

TEXAS WATER DEVELOPMENT BOARD

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REPORT 197

GROUND-WATER DATA FOR ORANGE COUNTY  
AND VICINITY, TEXAS AND LOUISIANA, 1971-74

By

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# GROUND-WATER DATA FOR ORANGE COUNTY AND VICINITY, TEXAS AND LOUISIANA, 1971-74

## INTRODUCTION

### Purpose and Scope

The program of continuing ground-water studies in Orange County and adjacent areas began in March 1967 because of the need for a systematic program to monitor the changing ground-water conditions. The data-collection program, conducted by the U.S. Geological Survey in cooperation with the Texas Water Development Board, the Sabine River Authority of Texas, and the Orange County Commissioner's Court, consists of water-level measurements in observation wells, the collection of water samples from wells for chemical analyses, an inventory of new large-capacity wells, and pumping tests on new large-capacity wells.

This report presents the data collected during the period September 1971 to October 1974 on water-level measurements, chemical analyses of water from wells, and ground-water withdrawals.

The English units used in this report may be converted to metric units by the following conversion factors:

FROM	MULTIPLY BY	TO OBTAIN
feet	0.3048	meters
million gallons per day	3.785	million liters per day

### Well-Numbering System

The well-numbering system in Texas was developed by the Texas Water Development Board for use throughout the State. Under this system, each 1-degree quadrangle is given a number consisting of two digits. These are the first two digits in the well number. Each 1-degree quadrangle is divided into 7½-minute quadrangles which are given two-digit numbers from 01 to 64. These are the third and fourth digits of the well

number. Each 7½-minute quadrangle is divided into 2½-minute quadrangles which are given a single-digit number from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2½-minute quadrangle is given a two-digit number in the order in which it was inventoried, starting with 01. These are the last two digits of the well number.

Only the last three digits of the well number are shown at each well location (Figure 2); the second two digits are shown in the northwest corner of each 7½-minute quadrangle; and the first two digits are shown by the large block numerals in each 1-degree quadrangle.

In addition to the seven-digit well number, a two-letter prefix is used to identify the county. The prefixes for Orange and adjacent counties are as follows: Orange, UJ; Jasper, PR; Jefferson, PT; Hardin, LH; and Newton, TZ.

Wells inventoried in Louisiana by the Geological Survey are assigned a number consisting of two parts, an abbreviation of the name of the parish in which the well is located and a serial number that designates the well. The number assigned does not indicate a specific location because the number is generally assigned in the order in which the well was inventoried. The prefix for Calcasieu Parish is CU; the prefix for Cameron Parish is CN.

## GROUND-WATER DATA

### Water-Level Measurements

A network of 116 observation wells was maintained for water-level measurements from 1971 to 1974. The area within the network includes Orange County, the southern parts of Jasper and Newton Counties, the eastern part of Jefferson County, the southeastern part of Hardin County, all in Texas; and the western parts of Cameron and Calcasieu Parishes, Louisiana. The heaviest concentration of observation

wells is within the industrial area in the southern part of Orange County. The locations of water-level observation wells are shown on Figure 2.

Static water-level measurements were made generally in the early part of the year at the time of least interference from pumping and maximum recovery from the previous heavy seasonal pumping. Pumping water-level measurements were made during the latter part of the year at the time of maximum drawdown of water levels. These data are needed to study the relationships between water levels and withdrawals at the time of maximum effects. In addition to the periodically measured wells, one well has been selected for continuous monitoring of water levels. All static and pumping water-level measurements and selected measurements from the continuous monitor are given in Table 2. Hydrographs of two wells with the longest periods of record are shown on Figure 1.

### **Chemical Analyses of Water From Wells**

A network of 76 wells to observe changes in chemical quality of the ground water was maintained from 1971 to 1974 in Orange County. Water samples were obtained from most of these wells during the latter part of each year. During these periods, the maximum concentrations of chlorides are expected.

Locations of the chemical-quality observation wells are shown on Figure 3. The results of chemical analyses are given in Table 3.

### **Ground-Water Withdrawals**

Data on ground-water pumpage for all major uses during the period 1963-74 are given in Table 1. These data are essential to any study of the cause and effect relationships between pumping and the decline in water levels or changes in chemical quality.

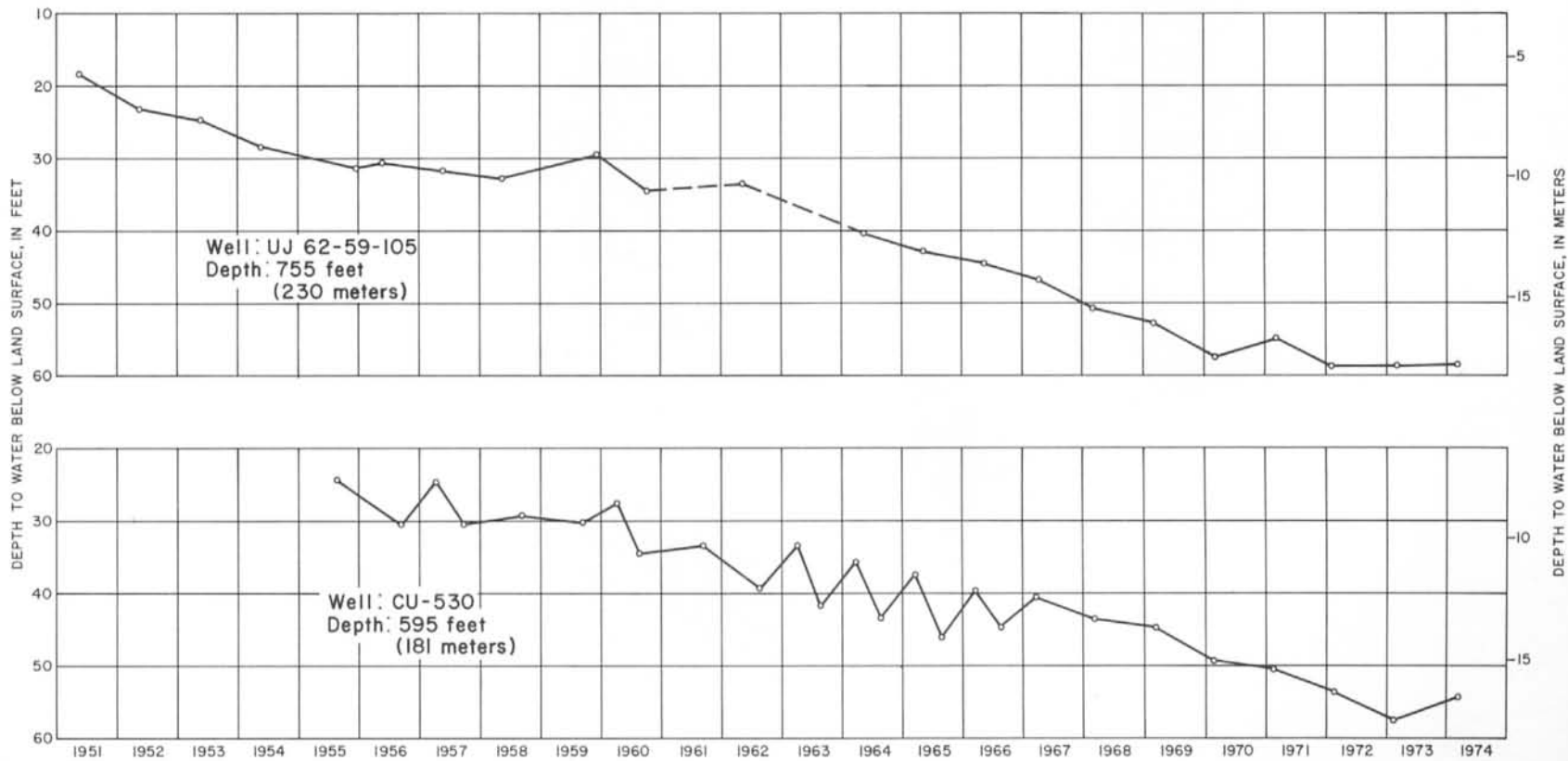


Figure 1  
Changes in Water Levels in Wells  
UJ-62-59-105 and CU-530

Table 1.—Ground-water withdrawals in Orange County, 1963-74.

(million gallons per day)

YEAR	MUNICIPAL SUPPLY	INDUSTRIAL USE	TOTAL
1963	3.8	14.7	18.5
1964	4.1	16.2	20.3
1965	4.5	16.3	20.8
1966	4.7	16.3	21.0
1967	5.8	14.7	20.5
1968	4.6	16.6	21.2
1969	4.8	16.0	20.8
1970	5.1	15.9	21.0
1971	5.4	17.6	23.0
1972	5.4	17.7	23.1
1973	5.3	15.8	21.1
1974	5.5	15.0	20.5

## SELECTED REFERENCES

- Gabrysch, R. K., and McAdoo, G. D., 1972, Development of ground-water resources in the Orange County area, Texas and Louisiana, 1963-71: Texas Water Devel. Board Rept. 156, 47 p., 10 figs.
- McAdoo, G. D., 1968, Ground-water data for Orange County and vicinity, Texas and Louisiana, 1968: U.S. Geol. Survey open-file rept., 20 p.
- \_\_\_\_\_, 1969, Ground-water data for Orange County and vicinity, Texas and Louisiana, 1969: U.S. Geol. Survey open-file rept., 22 p.
- McAdoo, G. D., 1970, Ground-water data for Orange County and vicinity, Texas and Louisiana, 1970: U.S. Geol. Survey open-file rept., 19 p.
- Wesselman, J. B., 1965, Geology and ground-water resources of Orange County, Texas: Texas Water Comm. Bull. 6516, 112 p.

Table 2.--Water-level measurements in the Orange County area, 1971-74

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
Orange County UJ-61-56-103	B. H. Thibodeau	76	2- 7-72	14.47	--	--
			3-19-73	12.79	--	--
			3-18-74	9.28	--	--
61-56-116	H. H. Houseman	800	2- 7-72	37.95	--	--
			3-19-73	37.59	--	--
			3-18-74	36.52	--	--
61-56-314	L. B. Williamson	375-385	6-29-72	39.68	--	--
			3-19-73	38.82	--	--
			3-18-74	37.87	--	--
61-56-315	Iwanda Trailer Park	356-380	6-29-72	39.69	--	--
			3-19-73	38.80	--	--
			3-18-74	37.62	--	--
61-56-611	B&B Water System	441-457	2- 7-72	40.65	--	--
			3-19-73	41.46	--	--
			3-18-74	38.14	--	--
61-56-901	Orange County WC&ID No. 1, well 2	350-400	--	--	9-16-71	75.23
			2-11-72	45.20	9-27-72	80.62
			3-23-73	42.45	9-25-73	82.76
			3-22-74	40.00	10-17-74	86.27
61-56-911	B&B Water System	468-486	2- 7-72	37.76	--	--
			3-19-73	38.77	--	--
			3-18-74	38.38	--	--
61-56-919	Orange County WC&ID No. 1, well 3	385-420	--	--	9-16-71	61.07
			2-11-72	51.15	9-27-72	62.89
			3-23-73	52.60	9-25-73	63.38
			3-22-74	50.54	10-17-74	68.00



Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-61-56-920	B&B Water System	380	2- 7-72 3-19-73 3-18-74	43.4 44.35 44.10	-- -- --	-- -- --
62-49-503	G. L. Linscomb	117	2- 7-72 3-26-73 3-26-74	12.73 8.88 8.54	-- -- --	-- -- --
62-49-904	Texas Highway Department	399-415	2- 7-72 3-19-73 3-18-74	41.70 42.98 42.45	-- -- --	-- -- --
62-50-201	Boyce Ward	476-586	2- 9-72 3-27-73 3-20-74	44.72 44.73 44.08	-- -- --	-- -- --
62-50-602	Huber Oil Co.	380-400	2- 9-72 3-22-73 Measurements discontinued	45.61 46.67	-- --	-- --
62-50-807	Frank Michell	442-454	6-30-72 3-20-73 3-21-74	50.70 49.52 49.04	-- -- --	-- -- --
62-50-808	H. D. Womack	643-655	3-20-74	51.99	--	--
62-50-904	George Glidden	566	2- 7-72 3-28-73 3-20-74	10.89 8.59 5.98	-- -- --	-- -- --
62-51-103	Owens Illinois, Inc.	445-515	6-28-72 3-27-73 3-20-74	49.38 44.86 46.04	-- -- --	-- -- --

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-51-104	Owens Illinois, Inc.	460-470	6-28-72 3-27-73 3-20-74	52.02 47.80 48.70	-- -- --	-- -- --
62-51-706	Phillips Chemical Co.	428-488	-- -- -- --	-- -- -- --	9-20-71 9-21-72 10- 2-73 10-22-74	67.28 66.41 66.10 66.22
62-51-707	do.	428-488	2- 9-72 3-27-73 3-28-74	50.49 50.51 52.18	-- -- --	-- -- --
62-57-203	K. Kishi	740	2-11-72 3-20-73 3-21-74	46.13 46.92 46.99	-- -- --	-- -- --
62-57-401	Texas Eastern Transmission Co.	448-468	2-11-72 3-23-73 3-21-74	45.57 46.27 46.72	-- -- --	-- -- --
62-57-403	Gulf States Utilities Co., Vidor, well 1	433-483	-- 3-22-74	-- 42.14	9-27-73 10-23-74	68.75 69.85
62-57-404	Gulf States Utilities Co., Vidor, well 2	430-481	3-23-73 3-21-74	32.32 30.11	-- --	-- --
62-57-405	Gulf States Utilities Co., Vidor, well 3	430-480	2- 9-72 3-23-73 3-22-74	36.54 34.94 38.84	-- -- 10-23-74	-- -- 89.29
62-57-406	Gulf States Utilities Co., Vidor, well 6	430-480	3-23-73 3-21-74	42.17 45.88	-- 10-22-74	-- 81.88

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-57-407	Gulf States Utilities Co., Vidor, well 4	320-370	3-22-74	37.80	10-23-74	59.54
62-57-408	Gulf States Utilities Co., Vidor, well 5	343-383	3-22-74	40.72	10-23-74	86.12
62-57-409	L. N. Michael	550-640	2-11-72	43.91	--	--
			3-23-73	44.72	--	--
			3-21-74	44.98	--	--
62-57-501	Florida Gas Co.	405-435	2-11-72	43.69	--	--
			3-23-73	44.03	--	--
			3-21-74	44.64	--	--
62-57-904	Gulf States Utilities Co., Sabine, well 4	432-455	1-24-72	89.5*	8-72	155.5*
			3-27-73	93.5*	10- 1-73	155.5*
			--	--	10-23-74	152.5*
62-57-905	Gulf States Utilities Co., Sabine, well 5	422-461	1-24-72	84.5*	--	--
			3-27-73	90.5*	--	--
62-57-907	Gulf States Utilities Co., Sabine, well 7	604-654	1-24-72	39.5*	8-72	76.5*
			3-23-73	40.5*	--	--
			3-28-74	43.37	--	--
62-57-908	Gulf States Utilities Co., Sabine, well 8	573-623	3-28-74	42.33	6-72	70*
62-58-304	Orange County WC&ID No. 2, well 1	626-706	--	--	9-16-71	72.78
			2- 9-72	62.57	9-20-72	76.08
			3-20-73	59.11	9-26-73	72.79
			3-19-74	59.54	10-16-74	68.46

\* Water level reported.

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-58-305	City of Orange, Pinehurst well	520-610	2- 8-72 3-20-73 3-19-74	60.47 53.75 53.90	9-19-72 9-24-73 10-16-74	95.20 93.57 93.75
62-58-324	City of Pinehurst	365-445	-- 2- 9-72 3-20-73 3-19-74	-- 59.04 55.15 54.41	9-16-71 9-20-72 10- 2-73 10-16-74	108.70 110.95 109.69 108.10
62-58-325	Orange County WC&ID No. 2, well 2	620-670	-- 2- 9-72 3-20-73 3-19-74	-- 61.13 59.15 58.75	9-16-71 9-20-72 9-26-73 10-16-74	78.54 81.03 76.58 75.26
62-58-403	Orangefield Ind. School District	460-480	2- 7-72 3-20-73 3-21-74	35.40 37.62 38.93	-- -- --	-- -- --
62-58-410	Orangefield Recreation Park	110-120	2- 7-72 3-20-73 3-21-74	6.01 4.62 4.07	-- -- --	-- -- --
62-58-602	Donnar Corp.	711	2- 8-72 3-28-73 3-19-74	62.28 60.83 60.69	-- -- --	-- -- --
62-58-603	W. H. Stark Estate	204	2- 7-72 3-19-74	8.68 8.19	-- --	-- --
62-58-605	Gulf Chemical Co., well 4	604-717	3-20-74	61.44	9-17-71	74.14
62-58-606	Gulf Chemical Co., well 3	630-710	--	--	9-21-72	71.00

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-58-608	Allied Chemical Co.	620-735	--	--	9-17-71	81.13
			--	--	9-20-72	84.87
			--	--	9-26-73	86.11
			--	--	10-17-74	67.98
62-58-609	E. I. DuPont Co., well 103-3	634-723	--	--	9-21-71	100.46
			--	--	9-20-72	101.52
			--	--	9-26-73	104.04
			--	--	10-18-74	99.93
62-58-610	E. I. DuPont Co., well 103-3.1	715	--	--	8- 8-72	64.36
			--	--	3-21-73	62.67
			--	--	3-28-74	62.74
62-58-611	E. I. DuPont Co., well 103-2	715	3-20-73	61.53	--	--
			3-28-74	61.16	--	--
62-58-612	E. I. DuPont Co., well 103-4	735	2- 8-72	62.05	--	--
			3-21-73	60.46	--	--
			3-28-74	60.80	--	--
62-58-613	E. I. DuPont Co., well 103-1.1	723	2- 8-72	63.40	--	--
			3-21-73	61.99	--	--
			3-28-74	61.09	--	--
62-58-614	E. I. DuPont Co., well 103-1	726	--	--	9-21-71	77.69
			--	--	9-20-72	89.82
			--	--	9-26-73	87.80
			--	--	10-18-74	81.85

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-58-615	Firestone Petrochemical Center, well P-817	700	--	--	9-17-71	74
			--	--	9-22-72	70.72
			3-21-73	55.96	--	--
62-58-616	Gulf Chemical Co., well 2	718	3-20-74	55.80	--	--
			2- 8-72	61.55	--	--
			3-21-73	59.06	--	--
62-58-618	E. I. DuPont Co., well 103-6	637-682	3-20-74	58.94	--	--
			2- 8-72	56.55	--	--
			3-21-73	55.27	--	--
62-58-629	Firestone Petrochemical Center, well P-821	595-680	3-28-74	54.89	--	--
			--	--	9-17-71	57.05
			--	--	10- 1-73	80
62-58-631	Firestone Petrochemical Center, well P-826	585-680	2- 8-72	59.38	--	--
			3-21-73	57.47	--	--
			3-20-74	57.48	--	--
62-58-632	B. F. Goodrich Co., well 1	640-710	--	--	9-17-71	70.30
			--	--	9-21-72	70.17
			3-21-73	55.72	9-26-73	74.27
			--	--	10-22-74	67.62
62-58-633	B. F. Goodrich Co., well 2	625-725	2- 8-72	58.79	--	--
			3-29-74	55.99	--	--
62-58-634	B. F. Goodrich Co., well 3	614-715	--	--	9-17-71	72.10
			--	--	9-21-72	70.96
			3-21-73	58.04	9-26-73	73.37
			--	--	10-22-74	61.74

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-58-639	B. F. Goodrich Co., well 4	620-725	--	--	9-17-71	71.51
			--	--	9-21-72	73.26
			--	--	9-26-73	74.04
			3-29-74	58.07	10-22-74	65.35
62-58-640	B. F. Goodrich Co., well 5	612-718	--	--	9-21-72	81.37
			3-21-73	58.41	9-26-73	81.98
			--	--	10-22-74	75.38
62-58-641	E. I. DuPont Co., well 103-6	697-702	2- 8-72	57.03	--	--
			3-21-73	55.76	--	--
			3-28-74	55.39	--	--
62-58-702	Orange County WC&ID No. 3, well 2	600-672	--	--	9-21-71	65
			--	--	9-22-72	64
			3-20-73	43	9-25-73	64
			3-19-74	43	--	--
62-58-809	Orange County WC&ID No. 3, well 3	570-650	--	--	9-23-71	64
			2- 9-72	49.20	9-22-72	64
			3-20-73	45	9-25-73	74
			3-19-74	46	10-17-74	78
62-58-810	H. H. Silkwood	160-170	6-29-72	13.62	--	--
			3-23-73	9.55	--	--
			3-19-74	9.50	--	--
62-59-101	City of Orange, well 7	555-666	--	--	9-15-71	110
			2- 8-72	59.87	9-19-72	106.07
			3-20-73	60.32	9-24-73	102.33
			3-19-74	59.79	10-16-74	100.64

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
UJ-62-59-103	City of Orange, well 2	565-685	2- 8-72	62.78	9-19-72	130.4
			3-20-73	60.67	--	--
			3-19-74	60.81	--	--
<u>1/</u> 62-59-105	Levingston Ship Yard	672-737	1- 1-71	54.4	--	--
			2- 1-71	54.9	--	--
			3- 3-71	55.2	--	--
			4- 1-71	53.6	--	--
			5- 1-71	54.4	--	--
			9-17-71	61.2	--	--
			10-17-71	61.2	--	--
			11-17-71	61.1	--	--
			2- 9-72	58.8	--	--
			6-27-72	63.7	--	--
			7-27-72	64.1	--	--
			8- 9-72	64.7	--	--
			9-30-72	63.5	--	--
			10-30-72	61.7	--	--
			11-30-72	62.1	--	--
			12- 5-72	61.7	--	--
			3-20-73	58.3	--	--
			4-20-73	56.0	--	--
			5-20-73	57.2	--	--
			6-14-73	57.6	--	--
			8-13-73	60.8	--	--
			9- 9-73	60.1	--	--
			10- 9-73	60.6	--	--
			11- 9-73	59.7	--	--
			1-29-74	57.9	--	--
			2-28-74	58.4	--	--
			3-28-74	57.2	--	--

1/ Selected measurements from continuous water-level recorder.



Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
1/UJ-62-59-105-- Cont.	Levingston Ship Yard	672-737	4-25-74	57.8	--	--
			5-25-74	58.3	--	--
			6-25-74	59.3	--	--
			8-25-74	60.5	--	--
			9-24-74	59.8	--	--
			10-24-74	60.1	--	--
			11-24-74	59.8	--	--
62-59-123	City of Orange, well 9	529-643	--	--	9-15-71	100.77
			2- 8-72	61.04	9-19-72	100.02
			3-20-73	55.19	9-24-73	99.60
			3-19-74	56.17	10-16-74	97.73
62-59-124	Equitable Bag Co.	590-640	--	--	9-21-72	127.39
			--	--	10- 2-73	110.04
			--	--	10-24-74	107.57
62-59-416	Levingston Ship Yard	650-730	--	--	10-24-74	62.70
Hardin County LH-61-47-208	City of Silsbee	442-842	2-10-72	100.07	--	--
			3-26-73	95.11	--	--
			3-27-74	92.68	--	--
61-47-210	do.	900	2-10-72	117.94	--	--
			3-26-73	110.85	--	--
			3-27-74	110.55	--	--
61-55-203	City of Beaumont	301-775	3-26-73	47.97	--	--
			3-26-74	50.61	--	--

1/ Selected measurements from continuous water-level recorder.

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
Jasper County PR-61-48-209	East Texas Pulp & Paper Co.	213-594	2-11-72 2-15-73 2- 5-74	33.67 36.15 33.44	-- -- --	-- -- --
61-48-214	Southern Pine Co.	226	2-10-72 3-22-73 3-27-74	33.45 34.85 33.51	-- -- --	-- -- --
<sup>2/</sup> 61-48-221	East Texas Pulp & Paper Co.	723-1,264	2-11-72 2-15-73	175.82 178.04	-- --	-- --
61-48-701	Larkin Franklin	1,210-1,250	2-10-72 3-26-73 3-27-74	93.73 95.76 96.14	-- -- --	-- -- --
61-48-702	J. C. Chance	448-468	2-10-72 3-26-73 3-27-74	42.33 40.55 39.83	-- -- --	-- -- --
62-17-902	W. S. Gillespie	325	2-10-72 2-15-73 2- 5-74	31.42 31.04 26.86	-- -- --	-- -- --
62-33-201	Kirby Lumber Co.	1,100	2-10-72	100.48	--	--
62-33-211	Cougar County Subdivision	495-535	3-27-74	40.98	--	--

<sup>2/</sup> Formerly reported as well 209.

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
PR-62-33-401	City of Buna	230-375	2-10-72 3-22-73 3-27-74	34.43 32.90 29.45	-- -- --	-- -- --
62-33-409	do.	803	3-22-73 3-27-74	81.48 82.83	-- --	-- --
62-41-908	Farm Market	70	2-10-72 3-26-73 3-28-74	26.57 26.00 24.50	-- -- --	-- -- --
Jefferson County PT-61-64-502	Gulf States Utilities Co.	306-435	2-11-72 3-28-73 3-22-74	39.08 38.94 38.34	-- -- --	-- -- --
61-64-509	do.	380-542	2-11-72 3-28-73 3-22-74	34.15 34.30 34.37	-- -- --	-- -- --
61-64-902	Air Reduction Co.	497-550	2-11-72 3-28-73 3-22-74	43.73 44.01 44.16	-- -- --	-- -- --
63-01-201	City of Groves	520-540	2-11-72 3-28-73 3-22-74	38.92 39.28 39.58	-- -- --	-- -- --
63-01-606	do.	814	3-28-73	34.07	--	--

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
Newton County TZ-62-18-801	Texas Forest Service	186-210	2-10-72	42.57	--	--
			3-22-73	41.29	--	--
			3-29-74	39.98	--	--
62-26-611	Cecil Lazanbee	637-647	2-10-72	4.29	--	--
			3-22-73	4.32	--	--
			3-29-74	3.95	--	--
62-34-201	Adolph Ebner	252-332	2-10-72	16.23	--	--
			3-22-73	15.23	--	--
			3-27-74	12.22	--	--
62-42-102	do.	179-429	2-10-72	33.79	--	--
			3-22-73	33.35	--	--
			3-29-74	33.00	--	--
62-42-603	L. S. Arrendell	184-190	2- 9-72	5.76	--	--
			3-27-73	4.76	--	--
			3-20-74	5.84	--	--
62-42-904	L. A. Whidden	270	2- 9-72	39.92	--	--
			3-27-73	39.61	--	--
			3-20-74	38.28	--	--
Calcasieu Parish, La. CU-530	M. Gray	595	2-25-72	53.83	--	--
			2-28-73	57.40	--	--
			3- 4-74	54.14	--	--

Table 2.--Water-level measurements in the Orange County area, 1971-74--Continued

Well no.	Owner	Screened interval or depth (feet)	Date of measurement	Static water-level below land surface datum (feet)	Date of measurement	Pumping water-level below land surface datum (feet)
CU-531	Unknown	--	2-25-72 2-28-73 Measurements discontinued	57.07 57.89	-- --	-- --
534	Wilton Corbello	550	3- 1-73 Measurements discontinued	55.49	--	--
625	Stine & Kinney	460	2-29-72 3- 1-73 3- 5-74	47.27 47.00 45.63	-- -- --	-- -- --
629	Ohio Petroleum Co.	778	2-25-72 2-28-73	50.91 51.10	-- --	-- --
762	Unknown	--	2-29-72 3- 1-73	59.27 59.74	-- --	-- --
781	Edgerly Rice Dryer	460	2-29-72 3- 1-73 3- 5-74	51.89 52.24 51.75	-- -- --	-- -- --
Cameron Parish, La. CN-86U	U.S. Geological Survey	525-535	2- 7-72 2-28-73 3- 4-74	48.34 48.99 49.82	-- -- --	-- -- --
86L	do.	631-641	2- 7-72 2-28-73 3- 4-74	48.52 49.10 49.95	-- -- --	-- -- --
94	do.	1,112-1,118	2-23-72 2-27-74	38.97 39.14	-- --	-- --

Table 3.—Chemical analyses of water from wells in the Orange County area, 1971-74

WELL	OWNER	DEPTH OR PRODUCING INTERVAL (FT)	WATER BEARING UNIT	DATE	DIS-SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS-SOLVED IRON (FE) (MG/L)	DIS-SOLVED MANGANESE (MN) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED POTASSIUM (KA) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS-SOLVED CARBONATE (CO <sub>3</sub> ) (MG/L)	DIS-SOLVED BICARBONATE (HCO <sub>3</sub> ) (MG/L)	DIS-SOLVED SILICIC ACID (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED BORON (B) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	DIS-SOLVED NITRATE (NO <sub>3</sub> ) (MG/L)	DIS-SOLVED NITRITE (NO <sub>2</sub> ) (MG/L)	DIS-SOLVED AMMONIA (NH <sub>3</sub> ) (MG/L)	DIS-SOLVED AMMONIUM (NH <sub>4</sub> ) (MG/L)	HARDNESS (CA, MG) (MG/L)	PERCENT SODIUM (NA, MG) (PERCENT)	RE-SOLVED SODIUM BORATE (BEC) (MG/L)	SODIUM ADP-TION RATIO (SAR)	SPECIFIC CONDUCTANCE (MICROHMOS) (UMHOS)	TEMPERATURE (°C)	
																														U
U/ 61-36-614	Pine Forest School District	633-483	M	9-25-73 10-15-74	--	--	--	--	--	--	--	89	0	282	288	--	--	--	--	--	--	--	--	23	--	4.29	--	608 621	7.8 7.5	--
901	Orange County WOAD No. 1 Well 2	350-400	M	9-27-72 9-25-73 10-17-74	--	--	--	--	--	--	--	280	0	270	274	--	--	--	--	--	--	--	--	55	--	3.31	--	1,350 1,370 1,470	7.0 7.9 7.4	23.0 23.0 22.5
U/ 911	B & B Water System	468-486	M	9-14-71 9-22-72 9-25-73 10-15-74	--	--	--	--	--	--	--	80	0	238	260	--	--	--	--	--	--	--	--	17	--	3.89	--	693 670 662 693	7.7 7.8 7.7 7.5	--
919	Orange County WOAD No. 1 Well 3	385-420	M	9-16-71 9-27-72 9-25-73 10-17-74	--	--	--	--	--	--	--	150	0	216	222	--	--	--	--	--	--	--	--	33	--	2.88	--	810 819 857 903	7.6 7.3 7.8 7.4	23.0 23.0 23.0 23.0
U/ 64-101	G&W Marine, Inc.	130	U	9-16-71 9-29-72	--	--	--	--	--	--	--	420	0	424	428	--	--	--	--	--	--	--	--	380	--	.0	--	2,030 1,960	7.0 7.0	--
U/ 102	do	60	U	9-26-73 10-22-74	--	--	--	--	--	--	--	820	0	440	440	--	--	--	--	--	--	--	--	460	--	.0	--	3,120 3,540	6.1 6.4	--
U/ 302	Vidor Independent School District	521	M	9-16-71 9-28-72 9-25-73 10-15-74	--	--	--	--	--	--	--	510	0	296	280	--	--	--	--	--	--	--	--	72	--	3.61	--	1,900 1,760 1,760 1,800	7.4 7.3 7.7 7.5	--
U/ 304	GO - Inc.	385-400	M	9-16-71 9-27-72 9-25-73 10-15-74	--	--	--	--	--	--	--	350	0	292	292	--	--	--	--	--	--	--	--	32	--	4.15	--	1,390 1,390 1,420	7.3 7.8 7.4	--
305	David Milkerson	462-472	M	9-16-71 9-27-72 9-25-73 10-15-74	--	--	--	--	--	--	--	130	0	224	225	--	--	--	--	--	--	--	--	14	--	3.39	--	759 775 764 794	7.2 7.3 7.3 7.3	23.0 23.0 23.0 22.0
U/ 306	B&B Water System	525-565	M	9-16-71 9-27-72 9-25-73 10-15-74	--	--	--	--	--	--	--	400	0	272	272	--	--	--	--	--	--	--	--	29	--	3.88	--	1,350 1,450 1,470	7.5 7.9 7.4	--
U/ 62-49-703	James P. Wilson	693-703	M	9-20-72 9-29-72 9-27-73 10-23-74	--	--	--	--	--	--	--	740	0	294	288	--	--	--	--	--	--	--	--	54	--	3.74	--	2,540 2,440 2,530 2,530	7.2 7.3 7.9 7.5	--
U/ 904	Texas Highway Department	399-415	M	9-16-71 9-22-72 9-25-73 10-15-74	--	--	--	--	--	--	--	12	0	132	126	--	--	--	--	--	--	--	--	18	--	1.66	--	241 252 252	7.2 7.3 7.4	--
U/ 905	do	378-394	M	9-26-73 10-15-74	--	--	--	--	--	--	--	13	0	129	122	--	--	--	--	--	--	--	--	8	--	1.95	--	266 250	7.4 7.0	--
U/ 50-804	H. D. Womack	800	M	9-22-71 9-22-72 9-25-73 10-16-74	--	--	--	--	--	--	--	300	0	186	184	--	--	--	--	--	--	--	--	17	--	2.71	--	1,090 1,040 1,040 1,030	7.2 7.4 7.4 7.2	--
U/ 808	do	643-655	M	10-16-74	--	--	--	--	--	--	--	220	0	162	162	--	--	--	--	--	--	--	--	--	--	--	--	763	7.0	--
910	Little Cypress-Mauriceville Consolidated School District	450-500	M	9-22-71 9-29-72 10-2-73 10-22-74	--	--	--	--	--	--	--	29	0	132	126	--	--	--	--	--	--	--	--	38	--	1.40	--	330 324 318 339	7.1 6.7 6.9 6.9	23.0 23.0 23.0 23.0
51-706	Phillips Chemical Company	428-488	M	9-20-71 9-21-72 10-2-73 10-22-74	--	--	--	--	--	--	--	22	0	170	166	--	--	--	--	--	--	--	--	37	--	2.05	--	356 355 351 358	7.2 7.0 7.3 7.1	22.5 22.0 22.0 22.0
U/ 57-203	K. Klahi	740	M	9-21-71 9-22-72 9-27-73 10-17-74	--	--	--	--	--	--	--	54	0	182	184	--	--	--	--	--	--	--	--	6	--	2.86	--	467 474 474 490	7.3 7.5 7.6 7.4	--

U/ water sampled from storage tank.

Table 3.—Chemical analyses of water from wells in the Orange County area, 1971-74—continued

WELL ID	OWNER	DEPTH OR PRODUCING ELEVATION (FT)	WATER BEARING UNIT	DATE	DIS- SOLVED SILICA (MG/L)	DIS- SOLVED IRON (MG/L)	DIS- SOLVED MANG- NESE IRON (MG/L)	DIS- SOLVED CAL- CIUM (MG/L)	DIS- SOLVED MAG- NESIUM (MG/L)	DIS- SOLVED SODIUM (MG/L)	DIS- SOLVED POTAS- SIUM (MG/L)	DIS- SOLVED BICAR- BONATE (MG/L)	DIS- SOLVED SUL- FATE (MG/L)	DIS- SOLVED CHLO- RIDE (MG/L)	DIS- SOLVED FLUO- RIDE (MG/L)	DIS- SOLVED NITRATE PLUS NITR- ITE (MG/L)	DIS- SOLVED ORTHO PHOS- PHATE (MG/L)	DIS- SOLVED BOR- ON (MG/L)	DIS- SOLVED ZINC OR COPPER (MG/L)	HARD- NESS (MG/L)	FER- ROUS SODIUM (MG/L)	RE- SODIUM EQUIV- ALENT (MGC)	SODIUM EQUIV- ALENT (MGC)	SPECIFIC CONDUCT- ANCE (MHMS)	PH	TEMP- ERATURE (°C)
62-57-401	Texas Eastern Transmission Co.	448-468	N	9-14-71 9-28-72 9-27-73 10-17-74	--	--	--	--	--	--	--	180 178 176 0	63 65 64 68	--	--	--	--	--	9 10 9 --	--	2.77 2.72 2.77 --	--	505 496 494 499	7.9 7.5 7.8 7.6	--	
403	Gulf States Utilities Co. Vidor, Well 1	433-443	N	3-19-71 9-27-72 9-27-73 10-23-74	--	--	--	--	--	--	--	204 199 207 210	240 230 280 380	--	--	--	--	--	40 40 51 --	--	2.54 2.46 2.37 --	--	1,080 1,070 1,230 1,440	7.6 7.2 7.7 7.3	26.0 26.0 26.0 26.0	
404	Gulf States Utilities Co. Vidor, Well 2	430-481	N	9-22-71 9-27-72 9-27-73 10-23-74	--	--	--	--	--	--	--	228 236 244 246	760 840 950 1,000	--	--	--	--	--	140 180 200 --	--	0.90 0.31 0.00 --	--	2,520 2,490 3,250 3,320	7.2 7.0 7.8 7.2	26.0 26.0 26.0 26.5	
405	Gulf States Utilities Co. Vidor, Well 3	430-480	N	10-23-74	--	--	--	--	--	--	--	220 0	570 --	--	--	--	--	--	--	--	--	--	2,040 --	7.3 --	26.5 --	
406	Gulf States Utilities Co. Vidor, Well 6	430-480	N	10-23-74	--	--	--	--	--	--	217 0	560 --	--	--	--	--	--	--	--	--	--	--	1,970 --	7.4 --	26.0 --	
407	Gulf States Utilities Co. Vidor, Well 4	320-370	N	9-27-72 9-27-73 10-23-74	--	--	--	--	--	--	210 218 210	65 64 68	--	--	--	--	--	--	16 13 --	--	3.12 3.31 --	--	562 563 564	7.4 7.9 7.4	23.0 23.0 23.0	
408	Gulf States Utilities Co. Vidor, Well 5	343-383	N	9-23-71 9-27-72 9-27-73 10-23-74	--	--	--	--	--	--	250 250 252 250	48 45 65 77	--	--	--	--	--	--	13 11 15 --	--	3.64 3.48 3.83 --	--	555 618 644	7.9 8.6 7.5	23.0 -- 23.0	
501	Florida Gas Co.	403-435	N	9-21-71 9-27-72 9-27-73 10-17-74	--	--	--	--	--	--	173 171 175 173	28 26 28 30	--	--	--	--	--	--	7 11 8 --	--	2.70 2.58 2.71 --	--	376 371 376 375	7.5 7.3 7.7 7.4	--	
502	The Texas Co.	478-528	N	9-21-71 9-27-72 9-27-73 10-17-74	--	--	--	--	--	--	188 189 182 181	30 28 24 24	--	--	--	--	--	--	10 11 9 --	--	2.88 2.88 2.87 --	--	404 397 370 371	7.5 7.6 7.5 7.5	--	
605	Paul Cormier	469-489	N	9-14-71 9-22-72 9-27-73 10-17-74	--	--	--	--	--	--	144 144 146 144	24 22 26 28	--	--	--	--	--	--	11 8 8 --	--	2.14 2.20 2.23 --	--	321 325 322 322	7.4 7.2 7.4 7.2	--	
901	Gulf States Utilities Co. Sabine, Well 1	573-525	N	9-28-72	--	--	--	--	--	--	222 0	910 --	--	--	--	--	--	--	140 --	--	.76 --	--	3,110 --	6.8 --	--	
904	Gulf States Utilities Co. Sabine, Well 4	432-455	N	9-21-71 9-28-72 10-17-73 10-23-74	--	--	--	--	--	--	220 220 222 224	40 38 42 45	--	--	--	--	--	--	10 11 11 --	--	3.41 3.39 3.42 --	--	491 492 494 500	7.6 7.5 7.7 7.4	26.0 26.0 26.0 26.0	
905	Gulf States Utilities Co. Sabine, Well 5	422-461	N	9-21-71 9-27-72 10-17-73 10-23-74	--	--	--	--	--	--	245 249 244 250	43 40 44 46	--	--	--	--	--	--	13 13 13 --	--	3.76 3.82 3.84 --	--	538 527 541 543	7.7 7.6 7.8 7.3	--	
907	Gulf States Utilities Co. Sabine, Well 7	604-654	N	10-24-74	--	--	--	--	--	--	181 0	110 --	--	--	--	--	--	--	--	--	--	--	646 --	7.5 --	25.0 --	
908	Gulf States Utilities Co. Sabine, Well 8	573-623	N	10-24-74	--	--	--	--	--	--	240 0	46 --	--	--	--	--	--	--	--	--	--	--	527 --	7.5 --	26.0 --	
30-304	Orange County WWD No. 2 Well 1	626-706	N	9-16-71 9-20-72 9-26-73 10-16-74	--	--	--	--	--	--	180 180 190 192	300 300 190 180	--	--	--	--	--	--	42 64 62 --	--	1.87 1.80 1.92 --	--	928 918 919 931	7.1 7.1 7.2 7.2	--	
305	City of Orange Well 8	520-610	N	9-19-72 9-24-73 10-16-74	--	--	--	--	--	--	160 165 164	98 110 120	--	--	--	--	--	--	75 87 --	--	1.12 1.06 --	--	603 641 660	6.8 7.6 7.0	26.0 26.0 26.0	

1/ Water sampled from storage tank.

Table 3.1.—Chemical analysis of water from wells in the Orange County area, 1971-74—continued

WELL ID	OWNER	DEPTH OR PRODUCING INTERVAL (FT)	MATER BEARING UNIT	DATE	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MANGANESE (MNS) (MG/L)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNESIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO <sub>3</sub> ) (MG/L)	CARBONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED FLUORIDE (F) (MG/L)	DIS- SOLVED NITRATE PLUS NITRITE (B) (MG/L)	DIS- SOLVED ORTHOPHOSPHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (SUM OF BORON CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	FERRIC SODIUM (CA, MG) (MG/L)	SODIUM ADJUSTMENT RATIO (SAR)	SPECIFIC CONDUCTANCE (MICRO- MHMS) (UNITS)	TEMPERATURE (°C)	
62-38-324	City of Pinhurst	365-445	M	9-16-71 9-20-72 9-26-73 10-16-74	--	--	--	--	--	--	--	148	0	--	14	--	--	--	--	--	38	--	1.67	294	7.2	23.0
325	Orange County W&I No. 2 Well 2	630-670	M	9-16-71 9-20-72 9-26-73 10-16-74	--	--	--	--	--	--	--	148	0	--	15	--	--	--	--	--	40	--	1.64	295	7.2	23.0
402	Orangefield Independent School District	515-535	M	9-14-71 9-20-72 9-27-73 10-17-74	--	--	--	--	--	--	--	180	0	--	16	--	--	--	--	--	31	--	2.09	896	7.2	24.5
409	J. V. Phillips Water System	564-651	M	9-21-71 9-22-72 9-27-73 10-17-74	--	--	--	--	--	--	--	186	0	--	190	--	--	--	--	--	54	--	2.01	890	7.0	25.0
411	Orangefield Recreation Park	640-650	M	9-21-71 9-20-72	--	--	--	--	--	--	--	190	0	--	200	--	--	--	--	--	6	--	2.31	341	7.6	--
423	B.S.B. Water System	208-218	U	9-21-71 9-26-72 9-27-73 10-23-74	--	--	--	--	--	--	--	185	0	--	210	--	--	--	--	--	22	--	2.39	941	7.4	--
513	Bayou Pines Trailer Park	205-215	U	10-23-74	--	--	--	--	--	--	--	232	0	--	18	--	--	--	--	--	11	--	3.57	430	7.6	--
602	Donnar Corp.	700	M	9-16-71	--	--	--	--	--	--	--	383	0	--	70	--	--	--	--	--	60	--	5.08	799	7.4	--
603	Gulf Chemical Co., Well 4	604-717	M	9-17-71 9-21-72 10-24-74	--	--	--	--	--	--	--	380	0	--	55	--	--	--	--	--	62	--	4.99	796	7.2	--
606	Gulf Chemical Co., Well 3	630-710	M	9-17-71 9-21-72 10-25-74	--	--	--	--	--	--	--	380	0	--	71	--	--	--	--	--	62	--	5.13	809	7.2	--
608	Allied Chemical Co.	630-735	M	9-17-71 9-20-72 9-16-73 10-17-74	--	--	--	--	--	--	--	378	0	--	65	--	--	--	--	--	47	--	2.01	727	7.1	--
609	E.I. DuPont Co. 103-3	634-723	M	9-21-71 9-20-72 9-26-73 10-18-74	--	--	--	--	--	--	--	208	0	--	190	--	--	--	--	--	37	--	2.67	903	7.5	25.0
612	E.I. DuPont Co. 103-4	735	M	9-20-72 10-22-74	--	--	--	--	--	--	--	204	0	--	200	--	--	--	--	--	47	--	2.40	961	7.1	25.0
614	E.I. DuPont Co. 103-1	776	M	9-20-72 9-26-73 10-18-74	--	--	--	--	--	--	--	212	0	--	220	--	--	--	--	--	52	--	2.43	1,020	7.7	25.0
615	Firestone Petrochemical Center	611-700	M	9-17-71 9-22-72 10-18-74 10-18-74	--	--	--	--	--	--	--	198	0	--	190	--	--	--	--	--	66	--	2.33	873	7.3	25.0
616	Gulf Chemical Co.	718	M	10-25-74	--	--	--	--	--	--	--	200	0	--	180	--	--	--	--	--	32	--	2.44	871	6.9	25.0
623	A. Schulman Co.	440-460	M	9-16-71 9-21-72 9-25-73 10-16-74	--	--	--	--	--	--	--	198	0	--	270	--	--	--	--	--	58	--	2.09	852	7.1	25.0
629	Firestone Petrochemical Center	595-680	M	9-17-71 9-22-72 10-1-73 10-18-74	--	--	--	--	--	--	--	222	0	--	16	--	--	--	--	--	18	--	3.28	413	7.8	--
					--	--	--	--	--	--	--	216	0	--	14	--	--	--	--	24	--	3.06	401	8.8	--	
					--	--	--	--	--	--	--	216	0	--	18	--	--	--	--	20	--	3.14	404	7.6	--	
					--	--	--	--	--	--	--	213	0	--	18	--	--	--	--	--	--	--	--	400	7.5	--
					--	--	--	--	--	--	--	188	0	--	190	--	--	--	--	32	--	2.44	865	7.2	24.5	
					--	--	--	--	--	--	--	187	0	--	180	--	--	--	--	32	--	2.42	899	7.1	25.0	
					--	--	--	--	--	--	--	192	0	--	270	--	--	--	--	42	--	2.31	1,000	7.5	24.5	
					--	--	--	--	--	--	--	192	0	--	270	--	--	--	--	--	--	--	--	1,150	7.1	24.5

a/ Water sampled after pumping 30 minutes.  
 b/ Water sampled after pumping 60 minutes.  
 c/ Water sampled from storage tank.



Table 3.--Chemical analyses of water from wells in the Orange County area, 1971-74--continued

WELL ID	OWNER	DEPTH OR PRODUCING INTERVAL (FT)	WATER BEARING UNIT	DATE	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANGANESE (MANG) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MAG) (MG/L)	DIS- SOLVED POTAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SUL- FATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (NO <sub>3</sub> ) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SODIUM CHLOR- IDE (CL) (MG/L)	HARD- NESS (CA, MG) (MG/L)	FER- ROUS SODIUM (MG/L)	NE- GATIVE SODIUM CAR- BONATE RATIO (NSC)	SODIUM AD- JUST- MENT RATIO (SAR)	SPECIFIC CONDUCT- ANCE (MICHO- MMHO)	PH (UNITS)	TEM- PERA- TURE (°C)	
62-58-631	Firestone Petrochemical Center	585-625 635-680	M	10-18-74 a/ 10-18-74 b/	--	--	--	--	--	--	220	0	--	830	--	--	--	--	--	--	--	--	--	2,800	7.3	24.0	
632	B. F. Goodrich Co. Well 1	640-710	M	9-17-71 9-21-72 9-26-73 10-22-74	--	--	--	--	--	--	192	0	--	170	--	--	--	--	--	31	--	--	2.53	--	817	7.4	25.0
633	B. F. Goodrich Co. Well 2	625-725	M	9-20-71 9-21-72 10-22-74	--	--	--	--	--	--	208	0	--	140	--	--	--	--	--	27	--	--	2.67	--	708	7.3	25.0
634	B. F. Goodrich Co. Well 3	615-715	M	9-17-71 9-21-72 9-26-73 10-22-74	--	--	--	--	--	--	204	0	--	140	--	--	--	--	--	35	--	--	2.71	--	1,340	7.1	25.0
635	Big Three Welding Co.	639-689	M	9-16-71 9-21-72 10-1-73	--	--	--	--	--	--	192	0	--	250	--	--	--	--	--	53	--	--	2.32	--	1,180	7.2	23.0
637	Gulf Chemical Co. Well 5	630-670	M	9-17-71 9-21-72 10-1-73 10-25-74	--	--	--	--	--	--	196	0	--	190	--	--	--	--	--	32	--	--	2.57	--	907	7.3	25.0
638	Gulf Chemical Co. Well 6	634-735	M	9-17-71 9-21-72 10-1-73 10-25-74	--	--	--	--	--	--	188	0	--	220	--	--	--	--	--	40	--	--	2.28	--	972	7.2	25.0
639	B. F. Goodrich Co. Well 4	620-725	M	9-17-71 9-21-72 9-26-73 10-22-74	--	--	--	--	--	--	204	0	--	230	--	--	--	--	--	38	--	--	2.58	--	1,020	7.4	25.0
640	B. F. Goodrich Co. Well 5	612-622 628-718	M	9-17-71 9-21-72 9-26-73 10-22-74	--	--	--	--	--	--	204	0	--	190	--	--	--	--	--	25	--	--	2.84	--	895	7.4	24.5
642	Bonnar Corp.	420-426	M	9-21-72 9-25-73 10-16-74	--	--	--	--	--	--	224	0	--	220	--	--	--	--	--	18	--	--	3.31	--	419	7.4	25.0
701	The Texas Co.	704	M	9-21-71 9-28-72 9-27-73 10-23-74	--	--	--	--	--	--	193	0	--	200	--	--	--	--	--	16	--	--	2.84	--	932	7.4	25.0
702	Orange County WQID No. 3	600-672	M	9-21-71 9-22-72 9-25-73	--	--	--	--	--	--	222	0	--	160	--	--	--	--	--	16	--	--	3.32	--	817	7.4	25.0
708	Gulf States Utilites Co. Sabine, Well 6	465	M	9-22-71 10-24-74	--	--	--	--	--	--	261	0	--	50	--	--	--	--	--	14	--	--	4.00	--	511	7.8	23.0
809	Orange County Well 3	570-650	M	9-23-71 9-25-72 10-12-74	--	--	--	--	--	--	236	0	--	320	--	--	--	--	--	22	--	--	3.41	--	1,170	7.4	24.5
59-101	City of Orange Well 7	555-666	M	9-15-71 9-19-72 9-24-73 10-16-74	--	--	--	--	--	--	188	0	--	150	--	--	--	--	--	50	--	--	2.08	--	751	7.3	26.0
103	City of Orange Well 2	565-685	M	9-15-71 9-19-72 9-24-73 10-16-74	--	--	--	--	--	--	168	0	--	54	--	--	--	--	--	35	--	--	2.05	--	462	7.1	24.0

a/ Water sampled after pumping 30 minutes.  
b/ Water sampled after pumping 60 minutes.  
c/ Water sampled from storage tank.

Table 3.—Chemical analyses of water from wells in the Orange County area, 1971-74—continued

WELL ID	OWNER	DEPTH OR PRODUCING INTERVAL (FT)	WATER BEARING UNIT	DATE	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTASSIUM (K) (MG/L)	BICAR- BONATE (HCO <sub>3</sub> ) (MG/L)	CAR- BONATE (CO <sub>3</sub> ) (MG/L)	DIS- SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED FLUORIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRO- PHOSPHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SILICIC ACID (MG/L)	PER- CENT SODIUM	RE- SODIAL AD- JUST- MENT RATIO (SAR)	STRICTLY CONDUCT- ANCE (MICHO- MHS)	PH	TEMP- ERATURE (°C)		
62-59-104	Livingston Shipyards	749	M	9-19-72 9-24-73 10-24-74	--	--	--	--	--	--	--	211 208 214	0 0 0	--	84 87 78	--	--	--	--	--	--	--	2.94 2.81 617	623 620 617	7.2 7.9 7.4	--	24.0 27.5
106	do	750	M	9-19-72	--	--	--	--	--	--	--	206	0	--	86	--	--	--	--	32	--	--	2.74	610	7.2	25.0	
107	do	745	M	9-16-71	--	--	--	--	--	--	--	216	0	--	94	--	--	--	--	25	--	--	3.04	655	7.3	24.5	
123	City of Orange Well 9	529-643	M	9-15-71 9-19-72 9-24-73 10-16-74	--	--	--	--	--	--	--	204 204 208 208	0 0 0 0	--	130 110 120 130	--	--	--	--	34 36 35 35	--	--	2.66 2.62 2.71 --	697 706 727 737	7.1 7.3 7.8 7.3	24.5 25.0 25.0 24.0	
124	Equitable Bag Co., Inc.	590-640	M	9-22-71 9-24-72 10-2-72 10-24-74	--	--	--	--	--	--	--	179 170 180 180	0 0 0 0	--	150 140 140 140	--	--	--	--	55 55 54 54	--	--	1.83 1.83 1.87 --	743 743 752 769	7.1 7.0 7.3 7.1	24.0 25.0 --	
401	Marathon Oil Co.	580	M	9-26-73 10-17-74	--	--	--	--	--	--	--	176 182	0 0	--	40 42	--	--	--	--	32	--	--	2.26 --	422 428	7.6 7.3	23.0 23.5	
416	Livingston Shipyards	650-730	M	10-24-74	--	--	--	--	--	--	--	195	0	--	190	--	--	--	--	--	--	--	--	902	7.4	--	