 15	Screened from 20 to 60 feet. Reported yield 1000 gpm with 15 feet drawdown after pumping 72 hours in 1983.
* Old Well	48-42-702	31-16-57 105-51-45	K.C. Wheeler	06-60	213	Rio Grande Alluvium & Hueco Bolson	3,529	28	07-60	8 6	170 213	T	Unused. Screened from 170 to 213 feet. Reported yield 150 gpm in 1960.
* Old Well	48-42-708	31-16-55 105-51-43	do	--	189	do	3,529	14.2	12-10-78	12 8	--	T	Unused.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine.

WATER QUALITY ANALYSES

Fort Hancock WCID
(Hudspeth County)

State Well Number	48-42-702	48-42-708
Date of Collection	09/03/74	08/31/73
Temperature-°F		
Temperature-°C		
Silica		
Calcium	98.0	399.0
Magnesium	26.0	105.0
Sodium	409.0	465.0
Potassium		
Manganese	.1	.5
Boron		
Carbonate	.0	.0
Bicarbonate	234.0	279.0
Sulfate	332.0	760.0
Chloride	490.0	1,000.0
Fluoride	1.3	.8
Nitrate	.8	.5
Iron	.6	.9
pH	8.0	7.5
* Dissolved Solids	1,472.8	2,868.8
Phenol. Alk. CaCO ₃	.0	.0
Total Alk. CaCO ₃	192.0	229.0
Total Hard CaCO ₃	351.0	1,430.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

HUDSPETH COUNTY

Record of Wells - Hudspeth County Water Control and Improvement District No. 1
(City of Sierra Blanca)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 1	48-53-802	31-08-37 105-26-27	H.H. Virdeell	1970	286	Cretaceous	4,695	154.7 223	02-03-72 10-30-73	8	180	--	Unused supply well for Sierra Blanca. Originally drilled to 184 feet, deepened in 1973. Perforated from 166 to 178 ft. Original reported yield 100 gpm with 17 feet drawdown. Reported yield 20 gpm in 1975.
* Well No. 2	48-53-803	31-08-52 105-26-28	R.W. Blair & R.A. Foster	1972	357	do	4,681	165.2 242	02-10-72 12-11-73	6	357	--	Unused supply well for Sierra Blanca. Original reported yield 60 gpm with 180 feet drawdown. Reported yield 13 gpm in 1975.
* Well No. 3	48-53-804	31-09-16 105-26-19	H.H. Virdeell	1973	970	do	4,655	355.9 372	07-20-73 02-06-74	7	70	--	Unused supply well for Sierra Blanca. Reported yield 40 gpm in 1974.
Well No. 1A	48-53-805	31-08-36 105-26-27	do	1973	298	do	4,697	176.3 236.2 259.0	07-20-73 12-11-73 06-21-74	6	280	--	Unused supply well for Sierra Blanca. Drilled to replace Well No. 1 but never used. Perforated from 188 to 191, 211 to 214, 231 to 234, and 254 to 257 feet.
* --	48-54-401	31-11-14 105-21-13	C.W. Gooden	1957	1,102	do	4,595	965	06-06-57	7	1,100	--	Unused supply well for Sierra Blanca. Perforated from 1,010 to 1,100 feet. Original reported yield 70 gpm with 100 feet drawdown. Reported yield 45 gpm in 1975.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Hudspeth County WCID No. 1 (City of Sierra Blanca)
(Hudspeth County)

State Well Number	48-53-802	48-53-803	48-53-804	48-54-401
Date of Collection	11/17/70	02/03/72	08/23/73	09/27/68
Temperature-°F				
Temperature-°C				
Silica			19.0	
Calcium	109.0	115.0	76.0	97.0
Magnesium	11.0	17.0	25.0	36.0
Sodium	40.0	81.0	100.0	540.0
Potassium				
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	320.0	332.0	316.0	356.0
Sulfate	107.0	164.0	190.0	362.0
Chloride	18.0	62.0	39.0	650.0
Fluoride	1.3	1.6	1.8	4.5
Nitrate	5.0	4.0	.7	.4
Iron		.3	.0	.0
pH	7.5	7.5	7.6	7.5
* Dissolved Solids	448.6	608.1	606.9	1,865.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	262.0	272.0	259.0	292.0
Total Hard CaCO ₃	315.0	358.0	290.0	390.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

IRION COUNTY

Record of Wells - Barnhart Water System (City of Barnhart)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
* Well No. 1	44-55-809	31-07-34 101-10-21	--	1926	425	Antlers Sand	2,562	--	--	8	120	T, 30	Leased from C.H. Porter Construction Co.	
* Well No. 2	44-55-804	31-07-40 101-10-34	--	1927	360	do	2,612	306.0	08-12-68	5	--	S, 30	do	

* For Chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Barnhart
(Irion County)

State Well Number	44-55-804	44-55-809	44-55-809
Date of Collection	08/12/68	07/29/68	12/14/74
Temperature-°F	69	71	
Temperature-°C			
Silica	10.0	21.0	
Calcium	64.0	89.0	85.0
Magnesium	31.0	41.0	30.0
Sodium	55.0	127.0	64.0
Potassium			
Manganese			
Boron			
Carbonate	.0	.0	.0
Bicarbonate	275.0	270.0	295.0
Sulfate	93.0	154.0	88.0
Chloride	51.0	184.0	92.0
Fluoride	1.2	2.9	1.2
Nitrate	.4	8.5	8.0
Iron			
pH	8.0	7.9	7.4
* Dissolved Solids	440.0	760.0	513.3
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	225.0	221.0	242.0
Total Hard CaCO ₃	286.0	391.0	336.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

IRION COUNTY

Record of Wells - City of Mertzson

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	LIFT AND HORSE- POWER	OF LIFT	
* Well No. 1	43-42-822	31-15-13 100-49-23	Charles Bailey	03-21-84	196	Antlers Sand	2,302	--	--	5	196	S,3	Slotted from 155 to 175 feet. Used only in the summer. Reported yield 22 gpm.	
* Well No. 2	43-42-823	31-15-13 100-49-30	do	05-15-84	188	do	2,300	--	--	5	188	S,3	Slotted from 150 to 165 feet. Reported yield 25 gpm with 40 feet drawdown after pumping one hour. Used only in the summer.	
Well No. 3	43-42-824	31-15-15 100-49-02	do	1984	200 +	do	2,211	--	--	5	--	N	Abandoned.	
* Well No. 4	43-42-825	31-16-11 100-49-32	do	04-18-85	118	do	2,240	--	--	5	118	S,3	Slotted from 72 to 117 feet. Reported yield 20 gpm. Used only in the summer.	
* Well No. 5	43-42-826	31-16-08 100-49-29	do	04-18-85	110	do	2,235	--	--	6	110	S,3	Slotted from 62 to 107 feet. Reported yield 30 gpm with 30 feet drawdown after pumping one hour. Used only in the summer.	
Tankersley No. 1	43-50-214	31-14-47 100-48-56	James Smith	--	78 +	do	2,211	--	--	8	--	S,3	Leased from Boyce Tankersley Estate. Reported yield 38 gpm.	
* Tankersley No. 2	43-50-215	31-14-49 100-48-51	Charles Bailey	--	130 +	do	2,202	--	--	6	--	S,3	Leased from Boyce Tankersley Estate. Reported yield 18 gpm.	
* Tankersley No. 3	43-50-216	31-14-21 100-49-03	Milton Laudermilt	1978 +	55	do	2,212	--	--	8	--	S,5	Leased from Boyce Tankersley Estate. Reported yield 52 gpm.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Mertzton
(Irion County)

State Well Number	43-42-822	43-42-823	43-42-825	43-42-825
Date of Collection	05/27/87	05/27/87	11/02/84	05/27/87
Temperature-°F				
Temperature-°C	20	20		20
Silica	16.0	16.0		24.0
Calcium	78.0	68.0	84.0	66.0
Magnesium	20.0	24.0	24.0	19.0
Sodium	23.0	9.0	70.0	57.0
Potassium	2.0	1.0		1.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	311.0	299.0	293.0	254.0
Sulfate	34.0	13.0	100.0	79.0
Chloride	25.0	13.0	76.0	43.0
Fluoride	.5	.4		.8
Nitrate	16.0	13.3	14.9	21.9
Iron				
pH	8.0	8.0	7.8	8.0
Dissolved Solids	367.4	304.7	513.0	436.6
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	255.0	245.0	240.0	208.0
Total Hard CaCO ₃	279.0	270.0	310.0	244.0
State Well Number	43-42-826	43-50-215	43-50-216	
Date of Collection	05/09/85	05/27/87	05/27/87	
Temperature-°F				
Temperature-°C		20	21	
Silica		24.0	22.0	
Calcium	88.0	128.0	107.0	
Magnesium	35.0	30.0	23.0	
Sodium	194.0	49.0	37.0	
Potassium		1.0	2.0	
Manganese				
Boron				
Carbonate	.0	.0	.0	
Bicarbonate	376.0	414.0	346.0	
Sulfate	240.0	69.0	49.0	
Chloride	162.0	104.0	73.0	
Fluoride		.6	.6	
Nitrate	1.8	5.0	12.2	
Iron				
pH	7.9	8.0	7.8	
* Dissolved Solids	905.6	614.2	495.9	
Phenol. Alk. CaCO ₃	.0	.0	.0	
Total Alk. CaCO ₃	308.0	339.0	284.0	
Total Hard CaCO ₃	365.0	442.0	363.0	

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

JEFF DAVIS COUNTY

Record of Wells - Davis Mountain State Park

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
* Well No. 1	52-25-204	30-35-32 103-56-26	Pucket Water Well Service	04-66	250	Tertiary Volcanics	5,045	--	--	6	--	S,15	Reported yield 300 gpm.	
* Well No. 2	52-25-303	30-36-05 103-54-42	do	1966	275	do	4,910	--	--	6	--	S,15	Reported yield 110 gpm.	

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible.

WATER QUALITY ANALYSES

Davis Mountain State Park
(Jeff Davis County)

State Well Number	52-25-204	52-25-204	52-25-303
Date of Collection	10/05/74	06/25/85	07/30/75
Temperature-°F		75	
Temperature-°C			
Silica		51.0	
Calcium	57.0	52.0	48.0
Magnesium	5.0	4.0	6.0
Sodium	28.0	28.0	28.0
Potassium		3.0	
Manganese	.1		.1
Boron			
Carbonate	.0	.0	.0
Bicarbonate	226.0	229.0	222.0
Sulfate	8.0	9.0	8.0
Chloride	18.0	8.0	9.0
Fluoride	2.6	2.5	2.5
Nitrate	1.3	2.2	.4
Iron	.0		.0
pH	7.4	7.9	8.1
* Dissolved Solids	231.1	272.3	211.1
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	185.0	188.0	182.0
Total Hard CaCO ₃	162.0	148.0	143.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

JEFF DAVIS COUNTY

Record of Wells - Fort Davis Water Supply Corp.

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
Well No. 1	52-25-304	30-35-14 103-53-58	—	1929	90	Tertiary Volcanics & Alluvium	4,910	—	—	6	90	S,5	Standby well. Perforated from 60 to 90 feet.	
* Well No. 2	52-25-305	30-35-09 103-53-58	H.H. Virdeitt	08-11-71	303	do	4,910	61	05-22-86	10 8 5/8 7	92 223 303	S,30	Slotted from 70 to 92, 62 to 223, and 215 to 303 feet.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

Fort Davis Water Supply Corp.
(Jeff Davis County)

State Well Number	52-25-305
Date of Collection	06/25/85
Temperature-°F	68
Temperature-°C	
Silica	53.0
Calcium	54.0
Magnesium	6.0
Sodium	30.0
Potassium	3.0
Manganese	
Boron	
Carbonate	.0
Bicarbonate	246.0
Sulfate	11.0
Chloride	10.0
Fluoride	2.5
Nitrate	2.0
Iron	
pH	8.0
* Dissolved Solids	291.5
Phenol. Alk. CaCO ₃	.0
Total Alk. CaCO ₃	202.0
Total Hard CaCO ₃	160.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

JEFF DAVIS COUNTY

Record of Wells - City of Valentine

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/} OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	HORSE- POWER	
* Well No. 1	51-29-104	30-35-19 104-29-15	Emmitt Harrell	1944	870	Salt Bolson	4,433	--	--	8	870	T,25	Reported yield 80 gpm in 1948.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine.

WATER QUALITY ANALYSES

City of Valentine
(Jeff Davis County)

State Well Number Date of Collection	51-29-104 08/13/48	51-29-104 01/03/55	51-29-104 11/27/74	51-29-104 06/27/85
Temperature-°F				
Temperature-°C				
Silica	28.0	31.0		34.0
Calcium	4.0	5.0	6.0	3.0
Magnesium	1.0	1.0	1.0	1.0
Sodium	71.0	76.0	71.0	77.0
Potassium	8.0	2.2		1.0
Manganese		.0	.1	
Boron	.7			
Carbonate	12.0	.0	.0	5.0
Bicarbonate	128.0	154.0	146.0	142.0
Sulfate	27.0	27.0	28.0	27.0
Chloride	13.0	14.0	15.0	14.0
Fluoride	1.3	1.6	1.2	1.1
Nitrate	4.5	5.8	7.0	6.5
Iron	.2	.0	.1	
pH	8.4	8.2	7.9	8.6
* Dissolved Solids	233.6	239.4	201.2	239.4
Phenol. Alk. CaCO ₃	10.0	.0	.0	4.0
Total Alk. CaCO ₃	125.0	126.0	120.0	124.0
Total Hard CaCO ₃	14.0	15.0	20.0	10.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

MIDLAND COUNTY

Record of Wells - Midland Air Terminal Water System (City of Midland)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 1	45-07-415	31-56-15 102-12-36	--	1941	120	Antlers Sand	2,857	31.9	08-24-87	7	85	T,10	
Well No. 2	45-07-416	31-56-15 102-12-33	--	1941	120	do	2,856	--	--	16	30	N	Abandoned.
* Well No. 3	45-07-417	31-56-06 102-12-25	--	1941	115	do	2,852	25.1	08-24-87	12	85	T,15	
Well No. 4	45-07-414	31-56-21 102-12-24	--	1941	120	do	2,851	30.7	08-24-87	12	90	T,15	
* Well No. 5	45-07-413	31-56-18 102-12-45	--	1941	115	do	2,860	41.7	08-24-87	16	30	S,25	
Well No. 6	45-07-412	31-56-17 102-12-52	--	1941	115	do	2,863	34.7	08-24-87	16	30	S,20	
* Well No. 10	45-07-406	31-56-28 102-15-12	--	1942	120	do	2,868	39.1	08-24-87	12	95	T,45	
Well No. 11	45-07-407	31-56-43 102-13-11	--	1943	100+	do	2,867	38.0	08-24-87	12	100	T,40	
Well No. 12	45-07-408	31-56-57 102-13-19	--	1943	85+	do	2,871	40.1	08-24-87	12	85	T,15	
* Well No. 13	45-07-409	31-57-10 102-13-27	--	1943	90+	do	2,876	50.1	08-24-87	12	90	T,25	
Well No. 14	45-07-410	31-57-19 102-13-12	--	1943	85+	do	2,876	46.0	08-24-87	12	85	T,15	
* Well No. 15	45-07-411	31-57-25 102-12-56	--	1943	85+	do	2,873	44.5	08-24-87	12	85	T,15	

See footnotes at end of table.

MIDLAND COUNTY
Record of Wells - City of Midland (McMillen Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								WATER LEVEL DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
Well 1, Sec. 6	27-62-606	32-03-00 102-15-37	--	1955	136	Ogallala	2,892	69.4	08-25-87	16	136	N	Abandoned.	
* Well 2, Sec. 6	27-62-607	32-03-06 102-16-06	--	1955	146	do	2,896	76.8	08-25-87	16	146	T,25		
Well 3, Sec. 6	27-62-608	32-02-47 102-16-19	--	1955	132	do	2,897	88.3	08-25-87	16	132	T,40		
* Well 4, Sec. 6	27-62-609	32-03-00 102-16-34	Barnette & Hamblin	07-16-55	145	do	2,904	92.4	08-25-87	16	145	S,25		
Well 5, Sec. 6	27-62-610	32-02-51 102-15-55	--	1955	126	do	2,893	72.8	08-25-87	16	126	T,15		
Well 1, Sec. 8	27-63-404	32-02-33 102-14-25	--	03-53	147	do	2,878	55.1	08-25-87	16	147	T,25		
Well 2, Sec. 8	27-63-405	32-02-37 102-14-32	--	1954	114	do	2,877	--	--	16	114	N	Abandoned.	
* Well 3, Sec. 8	27-63-406	32-02-53 102-14-34	--	1954	132	do	2,878	52.8	08-25-87	16 12 3/4	20 132	T,25	Screened from 102 to 132 feet.	
Well 4, Sec. 8	27-63-407	32-02-47 102-14-57	--	1954	129	do	2,879	60.0	08-25-87	16	129	T,25		
Well 5, Sec. 8	27-62-611	32-02-53 102-15-14	--	1954	134	do	2,884	62.4	08-25-87	16	134	N	Abandoned.	
Well 2, Sec. 9	27-63-706	32-02-30 102-13-57	--	1953	149	do	2,876	55.0	08-25-87	16	149	N	Abandoned.	
Well 1, Sec. 12	27-63-504	32-03-05 102-10-28	--	1956	158	do	2,846	82.8	08-25-87	16	158	N	Abandoned.	
Well 2, Sec. 12	27-63-505	32-03-10 102-10-41	--	1956	157	do	2,840	81.2	08-25-87	16	157	T,50		
* Well 3, Sec. 12	27-63-506	32-03-15 102-10-18	--	1956	147	do	2,837	91.8	08-25-87	16	147	S,50		

See footnotes at end of table.

Record of Wells - City of Midland (McMillen Field) -
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)			
Well 1, Sec. 13	27-63-501	32-02-40 102-10-58	--	1956	174	Ogallala	2,857	84.1	08-26-87	16	155	T,50		
Well 2, Sec. 13	27-63-507	32-02-54 102-10-46	--	1956	160	do	2,858	92.7	08-26-87	16	160	T,40		
Well 3, Sec. 13	27-63-508	32-02-58 102-10-24	--	1956	140	do	2,850	93.3	08-26-87	16	140	N	Abandoned.	
Well 4, Sec. 13	27-63-509	32-02-45 102-10-28	--	1956	137	do	2,856	96.4	08-26-87	16	137	N	Abandoned.	
* Well 1, Sec. 14	27-63-803	32-02-12 102-11-55	--	1956	125	do	2,858	76.0	08-27-87	16	125	T,20		
Well 2, Sec. 14	27-63-804	32-02-17 102-11-38	--	1956	135	do	2,855	76.2	08-27-87	16	135	N	Abandoned.	
* Well 3, Sec. 14	27-63-510	32-02-33 102-11-37	--	1956	130	do	2,849	76.3	08-26-87	16	130	T,50		
Well 4, Sec. 14	27-63-511	32-02-34 102-11-18	--	1956	130	do	2,852	79.8	08-26-87	16	130	T,50		
Well 5, Sec. 14	27-63-512	32-02-51 102-11-16	--	1956	145	do	2,852	82.4	08-27-87	16	145	T,25		
Well 1, Sec. 15	27-63-703	32-02-04 102-12-37	--	1953	136	do	2,863	72.5	08-26-87	16	130	T,20		
* Well 2, Sec. 15	27-63-707	32-02-02 102-12-45	--	1953	154	do	2,876	85.5	08-27-87	16	154	T,25		
* Well 3, Sec. 15	27-63-701	32-02-02 102-13-00	--	1953	128	do	2,863	60.4	08-27-87	16	128	N	Abandoned.	
Well 4, Sec. 15	27-63-805	32-01-58 102-12-23	--	1953	135	do	2,864	72.6	08-27-87	16	135	S,20		
* Well 5, Sec. 15	27-63-806	32-02-10 102-12-12	--	1953	148	do	2,859	73.0	08-27-87	16	148	T,25		

See footnotes at end of table.

Record of Wells - City of Midland (McMillen Field) -
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
Well 1, Sec. 16	27-63-708	32-02-04 102-13-25	--	1953	127	Ogallala	2,867	44.8	08-27-87	16	127	N	Abandoned.	
Well 2, Sec. 16	27-63-702	32-02-01 102-13-49	--	1953	146	do	2,873	53.9	08-25-87	16	141	T,30		
Well 4, Sec. 16	27-63-709	32-02-15 102-14-05	--	1953	173	do	2,882	66.9	09-03-87	16	173	T,20		
Well 6, Sec. f 16	27-63-710	32-01-52 102-13-13	--	1953	158	do	2,868	58.1	08-25-87	16	153	T,15		
* Well 7, Sec. 16	27-63-711	32-01-45 102-13-28	--	1953	145	do	2,869	56.3	08-25-87	16	145	T,20		

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Midland
(Midland County)

State Well Number	27-62-607	27-62-609	27-63-406	27-63-506
Date of Collection	08/25/87	08/25/87	08/24/87	08/25/87
Temperature-°F				
Temperature-°C				
Silica	57.0	37.0	57.0	61.0
Calcium	97.0	88.0	98.0	115.0
Magnesium	57.0	51.0	58.0	73.0
Sodium	133.0	156.0	134.0	172.0
Potassium	7.0	7.0	8.0	8.0
Manganese				
Boron				
Carbonate	.0	2.0	.0	.0
Bicarbonate	195.0	196.0	203.0	188.0
Sulfate	347.0	287.0	360.0	358.0
Chloride	152.0	213.0	153.0	302.0
Fluoride	3.2	2.3	3.2	3.1
Nitrate	18.0	3.1	17.6	10.4
Iron				
pH	8.3	8.4	8.3	8.3
* Dissolved Solids	967.1	942.8	988.6	1,194.0
Phenol. Alk. CaCO ₃	.0	2.0	.0	.0
Total Alk. CaCO ₃	160.0	165.0	166.0	154.0
Total Hard CaCO ₃	479.0	431.0	483.0	589.0

State Well Number	27-63-510	27-63-701	27-63-707	27-63-711
Date of Collection	08/25/87	08/25/87	08/25/87	08/25/87
Temperature-°F				
Temperature-°C				
Silica	62.0	58.0	62.0	61.0
Calcium	113.0	90.0	114.0	102.0
Magnesium	69.0	78.0	86.0	80.0
Sodium	180.0	179.0	162.0	146.0
Potassium	8.0	13.0	12.0	12.0
Manganese				
Boron				
Carbonate	2.0	2.0	.0	.0
Bicarbonate	199.0	251.0	222.0	234.0
Sulfate	370.0	347.0	433.0	426.0
Chloride	278.0	257.0	254.0	199.0
Fluoride	3.1	4.6	4.3	4.5
Nitrate	6.9	10.6	17.1	14.8
Iron				
pH	8.4	8.4	8.3	8.3
* Dissolved Solids	1,189.0	1,162.6	1,253.5	1,160.3
Phenol. Alk. CaCO ₃	2.0	2.0	.0	.0
Total Alk. CaCO ₃	167.0	210.0	182.0	192.0
Total Hard CaCO ₃	566.0	546.0	642.0	587.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

City of Midland
(Midland County)

State Well Number	27-63-803	27-63-806	45-07-406	45-07-409
Date of Collection	08/25/87	08/25/87	08/24/87	08/25/87
Temperature-°F				
Temperature-°C				
Silica	61.0	60.0	40.0	37.0
Calcium	110.0	84.0	70.0	64.0
Magnesium	68.0	74.0	11.0	9.0
Sodium	177.0	172.0	41.0	35.0
Potassium	8.0	13.0	4.0	4.0
Manganese				
Boron				
Carbonate	.0	2.0	2.0	.0
Bicarbonate	192.0	256.0	209.0	190.0
Sulfate	363.0	315.0	62.0	54.0
Chloride	277.0	237.0	39.0	36.0
Fluoride	3.1	4.9	.9	.9
Nitrate	11.6	11.0	18.8	17.6
Iron				
pH	8.3	8.4	8.4	8.3
* Dissolved Solids	1,173.1	1,098.8	391.5	350.9
Phenol. Alk. CaCO ₃	.0	2.0	2.0	.0
Total Alk. CaCO ₃	157.0	214.0	175.0	156.0
Total Hard CaCO ₃	556.0	514.0	221.0	200.0
State Well Number	45-07-411	45-07-413	45-07-415	45-07-417
Date of Collection	08/24/87	08/24/87	08/24/87	08/25/87
Temperature-°F				
Temperature-°C				
Silica	35.0	38.0	43.0	33.0
Calcium	58.0	76.0	80.0	81.0
Magnesium	9.0	8.0	15.0	15.0
Sodium	36.0	36.0	60.0	55.0
Potassium	3.0	4.0	5.0	5.0
Manganese				
Boron				
Carbonate	.0	2.0	.0	.0
Bicarbonate	182.0	233.0	200.0	231.0
Sulfate	50.0	48.0	101.0	87.0
Chloride	34.0	33.0	70.0	65.0
Fluoride	.9	.9	.9	.9
Nitrate	17.0	16.3	23.8	7.4
Iron				
pH	8.3	8.4	8.1	8.0
* Dissolved Solids	332.4	376.8	497.1	462.9
Phenol. Alk. CaCO ₃	.0	2.0	.0	.0
Total Alk. CaCO ₃	149.0	195.0	164.0	189.0
Total Hard CaCO ₃	186.0	224.0	262.0	264.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PECOS COUNTY

Record of Wells - City of Fort Stockton

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
* Well No. 1	52-16-904	30-47-20 103-01-38	Shackleford Drilling Co.	1962	400	Antlers Sand	3,219	235 218	03-05-79 03-13-87	--	--	T,200	Reported yield 1,500 gpm.
Well No. 2	52-16-903	30-47-04 103-01-32	do	1962	500	do	3,232	--	--	--	--	T,200	Reported yield 1,500 gpm.
* Well No. 3	52-16-503	30-47-40 103-02-35	--	1952	400	do	3,193	--	--	--	--	N	Abandoned. Well Z-12 in TBWE Bull. 6106. Reported yield 1,100 gpm.
Well No. 4	52-16-804	30-47-11 103-02-34	Gray	1954	400	do	3,219	--	--	--	--	N	Abandoned. Reported yield 1,200 gpm.
Well No. 5	52-16-902	30-46-19 103-01-31	Barbee	1956	517	do	3,259	195 252.6	06-56 03-10-87	20	--	T,250	Well Z-51 in TBWE Bull. 6106. Reported yield 2,400 gpm.
Well No. 6	52-16-906	30-46-20 103-01-19	Stephens Drilling Supply	1955	515	do	3,258	205.8	03-10-87	--	--	N	Well presently unused.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Fort Stockton
(Pecos County)

State Well Number	52-16-503	52-16-904
Date of Collection	07/22/75	03/25/87
Temperature-°F		
Temperature-°C		
Silica	19.0	22.0
Calcium	225.0	168.0
Magnesium	80.0	47.0
Sodium	261.0	287.0
Potassium		12.0
Manganese		
Boron		
Carbonate	.0	.0
Bicarbonate	299.0	277.0
Sulfate	600.0	444.0
Chloride	431.0	400.0
Fluoride	1.9	1.5
Nitrate	1.7	.5
Iron		
pH	7.5	7.9
* Dissolved Solids	1,766.6	1,518.2
Phenol. Alk. CaCO ₃	.0	.0
Total Alk. CaCO ₃	245.0	227.0
Total Hard CaCO ₃	890.0	613.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PECOS COUNTY

Record of Wells - City of Imperial (Imperial Water Company)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
Well No. 1	46-56-309	31-12-35 103-00-08	--	--	--	Cenozoic Pecos Alluvium	2,604	--	--	--	--	T,E 50	Unused.	
* Well No. 2	46-56-307	31-12-45 103-01-09	--	--	500	do	2,613	--	--	--	--	T,E 75	Stand-by well.	
* Well No. 3	46-56-308	31-12-50 103-01-43	Big 3 Machine and Supply, Inc.	1972	924	do	2,617	406.0	04-08-72	16 12	260 924	T,E 125	Reported yield 510 gpm with 29 feet draw-down after pumping 48 hours in 1972.	
	45-49-106	31-12-32 102-59-33	Brown Drilling and Welding Co.	1957	198	do	2,601	118.1	06-06-57	11	158	N	Well B-84 in TBWE Bull. 6106. Destroyed.	
	45-49-401	31-12-30 102-59-35	--	1956	235	do	2,601	146.35	02-15-77	12	235	N	Well B-87 in TBWE Bull. 6106. Historical observation well.	
	45-49-402	31-12-30 102-59-36	B.L. Breed	1956	110	do	2,601	118.9	06-06-57	11	222	N	Well B-85 in TBWE Bull. 6106. Originally drilled to 232 feet. Reported yield 600 to 700 gpm.	
	45-49-403	31-12-30 102-59-37	W.H. Drilling Co.	1957	676	do	2,601	118.9	06-06-57	11	676	N	Well B-86 in TBWE Bull. 6106. Destroyed.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Imperial
(Pecos County)

State Well Number	46-56-306	45-56-307	46-56-307
Date of Collection	03/24/87	06/28/56	03/24/87
Temperature-°F			
Temperature-°C			
Silica	31.0		11.0
Calcium	257.0	167.0	59.0
Magnesium	33.0	34.0	15.0
Sodium	173.0	145.0	164.0
Potassium	8.0		8.0
Manganese		.1	
Boron			
Carbonate	.0	.0	.0
Bicarbonate	151.0	183.0	237.0
Sulfate	653.0	477.0	216.0
Chloride	231.0	156.0	106.0
Fluoride	.7	1.0	1.5
Nitrate	51.1	15.5	.0
Iron		.1	
pH	7.9	7.4	8.1
* Dissolved Solids	1,512.1	930.0	697.1
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	124.0	150.0	194.0
Total Hard CaCO ₃	778.0	558.0	211.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PECOS COUNTY

Record of Wells - City of Iraan

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
* Well No. 1	53-08-601	30-57-23 102-02-58	Schneider Drilling Co.	08-09-63	260	Antlers Sand	2,384	--	--	10	260	T	Reported yield 464 gpm.
* Well No. 2	53-08-602	30-57-13 102-02-05	Dixon Pump & Drilling Co.	1963	255	do	2,358	--	--	10 3/4	255	T,30	--
* Well No. 3	53-08-501	30-57-23 102-02-31	--	1964	271	do	2,385	--	--	10 3/4	271	T,25	Screened from 211 to 271 feet. Reported yield 295 gpm.
* Well No. 4	53-08-603	30-57-07 102-01-57	--	09-16-71	276	do	2,355	130	09-16-71	16 10 3/4	10 276	T,40	Slotted from 187 to 260 feet.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Iraan
(Pecos County)

State Well Number	53-08-501	53-08-601	53-08-602	53-08-603
Date of Collection	03/26/87	03/26/87	03/26/87	03/26/87
Temperature-°F				
Temperature-°C				
Silica	15.0	16.0	16.0	15.0
Calcium	78.0	93.0	75.0	70.0
Magnesium	17.0	26.0	20.0	21.0
Sodium	28.0	53.0	29.0	26.0
Potassium	2.0	3.0	2.0	2.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	253.0	283.0	264.0	251.0
Sulfate	68.0	76.0	64.0	58.0
Chloride	34.0	100.0	37.0	34.0
Fluoride	1.3	1.1	1.2	1.3
Nitrate	6.8	6.3	7.1	7.4
Iron				
pH	8.0	7.9	7.9	7.9
* Dissolved Solids	374.5	513.6	381.1	358.2
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	207.0	232.0	216.0	206.0
Total Hard CaCO ₃	267.0	338.0	272.0	263.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PECOS COUNTY

Record of Wells - Pecos County Water Control and Improvement District No. 1

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/} OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	LIFT	POWER	
* Well No. 1	52-06-601	30-56-03 103-16-06	Spruill Bros. Drilling Co.	10-21-81	590	Cenezoic Pecos Alluvium	3,043	--	--	8 5/8	590	S,40	Slotted from 420 to 590 feet. Reported yield 200 gpm.	
* Well No. 2	52-06-602	30-56-10 103-16-07	do	10-23-81	598	do	3,038	--	--	8 5/8	598	S,40	Slotted from 398 to 598 feet.	

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Pecos County WCID
(Pecos County)

State Well Number	52-06-601	52-06-602
Date of Collection	03/24/87	04/15/87
Temperature-°F		
Temperature-°C		
Silica	15.0	17.0
Calcium	87.0	78.0
Magnesium	13.0	17.0
Sodium	46.0	42.0
Potassium	5.0	5.0
Manganese		
Boron		
Carbonate	.0	2.0
Bicarbonate	234.0	228.0
Sulfate	91.0	88.0
Chloride	66.0	57.0
Fluoride	.8	.8
Nitrate	.0	.0
Iron		
pH	7.8	8.4
* Dissolved Solids	438.9	418.9
Phenol. Alk. CaCO ₃	.0	2.0
Total Alk. CaCO ₃	192.0	191.0
Total Hard CaCO ₃	271.0	268.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PECOS COUNTY

Record of Wells - Sheffield Water Supply Corp. (City of Sheffield)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
* Well No. 1	54-18-503	30-41-30 101-49-42	Roy Harrison Johnson	09-15-67	227	Antlers Sand	2,175	105	09-28-67	14 10 5/8	73 227	N	Unused. Slotted from 180 to 227 feet.	
Well No. 2	54-18-504	30-41-30 101-49-28	J. B. Chapman	06-16-74	294	do	2,175	130	06-17-74	14 8 5/8	60 278	S,30	--	
Well No. 3	54-18-505	30-41-32 101-49-43	J. L. Greer	07-10-67	237	do	2,175	111	07-13-67	10 3/4	237	N	Abandoned. Slotted from 197 to 237 feet.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; N, none.

WATER QUALITY ANALYSES

City of Sheffield
(Pecos County)

State Well Number	54-18-503	58-18-503
Date of Collection	03/24/69	03/26/87
Temperature-°F		
Temperature-°C		
Silica		18.0
Calcium	81.0	80.0
Magnesium	14.0	9.0
Sodium	21.0	17.0
Potassium		2.0
Manganese	.1	
Boron		
Carbonate	.0	.0
Bicarbonate	261.0	254.0
Sulfate	21.0	25.0
Chloride	41.0	28.0
Fluoride	.8	.8
Nitrate	8.5	6.1
Iron	.0	
pH	7.6	7.8
* Dissolved Solids	315.7	310.8
Phenol. Alk. CaCO ₃	.0	.0
Total Alk. CaCO ₃	214.0	208.0
Total Hard CaCO ₃	260.0	238.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PRESIDIO COUNTY
Record of Wells - City of Marfa

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	LIFT AND HORSE- POWER	
* Well No. 2	51-48-603	30-18-51 104-01-16	E. Harrell	03-45	1,100	Tertiary Volcanics	4,700	185.0	02-16-87	16 11	314 1,100	T	Well Q-7 in TBWE Bull. 6110. Perforated from 170 to 298, 358 to 570, and 815 to 889 feet. Reported yield 375 gpm.
* Well No. 3	51-48-601	30-18-51 104-01-15	J. H. Cass	1936	841	do	4,700	--	--	10 8	306 841	T	Well Q-5 in TBWE Bull. 6110. Perforated from 411 to 841 feet. Reported yield 1,000 gpm.
* Well No. 4	51-48-602	30-18-52 104-01-15	Layne Texas Co.	1928	881	do	4,700	185.9	02-16-87	16 10	291 881	T	Emergency use well. Well Q-6 in TBWE Bull. 6110. Reported discharge 700 gpm.
Well No. 5	51-48-604	30-18-55 104-01-00	James Cole	05-25-83	882	do	4,711	194.5	03-09-87	20 --	240 --	S	Standby well. Reported yield 180 gpm with 151 feet drawdown.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Marfa
(Presidio County)

State Well Number	51-48-601	51-48-602	51-48-603
Date of Collection	11/26/73	01/09/86	06/11/85
Temperature-°F			88
Temperature-°C			
Silica			78.0
Calcium	29.0	32.0	32.0
Magnesium	4.0	2.0	2.0
Sodium	61.0	67.0	67.0
Potassium	6.0		8.0
Manganese		.0	
Boron			
Carbonate	.0	.0	.0
Bicarbonate	196.0	200.0	200.0
Sulfate	27.0	29.0	31.0
Chloride	18.0	21.0	21.0
Fluoride	3.0	2.6	2.5
Nitrate	11.0	15.3	15.1
Iron		.0	
pH	8.0	8.1	8.1
* Dissolved Solids	255.4	267.3	354.9
Phenol. Alk. CaCO ₃	1.0	.0	.0
Total Alk. CaCO ₃	161.0	164.0	164.0
Total Hard CaCO ₃	88.0	90.0	90.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

PRESIDIO COUNTY
Record of Wells - Presidio Water Supply Corporation - (City of Presidio)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
Well No. 1	74-30-407	29-33-26 104-21-00	H. H. Vindell	1948 Approx.	84	Rio Grande Alluvium	2,595	63.1	05-10-74	16	78	S,10	Originally owned by Sante Fe Railroad. Slotted from 58 to 78 feet. Reported discharge 275 gpm.	
Well No. 2	74-29-616	29-34-02 104-22-33	Ray's Drilling	1979	80	do	2,598	42.2	03-27-79	8	--	S,15	--	
Well No. 3	74-29-617	29-34-07 104-22-32	Sparks Drilling Co.	02-12-85	98	do	2,600	53	02-12-85	14 8	22 88	S,15	Reported yield 145 gpm with 15 feet drawdown.	

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible; T, turbine; N, none.

REAGAN COUNTY

Record of Wells - City of Big Lake

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)			
City Well No. 1	44-53-402	31-11-30 101-27-39	--	1920's	440	Edwards Limestone	2,691	307.2	05-04-66	--	--	N	Abandoned. Reported yield 90 gpm in 1960.	
City Well No. 2	44-53-406	31-11-30 101-27-39	--	1920's	535	do	2,691	307.2	05-04-66	6	--	N	Abandoned. Reported yield 140 gpm in 1947.	
* City Well No. 3	44-53-403	31-11-22 101-27-36	W.A. Schooler	1944	535	do	2,688	--	--	7	535	T,25	--	
City Well No. 4	44-53-408	31-11-22 101-27-35	do	1944	670	Antlers Sand	2,688	302.6 290.6	05-03-66 06-24-75	--	--	N	Abandoned.	
* City Well No. 5	44-53-401	31-11-13 101-27-58	John Holt	03-52	557	Edwards Limestone	2,699	380 316.1	03-52 05-03-66	8 5/8	130	S,25	Used to irrigate cemetery. Reported yield 145 gpm in 1987.	
City Well No. 6	44-53-407	31-11-12 101-27-49	--	1951	553	do	2,695	313.2	05-03-66	--	--	N	Abandoned.	
City Well No. 7	44-53-411	31-11-12 101-27-39	--	04-55	503	do	2,690	306.7 306.4	08-27-61 05-04-66	10 3/4	130	N	Abandoned.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Big Lake
(Reagan County)

State Well Number	44-53-401	44-53-403
Date of Collection	05/28/87	08/20/87
Temperature-°F		
Temperature-°C	21	
Silica	25.0	6.0
Calcium	374.0	182.0
Magnesium	121.0	109.0
Sodium	419.0	289.0
Potassium	7.0	24.0
Manganese		
Boron		
Carbonate	.0	.0
Bicarbonate	279.0	274.0
Sulfate	1,221.0	933.0
Chloride	585.0	254.0
Fluoride	2.8	2.4
Nitrate	10.5	.8
Iron		
pH	7.8	7.3
* Dissolved Solids	2,902.5	1,934.0
Phenol. Alk. CaCO ₃	.0	.0
Total Alk. CaCO ₃	229.0	225.0
Total Hard CaCO ₃	1,434.0	902.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

REAGAN COUNTY

Record of Wells - Reagan County Water Supply District (City of Big Lake)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	44-37-108	31-28-10 101-28-23	Eugene Tuttle Drilling Co.	11-19-83	342	Antlers Sand	2,620	191	11-02-83	7	309	S,15	Screened from 207 to 309 feet. Reported yield 87 gpm with 53 feet drawdown after pumping 24 hours.
* Well No. 2	44-37-109	31-27-45 101-28-23	do	11-10-83	330	do	2,629	204	11-15-83	7	327	S,10	Screened from 228 to 327 feet. Reported yield 99 gpm with 107 feet drawdown after pumping 24 hours.
* Well No. 3	44-37-404	31-27-20 101-28-23	do	10-04-83	360	do	2,642	202	10-31-83	7	360	S,15	Screened from 258 to 360 feet. Reported yield 135 gpm with 123 feet drawdown after pumping 24 hours.
Well No. 4	44-37-405	31-26-55 101-28-23	do	09-21-83	368	do	2,644	219	09-29-83	--	--	S,15	Reported yield 125 gpm with 119 feet drawdown after pumping 24 hours.
Well No. 5	44-37-110	31-28-34 101-27-56	do	11-28-82	374	do	2,652	214	11-29-82	--	--	S,20	Reported yield 195 gpm with 92 feet drawdown after pumping 24 hours.
* Well No. 6	44-37-111	31-28-10 101-27-54	do	02-19-84	360	do	2,640	208 283	02-20-84 05-26-87	--	--	S,20	Reported yield 122 gpm with 74 feet drawdown after pumping 24 hours.
Well No. 7	44-37-406	31-27-20 101-27-53	do	01-08-84	360	do	2,643	204	01-10-84	--	--	S,20	Reported yield 161 gpm with 67 feet drawdown after pumping 24 hours.
Well No. 8	44-37-407	31-26-55 101-27-54	do	12-06-83	349	do	2,629	195	12-14-83	--	--	S,20	Reported yield 174 gpm with 78 feet drawdown after pumping 24 hours.
* Well No. 9	44-37-408	31-26-26 101-27-36	do	10-19-82	360	do	2,622	188	11-09-82	--	--	S,20	Reported yield 156 gpm with 127 feet drawdown after pumping 24 hours.
* Well No. 10	44-37-206	31-28-34 101-27-25	do	03-28-84	366	do	2,648	277	04-09-84	--	--	S,15	Reported yield 116 gpm with 80 feet drawdown after pumping 24 hours.
Well No. 11	44-37-207	31-28-10 101-27-25	do	01-19-84	357	do	2,643	208	01-30-84	--	--	S,10	Reported yield 83 gpm with 81 feet drawdown after pumping 24 hours.
Well No. 12	44-37-208	31-27-45 101-27-25	do	03-84	366	do	2,642	215	03-27-84	--	--	S,20	Reported yield 161 gpm with 83 feet drawdown after pumping 24 hours.

See footnotes at end of table.

Record of Wells - Reagan County Water Supply District (City of Big Lake)
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 13	44-37-503	31-27-19 101-27-25	Eugene Tuttle Drilling Co.	02-24-84	366	Antlers Sand	2,646	215 240.0	04-12-84 05-26-87	-- --	S,20	Reported yield 125 gpm with 45 feet drawdown after pumping 24 hours.	
* Well No. 14	44-37-209	31-28-36 101-26-56	do	04-16-84	356	do	2,640	223	04-24-84	-- --	S,15	Reported yield 77 gpm with 94 feet draw- down after pumping 24 hours.	
Well No. 15	44-37-210	31-27-45 101-26-55	do	12-20-84	361	do	2,638	229	01-08-85	-- --	S,15	Reported yield 93 gpm with 57 feet draw- down after pumping 24 hours.	
Well No. 16	44-37-505	31-26-54 101-26-56	do	11-05-84	272	do	2,552	152	11-13-84	-- --	S,15	Reported yield 85 gpm with 60 feet draw- down after pumping 24 hours.	
Well No. 17	44-37-504	31-26-50 101-27-25	do	11-28-84	289	do	2,588	178	12-11-84	-- --	S,20	Reported yield 111 gpm with 42 feet draw- down after pumping 24 hours.	
Well No. 18	44-37-211	31-28-10 101-26-29	do	01-25-85	354	do	2,615	202	03-05-85	-- --	S,15	Reported yield 114 gpm with 69 feet draw- down after pumping 24 hours.	
Well No. 19	44-37-506	31-27-19 101-25-59	do	03-08-85	358	do	2,626	206	04-03-85	-- --	S,15	Reported yield 116 gpm with 101 feet draw- down after pumping 24 hours.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

Reagan County Water Supply District (City of Big Lake)
(Reagan County)

State Well Number	44-37-109	44-37-111	44-37-206	44-37-206
Date of Collection	05/26/87	05/26/87	05/26/87	11/17/87
Temperature-°F				
Temperature-°C	20	20	20	20
Silica	12.0	11.0	11.0	10.0
Calcium	45.0	69.0	80.0	59.0
Magnesium	29.0	35.0	35.0	23.0
Sodium	32.0	59.0	87.0	28.0
Potassium	4.0	5.0	5.0	7.0
Manganese				
Boron				.3
Carbonate	.0	.0	.0	.0
Bicarbonate	228.0	238.0	260.0	223.0
Sulfate	70.0	193.0	228.0	73.0
Chloride	21.0	35.0	57.0	31.0
Fluoride	1.9	1.6	1.3	1.4
Nitrate	16.2	18.3	15.4	17.7
Iron				
pH	8.0	7.9	8.0	8.1
* Dissolved Solids	343.2	543.9	647.5	360.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	187.0	195.0	213.0	183.0
Total Hard CaCO ₃	233.0	318.0	344.0	244.0

State Well Number	44-37-209	44-37-404	44-37-408	44-37-503
Date of Collection	05/26/87	05/26/87	05/26/87	05/26/87
Temperature-°F				
Temperature-°C	21	19	19	20
Silica	17.0	21.0	10.0	12.0
Calcium	50.0	52.0	77.0	60.0
Magnesium	31.0	31.0	38.0	33.0
Sodium	29.0	33.0	110.0	59.0
Potassium	3.0	4.0	6.0	5.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	222.0	222.0	256.0	246.0
Sulfate	77.0	53.0	261.0	146.0
Chloride	30.0	55.0	69.0	37.0
Fluoride	1.6	1.6	1.8	1.7
Nitrate	21.6	13.0	13.9	1.4
Iron				
pH	8.3	8.0	8.1	8.0
* Dissolved Solids	369.4	372.7	712.6	476.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	182.0	182.0	210.0	202.0
Total Hard CaCO ₃	252.0	259.0	348.0	286.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

REAGAN COUNTY

Record of Wells - City of Texon

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 1	44-51-201	31-12-38 101-41-08	Big Lake Oil Co.	1966	565	Antlers Sand	2,785	--	--	8 5/8	2,647	S,10	Well operated by Denson Gas Plant. Originally drilled to 3,000 feet as an oil well in 1948 by Marathon Oil Co.
* Well No. 2	44-51-205	31-13-00 101-41-20	do	1963	475+	do	2,755	--	--	8 5/8	2,645	S,7.1/2	Well operated by Denson Gas Plant. Originally drilled to 3,079 feet as an oil well in 1936 by Marathon Oil Co.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

City of Texon
(Reagan County)

State Well Number	44-51-201	44-51-201	44-51-205	44-51-205
Date of Collection	03/25/66	05/27/87	03/25/66	05/27/87
Temperature-°F		20		20
Temperature-°C				
Silica	12.0	12.0	11.0	11.0
Calcium	184.0	175.0	169.0	165.0
Magnesium	116.0	110.0	105.0	107.0
Sodium	270.0	259.0	278.0	293.0
Potassium		8.0		9.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	321.0	320.0	281.0	276.0
Sulfate	920.0	923.0	940.0	979.0
Chloride	197.0	167.0	158.0	171.0
Fluoride	3.0	2.4	3.4	2.7
Nitrate	18.0	24.0	18.0	23.4
Iron				
pH	7.6	7.8	7.9	7.8
* Dissolved Solids	1,877.0	1,837.8	1,820.0	1,896.8
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	263.0	262.0	230.0	226.0
Total Hard CaCO ₃	940.0	889.0	850.0	852.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

REEVES COUNTY

Records of Wells - City of Balmorhea

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
* Phantom Lake Spring	52-02-405	30-56-06 103-50-57	--	--	Spring	Lower Cretaceous Limestone	3,476	--	--	--	--	Flows	Spring located in Jeff Davis County.	
* Well No. 1	52-02-407	30-55-07 103-50-59	--	1964	290	Cenezoic Pecos Alluvium	3,520	48.7 67.6 82.0	05-14-69 03-18-70 10-16-86	12	--	S,10	Well located in Jeff Davis County. Re- ported yield 276 gpm with 56 feet of drawdown in 1986. Measured yield 270 gpm on 3-27-87.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

City of Balmorhea
(Jeff Davis County)

State Well Number	52-02-405	52-02-405	52-02-405	52-02-407
Date of Collection	06/06/69	04/28/71	03/27/87	03/27/87
Temperature-°F	78	78		
Temperature-°C				
Silica	19.0	16.0	18.0	55.0
Calcium	182.0	192.0	205.0	53.0
Magnesium	72.0	91.0	70.0	2.0
Sodium	456.0	467.0	467.0	10.0
Potassium		1.9	20.0	3.0
Manganese		.1		
Boron		.5		
Carbonate	.0	.0	.0	.0
Bicarbonate	207.0	278.0	277.0	171.0
Sulfate	670.0	680.0	674.0	14.0
Chloride	640.0	650.0	647.0	5.0
Fluoride	2.1	2.2	1.7	.3
Nitrate	.4	.4	1.0	6.7
Iron				
pH	7.7	7.4	7.9	7.3
* Dissolved Solids	2,143.0	2,237.8	2,239.9	233.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	170.0	228.0	227.0	140.0
Total Hard CaCO ₃	750.0	850.0	801.0	140.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

REEVES COUNTY

Record of Wells - Madera Valley Water Supply Corporation

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)	OF LIFT AND HORSE- POWER		
Well No. 1	52-02-404	30-55-02 103-50-41	Richardson Brothers	02-68	285	Cenezoic, Pecos Alluvium	3,510	55	02-69	16 12 3/4 10 3/4	51 200 285	T,25	Perforated from 50 to 200 and 195 to 285 feet. Reported yield 220 gpm in 1968. Well located in Jeff Davis County.	
Well No. 2	52-02-408	30-55-01 103-50-44	--	08-71	300	do	3,510	--	--	10	300	--	Well located in Jeff Davis County.	
* McIntire No. 1	52-01-301	31-59-07 103-54-26	Ray's Well Service	1978	475	Cretaceous	3,678	--	--	10 3/4	403	S,30	Open hole from 403 to 475 feet. Reported yield 220 gpm.	
* McIntire No. 2	52-01-302	31-59-06 103-54-28	--	1977	415	do	3,682	--	--	--	--	S,20	Formerly owned by an oil company. Reported yield 160 gpm.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine.

WATER QUALITY ANALYSES

Madera Valley Water Supply Corp.
(Reeves County)

State Well Number	52-01-301	52-01-301	52-01-302	52-01-302
Date of Collection	04/02/80	04/27/87	03/03/80	04/27/87
Temperature-°F		76		76
Temperature-°C				
Silica		19.0		19.0
Calcium	113.0	120.0	119.0	106.0
Magnesium	33.0	33.0	36.0	26.0
Sodium	161.0	190.0	187.0	152.0
Potassium	8.0	8.0		7.0
Manganese	.0			
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	233.0	238.0	239.0	228.0
Sulfate	261.0	281.0	294.0	220.0
Chloride	230.0	263.0	257.0	204.0
Fluoride	.9	.9	.9	.8
Nitrate	.2	.3	.1	.3
Iron	.1			
pH	7.8	7.6	7.7	7.8
* Dissolved Solids	921.8	1,032.2	1,011.5	847.2
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	191.0	195.0	196.0	187.0
Total Hard CaCO ₃	417.0	438.0	446.0	370.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

REEVES COUNTY

Record of Wells - City of Pecos (Ward County Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	46-40-305	31-28-50 103-01-23	Burkholder Drilling Co.	05-13-63	252	Cenezoic Pecos Alluvium	2,618	116 130	04-17-67 01-08-76	14	250	N	Abandoned. Perforated from 97 to 246 feet. Reported yield 884 gpm with 34 feet drawdown in 1967.
* Well No. 1-A	46-40-311	31-28-49 103-01-23	Walker Drilling Co.	04-16-80	273	do	2,618	122	04-24-80	16	273	T,100	Reported yield 855 gpm with 30 feet drawdown in 1980.
* Well No. 2	46-40-306	31-29-07 103-01-44	Burkholder Drilling Co.	05-18-63	240	do	2,633	125 138	04-10-67 05-04-83	14	240	T,100	Reported yield 865 gpm with 40 feet drawdown in 1967.
Well No. 3	46-40-307	31-29-25 103-02-07	F.C. Wheeler	06-62	316	do	2,631	113.5 123	07-13-62 04-17-67	14	316	N	Abandoned. Screened from 127 to 227 and perforated from 227 to 309 feet. Reported yield 655 gpm with 21 feet drawdown in 1967.
* Well No. 3-A	46-40-312	31-29-26 103-02-08	H.E. Stanton Drilling	06-15-72	250	do	2,631	126 135	08-11-72 05-07-76	16	250	T,100	Perforated from 150 to 250 feet. Reported yield 700 gpm with 63.7 feet drawdown in 1972.
Well No. 4	46-40-308	31-28-37 103-01-50	F.C. Wheeler	08-62	256	do	2,628	127 135.2	01-06-64 03-24-87	14	256	N	Abandoned. Perforated from 126 to 251 feet. Reported yield 766 gpm with 33 feet drawdown in 1967.
Well No. 5	46-40-206	31-28-49 103-02-48	H.E. Stanton Drilling	06-18-72	250	do	2,621	115 123.0	12-08-72 03-24-87	16	250	N	Abandoned. Cement plug at 250 feet in 1-80. Perforated from 143 to 222 feet. Reported yield 700 gpm with 77.2 feet drawdown in 1972.
* Well No. 6	46-40-313	31-29-07 103-02-28	Walker Drilling Co.	04-04-80	269	do	2,626	130	12-23-80	16	269	T,100	Perforated from 149 to 269 feet. Reported yield 850 gpm with 44 feet drawdown in 1980.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine; N, none.

WATER QUALITY ANALYSES

City of Pecos
(Ward County)

State Well Number	46-40-306	46-40-311	46-40-312	46-40-313
Date of Collection	08/06/85	03/24/87	08/06/85	03/24/87
Temperature-°F				
Temperature-°C				
Silica		38.0		41.0
Calcium	88.0	86.0	66.0	116.0
Magnesium	38.0	32.0	26.0	49.0
Sodium	383.0	338.0	273.0	399.0
Potassium	9.0	8.0	7.0	10.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	234.0	233.0	240.0	229.0
Sulfate	328.0	297.0	288.0	379.0
Chloride	478.0	400.0	260.0	542.0
Fluoride	3.0	3.1	3.4	3.2
Nitrate	1.0	5.3	1.3	4.4
Iron				.2
pH	8.2	7.9	8.3	8.0
* Dissolved Solids	1,443.0	1,321.9	1,042.7	1,656.4
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	192.0	191.0	197.0	188.0
Total Hard CaCO ₃	377.0	346.0	269.0	492.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

REEVES COUNTY

Record of Wells - City of Pecos (Worsham Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	AND HORSE-POWER	
Well No. 1	46-46-103	31-21-17 103-20-04	Tom Simonds	04-33	187	Dockum Group	2,635	73.5 87.8 134	05-11-33 10-10-40 10-16-51	10	187	N	Well K-32 in TBWE Bull. 6214. Abandoned. Perforated from 84 to 103 feet and 134 to 187 feet. Reported yield 220 gpm with 31 feet drawdown in 1958.	
* Well No. 2	46-46-201	31-21-14 103-19-53	do	1935	211	do	2,638	125 133.7	09-35 03-24-87	12	187	T,25	Well L-59 in TBWE Bull. 6214. Reported yield 180 gpm with 11 feet drawdown in 1935.	
Well No. 3	46-46-207	31-21-11 103-19-42	do	1935	300	do	2,636	123 150	1935 01-16-41	12	--	N	Well L-58 in TBWE Bull. 6214. Abandoned. Reported yield 225 gpm when drilled and 65 gpm in 1950's.	
Well No. 4	46-46-202	31-21-27 103-19-51	D.M. Bassett	1942	191	do	2,619	109.5 112	07-04-50 02-01-84	12	--	T,40	Well L-57 in TBWE Bull. 6214. Reported yield 445 gpm with 15 feet drawdown in 1952 and 350 gpm with 8 feet drawdown in 1966.	
* Well No. 5	46-46-203	31-21-27 103-19-59	do	1942	170	do	2,628	102 110 91	1942 02-59 09-21-66	12	--	T,40	Well K-31 in TBWE Bull. 6214. Reported yield 275 gpm with 30 feet drawdown in 1952.	
* Well No. 6	46-46-204	31-21-26 103-19-41	Wilhite & McDonald	1950	200	do	2,617	86.5 100.0 81	03-04-50 04-01-57 04-22-65	16	--	T,40	Well L-56 in TBWE Bull. 6214. Reported yield 467 gpm with 30.5 feet drawdown in 1950 and 440 gpm with 22 feet drawdown in 1965.	
Well No. 7	46-46-205	31-21-13 103-19-10	do	05-51	214	do	2,629	96.7 100	07-09-51 08-13-70	10	--	T,40	Well L-55 in TBWE Bull. 6214. Unused. Reported yield 350 gpm with 27 feet drawdown.	
Well No. 8	46-46-206	31-21-38 103-19-51	--	01-26-52	198	do	2,616	123.5 80	05-18-53 07-30-70	12	198	T,25	Well K-30 in TBWE Bull. 6214. Perforated from 68 to 198 feet. Reported yield 200 gpm with 50 feet drawdown in 1952 and 320 gpm in 1962.	
Old Well No. 9	46-46-212	31-20-52 103-18-28	Trotter	03-12-52	186	do	2,650	72 94	03-52 04-01-57	14 12	110 186	N	Destroyed. Perforated from 100 to 186 feet. Reported yield 85 gpm in 1953.	
* Well No. 9	46-46-301	31-20-22 103-17-09	Goforth	02-58	223	do	2,661	112 120	02-59 04-04-76	14 12	-- 223	T,40	Well K-40 in TBWE Bull. 6214. Perforated from 100 to 223 feet.	

See footnotes at end of table.

Record of Wells - City of Pecos (Worsham Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
* Well No. 10	46-46-601	31-19-56 103-17-23	Goforth	07-10-57	252	Dockum Group	2,666	107.0	07-15-58	12	252	T,40	Well L-41 in TBWE Bull. 6214. Perforated from 100 to 252 feet. Reported yield 690 gpm with 33 feet drawdown in 1958 and 450 gpm in 1970.	
Old Well No. 11	46-46-213	31-20-48 103-18-06	--	04-52	150	do	2,653	61 85	04-10-52 04-01-57	12	150	N	Well L-54 in TBWE Bull. 6214. Destroyed. Perforated from 90 to 150 feet.	
Well No. 11	46-46-602	31-19-30 103-16-30	Goforth	02-27-61	208	do	2,662	94.0 106	03-22-61 01-26-81	14	207	T,60	Perforated from 89 to 207 feet. Reported yield 736 gpm with 20 feet drawdown in 1961 and 750 gpm with 25 feet drawdown in 1976.	
* Well No. 12	46-46-208	31-20-45 103-17-55	Coleman & Huckabee	01-10-53	160	do	2,638	48.8 85.6 110	03-09-53 12-15-58 04-10-76	12	--	T,40	Well L-52 in TBWE Bull. 6214. Reported yield 605 gpm with 13 feet drawdown in 1953 and 470 gpm with 20 feet drawdown in 1976.	
Well No. 13	46-46-302	31-20-40 103-17-20	C & H Drilling Co.	01-53	160	do	2,632	85 84.9	01-53 12-15-57	12	--	N	Well L-46 in TBWE Bull. 6214. Abandoned.	
* Well No. 14	46-46-209	31-20-33 103-18-11	do	01-02-53	176	do	2,654	71 102 105	02-16-53 12-58 07-27-70	12	--	T,40	Well L-53 in TBWE Bull. 6214. Reported yield 330 gpm with a pumping level of 88.5 feet in 1953 and 300 gpm with 30 feet drawdown in 1970.	
Well No. 15	46-46-214	31-20-18 103-18-23	R.T. Mullican	10-56	250	do	2,666	125 114 118	10-56 04-01-57 01-59	10	250	N	Well L-44 in TBWE Bull. 6214. Abandoned. Perforated from 142 to 250 feet. Reported yield 200 gpm with 46 feet drawdown in 1957.	
Well No. 16	46-46-215	31-20-14 103-17-57	do	11-56	250	do	2,663	108 117 140.1	04-25-57 01-59 03-24-87	10	250	N	Well L-43 in TBWE Bull. 6214. Abandoned. Perforated from 124 to 242 feet. Reported yield 200 gpm with 28 feet drawdown in 1957.	
* Well No. 17	46-46-210	31-20-45 103-17-55	C & H Drilling Co.	04-15-54	173	do	2,638	89 110 105	01-59 04-02-76 06-01-83	12	173	T,40	Well L-48 in TBWE Bull. 6214. Perforated from 93 to 173 feet. Reported yield 697 gpm with 13 feet drawdown in 1954 and 650 gpm with 17 feet drawdown in 1973.	

See footnotes at end of table.

Record of wells - City of Pecos (Worsham Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 18	46-46-216	31-20-42 103-17-33	C & H Drilling Co.	05-54	180	Dockum Group	2,648	95 94 92.0	05-54 01-23-57 12-15-58	12	180	N	Well L-49 in TBWE Bull. 6214. Destroyed. Perforated from 60 to 100 feet. Reported yield 300 gpm with 46 feet drawdown in 1957.
Well No. 19	46-46-217	31-20-38 103-17-32	R.T. Mullican	1956	208	do	2,653	98 101.7	12-56 12-15-58	12	---	N	Well L-47 in TBWE Bull. 6214. Abandoned. Reported yield 400 gpm with 30 feet drawdown in 1957.
Well No. 20	46-46-211	31-20-52 103-17-53	C & H Drilling Co.	05-21-54	160	do	2,633	83 82.0 111.8	05-54 12-15-58 03-24-87	12	160	N	Well L-50 in TBWE Bull. 6214. Abandoned. Perforated from 100 to 160 feet. Reported yield 510 gpm with 35 feet drawdown in 1957.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine; N, none.

WATER QUALITY ANALYSES

City of Pecos
(Reeves County)

State Well Number	46-46-201	46-46-203	46-46-204	46-46-208
Date of Collection	08/05/85	08/05/85	03/24/87	03/24/87
Temperature-°F				
Temperature-°C				
Silica			35.0	32.0
Calcium	162.0	540.0	90.0	83.0
Magnesium	36.0	125.0	31.0	15.0
Sodium	106.0	398.0	247.0	72.0
Potassium	5.0	12.0	7.0	4.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	184.0	140.0	226.0	209.0
Sulfate	426.0	699.0	261.0	149.0
Chloride	136.0	1,369.0	300.0	68.0
Fluoride	1.3	.8	2.5	1.4
Nitrate	3.6	3.6	7.6	12.1
Iron				.2
pH	8.2	8.0	8.1	7.9
* Dissolved Solids	966.4	3,216.2	1,092.2	539.4
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	151.0	115.0	185.0	171.0
Total Hard CaCO ₃	552.0	1,863.0	352.0	271.0

State Well Number	46-46-209	46-46-210	46-46-301	46-46-601
Date of Collection	08/05/85	08/05/85	08/05/85	03/24/87
Temperature-°F				
Temperature-°C				
Silica				31.0
Calcium	73.0	72.0	70.0	80.0
Magnesium	20.0	21.0	19.0	15.0
Sodium	70.0	72.0	71.0	69.0
Potassium				5.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	216.0	212.0	212.0	214.0
Sulfate	142.0	144.0	142.0	140.0
Chloride	62.0	65.0	61.0	64.0
Fluoride	1.3	1.3	1.3	1.3
Nitrate	2.8	2.7	2.8	1.1
Iron				.2
pH	8.1	8.2	8.1	7.8
Dissolved Solids	477.3	482.3	471.3	511.9
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	177.0	174.0	174.0	175.0
Total Hard CaCO ₃	264.0	265.0	254.0	265.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

STERLING COUNTY

Record of Wells - City of Sterling City

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	OF LIFT AND HORSE-POWER		
Jeff Davis Well	44-16-301	31-50-02 101-00-41	--	--	--	Alluvium & Ogallala	2,271	--	--	--	--	--	Formerly leased by the city.	
* Well No. 2	43-09-117	31-50-32 100-59-01	C.W. Smith	07-15-74	99	Ogallala	2,300	65	07-15-74	6	99	S	--	
* Well No. 3	43-09-118	31-50-32 100-59-04	do	07-10-74	99	do	2,300	65	07-10-74	8	99	S	--	
Well No. 4	43-09-116	31-50-29 100-58-42	Howell Bowen	05-15-78	238	Ogallala & Dockum	2,302	--	--	6	238	S	--	
* Well No. 5	43-09-115	31-50-29 100-58-42	do	05-16-78	113	do	2,302	--	--	6	113	S	--	
Well No. 6	43-09-119	31-50-29 100-58-42	Curtis Drilling Co.	07-05-84	202	do	2,302	85	07-05-84	7	202	S	--	
* County Park Well	43-09-102	31-50-06 100-58-36	--	--	107	do	2,277	33.3	01-31-68	6 1/4	--	--	Used as an emergency public supply source.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

City of Sterling City
(Sterling County)

State Well Number	43-09-102	43-09-115	43-09-117	43-09-118
Date of Collection	06/06/86	06/06/86	06/06/86	06/06/86
Temperature-°F		70	70	
Temperature-°C				
Silica	23.0	23.0	24.0	24.0
Calcium	119.0	78.0	98.0	100.0
Magnesium	56.0	42.0	51.0	48.0
Sodium	127.0	42.0	53.0	54.0
Potassium	3.0	2.0	2.0	2.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	368.0	371.0	373.0	373.0
Sulfate	146.0	37.0	86.0	87.0
Chloride	251.0	79.0	120.0	119.0
Fluoride	1.2	1.3	1.2	1.2
Nitrate	8.6	8.5	8.8	8.7
Iron				
pH	8.0	8.0	8.0	7.7
* Dissolved Solids	915.8	495.2	627.4	627.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	302.0	304.0	306.0	306.0
Total Hard CaCO ₃	530.0	369.0	455.0	450.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

TOM GREEN COUNTY

Record of Wells - Concho Rural Water Corporation

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE-POWER		
* Water Valley Well No. 1	43-19-701	31-39-28 100-42-36	--	--	100+	Leona Formation	2,061	27.6	07-24-87	8	100	S		
* Water Valley Well No. 2	43-19-702	31-39-31 100-42-35	--	--	100+	do	2,070	26.0	07-24-87	8	100	S		
Water Valley Well No. 3	43-19-703	31-39-32 100-42-34	--	--	100+	do	2,061	--	--	8	100	T	Used for back up only.	
Carlsbad FWD#1 Well No. 1	43-27-306	31-36-47 100-39-30	--	1930's	60	do	2,029	22.3	07-24-87	5 1/2	60	S		
Carlsbad FWD#1 Well No. 2	43-27-307	31-36-45 100-39-33	--	1962-1963	85	do	2,019	--	--	8	85	S		
Carlsbad FWD#1 Well No. 3	43-27-308	31-36-49 100-39-34	--	1962-1963	85	do	2,027	--	--	8	85	S		
* Carlsbad FWD#1 Well No. 4	43-27-309	31-36-47 100-39-37	--	1973	100	do	2,020	--	--	8	100	S		
* Carlsbad FWD#1 Well No. 5	43-19-804	31-39-18 100-42-15	--	--	100+	do	2,076	--	--	10	100	S		
Carlsbad FWD#1 Well No. 6	43-19-805	31-39-16 100-42-16	--	--	100+	do	2,076	--	--	10	100	N	Used for back up only.	
* Deer Valley Well No. 1	43-27-603	31-34-51 100-39-45	--	--	100	do	2,055	--	--	8	100	S		
Deer Valley Well No. 2	43-27-604	31-34-49 100-39-46	--	--	105	do	2,056	--	--	8	105	S		
Deer Valley Well No. 3	43-27-605	31-34-45 100-39-45	--	--	120	do	2,061	35.2	07-24-87	6	120	N	Used for back up only.	

See footnotes at end of table.

Record of Wells - Concho Rural Water Corporation -
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	AND HORSE-POWER	
* Grape Creek Well No. 1	43-28-202	31-35-21 100-32-36	--	--	100+	Leona Formation	2,001	--	--	10	100	S, 7 1/2		
* Grape Creek Well No. 2	43-28-203	31-35-21 100-32-37	--	--	100+	do	2,001	--	--	10	100	S, 7 1/2		
Grape Creek Well No. 3	43-28-204	31-35-20 100-32-35	--	--	100+	do	2,002	--	--	10	100	S, 7 1/2		
Grape Creek Well No. 4	43-28-205	31-35-21 100-32-38	--	--	100+	do	2,000	--	--	10	100	S, 7 1/2		
Grape Creek Well No. 5	43-28-206	31-35-03 100-32-46	--	--	100+	do	1,995	--	--	10	100	S, 7 1/2		
Grape Creek Well No. 6	43-28-207	31-35-01 100-32-47	--	--	100+	do	1,995	--	--	10	100	S, 7 1/2		
Grape Creek Well No. 7	43-28-208	31-35-03 100-32-48	--	--	100+	do	1,995	--	--	10	100	S, 7 1/2		
* North Concho Lake Estates Well No. 1	43-29-721	31-31-40 100-29-03	--	--	110	do	1,925	--	--	8	110	S		
North Concho Lake Estates Well No. 2	43-29-722	31-31-42 100-29-04	--	--	110	do	1,925	--	--	8	110	S		
North Concho Lake Estates Well No. 3	43-29-723	31-31-39 100-29-04	--	--	110	do	1,925	34.8	07-24-87	8	110	S		

See footnotes at end of table.

Record of Wells - Concho Rural Water Corporation -
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Dove Creek/Tom Green FWSD#3 Well No. 1	43-44-404	31-18-58 100-37-22	--	--	75	Leona Formation	1,971	17.2	07-24-87	8	75	S,10	
Dove Creek/Tom Green FWSD#3 Well No. 2	43-44-405	31-18-56 100-37-22	--	--	75	do	1,971	16.3	07-24-87	8	75	S,10	
Dove Creek/Tom Green FWSD#3 Well No. 3	43-44-602	31-19-01 100-31-15	--	--	75	Leona Formation	1,962	14.9	07-24-87	10	75	S,10	
* Dove Creek/Tom Green FWSD#3 Well No. 4	43-44-603	31-19-00 100-31-13	--	--	75	do	1,962	15.5	07-24-87	10	75	S,10	
* The Oaks/North-view Estates Water System Well No. 1	43-53-411	31-11-09 100-29-56	--	--	85	Comanche Peak Limestone	2,030	13.5	07-24-87	6	--	S	
The Oaks/North-view Estates Water System Well No. 2	43-53-412	31-11-10 100-29-57	--	--	85	do	2,029	--	--	6	--	S	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Concho Rural Water Corp.
(Tom Green County)

State Well Number	43-19-701	43-19-702	43-19-804	43-27-309
Date of Collection	07/24/87	07/24/87	07/24/87	07/24/87
Temperature-°F	70	70	70	70
Temperature-°C				
Silica	27.0	27.0	28.0	31.0
Calcium	187.0	207.0	246.0	103.0
Magnesium	104.0	119.0	147.0	75.0
Sodium	137.0	161.0	130.0	47.0
Potassium	3.0	3.0	3.0	2.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	379.0	379.0	360.0	493.0
Sulfate	412.0	471.0	672.0	134.0
Chloride	316.0	394.0	338.0	78.0
Fluoride	.8	.8	.8	1.1
Nitrate	17.0	19.2	29.3	11.8
Iron				
pH	8.0	7.9	7.8	8.0
* Dissolved Solids	1,390.1	1,588.3	1,771.1	725.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	311.0	311.0	295.0	404.0
Total Hard CaCO ₃	896.0	1,006.0	1,222.0	567.0

State Well Number	43-27-603	43-28-202	43-28-203	43-29-721
Date of Collection	07/24/87	07/24/87	07/24/87	07/24/87
Temperature-°F	70	70	70	70
Temperature-°C				
Silica	25.0	28.0	25.0	25.0
Calcium	83.0	142.0	140.0	146.0
Magnesium	40.0	69.0	76.0	52.0
Sodium	35.0	212.0	113.0	93.0
Potassium	2.0	5.0	3.0	3.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	372.0	372.0	397.0	436.0
Sulfate	56.0	86.0	59.0	70.0
Chloride	52.0	498.0	342.0	253.0
Fluoride	.7	.6	.5	.5
Nitrate	10.7	36.7	31.3	22.8
Iron				
pH	8.0	8.1	8.1	7.8
* Dissolved Solids	487.3	1,260.2	985.0	879.7
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	305.0	305.0	325.0	357.0
Total Hard CaCO ₃	371.0	640.0	662.0	581.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

Concho Rural Water Corp.
(Tom Green County)

State Well Number	43-44-404	43-44-603	43-53-411
Date of Collection	07/24/87	07/24/87	07/24/87
Temperature-°F	67	70	67
Temperature-°C			
Silica	22.0	20.0	17.0
Calcium	92.0	87.0	97.0
Magnesium	23.0	17.0	16.0
Sodium	43.0	32.0	21.0
Potassium	2.0	1.0	1.0
Manganese			
Boron			
Carbonate	.0	.0	.0
Bicarbonate	342.0	337.0	353.0
Sulfate	35.0	25.0	27.0
Chloride	74.0	40.0	27.0
Fluoride	.5	.4	.4
Nitrate	1.7	5.6	.6
Iron			
pH	7.9	7.9	8.0
* Dissolved Solids	461.4	393.7	380.6
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	280.0	276.0	289.0
Total Hard CaCO ₃	323.0	286.0	310.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

UPTON COUNTY

Record of Wells - City of McCaney (Pecos County Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE-POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 1	53-08-402	30-57-09 102-05-35	Layne Texas Co.	09-30-29	272	Antlers Sand	2,383	--	--	15 8	238 272	S,10	Temporarily unused. Well V-14 in TBWE Bull. 6106. Perforated from 232 to 272 feet. Reported yield 280 gpm in 1947.
Well No. 2	53-08-401	30-57-17 102-05-44	do	1929	354	do	2,365	148.1 168.9	02-10-47 05-24-57	16	326	S,10	Well V-13 in TBWE Bull. 6106. Perforated from 286 to 326 feet.
Well No. 3	53-08-104	30-57-32 102-05-55	do	1950	285	do	2,340	--	--	--	--	S	Well V-12 in TBWE Bull. 6106.
Well No. 4	53-08-403	30-57-18 102-05-48	D. G. Ash	07-50	296	do	2,361	126	07-50	18 10 3/4	255 296	S,10	Well V-11 in TBWE Bull. 6106. Perforated from 256 to 296 feet.
* Well No. 5	53-08-103	30-57-32 102-05-43	N. C. House	03-06-55	318	do	2,350	208.0	05-24-57	18 8	250 318	S,10	Well V-10 in TBWE Bull. 6106. Perforated from 224 to 318 feet. Reported yield 350 gpm in 1957.
* Well No. 6	53-08-404	30-57-26 102-05-37	do	1954	328	do	2,362	192.3	05-24-57	18	250	S,10	Well V-9 in TBWE Bull. 6106. Originally drilled to 368 feet.
* Well No. 7	53-08-405	30-57-18 102-05-30	Buck Jones	05-64	349	do	2,378	--	--	--	--	S,10	--
Well No. 8	53-08-406	30-57-09 102-05-17	Layne Texas Co.	01-26-70	316	do	2,422	201	02-16-70	18 12 3/4	250 316	S,30	Slotted from 261 to 311 feet. Reported yield 264 gpm with 56 feet drawdown in 1970.
* Well No. 9	53-08-105	30-57-30 102-05-17	--	--	389	do	2,400	--	--	--	--	S,25	--
Well No. 10	53-08-407	30-57-05 102-05-11	--	--	295	do	2,430	--	--	18	250	S,5	--
* Well No. 11	53-08-106	30-57-31 102-05-35	D.G. Ash	1950	310	do	2,400	--	--	18	296	S,10	--
Well No. 12	53-08-408	30-57-28 102-05-22	Fannin Drilling	1984	344	do	2,480	--	--	8 5/8	334	S,10	Perforated from 224 to 344 feet.

See footnotes at end of table.

UPTON COUNTY

Record of Wells - City of McCarrey (Pecos County Field) - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/}		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT AND HORSE- POWER		
* Well No. 14	53-08-107	30-57-37 102-05-19	Fannin Drilling	06-19-84	403	Artiers Sand	2,400	--	--	8 5/8	403	S,10	Screened from 333 to 393 feet.	
* Well No. 15	53-08-409	30-57-29 102-05-27	do	1984	370	do	2,420	--	--	--	--	S,10	--	
* Well No. 16	53-08-108	30-57-30 102-05-09	do	1984	357	do	2,450	--	--	--	--	S,15	--	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible.

WATER QUALITY ANALYSES

City of McCamey
(Pecos County)

State Well Number	58-08-103	53-08-105	53-08-106	53-08-107
Date of Collection	03/25/87	03/25/87	03/25/87	03/25/87
Temperature-°F				
Temperature-°C				
Silica	16.0	14.0	15.0	14.0
Calcium	216.0	58.0	84.0	68.0
Magnesium	72.0	24.0	25.0	29.0
Sodium	305.0	28.0	45.0	38.0
Potassium	6.0	3.0	3.0	3.0
Manganese				
Boron				
Carbonate	.0	.0	.0	4.0
Bicarbonate	240.0	209.0	229.0	224.0
Sulfate	295.0	85.0	95.0	99.0
Chloride	708.0	32.0	86.0	51.0
Fluoride	1.1	1.3	1.4	1.5
Nitrate	.4	4.1	6.5	5.2
Iron				
pH	7.7	8.2	7.8	8.4
* Dissolved Solids	1,737.5	352.2	473.5	422.8
Phenol. Alk. CaCO ₃	.0	.0	.0	3.0
Total Alk. CaCO ₃	197.0	171.0	188.0	192.0
Total Hard CaCO ₃	834.0	244.0	311.0	288.0
State Well Number	53-08-108	53-08-404	53-08-405	53-08-409
Date of Collection	03/25/87	03/25/87	03/25/87	03/25/87
Temperature-°F				
Temperature-°C				
Silica	13.0	16.0	15.0	13.0
Calcium	77.0	110.0	62.0	70.0
Magnesium	18.0	48.0	28.0	22.0
Sodium	29.0	139.0	31.0	29.0
Potassium	3.0	4.0	2.0	3.0
Manganese				
Boron				
Carbonate	.0	.0	3.0	.0
Bicarbonate	242.0	198.0	220.0	238.0
Sulfate	82.0	173.0	80.0	87.0
Chloride	32.0	307.0	45.0	33.0
Fluoride	1.3	1.3	1.5	1.5
Nitrate	4.4	4.8	6.2	4.7
Iron				
pH	8.1	7.9	8.4	7.9
* Dissolved Solids	378.7	900.5	381.9	380.3
Phenol. Alk. CaCO ₃	.0	.0	3.0	.0
Total Alk. CaCO ₃	198.0	162.0	186.0	195.0
Total Hard CaCO ₃	265.0	473.0	270.0	267.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

UPTON COUNTY

Record of Wells - Upton County (City of Rankin)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/} OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)			
Well No. 1	44-49-301	31-14-25 101-54-03	Dixon Water Systems	12-53	208	Antlers Sand	2,550	76.4	04-15-64	7	208	N	Unused. Slotted from 63 to 208 feet.	
Well No. 2	44-49-305	31-14-15 101-53-40	do	12-53	220	do	2,558	50.7	04-30-87	8	220	S,3	Slotted from 79 to 220 feet.	
* Well No. 3	44-49-304	31-14-36 101-53-40	do	11-53	241	do	2,563	--	--	8	241	S,3	Slotted.	
Well No. 4	44-49-306	31-14-47 101-53-46	do	01-54	220	do	2,562	--	--	8	220	S	Slotted from 67 to 220 feet.	
* Well No. 5	44-41-908	31-15-01 101-53-39	do	12-53	221	do	2,569	--	--	8	221	S,3	Slotted from 84 to 221 feet.	
* Well No. 6	44-41-909	31-15-10 101-53-44	do	01-54	210	do	2,573	--	--	8	210	S,5	Slotted from 65 to 210 feet.	
* Well No. 7	44-41-907	31-15-19 101-53-40	do	12-53	210	do	2,578	--	--	8	210	S,5	Slotted from 80 to 210 feet. Reported yield 40 gpm.	
Well No. 8	44-41-906	31-15-24 101-53-50	Otto Huffman	1958 ⁺	220	do	2,588	--	--	8	220	S,3	Slotted.	
Well No. 9	44-41-905	31-15-24 101-53-35	do	1958 ⁺	220	do	2,593	--	--	8	220	--	Abandoned. Slotted.	
* Well No. 10	44-41-904	31-15-29 101-53-49	Dixon Water Systems	01-54	220	do	2,585	--	--	8	220	S,3	Slotted from 92 to 220 feet.	
* Well No. 11	44-41-902	31-15-38 101-53-39	do	11-53	242	do	2,595	--	--	8	242	S,3	Slotted.	
Well No. 12	44-41-912	31-15-43 101-54-40	Otto Huffman	1958 ⁺	250	do	2,615	122.7 127.8	10-14-86 04-30-87	8	243	S,3	Slotted.	
Well No. 13	44-41-913	31-15-39 101-54-24	Farrin Drilling	12-20-83	259	Antlers Sand	2,673	--	--	5 1/2	201	S,3 1/2	Perforated from 141 to 201 feet.	

See footnotes at end of table.

Record of Wells - Upton County (City of Rankin) (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	HORSE-POWER	
Well No. 14	44-49-213	31-14-33 101-56-18	C.M. Martin	07-25-68	375	Antlers Sand	2,664	--	--	6 5/8	355	S,7 1/2	Reported yield 50 gpm with 150 feet draw-down after pumping 3 hours.	
Well No. 16	44-49-214	31-14-26 101-56-31	Coleman Rotary Air Water Well	02-09-84	390	do	2,686	240	02-09-84	8	390	S,10	Perforated from 160 to 390 feet.	
Well No. 17	44-49-215	31-14-38 101-56-36	do	1984	377	do	2,688	--	--	8	--	S,10	--	
Well No. 18	44-49-216	31-14-16 101-56-37	do	1984	365	do	2,671	--	--	8	--	S,10	--	
* Well No. 19	44-49-217	31-14-03 101-56-25	do	05-22-84	360	do	2,642	185	05-22-84	8	360	S,10	Perforated from 120 to 360 feet.	
University No. 1	44-49-310	31-14-25 101-53-24	The Loftis Co.	06-23-82	220	do	2,561	70	06-23-82	5	220	S,3	Perforated from 180 to 220 feet. Reported yield 25 gpm.	
University No. 2	44-49-311	31-14-23 101-53-17	do	06-24-82	220	do	2,565	70	06-24-82	5	220	S,3	Perforated from 180 to 220 feet. Reported yield 25 gpm.	
University No. 3	44-49-312	31-14-20 101-53-01	do	06-23-82	220	do	2,571	70	06-23-82	5	220	S,3	Perforated from 180 to 220 feet. Reported yield 25 gpm.	
* University No. 4	44-50-105	31-14-45 101-52-14	Coleman Rotary Air Water Well	04-12-85	322	do	2,633	170 115	04-12-85 09-86	8	322	S,5	Perforated from 122 to 322 feet.	
University No. 5	44-50-106	31-14-38 101-51-38	do	05-15-85	370	do	2,632	160	05-15-85	8	370	S,7 1/2	Perforated from 170 to 370 feet.	
Old City of Rankin No. 1	44-49-202	31-13-17 101-56-19	Flack Water Well Contracting Co.	1939	160	do	2,509	--	--	8 6	142 160	--	No longer operated by the city.	
Old City of Rankin No. 2	44-49-203	31-13-10 101-56-19	N. O. House	08-10-48	166	do	2,498	50	08-10-48	7	166	--	No longer operated by the city. Perforated from 68 to 166 feet.	
Old City of Rankin No. 3	44-49-205	31-13-02 101-56-19	do	1951	170	do	2,500	--	--	6	170	--	No longer operated by the city. Perforated from 130 to 170 feet.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; N, none.

WATER QUALITY ANALYSES

Upton County (City of Rankin)
(Upton County)

State Well Number	44-41-902	44-41-904	44-41-907	44-41-908
Date of Collection	04/30/87	04/30/87	04/30/87	04/30/87
Temperature-°F	70	69	70	69
Temperature-°C				
Silica	26.0	15.0	14.0	14.0
Calcium	156.0	136.0	160.0	196.0
Magnesium	55.0	58.0	58.0	113.0
Sodium	90.0	88.0	111.0	187.0
Potassium	5.0	4.0	4.0	6.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	301.0	310.0	311.0	350.0
Sulfate	410.0	382.0	433.0	874.0
Chloride	72.0	63.0	105.0	123.0
Fluoride	1.4	2.0	2.1	2.5
Nitrate	36.8	31.5	32.5	22.3
Iron				
pH	7.5	7.6	7.6	7.6
* Dissolved Solids	1,000.2	932.0	1,072.5	1,709.9
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	247.0	254.0	255.0	287.0
Total Hard CaCO ₃	616.0	577.0	637.0	958.0

State Well Number	44-41-909	44-49-217	44-49-304	44-50-105
Date of Collection	04/30/87	04/30/87	04/30/87	04/30/87
Temperature-°F	81	72	70	70
Temperature-°C				
Silica	30.0	11.0	13.0	12.0
Calcium	196.0	156.0	198.0	128.0
Magnesium	67.0	74.0	119.0	65.0
Sodium	144.0	198.0	203.0	83.0
Potassium	5.0	7.0	6.0	4.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	355.0	288.0	368.0	300.0
Sulfate	564.0	662.0	862.0	383.0
Chloride	126.0	127.0	139.0	78.0
Fluoride	1.4	2.2	2.5	2.4
Nitrate	36.8	26.5	25.7	32.4
Iron				
pH	7.6	7.6	7.6	7.6
* Dissolved Solids	1,344.7	1,405.3	1,749.2	935.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	291.0	236.0	302.0	246.0
Total Hard CaCO ₃	764.0	694.0	987.0	589.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

UPTON COUNTY

Record of wells - Upton County Water District (City of Rankin)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
26-1	44-50-107	31-14-07 101-51-28	Hickerson Drilling Co.	02-86	400	Artiers Sand	2,655	--	--	8 5/8	400	S,15	Slotted from 190 to 220 and 300 to 400 feet.
26-2	44-50-108	31-14-11 101-50-49	do	02-86	411	do	2,667	--	--	8 5/8	411	S,15	Slotted from 220 to 240 and 320 to 411 feet.

a/ S, submersible.

WARD COUNTY
Record of Wells - Colorado River Municipal Water District (Pyote Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
* Well No. 1	46-32-501	31-32-36 103-03-55	William Purcell	09-42	189	Cenezoic Pecos Alluvium and Dockum Group	2,614	74 83	1942 01-13-45	10 8	136 174	T,15	Perforated from 111 to 174 feet. Reported yield 280 gpm with 12 feet drawdown in 1945. Measured yield 260 gpm in 1967.	
Well No. 2	46-32-511	31-32-38 103-03-47	do	10-42	235	do	2,615	95	05-44	10 8	168 235	N	Well caved-in and abandoned in 1945. Perforated from 214 to 235 feet. Reported yield 190 gpm with 36 feet drawdown in 1942.	
Well No. 3	46-32-806	31-32-27 103-03-54	do	1942	235	do	2,613	71	1942	--	--	N	Plugged in 1945 due to poor quality.	
Well No. 4	46-32-513	31-32-30 103-03-42	Bassett Drilling Co.	12-43	241	do	2,613	82 84.4	12-43 11-16-67	10 8	174 241	N	Abandoned. Perforated from 174 to 241 feet. Reported yield 315 gpm with 35 feet drawdown in 1945. Measured yield 310 gpm in 1967.	
* Well No. 4-A	46-32-516	31-32-31 103-03-44	High Plains Drilling	05-04-82	310	do	2,614	95.1	03-25-87	12	310	T,50	Screened from 245 to 305 feet. Reported yield 620 gpm with 84 feet drawdown in 1982. Measured yield 486 gpm in 1987.	
* Well No. 5	46-32-514	31-32-37 103-03-48	Layne-Texas Co.	06-45	240	do	2,614	92 86.8 98.5 99.7	07-10-45 11-16-67 03-25-87 07-14-87	18 10	159 240	N	Abandoned. Perforated from 186 to 238 feet. Reported yield 260 gpm with 63 feet drawdown in 1945. Measured yield 328 gpm in 1967.	
* Well No. 6	46-32-807	31-32-26 103-03-55	--	11-24-52	271	do	2,613	76	1952	12	271	T,40	Perforated from 103 to 271 feet.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine; N, none.

WATER QUALITY ANALYSES

Colorado River Municipal Water District (Pyote Field)
(Ward County)

State Well Number	46-32-501	46-32-514	46-32-516	46-32-807
Date of Collection	11/16/67	11/16/67	07/14/87	09/10/58
Temperature-°F				
Temperature-°C				
Silica	46.0	47.0	49.0	41.0
Calcium	59.0	78.0	68.0	56.0
Magnesium	19.0	23.0	18.0	25.0
Sodium	118.0	97.0	118.0	180.0
Potassium	4.2	3.9	4.0	
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	240.0	208.0	217.0	224.0
Sulfate	134.0	152.0	140.0	138.0
Chloride	102.0	118.0	124.0	211.0
Fluoride	3.0	2.6	2.6	2.4
Nitrate	3.2	3.8	9.1	3.5
Iron				
pH	7.5	7.5	7.8	7.7
* Dissolved Solids	606.0	627.0	639.4	767.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	197.0	170.0	178.0	184.0
Total Hard CaCO ₃	225.0	289.0	246.0	242.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WARD COUNTY

Record of Wells - Colorado River Municipal Water District (Wickett Field)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		b/		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
* Well No. 1	46-32-906	31-31-14 103-01-10	McDonald Water Development Corp.	11-17-70	350	Cenezoic Pecos Alluvium	2,604	116.2	03-25-87	16	350	T,150	Screened from 140 to 150, 190 to 200, 222 to 232, 250 to 270, and 300 to 310 feet. Measured yield 1,057 gpm in 1987.	
* Well No. 2	46-32-907	31-31-12 103-00-15	F. C. Wheeler Drilling Co.	04-14-71	295	do	2,601	82 125.3	04-19-71 03-25-87	16	295	T,150	Screened from 154 to 164, 174 to 194, 210 to 220, 236 to 246, and 270 to 280 feet. Reported yield 1,200 gpm with 79 feet drawdown in 1971. Measured yield 661 gpm in 1987.	
* Well No. 3	46-32-908	31-31-43 103-00-34	do	01-22-71	290	do	2,608	85 131.3	02-04-71 03-25-87	16	290	T,150	Screened from 170 to 190, 210 to 230, 240 to 260, and 270 to 280 feet. Reported yield 1,200 gpm with 59 feet drawdown in 1971. Measured yield 940 gpm in 1987.	
Well No. 4	46-32-622	31-32-34 103-00-36	do	02-13-71	295	do	2,624	95	02-23-71	16	295	N	Destroyed. Screened from 170 to 210, 230 to 240, and 260 to 280 feet. Reported yield 1,000 gpm with 50 feet drawdown in 1971.	
* Well No. 4-A	46-32-623	31-32-35 103-00-35	High Plains Drilling	05-11-82	300	do	2,624	125 132.7	05-19-82 03-25-87	16	300	T,150	Screened from 230 to 290 feet. Reported yield 1,100 gpm with 99 feet drawdown in 1982.	
Well No. 5	46-32-624	31-32-50 103-01-01	F. C. Wheeler Drilling Co.	01-06-71	290	do	2,622	93	01-18-71	16	290	N	Screened from 125 to 135, 160 to 190, 196 to 206, 220 to 230, and 248 to 258 feet. Reported yield 1,100 gpm with 55 feet drawdown in 1971.	
Well No. 5-A	46-32-625	31-32-50 103-01-00	High Plains Drilling	01-03-84	300	do	2,624	122 124.4	01-12-84 03-25-87	16	300	T,100	Screened from 230 to 290 feet. Reported yield 700 gpm with 121.5 feet drawdown in 1984.	
* Well No. 6	46-32-626	31-33-12 103-01-00	F. C. Wheeler Drilling Co.	02-03-71	295	do	2,642	115 138.0	02-23-71 03-25-87	12	29	T,75	Screened from 140 to 180, 224 to 244, and and 260 to 270 feet. Reported yield 500 gpm with 60 feet drawdown in 1971.	

See footnotes at end of table.

Record of Wells - Colorado River Municipal Water District - (Wickett Field)
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/:		CASING		b/:		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
Well No. 7	46-32-909	31-31-53 103-00-15	F.C. Wheeler Drilling Co.	03-21-71	310	Cenezoic Pecos Alluvium	2,610	85 132.2	04-02-71 03-25-87	16	310	T,150	Screened from 182 to 202, 210 to 220, 230 to 240, 250 to 270, and 286 to 296 feet. Reported yield 1,000 gpm with 80 feet drawdown in 1971. Measured yield 505 gpm in 1987.	
* Well No. 8	45-25-709	31-31-02 102-59-55	do	03-29-71	300	do	2,602	85.8 123.4	04-09-71 03-25-87	16	290	T,150	Screened from 160 to 200, 220 to 230, and 260 to 270 feet. Reported yield 1,000 gpm with 50 feet drawdown in 1971. Measured yield 694 gpm in 1987.	
* Well No. 9	46-32-627	31-32-59 103-00-40	do	02-20-71	310	do	2,637	96 141.2	02-23-71 03-25-87	16	310	T,150	Screened from 154 to 194, 204 to 214, 254 to 264, and 270 to 280 feet. Reported yield 1,000 gpm with 60 feet drawdown in 1971. Measured yield 577 gpm in 1987.	
Well No. 10	46-32-910	31-32-28 103-01-05	do	02-19-71	295	do	2,623	--	--	3	295	N	Monitor well. Slotted from 200 to 295 feet.	
Well No. 11	46-32-911	31-32-04 103-00-50	do	03-07-71	295	do	2,618	93 139.1	03-16-71 03-25-87	16	295	T	Screened from 150 to 170, 180 to 200, 210 to 220, 240 to 250, and 270 to 280 feet. Reported yield 1,200 gpm with 70 feet drawdown in 1971.	
Well No. 12	46-32-912	31-32-10 103-00-20	do	12-07-70	290	do	2,618	93 136.5	02-10-71 03-25-87	16	290	T,75	Screened from 170 to 200, 220 to 230, and 250 to 280 feet. Reported yield 1,200 gpm with 60 feet drawdown in 1971. Measured yield 542 gpm in 1987.	
Well No. 13	46-32-913	31-31-40 103-01-01	do	03-11-71	295	do	2,605	82	03-29-71	16	265	S	Screened from 130 to 150, 160 to 180, 196 to 206, 218 to 228, and 245 to 255 feet. Reported yield 600 gpm.	
Well No. 14	46-32-914	31-31-22 103-00-44	do	03-17-71	295	do	2,600	82.3 125.1	04-04-71 03-25-87	16	295	T,150	Screened from 160 to 180, 196 to 206, 220 to 250, and 255 to 265 feet. Reported yield 1,200 gpm.	

See Footnotes at end of table.

Record of Wells - Colorado River Municipal Water District - (Wickett Field)
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/:		CASING		b/:		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	METHOD OF LIFT AND HORSE- POWER		
Well No. 15	46-32-915	31-31-34 103-00-09	F.C. Wheeler Drilling Co.	03-28-71	310	Cenezoic Pecos Alluvium	2,600	82	05-07-71	163	10	N	Destroyed. Screened from 150 to 190, 230 to 240, 260 to 270, and 284 to 294 feet. Reported yield 400 gpm with 65 feet draw-down in 1971.	
Well No. 15-A	46-32-916	31-31-35 103-00-10	Water Industries	11-80	262	do	2,600	122.3 121.9	12-17-80 03-25-87	16	262	T,75	Plugged back from 532 feet. Screened from 180 to 190 and 202 to 252 feet. Reported yield 798 gpm with 89.8 feet drawdown in 1980.	
* Well No. 16	46-32-917	31-30-48 103-00-18	F.C. Wheeler Drilling Co.	01-17-71	290	do	2,611	90 129.4	01-20-71 03-25-87	16	290	T,150	Screened from 170 to 210, 225 to 235, 250 to 260, and 270 to 280 feet. Reported yield 1,200 gpm with 60 feet drawdown in 1971. Measured yield 1,057 gpm in 1987.	
* Well No. 17	45-25-710	31-30-42 102-59-49	do	04-03-71	240	do	2,606	92 122.9	04-12-71 03-25-87	16	240	T,150	Screened from 150 to 220 feet. Reported yield 800 gpm with 65 feet drawdown in 1971. Measured yield 600 gpm in 1987.	
Well No. 18	46-32-918	31-32-00 103-01-17	do	04-10-71	295	do	2,607	84	04-71	16	295	N	Destroyed. Screened at six intervals between 140 and 285 feet. Reported yield 1,200 gpm with 70 feet drawdown in 1971.	
* Well No. 18-A	46-32-919	31-32-01 103-01-16	Water Industries	12-11-80	324	do	2,607	110 111.4	12-17-80 03-25-87	16	324	T,150	Originally drilled to 359 feet. Screened from 238 to 248, 256 to 296, and 304 to 314 feet. Reported yield 1,302 gpm with 152 feet drawdown in 1980. Measured yield 1,062 gpm in 1987.	
Well No. 19	46-32-904	31-31-34 103-01-24	F.C. Wheeler Drilling Co.	03-77	310	do	2,599	102	01-22-77	16	310	T,150	Screened from 210 to 230, 240 to 260, and 280 to 300 feet.	
Well No. 20	46-32-905	31-30-29 103-00-09	do	03-77	316	do	2,605	100 116.0	03-77 03-25-87	16	316	S	Screened at 5 intervals between 200 and 306 feet. Reported yield 370 gpm with 161 feet drawdown in 1977.	
* Well No. 21	46-32-921	31-30-11 103-00-01	do	03-77	310	do	2,607	110 119.7	03-77 03-25-87	16	310	T,150	Screened from 200 to 220, 240 to 260, and 280 to 300 feet. Reported yield 1,475 gpm with 80 feet drawdown in 1977.	

* See footnotes at end of table.

Record of Wells - Colorado River Municipal Water District - (Wickett Field)
(Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)			
* Well No. 22	45-33-109	31-29-54 102-59-53	F.C. Wheeler Drilling Co.	03-77	300	Cenezoic Pecos Alluvium	2,606	103 115.9	03-77 03-25-87	16	300	T,150	Screened from 200 to 220, 240 to 260, and 270 to 290 feet. Reported yield 1,400 gpm with 140 feet drawdown in 1977.	
* Well No. 23	46-32-628	31-33-17 103-00-25	High Plains Drilling	08-13-84	290	do	2,647	140 143.6	12-21-83 03-25-87	16	290	T,60	Screened from 227 to 287 feet. Reported yield 500 gpm with 130 feet drawdown in 1983.	
* Well No. 24	46-32-629	31-32-39 103-00-10	do	12-83	290	do	2,631	140.7	03-25-87	16	290	T,75	Measured yield 413 gpm in 1987.	
* Well No. 25	46-32-920	31-32-18 103-00-03	do	12-19-83	290	do	2,625	138 140.5	12-19-83 03-25-87	16	290	T,75	Screened from 227 to 287 feet. Reported yield 500 gpm with 93 feet drawdown in 1983. Measured yield 574 gpm in 1987.	
* Well No. 26	45-25-711	31-30-25 102-59-42	do	12-27-83	300	do	2,598	109 110.4	01-06-84 03-25-87	16	300	T,150	Screened from 230 to 290 feet. Reported yield 850 gpm with 33 feet drawdown in 1984. Measured yield 786 gpm in 1987.	
Well No. 26-TH	45-25-712	31-31-31 103-59-45	do	12-21-83	277	do	2,596	138	12-30-83	16	277	N	Destroyed. Reported yield 600 gpm with 81 feet drawdown in 1983.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

Colorado River Municipal Water District (Wickett Field)
(Ward County)

State Well Number	45-25-709	45-25-710	45-25-711	45-33-109
Date of Collection	07/14/87	07/14/87	07/14/87	07/15/87
Temperature-°F				
Temperature-°C				
Silica	35.0	32.0	32.0	30.0
Calcium	61.0	63.0	59.0	73.0
Magnesium	17.0	16.0	15.0	27.0
Sodium	89.0	93.0	102.0	270.0
Potassium	4.0	4.0	4.0	6.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	212.0	211.0	209.0	222.0
Sulfate	144.0	149.0	149.0	204.0
Chloride	63.0	69.0	75.0	342.0
Fluoride	1.9	1.8	1.9	1.9
Nitrate	4.3	4.4	4.4	3.7
Iron				
pH	7.9	7.9	8.1	7.9
* Dissolved Solids	523.4	535.9	545.1	1,066.7
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	174.0	173.0	171.0	182.0
Total Hard CaCO ₃	222.0	223.0	210.0	293.0

State Well Number	46-32-623	46-32-626	46-32-627	46-32-628
Date of Collection	07/15/87	07/15/87	07/14/87	07/14/87
Temperature-°F				
Temperature-°C				
Silica	29.0	29.0	30.0	26.0
Calcium	57.0	71.0	64.0	113.0
Magnesium	15.0	16.0	16.0	28.0
Sodium	72.0	72.0	70.0	106.0
Potassium	3.0	3.0	3.0	4.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	196.0	200.0	196.0	192.0
Sulfate	114.0	154.0	128.0	145.0
Chloride	61.0	56.0	53.0	237.0
Fluoride	1.7	1.9	1.7	1.5
Nitrate	4.7	4.8	4.7	.4
Iron				
pH	8.0	7.9	8.0	7.9
* Dissolved Solids	453.8	506.0	466.8	755.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	161.0	164.0	161.0	157.0
Total Hard CaCO ₃	206.0	243.0	224.0	397.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

Colorado River Municipal Water District (Wickett Field)
(Ward County)

State Well Number	46-32-629	46-32-906	46-32-907	46-32-908
Date of Collection	07/14/87	07/14/87	07/14/87	07/14/87
Temperature-°F				
Temperature-°C				
Silica	26.0	26.0	32.0	31.0
Calcium	60.0	84.0	62.0	59.0
Magnesium	17.0	30.0	16.0	14.0
Sodium	80.0	319.0	105.0	97.0
Potassium	4.0	7.0	4.0	4.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	204.0	215.0	210.0	209.0
Sulfate	147.0	207.0	147.0	139.0
Chloride	56.0	453.0	89.0	77.0
Fluoride	1.6	1.8	1.9	1.9
Nitrate	4.1	3.5	5.0	4.7
Iron				
pH	8.0	7.8	8.0	8.0
* Dissolved Solids	496.0	1,237.1	565.2	530.3
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	167.0	176.0	172.0	171.0
Total Hard CaCO ₃	220.0	336.0	221.0	208.0

State Well Number	46-32-917	46-32-919	46-32-920	46-32-921
Date of Collection	07/15/87	07/14/87	07/14/87	07/15/87
Temperature-°F				
Temperature-°C				
Silica	30.0	25.0	27.0	29.0
Calcium	82.0	84.0	59.0	75.0
Magnesium	23.0	30.0	15.0	22.0
Sodium	205.0	311.0	83.0	254.0
Potassium	5.0	7.0	3.0	5.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	214.0	209.0	201.0	217.0
Sulfate	181.0	209.0	138.0	196.0
Chloride	279.0	433.0	56.0	329.0
Fluoride	1.8	1.7	1.7	1.9
Nitrate	4.0	4.1	4.2	4.0
Iron				
pH	7.9	7.9	8.1	7.9
* Dissolved Solids	916.0	1,207.6	485.7	1,022.6
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	175.0	171.0	165.0	178.0
Total Hard CaCO ₃	301.0	332.0	211.0	280.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WARD COUNTY

Record of Wells - City of Grandfalls

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE-POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)	LIFT	AND HORSE-POWER	
* Well No. 1	45-33-825	31-23-32 102-56-42	Cook Drilling Co.	1975	260	Qal-Trd	2,526	48	05-77	16	90 13 260	T,30	Slotted from 90 to 260 feet.	
* Well No. 2	45-33-812	31-23-18 102-57-10	Bradford Drilling Co.	08-46	140	Qal	2,503	28.7 41.3	11-26-46 08-07-67	15	140	T,25	Perforated from 68 to 140 feet. Reported yield 295 gpm with 7.5 feet drawdown in 1967.	
* Well No. 3	45-33-826	31-23-33 102-57-18	High Plains Drilling	03-04-86	225	Qal-Trd	2,521	50	03-11-86	8	225	S	Screened from 150 to 180 and 195 to 215 feet. Reported yield 250 gpm with 37 feet drawdown in 1986.	
Old Well No. 1	45-33-901	31-23-02 102-54-44	Boyd Hopkins	1940	95	Qal	2,512	42.6	01-02-51	8	95	N	Perforated from 55 to 95 feet.	
Old Well No. 2	45-33-902	31-22-58 102-54-40	--	1943	95	Qal	2,511	49.5	04-26-67	8	95	N	--	
Old Well No. 3	45-33-903	31-23-05 102-54-47	Tipton Drilling Co.	1943	137	Qal	2,511	44.2	07-14-87	12	137	N	Reported yield 200 gpm with 35 feet drawdown in 1966.	
* Old Well No. 4	45-33-908	31-23-07 102-54-50	do	1949	135	Qal	2,512	41.8	07-14-87	8	135	N	Abandoned. Perforated from 40 to 95 feet. Reported yield 200 gpm with 26 feet drawdown in 1966.	

Note: Qal = Cenezoic Pecos Alluvium
Qal-Trd = Cenezoic Pecos Alluvium and Dockum Group

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Grandfalls
(Ward County)

State Well Number	45-33-812	45-33-825	45-33-826	45-33-908
Date of Collection	07/16/87	07/16/87	07/16/87	01/22/65
Temperature-°F				
Temperature-°C				
Silica	33.0	27.0	29.0	
Calcium	92.0	91.0	85.0	73.0
Magnesium	24.0	18.0	27.0	29.0
Sodium	386.0	413.0	476.0	316.0
Potassium	6.0	7.0	8.0	
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	238.0	243.0	231.0	253.0
Sulfate	260.0	268.0	299.0	278.0
Chloride	512.0	527.0	621.0	355.0
Fluoride	2.0	1.9	1.4	2.3
Nitrate	2.1	2.4	.6	3.0
Iron				
pH	7.9	7.9	7.9	8.0
* Dissolved Solids	1,434.2	1,474.8	1,660.6	1,180.0
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	195.0	199.0	189.0	207.0
Total Hard CaCO ₃	328.0	301.0	325.0	300.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WARD COUNTY

Record of Wells - City of Monahans

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD ^{b/} OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)			
Well No. 3-2	45-25-601	31-34-45 102-53-49	Frank Gaylon	01-48	117	Qa1-Trd	2,605	46.4	04-10-67	14	117	N	Abandoned. Perforated from 79 to 160 feet.	
Well No. 3-3	45-25-602	31-34-57 102-53-53	do	01-48	160	Qa1-Trd	2,609	--	--	14	160	N	Capped.	
* Well No. 3-5	45-25-312	31-35-10 102-54-00	do	01-48	149	Qa1-Trd	2,609	49 62.4	03-48 04-10-67	8	160	T, 7 1/2	Abandoned. Perforated from 79 to 149 feet. Reported yield 100 gpm in 1964.	
Well No. 3-6	45-25-313	31-35-14 102-54-05	do	1948	160	Qa1-Trd	2,608	--	--	8	160	N	Abandoned.	
Well No. 3-7	45-25-314	31-35-18 102-54-11	do	1948	160	Qa1-Trd	2,609	63.8	04-10-67	16	160	N	Abandoned.	
* Well No. 3-8	45-25-315	31-35-02 102-54-10	R.C. Murray Well Drilling	03-52	221	Trd	2,607	--	--	14	221	S	Irrigates ballfield. Perforated from 121 to 221 feet.	
Well No. 3-9	45-25-603	31-34-59 102-54-29	do	10-53	140	Qa1-Trd	2,606	53	10-29-53	--	--	S	Irrigates ballfield. Sanded in from 185 feet. Top of perforations at 76 feet. Reported yield 137 gpm with 50 feet drawdown in 1953.	
Well No. 3-10	45-25-316	31-35-10 102-54-55	do	02-55	165	Qa1-Trd	2,603	72	10-20-59	20 10	65 165	N	Abandoned. Perforated from 65 to 165 feet.	
* Well No. 3-11	45-25-604	31-34-48 102-54-50	do	1954	156	Qa1-Trd	2,602	--	--	10	156	T, 20	Abandoned.	
* Well No. 3-12	45-25-605	31-34-28 102-54-45	do	1954	154	Qa1-Trd	2,599	--	--	10	154	N	Abandoned.	
* Well RR No. 6	45-25-322	31-35-34 102-54-06	Layne-Texas Co.	11-45	221	Qa1-Trd	2,613	55.7	05-17-67	20 10	81 221	N	Screened from 107 to 117, 127 to 149, 163 to 178, and 187 to 211 feet. Reported yield 160 gpm with 62 feet drawdown in 1945.	

See footnotes at end of table.

Record of Wells - City of Monahans (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well RR No. 7	45-25-321	31-35-31 102-54-20	Layne Texas Co.	12-46	220	Trd	2,613	42 57.6	12-16-46 05-17-67	18 10	80 220	N	Slotted from 97 to 137 and 170 to 210 feet. Reported yield 192 gpm with 68 feet drawdown in 1946.
Well No. 3	45-25-324	31-35-15 102-53-33	--	1930	450	Qal-Trd	2,612	47.3	08-13-67	--	--	N	Reported yield 80 gpm in 1941.
East Camp Well	45-25-507	31-34-55 102-56-17	Dixon Pump & Equipment Co.	1949	250	Qal-Trd	2,604	75.3	08-14-67	10 8	60 250	N	Perforated from 50 to 250 feet. Reported yield 131 gpm with 48 feet drawdown in 1950.
* West Camp Well	45-25-508	31-34-51 102-56-30	Flack & Felton	05-24-48	275	Qal-Trd	2,604	81	05-50	10 8	71 275	N	Perforated from 72 to 275 feet. Reported yield 147 gpm with 53 feet drawdown in 1950.
Well No. 4-1	46-24-703	31-37-55 103-05-09	Layne Texas Co.	05-30-57	385	Qal-Trd	2,696	118 152.1	06-07-57 07-15-87	12	385	N	Abandoned. Perforated from 182 to 385 feet. Reported yield 500 gpm with 35.8 feet drawdown in 1957. T=15,350 gpd/ft.
* Well No. 4-2	46-24-704	31-38-03 103-05-12	do	03-25-59	392	Qal-Trd	2,694	116.1 124.6	05-57 12-14-67	20 12	191 390	T,100	Screened from 200 to 290, 294 to 314, and 324 to 384 feet. Reported yield 1,208 gpm with 54 feet drawdown in 1959. Measured yield 730 gpm in 1987.
Well No. 4-3	46-24-702	31-37-42 103-05-05	do	07-29-59	395	Qal-Trd	2,690	119 168.8	07-29-59 07-15-87	20 12	185 395	N	Abandoned. Screened from 185 to 280, 290 to 340, 355 to 375, and 378 to 385 feet. Reported yield 1,000 gpm with 125 feet drawdown in 1959. T=91,000 gpd/ft.
Well No. 4-4	46-24-705	31-38-21 103-05-35	Dixon Pump & Equipment Co.	01-30-65	387	Qal-Trd	2,692	118.3 139.7	04-14-67 07-15-87	20 14	177 387	N	Abandoned. Screened from 232 to 382 feet. Reported yield 920 gpm with 38.2 feet drawdown in 1970.
Well No. 4-5	46-24-711	31-38-38 103-05-56	McDonald Drilling Co.	02-70	397	Qal-Trd	2,701	125	02-70	20 14	148 397	N	Abandoned. Screened from 220 to 370 feet. Reported yield 1,000 gpm with 37 feet drawdown in 1970.
Well No. 4-7	46-24-712	31-38-32 103-05-04	High Plains Drilling	03-10-73	415	Qal-Trd	2,703	136	03-19-73	20 14	180 415	N	Abandoned. Screened from 260 to 410 feet. Reported yield 1,000 gpm with 48 feet drawdown in 1973.

See footnotes at end of table.

Record of Wells - City of Monahans - (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Well No. 4-8	46-32-102	31-37-25 103-05-06	High Plains Drilling	09-21-77	415	Qal-Trd	2,695	136 149.3	10-11-77 07-15-87	14	415	N	Abandoned. Screened from 188 to 258, 291 to 334, and 370 to 407 feet. Reported yield 1,000 gpm with 48 feet drawdown in 1977.
Well No. 4-9	46-24-714	31-38-37 103-05-32	do	09-28-77	420	Qal-Trd	2,699	132	10-18-77	14	415	T,125	Screened from 147 to 254, 327 to 365, and 405 to 410 feet. Reported yield 1,000 gpm with 32 feet drawdown in 1977. Measured yield 914 gpm in 1987.
* Well No. 4-10	46-24-715	31-37-40 103-05-10	do	07-07-80	399	Qal-Trd	2,688	138	07-22-80	14	399	T,60	Screened from 193 to 274, 283 to 303, 326 to 336, and 342 to 382 feet. Measured yield 515 gpm in 1987.
* Well No. 4-11	46-24-716	31-37-50 103-05-26	do	07-14-80	405	Qal-Trd	2,685	--	--	14	405	T,125	Screened from 218 to 269, 274 to 355, and 375 to 395 feet. Measured yield 708 gpm in 1987.
* Well No. 4-12	46-24-717	31-38-20 103-05-38	Water Industries	04-29-82	402	Qal-Trd	2,692	132.5	05-13-82	14	402	T,100	Screened from 242 to 262 and 292 to 392 feet. Reported yield 1,300 gpm with 62 feet drawdown in 1982. Measured yield 622 gpm in 1987.
* Well No. 4-13	46-24-718	31-38-40 103-06-00	do	05-04-82	411	Qal-Trd	2,700	131	05-04-82	14	402	T,150	Screened from 237 to 402 feet. Measured yield 1,363 gpm in 1987.
* Well No. 4-14	46-24-719	31-38-10 103-06-05	High Plains Drilling	08-29-83	385	Qal-Trd	2,692	136	09-08-83	14	385	T,150	Screened from 180 to 310 and 360 to 380 feet. Reported yield 1,400 gpm with 34 feet drawdown in 1983. Measured yield 1,356 gpm in 1987.

Note: Qal = Cenezoic Pecos Alluvium
Trd = Dockum Group

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Monahans
(Ward County)

State Well Number	45-25-312	45-25-315	45-25-322	45-25-508
Date of Collection	09/09/68	07/26/79	09/16/64	01/28/68
Temperature-°F		77		
Temperature-°C				
Silica		39.0		
Calcium	302.0	72.0	113.0	226.0
Magnesium	44.0	29.0	7.0	67.0
Sodium	239.0	109.0	108.0	170.0
Potassium				
Manganese	.2			.1
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	170.0	176.0	176.0	163.0
Sulfate	680.0	109.0	180.0	860.0
Chloride	426.0	197.0	154.0	128.0
Fluoride	1.4	2.0		1.3
Nitrate	10.5	3.0		18.5
Iron	.2			.1
pH	7.4	7.5	7.7	7.6
* Dissolved Solids	1,786.9	646.5	648.0	1,551.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	139.0	144.0	144.0	134.0
Total Hard CaCO ₃	940.0	298.0	312.0	840.0

State Well Number	45-25-604	45-25-605	46-24-704	46-24-715
Date of Collection	09/09/68	09/09/68	07/15/87	07/15/87
Temperature-°F				
Temperature-°C				
Silica			38.0	48.0
Calcium	133.0	126.0	62.0	54.0
Magnesium	26.0	24.0	16.0	14.0
Sodium	112.0	104.0	74.0	44.0
Potassium			3.0	3.0
Manganese	.3	.1		
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	165.0	161.0	179.0	181.0
Sulfate	295.0	272.0	86.0	76.0
Chloride	166.0	151.0	104.0	39.0
Fluoride	1.5	1.7	2.1	1.9
Nitrate	13.0	17.0	5.8	12.9
Iron	.2	.0		
pH	7.5	7.5	7.9	8.0
* Dissolved Solids	828.2	774.9	478.9	381.7
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	135.0	132.0	147.0	148.0
Total Hard CaCO ₃	441.0	413.0	222.0	193.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WATER QUALITY ANALYSES

City of Monahans
(Ward County)

State Well Number	46-24-716	46-24-717	46-24-718	46-24-719
Date of Collection	07/15/87	07/15/87	07/15/87	07/15/87
Temperature-°F				
Temperature-°C				
Silica	39.0	40.0	40.0	39.0
Calcium	60.0	51.0	42.0	45.0
Magnesium	22.0	15.0	19.0	19.0
Sodium	103.0	53.0	50.0	54.0
Potassium	5.0	4.0	5.0	5.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	174.0	168.0	179.0	190.0
Sulfate	85.0	70.0	73.0	78.0
Chloride	163.0	66.0	47.0	51.0
Fluoride	2.1	2.1	2.1	2.1
Nitrate	5.9	5.6	5.3	5.6
Iron				
pH	7.9	8.3	8.0	7.9
* Dissolved Solids	570.6	389.3	371.4	392.2
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	143.0	138.0	147.0	156.0
Total Hard CaCO ₃	243.0	188.0	182.0	192.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WARD COUNTY

Record of Wells - Monahans Sandhills State Park

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
* Well No. 1	45-26-203	31-37-10 102-48-35	R.C. Murray Water Well Drilling	1957	115	Cenezoic Pecos Alluvium and Dockum Group	2,720	--	--	8	115	S	Park superintendent's house well. Perforated from 55 to 115 feet.
* Well No. 2	45-18-801	31-38-08 102-48-54	do	1957	75	do	2,732	30.6	04-07-67	8	75	W	Open hole from 44 to 75 feet.
* Well No. 3	45-26-204	31-37-06 102-48-44	do	1956	98	do	2,720	--	--	8	98	S	--
* Well No. 4	45-18-803	31-38-08 102-49-00	do	12-28-69	85	do	2,733	25	12-28-69	10 7	38 85	S	Perforated from 40 to 85 feet. Reported yield 50 gpm with 40 feet drawdown in 1969.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ S, submersible; W, windmill.

WATER QUALITY ANALYSES

Monahans Sandhills State Park
(Ward County)

State Well Number	45-18-801	45-18-803	45-26-203	45-26-204
Date of Collection	07/14/87	10/05/75	10/05/75	06/09/83
Temperature-°F				
Temperature-°C				
Silica	38.0			39.0
Calcium	34.0	34.0	30.0	34.0
Magnesium	7.0	6.0	6.0	8.0
Sodium	7.0	7.0	9.0	11.0
Potassium	2.0			2.0
Manganese		.1	.1	
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	96.0	96.0	89.0	92.0
Sulfate	15.0	12.0	20.0	30.0
Chloride	3.0	5.0	4.0	10.0
Fluoride	.3	.3	.8	.4
Nitrate	37.7	32.0	25.0	30.2
Iron		.0	.0	
pH	7.8	7.7	8.2	8.1
* Dissolved Solids	191.2	143.6	138.6	209.8
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	79.0	79.0	73.0	75.0
Total Hard CaCO ₃	112.0	107.0	101.0	119.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WARD COUNTY

Records of Wells - City of Wickett

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)			
* Well No. 1	46-32-603	31-33-57 103-00-51	Buckholder Drilling Co.	1963	306	Cenezoic Pecos Alluvium and Dockum Group	2,652	120	1963	12	306	T,50	Screened from 206 to 306 feet. Reported yield 800 gpm.	
Well No. 2	46-32-604	31-33-58 103-00-52	R.C. Murray Water Well Drilling	04-18-66	284	do	2,652	119	04-18-66	16 8	175 284	T,15	Screened from 178 to 284 feet. Reported yield 310 gpm with 15 feet drawdown in 1966.	
* Well No. 3	46-32-630	31-33-57 103-00-50	Dixon Pump & Drilling Co.	02-81	400	Dockum Group	2,653	153	02-12-81	10	400	T,50	Perforated from 299 to 320 and 359 to 380 feet. Reported yield 625 gpm with 57 feet drawdown in 1981.	

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine.

WATER QUALITY ANALYSES

City of Wickett
(Ward County)

State Well Number	46-32-603	46-32-630	46-32-630
Date of Collection	10/14/70	02/12/81	07/14/87
Temperature-°F			
Temperature-°C			
Silica			39.0
Calcium	75.0	81.0	76.0
Magnesium	18.0	18.0	18.0
Sodium	59.0	71.0	63.0
Potassium			3.0
Manganese	.1		
Boron			
Carbonate	.0	.0	.0
Bicarbonate	182.0	200.0	181.0
Sulfate	141.0	162.0	152.0
Chloride	62.0	70.0	68.0
Fluoride	1.8		1.7
Nitrate	4.0		4.6
Iron	.1	.3	
pH	7.7	7.8	7.9
* Dissolved Solids	450.4	500.7	514.3
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	149.0	167.0	148.0
Total Hard CaCO ₃	260.0	276.0	263.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WINKLER COUNTY

Record of Wells - City of Kermit

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE-POWER ^{b/}	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Underwood Well No. 1	46-16-120	31-50-48 103-05-46	Bud Huff	1929	530	Cenezoic Pecos Alluvium and Dockum Group	2,850	125.7	07-14-60	--	--	T,25	Well D-279 in TBWE Bull. 5916. Converted oil test. Reported yield 369 gpm in 1961.
* Underwood Well No. 2	46-16-102	31-50-50 103-05-55	Bob Glynn	1949	300	do	2,848	67.0 67.7 71.0	04-02-52 01-09-68 08-28-85	13 3/8	220	T,25	Well D-278 in TBWE Bull. 5916. Open hole from 220 to 300 feet. Reported yield 330 gpm in 1961.
Underwood Well No. 3	46-16-103	31-50-37 103-05-48	J.D. Cole	1952	300	do	2,845	61.8	03-18-57	13 3/8	173	T,25	Well D-282 in TBWE Bull. 5916. Open hole from 173 to 300 feet. Reported yield 300+ gpm in 1984.
* Underwood Well No. 4	46-16-127	31-50-42 103-05-44	Glynn and Wade Drilling Co.	1948	525	do	2,852	69.9 69.0 68.6	03-15-60 05-02-69 07-20-87	11 3/4	240	T,40	Well D-283 in TBWE Bull. 5916. Originally drilled to 300 feet in 1948. Deepened to 525 feet in 1961.
* Underwood Well No. 5	46-16-128	31-50-52 103-05-33	Pemian Well Service	1946	525	Dockum Group	2,853	78.0 108.1 135.6	04-02-52 04-15-60 05-02-69	13 3/8	236	T,40	Well D-280 in TBWE Bull. 5916. Open hole from 236 to 525 feet. Originally drilled to 501 feet in 1946. Deepened to 525 feet in 1961. Reported yield 360 gpm in 1954.
Underwood Well No. 6	46-16-105	31-50-37 103-06-04	J.D. Cole	1957	400	Cenezoic Pecos Alluvium and Dockum Group	2,845	54.9 61.6	03-11-57 01-09-68	11 3/4	242	T,25	Well D-281 in TBWE Bull. 5916. Open hole from 242 to 400 feet. Originally drilled to 300 feet in 1957. Deepened to 400 feet in 1961. Reported yield 330 gpm in 1969.
* Walton Well No. 1	46-16-130	31-51-12 103-05-14	--	1940's	400	do	2,858	145.2 139.1 150.8	10-11-56 07-14-60 03-23-69	--	--	T,20	Well D-293 in TBWE Bull. 5916. Converted oil test originally drilled to 700 feet. Reported yield 139 gpm in 1954.
Walton Well No. 2	46-16-131	31-51-15 103-05-19	Crandall, Osmond and J.C. Maxwell	1935	471	Dockum Group	2,858	90.7	05-02-69	13 3/8	397	T,25	Abandoned. Well D-292 in TBWE Bull. 5916. Open hole from 397 to 471 feet. Converted oil test. Originally drilled to 3,295 feet in 1935. Reported yield 207 gpm in 1954.

See footnotes at end of table.

Record of Wells - City of Kenmit (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)		
* Santa Rosa No. 1	46-16-104	31-51-07 103-05-21	Bud Carr and J. D. Cole	1957	559	Dockum Group	2,858	107.8 126.7 115.0	04-26-57 03-06-69 03-16-81	8 5/8	262	T,40	Well D-291 in TBWE Bull. 5916. Open hole from 262 to 559 feet. Reported yield 309 gpm. Reported to have caved in at 286 feet in 1981.
* Santa Rosa No. 2	46-16-201	31-51-21 103-04-43	Homer Schutten	1957	394	do	2,868	129.5 124.1 128.0	07-28-57 01-09-68 04-20-81	16	265	T,75	Well D-299 in TBWE Bull. 5916. Open hole from 265 to 394 feet. Reported yield 1,875 gpm with 94 feet drawdown after pumping 24 hours in 1957.
* Santa Rosa No. 3	46-16-101	31-50-51 103-06-07	do	1957	405	do	2,846	89.7 108.2 89.8	08-16-57 05-01-69 12-07-84	16	230	T,100	Well D-277 in TBWE Bull. 5916. Open hole from 230 to 405 feet. Reported yield 1,288 gpm with 48 feet drawdown after pumping 4 hours in 1981.
Santa Rosa No. 4	46-16-129	31-51-16 103-05-15	Layne-Texas Co.	1961	497	do	2,858	163.0 154.1 200.0	06-28-61 05-01-69 08-28-86	16	260	T	Open hole from 260 to 497 feet. Reported yield 627 gpm.
Community Well No. 1	46-16-132	31-51-32 103-05-32	Glynn and Wade Drilling Co.	1948	350	Cenezoic Pecos Alluvium and Dockum Group	2,862	69.7 68.6 69.5	04-08-57 01-09-68 05-02-69	9 5/8	350	T,30	Abandoned. Well D-273 in TBWE Bull. 5916. Slotted from 250 to 350 feet. Reported yield 447 gpm in 1954.
Community Well No. 2	46-16-133	31-51-40 103-05-29	do	1948	312	do	2,865	67.7 70.2 70.5	03-18-57 01-09-68 05-02-69	8 5/8	288	T,20	Abandoned. Well D-272 in TBWE Bull. 5916. Screened from 265 to 285 feet.

* For chemical analysis see following table.

a/ Reported water levels given in feet; measured water levels given in feet and tenths.

b/ T, turbine.

WATER QUALITY ANALYSES

City of Kermit
(Winkler County)

State Well Number Date of Collection	46-16-101 07/20/87	46-16-102 07/20/87	46-16-104 07/20/87	46-16-127 07/20/87
Temperature-°F	72	72	77	75
Temperature-°C				
Silica	31.0	35.0	27.0	30.0
Calcium	68.0	142.0	62.0	72.0
Magnesium	10.0	18.0	9.0	10.0
Sodium	19.0	29.0	22.0	21.0
Potassium	2.0	3.0	2.0	2.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	100.0	168.0	135.0	107.0
Sulfate	34.0	169.0	61.0	50.0
Chloride	94.0	119.0	47.0	90.0
Fluoride	.8	.7	1.1	.8
Nitrate	5.9	25.7	.7	6.7
Iron				
pH	8.0	8.1	8.2	8.0
* Dissolved Solids	313.8	624.0	298.2	335.1
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	82.0	138.0	111.0	88.0
Total Hard CaCO ₃	210.0	429.0	193.0	221.0

State Well Number Date of Collection	46-16-128 07/20/87	46-16-130 07/20/87	46-16-201 07/20/87
Temperature-°F	72	72	
Temperature-°C			
Silica	30.0	19.0	25.0
Calcium	52.0	55.0	41.0
Magnesium	7.0	9.0	10.0
Sodium	23.0	23.0	26.0
Potassium	2.0	2.0	2.0
Manganese			
Boron			
Carbonate	.0	.0	.0
Bicarbonate	113.0	139.0	138.0
Sulfate	32.0	72.0	54.0
Chloride	53.0	25.0	18.0
Fluoride	1.0	1.3	1.8
Nitrate	5.9	6.3	5.1
Iron			
pH	8.1	8.2	8.2
* Dissolved Solids	261.5	281.0	250.7
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	93.0	114.0	113.0
Total Hard CaCO ₃	160.0	175.0	143.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

WINKLER COUNTY

Record of Wells - City of Wink

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	a/ WATER LEVEL		CASING		b/ METHOD OF LIFT AND HORSE- POWER		REMARKS
								DEPTH (FT)	DATE	DIAMETER: (IN)	DEPTH (FT)			
* New Well No. 1	46-15-921	31-45-25 103-08-59	W-H-B	08-04-85	275	Cenezoic Pecos Alluvium	2,790	100	08-05-85	12 3/4 7	160 275	S,15	Screened from 230 to 270 feet. Reported yield 153 gpm with 8 feet drawdown after pumping 12 hours in 1985.	
* New Well No. 2	46-15-920	31-45-38 103-09-04	do	1986	284	do	2,797	95.0	07-21-87	12 3/4 7	-- 284	S,10	Screened from 240 to 280 feet. Reported yield 160 gpm in 1986.	
* "Carter" Well	46-15-922	31-45-23 103-09-30	Big "3" Machine & Supply	1975	350	do	2,790	62.0	07-22-87	--	--	S,10		
* "Dixon" Well	46-15-918	31-45-34 103-09-34	Dixon Pump	04-13-81	320	do	2,795	100.0	07-22-87	15 11 1/2 8 5/8	130 298 320	S,10	Perforated from 246 to 261 and 283 to 298 feet.	
* "South" Well (Old Well No. 7)	46-23-302	31-44-53 103-09-10	H.W. Schutten	1957	345	do	2,785	85.0 69.2	08-58 04-28-69	16 10	270 345	S,20	Slotted from 270 to 345 feet. Reported yield 550 to 600 gpm in 1969.	
* "Stanolind" Well	46-23-305	31-44-58 103-09-48	—	1930's	250	do	2,782	48.3 56.0	05-12-56 04-28-69	8 1/2	--	N	Abandoned. Well F-33 in TBWE Bull. 5916.	
Old Well No. 2	46-15-919	31-45-23 103-09-33	Big "3" Machine & Supply	08-26-76	350	do	2,790	90	04-11-77	10 3/4	350	S,7 1/2	Abandoned. Reported yield 220 gpm with 120 feet drawdown after pumping 40 hours in 1976.	
Old Well No. 5	46-15-909	31-45-28 103-09-35	J.D. Cole	1953	240	do	2,790	90.2	09-23-56	10 3/4	240	N	Abandoned. Well G-110 in TBWE Bull. 5916. Slotted from 180 to 240 feet. Reported yield 125 gpm in 1969.	
* Old Well No. 6	46-15-910	31-45-28 103-09-34	do	1955	240	do	2,791	90	09-23-56	16 7	183 240	T,10	Well G-111 in TBWE Bull. 5916. Slotted from 183 to 240 feet. Reported yield 125 gpm in 1969.	
Old Well No. 9	46-23-303	31-44-54 103-09-10	Noil Drilling Co.	1963	406	do	2,785	71.3	04-20-69	8 5/8	406	N	Abandoned. Screened from 314 to 334 and 382 to 402 feet. Reported yield 80 gpm in 1969.	

See footnotes at end of table.

Record of Wells - City of Wink (Continued)

OWNER'S WELL NUMBER	STATE WELL NUMBER	LATITUDE/ LONGITUDE	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT)	WATER BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL ^{a/}		CASING		METHOD OF LIFT AND HORSE- POWER	REMARKS
								DEPTH (FT)	DATE	DIAMETER (IN)	DEPTH (FT)		
Old Well	--	--	--	--	165	Cenezoic Pecos Alluvium	--	--	--	--	N	Abandoned. Location uncertain. Well G-108 in TBWE Bull. 5916.	
Old Well No. 3	--	--	Taylor	1930	250	do	--	--	--	--	N	Abandoned in 1957. Location uncertain. Well G-109 in TBWE Bull. 5916.	

* For chemical analysis see following table.

^{a/} Reported water levels given in feet; measured water levels given in feet and tenths.

^{b/} S, submersible; T, turbine; N, none.

WATER QUALITY ANALYSES

City of Wink
(Winkler County)

State Well Number	46-15-910	46-15-918	46-15-920	46-15-921
Date of Collection	07/20/87	07/20/87	07/20/87	07/20/87
Temperature-°F	75	75	76	74
Temperature-°C				
Silica	24.0	22.0	37.0	38.0
Calcium	49.0	39.0	51.0	98.0
Magnesium	14.0	13.0	13.0	24.0
Sodium	49.0	45.0	30.0	47.0
Potassium	3.0	3.0	2.0	3.0
Manganese				
Boron				
Carbonate	.0	.0	.0	.0
Bicarbonate	173.0	182.0	135.0	117.0
Sulfate	73.0	65.0	49.0	105.0
Chloride	48.0	22.0	59.0	175.0
Fluoride	2.2	2.2	1.6	1.1
Nitrate	2.0	1.8	.4	1.2
Iron				
pH	8.2	8.3	8.2	7.9
* Dissolved Solids	349.3	302.5	309.4	549.9
Phenol. Alk. CaCO ₃	.0	.0	.0	.0
Total Alk. CaCO ₃	142.0	149.0	111.0	96.0
Total Hard CaCO ₃	182.0	151.0	182.0	343.0

State Well Number	46-15-922	46-23-302	46-23-305
Date of Collection	07/20/87	07/20/87	04/28/69
Temperature-°F	76	74	70
Temperature-°C			
Silica	27.0	32.0	34.0
Calcium	57.0	109.0	101.0
Magnesium	17.0	27.0	21.0
Sodium	49.0	48.0	51.0
Potassium	3.0	3.0	
Manganese			
Boron			
Carbonate	.0	.0	.0
Bicarbonate	170.0	110.0	160.0
Sulfate	70.0	77.0	133.0
Chloride	77.0	235.0	135.0
Fluoride	1.9	1.1	1.6
Nitrate	2.8	.3	5.5
Iron			
pH	8.0	7.9	7.5
* Dissolved Solids	388.3	586.5	560.8
Phenol. Alk. CaCO ₃	.0	.0	.0
Total Alk. CaCO ₃	139.0	90.0	131.0
Total Hard CaCO ₃	212.0	383.0	338.0

Analyses given are in milligrams per liter, except pH.

* The Bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

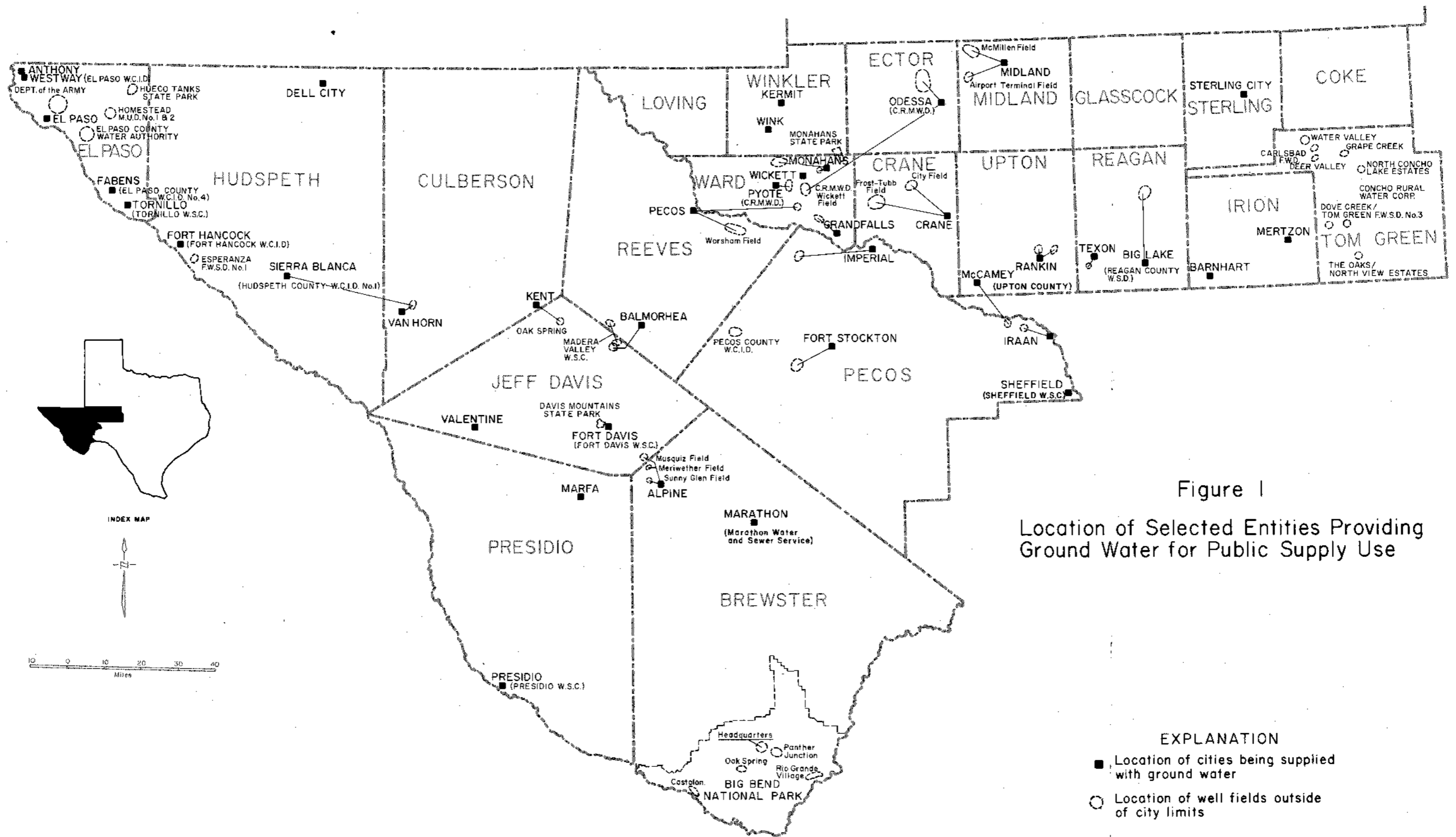


Figure 1
 Location of Selected Entities Providing Ground Water for Public Supply Use



