

GREGG COUNTY, TEXAS

Records of wells, drillers' logs, water analyses,
and map showing locations of wells

TEXAS STATE BOARD OF WATER ENGINEERS

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Prepared in cooperation with the United States
Department of the Interior, Geological Survey

April 1943

GREGG COUNTY, TEXAS

Introduction

By

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This publication is supplemental to one that was released for Gregg County by the Texas Board of Water Engineers on February 15, 1937. It contains records of 90 wells, drillers' logs of 52 wells, summary descriptions of electrical logs of 6 wells, and results of chemical analyses of water from 70 wells in Gregg County, Texas.

It also includes a map, showing the location of the wells, each well being given a number on the map corresponding to the number assigned to it in the records. A part of the records are taken from the 1937 publication. Most of them were collected during 1941 and 1942. The field work was done in connection with a state-wide program of ground-water investigations in Texas conducted by the State Board of Water Engineers in cooperation with the United States Department of the Interior, Geological Survey.

The water analyses were made by W. W. Hastings, Chemist of the Quality of Water Division of the Federal Geological Survey, and by chemists employed by the Work Projects Administration under the supervision of Mr. Hastings, and Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry of The University of Texas. The results of the analyses, which relate only to the mineral constituents in the water, and not to its sanitary character, are tabulated in parts per million on pages 28 to 33. For the convenience of those who prefer a different form of expression the analyses of 18 samples are given in milligram equivalents per liter on page 34.

The records serve as a guide to land owners, officials of industrial plants, well drillers and others who need information regarding wells, the depth to ground water in different parts of the county, and the quantity and chemical character of water yielded by the wells.

A limited number of copies of this release are available for free distribution. They may be obtained by addressing a request to Mr. C. S. Clark, Chairman, Texas State Board of Water Engineers, 302 West 15th Street, Austin, Texas.

Records of wells in Gregg County, Texas
 All wells are drilled unless otherwise stated under remarks
 (Supplemental to wells listed in report of Feb. 15, 1937)

Well	Distance from Longview	Owner	Driller	Date com- plete- ted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
30	7 $\frac{3}{4}$ miles northwest	Tide Water Associated Oil Co. (J.J. Flewelling)	Layne-Texas Co.	1931	812	6- 5/8	--
62	7 miles northwest	Humble Oil and Refining Co. (G.W. Willingham)	do.	1931	390	10	0.5
84a	5 $\frac{1}{2}$ miles north	Judson Grove School	--	1925	594	--	--
112	7 miles northwest	Magnolia Petroleum Co. (W.E. Jones)	Layne-Texas Co.	1931	611	8	--
178	2 $\frac{3}{4}$ mile northeast	Dr. -- Hurst	--	1932	548	--	--
Well	Distance from Gladewater	Owner	Driller	Date com- plete- ted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
214	2 miles northeast	Humble Oil and Refining Co. (W.W. Holland)	Layne-Texas Co.	1931	1,084	9- 7/8	--
258	In Glade-water	City of Gladewater No. 1	do.	1931	826	12 $\frac{1}{2}$, 6- 5/8	0.5
259	do,	City of Gladewater No. 2	do.	1931	388	12 $\frac{1}{2}$	1.7
264	do.	City of Gladewater No. 3	do.	1933	213	10, 8 $\frac{1}{2}$	2.0
265	1 $\frac{1}{2}$ mile southwest	Sinclair-Prairie Oil Co. (W.H. York)	Conway Bros.	1932	807	8 $\frac{1}{2}$	--
275	5 $\frac{1}{2}$ miles east	Stanolind Oil and Gas Co. (L.E. Pearson)	L. W. Little	1931	872	10, 6-5/8	2.0
285	7 miles east	Gulf Oil Corp. (M. Smith)	--	1931	964	6- 5/8	--
290	5 $\frac{1}{2}$ miles east	Tide Water Associated Oil Co. (E.J. Nettleton "A")	Mid-Kansas Oil Co.	1931	843	8 $\frac{1}{2}$, 6	--

a/ Plus (+) indicates water level is above ground.

b/ T, turbine; A, air, steam or natural gas lift; H, hand pump or bucket and rope;
 C, cylinder; G, gasoline; E, electric. Number indicates horsepower.

Chemical analyses of water from some of these wells are shown in a table of analyses on pages 28 to 34.

Water level						Remarks
Well	Below measuring point (ft.)	Date of measure- ment a/	Method of lift b/	Use of water c/		
30	--	--	A,90	Ind	Cased to bottom. Screens at 452-497, 581-604, 702-746 and 768-789 feet. See log.	
62	54.15	June 15, 1936	T,E, 30	D,Ind	Cased to bottom. Screens at 50-72, 153-175, 184-195 and 337-381 feet. Reported yield 108 gallons a minute with drawdown of 120 feet in	
84a	--	--	C,E	P	Sec log.	1936. See log.
112	--	--	A,90	Ind	Cased to bottom. Screens at 497-518, 544-565, 602-620 and 747-789 feet. Estimated yield 150	
178	--	--	C,E, $1\frac{1}{2}$	Irr	Sand gallons a minute in 1936. See log. reported from 320 to 348 feet.	
Water level						Remarks
Well	Below measuring point (ft.)	Date of measure- ment a/	Method of lift b/	Use of water c/		
214	--	--	T,E, 60	D,Ind	See log.	
258	178.02	June 10, 1938	None	N	Casing: 12 $\frac{1}{2}$ -inch to 294 feet and 6-5/8-inch to 629 feet. Screens at 316-333, 339-349, 355-375, 489-499 and 589-629 feet. Gravel-walled.	
259	143.50	Apr. 4, 1940	T,E, 25	P	Cased to bottom. Screens at 173-195, 206-216, and 312-354 feet. Gravel-walled. Reported yield 140 gallons a minute with draw-	See log.
264	71.99	July 12, 1940	None	N	Casing: down of 90 feet when drilled. See log. 10-inch to 139 feet and 8-inch to 213 feet, perforated at 41-98, 140-162 and 191-211	
265	--	--	C,A, 5	Ind	Cased to bottom. See log.	feet. See log.
275	105.0	Apr. 6, 1936	A,G, 25	Ind	Casing: 10-inch to 82 feet; 6-5/8-inch from 9 to 872 feet. See log.	
285	--	--	C,E, 10	D,Ind	Cased to bottom, perforated from 784 to 844 feet. Reported yield 200 gallons a minute.	
290	--	--	None	N	Casing: 8 $\frac{1}{2}$ -inch to 780 feet, cemented; 6-inch perforated liner from 757 to 843 feet. See log.	See log.

c/ P, public supply; D, domestic; S, stock; Ind, industrial; Irr, irrigation; N, not used.

d/ Water level reported by driller or owner.

e/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.

* This well is located in Upshur County, and is recorded in the Upshur County report however, it is included here because it is one of the several wells used by the City of Gladewater.

Records of wells in Gregg County--Continued

Well	Distance from Kilgore	Owner (Lessor)	Driller	Date	Depth	Diam-	Height of measuring point
				com- ple- ted	of well	eter of well	above ground (in.)
411	6 $\frac{1}{4}$ miles northwest	Sinclair-Prairie Oil Co. (M.T.Cole)	Layne-Texas Co.	1931	1,008	12 $\frac{1}{2}$, 8 $\frac{1}{2}$	--
468	In Kilgore (City Park)	City of Kilgore No. 4	do.	1934	780	16, 10	--
469	In Kilgore	City of Kilgore No. 1	do.	1931	875	15 $\frac{1}{2}$, 8 $\frac{1}{4}$	1.0
470	do.	City of Kilgore No. 3	do.	1934	906	10, 6- 5/8	0.7
471	1 $\frac{1}{2}$ mile south	Humble Oil and Re- fining Co. (S.S.Laird "B")	do.	1931	908	16, 8 $\frac{1}{2}$	--
476	1 $\frac{1}{2}$ miles west	Shell Oil Co., Inc. (W. W. Elder)	do.	1931	500	10	--
Well	Distance from Longview	Owner or Lessor	Driller	Date	Depth	Diam-	Height of measuring point
				com- ple- ted	of well	eter of well	above ground (in.)
503	2 miles south	D. H. Jones	Walter Meller	1934	467	6	--
525	6 miles southwest	Magnolia Pipe Line Co.	--	1931	218	--	--
531	4 $\frac{3}{4}$ miles southwest	Atlantic Pipe Line Co.	Walter Meller	1935	365	6	0
607	3 miles south	United Gas Public Service Co.	Layne-Texas Co.	1931	378	6	--
Well	Distance from Gladewater	Owner or Lessor	Driller	Date	Depth	Diam-	Height of measuring point
				com- ple- ted	of well	eter of well	above ground (in.)
640	In Glade- water City	City of Gladewater	Layne-Texas Co.	1937	765	--	--
* 75	1 $\frac{1}{2}$ miles northwest (In Upshur County)	City of Gladewater No. 4	do.	1937	294	10 $\frac{3}{4}$	1.5
641	1 $\frac{1}{2}$ mile southwest	City of Gladewater No. 5	do.	1940	279	10 $\frac{3}{4}$, 8	2.0
642	1 $\frac{3}{4}$ miles northeast	Tide Water Asso- ciated Oil Co. (W. H. Richey)	Johnson and Sitton	1931	600	7, 5- 3/16	--

Water level						Remarks
Well	Below measuring point (ft.)	Date of measure- ment	Method	Use		
	a/	b/	c/			
411 d/	60	Aug. 5, 1931	T,E, 60	Ind	Casing: 12 $\frac{1}{2}$ -inch to 844 feet and 8-inch screen from 846 to 1,003 feet. Reported yield 560 gallons a minute. See log.	
468	111.0	Sept. 14, 1934	T,E, 40	P	Casing: 16-inch to 607 feet, cemented; 10-inch from 0 to 777 feet. Screens at 607-625 and 665-755 feet.	
469	156.04	Dec. 11, 1939	T,E, 30	P	Casing: 15 $\frac{1}{2}$ -inch to 373 feet and 8 $\frac{1}{2}$ -inch to 873 feet. Screen from 773 to 873 feet. Water level reported to have been 87 feet below ground when drilled. See log.	
	158.33	Nov. 26, 1940				
	162.81	Sept. 3, 1941				
470	150.76	Dec. 11, 1939	T,E, 25	P	Casing: 10-inch to 763 feet and 6-5/8-inch to 906 feet. Screen from 802 to 906 feet. Water level reported to have been 134 feet below ground in 1934. Temperature 80° F. See log.	
	153.88	Nov. 26, 1940				
	157.78	Sept. 3, 1941				
471 d/	76	Apr. 29, 1931	T,E, 50	D,S, Ind	Casing: 16-inch to 350 feet and 8 $\frac{1}{2}$ -inch to 908 feet. Screens at 380-436, 747-769 and 821-	
476 d/	70	Apr. 13, 1936	T,E, 10	D,Ind	Cased to 450 feet. \ 865 feet. See log. Reported yield 200 gallons a minute in 1933.	

Water level						Remarks
Well	Below measuring point (ft.)	Date of measure- ment	Method	Use		
	a/	b/	c/			
503	32	June 30, 1936	A,-	D		
525	--	--	A,-	D,Ind	Estimated yield 500 gallons a minute in 1936.	
531 d/	45	1935	C,E, 5	D	Fine-grained sand reported from 355 to 365 feet yield 15 gallons a minute.	
607	--	--	A,-	Ind	See log.	

Water level						Remarks
Well	Below measuring point (ft.)	Date of measure- ment	Method	Use		
	a/	b/	c/			
640	--	--	None	N	City test well. Supply reported inadequate. See log.	
*75	80.44	Nov. 26, 1940	T,E, 25	P	Casing: 20-inch to 203 feet, cemented; 10 $\frac{3}{4}$ -inch from 0 to 294 feet. Screen from 205 to 268 feet. Gravel-walled. Yield 185 gallons a minute with drawdown of 160 feet when drilled.	
641	85.21	July 12, 1940	T,E, 15	P	Casing: 18-5/8- Temperature 74° F. See log. inch to 50 feet, cemented; 10 $\frac{3}{4}$ -inch from 0 to 275 feet. Screen from 202 to 365 feet. Gravel-walled. Liner: 8-inch from 186 to 268 feet perforated. Yield 124 gallons a minute with drawdown of 130 feet when drilled. See log.	
642	--	--	--	--	Casing: 8 $\frac{1}{2}$ -inch to 353 feet; 7-inch from 0 to 531 feet; 5-3/16-inch perforated from 513 to 600 feet. See log.	

Records of wells in Gregg County--Continued

Well	Distance from Gladewater	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
643	2 $\frac{3}{4}$ miles northeast	Gulf Oil Corp. (J. H. Bozeman)	R. L. Miles	1931	1,023	4	--
644	do.	J. H. Bozeman	Bill Boling	1938	400	6	0
645	2 $\frac{1}{2}$ miles southeast	Gulf Oil Corp. (M. J. Shepard)	H. L. Taylor	1937	304	4	0
646	do.	do.	Bill Boling	1941	305	4 $\frac{1}{2}$	--
647	1 $\frac{3}{4}$ miles southeast	Gulf Oil Corp. (F. M. Fonville)	do.	1941	258	4 $\frac{1}{2}$	--
648	3 $\frac{1}{2}$ miles southeast	Gulf Oil Corp. (E. L. Walker)	do.	1942	104	4 $\frac{1}{2}$	0.8
649	3 $\frac{1}{2}$ miles southeast	E.P.Halliburton, Inc. (W.D.Lacy "B")	Dan Kerr	1937	485	6	0
650	5 $\frac{1}{2}$ miles southeast	Gulf Oil Corp. (J. C. Judge)	H. L. Taylor	1940	302	4	--
651	5 miles southeast	Atlantic Ref. Co. (Martin Hays)	J. C. Boling	1938	340	4 $\frac{1}{2}$	0
652	4 $\frac{1}{2}$ miles southeast	Atlantic Ref. Co. (S. C. Fishburn)	Pilot Oil Co.	1933	214+	6	0
653	3 $\frac{3}{4}$ miles southeast	Superior Oil Co. (W. E. Pasture)	--	1932	512	8	0
654	5 miles southeast	Sinclair-Prairie Oil Co. No. 2 (D. Moore)	W. A. Meller	1934	476	8, 6	--
655	do.	Sinclair-Prairie Oil Co. No. 3 (D. Moore)	do.	1934	241	6	--
656	do.	Sinclair-Prairie Oil Co. No. 4 (D. Moore)	do.	1935	456	8 $\frac{1}{2}$	--

Well	Distance from Greggton	Owner or Lessor	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
657	3 $\frac{1}{2}$ miles west	Tide Water Associated Oil Co. (E.M.Nettleton "A")	W. A. Meller	1936	457	10 $\frac{3}{4}$, 7	--
658	do.	Tide Water Associated Oil Co. No. 2 (E.M.Nettleton "A")	Layne-Texas Co.	1938	458	7	0
659	3 miles west	Texas-Empire Pipe Line Co. (E.M.Nettleton "A")	do.	--	375	6	0
660	2 $\frac{1}{2}$ miles west	Atlantic Ref. Co. (T. B. Harris)	Boling and Boling	1938	362	5 $\frac{1}{2}$, 4	--
661	3 miles northwest	Gulf Oil Corp. (Lacy-Snider)	Bill Boling	1941	228	4 $\frac{1}{2}$	--

Water level						
Well	Below	Date of	Method	Use		Remarks
	measuring point	measure-	ment	lift	water	
(ft.)	a/	b/	c/			
643	--	--	None	N	Cased to bottom, 180 feet perforated between 497 and 835 feet. Reported yield 230 gallons a minute of highly mineralized water. See log.	
644	d/ 25	1938	C,A, 5	D	Reported sand from 360 to 400 feet, and yields 10 gallons a minute.	
645	d/ 75	1937	C,E, ½	D	Cased to bottom, perforated from 284 to 304 feet. Estimated yield 3 gallons a minute. See log.	
646	--	--	C,E, ½	D	Casing: 8-5/8-inch to 51 feet; 4½-inch log. from 0 to 295 feet. perforated from 278 to 295 feet; 4½-inch from 0 to 251 feet. Screen from 0 to 295 feet; 4½-inch from 0 to 104 feet, perforated from 82 to 104 feet. See log.	
647	--	--	C,E, ½	D	Casing: 8-5/8-inch to 63 feet. See log.	
648	19.50	Jan. 22, 1942	C,E, ½	D	Casing: 8-5/8-inch to 231 to 251 feet. See log. to 66 feet; 4½-inch from 0 to 104 feet, perforated from 82 to 104 feet. See log.	
649	d/ 25	1937	C,A, 11	Ind	Cased to bottom, two perforations 2 feet long at 450 feet. See log.	
650	--	--	C,E, 5	D	Cased to bottom. Reported 50 gallons a minute when drilled. See log.	
651	d/ 125	1938	C,E, 3	D,S	Casing: 6-inch to 150 feet, cemented; log. 4½-inch from 0 to 340 feet, perforated from 310 to 178 feet; 6-inch from 0 to 241 feet. Screen from 177 to 241 feet. Estimated yield 15 gallons a minute. See log.	
652	d/ 70	1940	C,A, 5	D	Reported yield 4-inch pipe full 24 hours a day when drilled.	
653	d/ 60	1932	A,-	D	Reported yield 85 gallons a minute when drilled	
654	--	--	A	Ind	Casing: 8-inch to 340 feet, cemented. Screen 6-inch below 340 feet. Estimated yield 15 gallons a minute. See log.	
655	--	--	A	Ind	Casing: 8-inch to 178 feet; 6-inch from 0 to 241 feet. Screen from 177 to 241 feet. Estimated yield 15 gallons a minute. See log.	
656	--	--	A	Ind	Casing: 8½-inch to 330 feet, cemented. Estimated yield 15 gallons a minute. See log.	

Water level						
Well	Below	Date of	Method	Use		Remarks
	measuring point	measure-	ment	lift	water	
(ft.)	a/	b/	c/			
657	--	--	None	N	Casing: 10½-inch to 405 feet, cemented. Screen: 7-inch from 405 to 457 feet. Abandoned.	
658	d/146	June 1938	T,E, 15	D,Ind	Casing: 13-inch to 356 feet, cemented; 7-inch from 0 to 458 feet. Screen from 370 to 434 feet. Gravel-walled. Reported yield 100 gallons a minute when drilled. See log.	
659	d/ 60	--	T,E, 5	Ind	Casing: 6-inch to 314 feet. Reported log sand from 310 to 350 feet and yield 47 gallons	
660	--	--	C,E, 3	D	Casing: 5½-inch to 250 feet and a minute. 4-inch to 350 feet. Reported yield 3 gallons	
661	--	--	C,E, ½	D	Casing: 8-inch to 34 feet; 4½-inch a minute from 0 to 221 feet, perforated from 199 to 221 feet. See log.	

Records of wells in Gregg County--Continued

Well	Distance from Greggton	Owner (Lessor)	Driller	Date com- pled	Depth of well (ft.)	Diam- eter of well (in.)	Height of point above ground (ft.)
662	3½ milcs west	W. C. Turnbow	-- Adams	1934	390	10, 7	1.2
663	4 miles northwest	White Oak School No. 2	Layne-Texas Co.	1940	470	13- 3/8, 7	1.5
664	4¾ miles north	Greggtex Gasoline Corp.	Bill Boling	1941	161	6½	0
665	do.	do.	W. A. Meller	1934	410	6	0
666	do.	do.	do.	1934	420	6	--
667	8 miles north	Mabee Oil and Gas Co. (H.F. Whitehurst)	--	1932	320	8	--
668	2½ miles north	Leroy Ziegler	--	1937	148	6	--
669	1 mile northwest	H. C. Pederson	--	1937	20	36	--
670	In Greggton	Magnolia Petroleum Co.	Magnolia Petroleum Co.	1933	425	6- 5/8	0
671	do.	do.	--	1931	425	6- 5/8	--
672	do.	LeBus Rotary Tool Works	W. L. Little	1932	250	7	0
673	do.	Trinity Drilling Co.	--	1931	260	--	--
674	1¾ miles east	Royal Crown Bottling Co.	J. C. Boling	1940	550	6	0
675	do.	Jack Nesbitt	--	1931	150+	8	2.0
676	1½ miles southeast	Humble Oil and Refining Co. (E.B. Robertson)	--	--	300+	5	--
677	do.	Humble-Gulf (E.B. Robertson No.1)	Humble-Gulf	1937	10,284	--	--
678	2 miles southeast	Lone Star Gas Co.	Layne-Texas Co.	1941	423	7	0
679	3½ miles south	Humble Oil and Refining Co.	--	1937	300±	6	--
680	In Longview	R. G. Brown	--	1890	580	5	--
681	do.	Texas and Pacific Railway Co.	Texas and Pacific Railway Co.	1892	603	10	--

Well	Water level Below measuring point (ft.)	Date of measure- ment	Method of lift	Use a/ b/ c/	Remarks	
662	137.85	Sept. 29, 1941	T,E, 15	Irr	Casing: 10-inch to 300 feet; 7-inch perforated from 300 to 390 feet. Reported sand from 320 to 390 feet and yield 40 gallons a minute.	
663	172.08	Aug. 29, 1941	T,E, $7\frac{1}{2}$	P	Casing: 13-3/8-inch to 360 feet, cemented; 7-inch from 315 to 470 feet. Gravel-walled. Yield 52 gallons a minute with drawdown of 103 feet when drilled. See log. Electrical log in files of the Texas State Board of Water Engineers shows thick sand from 100 to 220 feet and thin sands between 360 and 480 feet.	
664	d/ 100	1941	T,E, 3	D	Cased to bottom. Reported yield 15 to 20 gal- lons a minute. See log.	
665	d/ 100	1934	A	Ind	Casing: 6-inch to 390 feet. Reported yield 20 gallons a minute.	
666	--	--	A	Ind	Cased to bottom. Reported yield 40 gallons a minute.	
667	--	--	C,A	D	Cased to bottom. Reported yield 8 gallons a minute.	
668	--	--	C,E, 1	D	Cased to bottom, perforated from 128 to 143 feet.	
669	--	--	C,E, 1	D	Dug well.	
670	d/ 75	1933	C,E, 5	P	Cased to bottom, perforated from 385 to 425 feet. Reported yield 3 gallons a minute.	
671	--	--	None	N	Cased to bottom. Abandoned.	
672	d/ 85	1932	C,E, 5	D, Ind	Cased to bottom. Reported yield 9 gallons a minute.	
673	--	--	C,E	D		
674	d/ 80	1940	T,E, 3	Ind	Cased to bottom, perforated from 290 to 350 feet. Gravel-walled. Reported yield 60 gallons	
675	84.47	Sept. 10, 1941	C,E	N	Formerly supplied tourist courts. a minute.	
676	--	--	A	Ind	Reported yield 60 gallons a minute.	
677	--	--	--	--	Oil test. Electrical log from 486 to 1,900 feet in files of the Texas State Board of Water Engineers shows thin sands between 486 and 875	
678	d/ 107	1941	T,A, 80	Ind	Casing: 13-3/8-inch to 502 feet, [feet]. cemented; 7-inch from 0 to 423 feet. Screens at 313-338, 352-362, 371-381, 385-397, and 402- 418 feet. Gravel-walled. Yield 200 gallons a minute with drawdown of 45 feet after 24 hours	
679	--	--	A	Ind	Reported yield 150 pumping. See log. gallons a minute.	
680	--	--	None	N	Water formerly used by ice factory; not suit- able for boilers. Deussen No. 365 e/. See log.	
681	--	--	None	N	Water formerly used for the manufacture of ice; not suitable for locomotives. Deussen No. 367 e/. See log.	

Records of wells in Gregg County--Continued

Well	Distance from Kilgore	Owner (Lessor)	Driller	Date com- plete- d	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
682	6 $\frac{1}{2}$ miles northwest	Sabine School No. 3	O. B. Harris	1940	407	7	--
683	4 $\frac{1}{2}$ miles northwest	North Chapel Colored School	J. C. Boling	1936	255	4 $\frac{1}{2}$	--
684	3 miles northwest	Midfield Oil Co. (Benson "A")	Midfield Oil Co.	1937	900+	4	0
685	2 $\frac{1}{2}$ miles west	Danciger Oil and Refining Co. (McNeeley)	L. C. Gandy	1937	625	6	--
686	2 $\frac{1}{2}$ miles west	Jacob H. Wood	Jacob H. Wood	1941	3,598	--	--
687	2 miles west	do.	do.	1931	625	6	--
688	2 $\frac{1}{2}$ miles southwest (In Rusk Co.)	Gulf Oil Corp. (M. E. Peterson)	Layne-Texas Co.	1937	440	16, 3- 5/8	0
689	1 $\frac{3}{4}$ miles southwest (In Rusk Co.)	Tide Water Associated Oil Co. (Nat Bean "A")	do.	1933	437	7	0
690	$\frac{3}{4}$ mile west	Tide Water Associated Oil Co. (J.B.Watson)	Fred Fielder	--	932	--	--
691	In Kilgore	Shell Oil Co. (E.W.Willoughby No. 34)	Shell Oil Co.	1941	3,600	--	--
692	do.	Kilgore Drilling Co. (Utzman No. 1)	Kilgore Drilling Co.	1941	1,720	--	--
693	do.	Malcom Crim	Bill Boling	1937	312	5 $\frac{1}{2}$	--
694	1 $\frac{1}{2}$ miles east	Doug Godfrey	Doug Godfrey	1938	272	5- 3/16	--
695	1 $\frac{1}{2}$ miles northeast	J. G. Beard (J.S.Elder No. 9)	J. G. Beard	--	3,588	--	--
696	1 $\frac{1}{2}$ miles north	Houston Oil Co. (J. S. Elder)	Houston Oil Co.	1933	416	6- 5/8	0
697	1 $\frac{1}{2}$ miles north	Wickham Packing Co.	J. C. Boling	1940	420	8	0.2
698	2 $\frac{1}{4}$ miles north	Tide Water Associated Oil Co. (M. G. Barton)	Layne-Texas Co.	1938	569	7	0
699	4 miles north	Jones-O'Brian (John Lloyd)	Jones-O'Brian	1931	800+	6- 5/8	1.6
700	4 $\frac{1}{2}$ miles north	Hughey School	J. C. Boling	1935	190	--	--
701	3 $\frac{3}{4}$ miles north	M. B. Hughey	Bill Boling	1938	276	5- 3/16	--
702	3 $\frac{1}{2}$ miles north	Tide Water Associated Oil Co. (W.Clayton)	Bill Collins	1931	915	6-5/8, 4	3.2

Well	Water level Below measuring point (ft.)	Date of measurement a/	Method measure- ment	Use lift water b/	Remarks
682	--	--	C,E, 3	P	Cased to bottom, perforated from 5-4 to 407 feet. Estimated yield 10 gallons a minute,
683	--	--	C,E, 3	P	Cased to bottom. September 1941. See log. See log.
684	d/ 150	1937	C,-	D,Ind	
685	d/ 90	1937	C,E, 10	Ind	Cased to bottom. Reported yield 40 gallons a minute when drilled.
686	--	--	--	--	Oil test. Electrical log in files of Texas State Board of Water Engineers shows several
687	--	--	C,-	D,S, Ind	Cased to sands between 150 and 1,000 feet. bottom.
688	d/ 230	May 29, 1937	T,E, 25	D,Ind	Casing: 16-inch to 340 feet. Screen: 8-5/8-inch from 340 to 440 feet. Reported yield 300 gallons a minute with drawdown of 72 feet after
689	d/ 170	1938	T,E, 20	Ind	Casing: 13-3/8- 24 hours pumping. See log. inch to 260 feet; 7-inch from 0 to 437 feet. Screen from 354 to 437 feet. Gravel-walled. Reported yield 115 gallons a minute. See log.
690	--	--	None	N	See log.
691	--	--	--	--	Oil test. Electrical log in files of Texas State Board of Water Engineers shows several
692	--	--	--	--	Oil test. sands between 107 and 1,000 feet. Electrical log in files of Texas State Board of Water Engineers shows several sands between 100
693	--	--	C,E, 7½	D	Reported yield 23 gallons a and 1,000 feet. minute, January 1942.
694	d/ 40	1938	C,E, 3	D,S	Casing: 12-inch to 100 feet, cemented; 5½-inch from 0 to 271 feet, perforated from 233 to 271 feet. Reported yield 20 gallons a minute, Sep-
695	--	--	--	--	tember 1941. Oil test. Electrical log from 950 to 1,350 feet in files of Texas State Board of Water Engineers shows sand from 970 to 985
696	d/ 50	1933	C,A, 6	D	Cased to bottom, perforated from 367 to feet. 412 feet. Reported yield 7 gallons a minute.
697	134.52	Sept. 25, 1941	T,E, 5	Ind	Cased to bottom. Reported yield 50 gallons a minute.
698	d/ 123	May 24, 1938	T,E, 15	Ind	Casing: 13-3/8-inch to 347 feet, cemented; 7-inch from 0 to 446 feet. Screens at 351-371 and 387-428 feet. Gravel-walled. Yield 105 gallons a minute with drawdown of 125 feet when
699	116.06	Sept. 24, 1941	A,-	N	drilled. Temperature 74° F. See log.
700	d/ 90	1935	C,E, 2	P	
701	--	--	C,E, 3	D	Cased to bottom, perforated from 256 to 276 feet. Reported yield 30 gallons a minute. See
702	125.79	Oct. 21, 1941	A,-	N	Cased to bottom, perforated from 645 to 915 feet.

Records of wells in Gregg County--Continued

Well	Distance from Kilgore	Owner (Lessor)	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
703	3 miles northeast	A. B. Spear	Layne-Texas Co.	1938	433	7	0
704	4½ miles northeast	Danville School	-- Leach	1936	19	96	0
705	9 miles east	Gregg County Air Port	Layne-Texas Co.	1941	603	16, 10	2.0

a/ Plus (+) indicates water level is above ground.

b/ T, turbine; A, air, steam or natural gas lift; H, hand pump or bucket and rope; C, cylinder; G, gasoline; E, electric. Number indicates horsepower.

Well	<u>Water level</u>	Below measuring point (ft.)	Date of measure- ment (a)	Method of lift	Use of water (b)	Remarks
703	d/ 117		July 3, 1933	T,E, 15	D,S, Irr	Casing: 13-3/8-inch to 348 feet, cemented; 6-5/8-inch from 0 to 425 feet. Screen from 355 to 413 feet. Gravel-walled. Yield 88 gallons a minute with drawdown of 173 feet
704	8.8		Sept. 2, 1941	C,E, 1	F	Dug well. [] where drilled. See log.
705	95.86		Aug. 29, 1941	T,E, 10	D,Ind	Casing: 16-inch to 307 feet, cemented; 10-inch from 0 to 454 feet. Screens at 246-249, 311-331, 357-363, and 413-444 feet. Yield 168 gallons a minute with drawdown of 109 feet after 24 hours pumping. See log. Electrical log in files of the Texas State Board of Water Engineers shows several sands between 55 and 500 feet.

c/ P, public supply; D, domestic; S, stock; Ind, industrial; F, not used.

d/ Water level reported by driller or owner.

e/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.

* This well is located in Upshur County, and is recorded in the Upshur County report; however, it is included here because it is one of the several wells used by the City of Gladewater.

Table of Drillers' Logs, Gregg County, Texas

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)		
<u>Well 30</u>					<u>Well 62</u>		
Tide Water Associated Oil Co. (J. J. Flewellen), 7½ miles north of Longview. Layne-Texas Co., driller.					Humble Oil and Refining Co. (G. W. Willingham), 7 miles northwest of Longview. Layne-Texas Co., driller.		
Sandy soil	3	3	Clay	18	18		
Hard red clay and rock	6	9	Sand, fair	28	46		
Sandy yellow clay	35	44	Hard brown sand	25	71		
Yellow sand and streaks of clay	45	89	Sandy shale, boulders	59	130		
Dark-brown sand	9	98	Brown sand	36	162		
Rock	1	99	Shale and boulders	13	179		
Brown sand, streaks of shale and boulders	39	138	Coarse-grained white sand	16	195		
Sandy green shale	24	162	Sandy shale and boulders	88	283		
Sandy brown shale and boulders	33	195	Shale and lignite	55	338		
Rock	1	196	Black and gray sand	45	383		
Sandy shale	37	233	Sandy shale	7	390		
Shale and streaks of sand	15	248	<u>Well 84a</u>				
Rock	1	249	Judson Grove School, 5½ miles north of Longview.				
Shale and boulders, streaks of sand	28	277	Red beds	32	32		
Hard shale	26	303	Water sand	6	38		
Gray sand	12	315	Blue shale	97	135		
Sandy gray shale	15	350	Water sand	5	140		
Gray sand	12	342	Blue shale	8	148		
Sandy shale	22	364	Lime and shell	2	150		
Sandy streaks of shale	15	379	Brown shale	60	210		
Fine-grained sand, streaks of shale	40	419	Water sand	8	218		
Sand and lignite	7	426	Brown shale	102	320		
Sandy shale	21	447	Water sand	6	326		
Gray sand, good	20	467	Blue shale	46	372		
Shale	7	474	Water sand	12	384		
Gray sand, good	28	502	Blue shale	10	394		
Sand and shale	13	514	<u>Well 112</u>				
Shale and boulders	27	541	Magnolia Petroleum Co. (W. E. Jones), 7 miles northwest of Longview. Layne-Texas Co., driller.				
Sandy shale and boulders	38	579	Sandy clay	15	15		
Shale	10	589	Blue clay	18	33		
Sand and gravel	10	599	Muddy sand	54	87		
Sandy shale	44	643	Shale and boulders	16	103		
Sand and shale	22	665	Sand with layers of shale	26	129		
Sand, streaks of shale	30	695	Shale and boulders	15	144		
Gray sand	31	726	Brown sand	51	195		
Rock	2	728	Shale and boulders	123	318		
Sand	40	768	Shale	13	331		
Boulders	3	771					
Rock	3	774					
Gray sand	38	812					

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Table of Drillers' Logs, Greg. County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 112--Continued</u>			<u>Well 258</u>		
Fine-grained gray sand	60	391	City of Gladewater No. 1 (Sam Kay), in Gladewater. Layne-Texas Co., driller.		
Sandy shale	31	422	Soil	2	2
Shale and boulders	77	499	Boulders	1	3
Good sand	22	521	Sandy clay	9	12
Shale	17	538	Sand	10	22
Good sand	30	568	Red clay	4	26
Sandy shale	36	604	Sticky shale	20	46
Sand, fair	19	623	Fine-grained sand	15	61
Shale	31	654	Sticky shale	34	95
Shale and lignite	98	752	Fine-grained gray sand	47	142
Sand	49	801	Boulders	1	143
Shale	10	811	Shale and boulders	24	167
<u>Well 214</u>			Sandy shale	16	183
Humble Oil and Refining Co. (W. W. Holland), 2 miles northeast of Gladewater			Sticky lime	80	263
Clay and rock	15	15	Sandy lime and boulders	10	273
Sand	60	75	Fine-grained sand and lignite	12	285
Shale and boulders	98	173	Shale and boulders	8	293
Fine-grained white sand	13	191	Shale and streaks of sand	34	327
Shale and boulders	104	295	Fine-grained gray sand and shale	54	381
Fine-grained sand	23	318	Sticky shale	70	451
Shale and lignite	6	324	Hard shale and lignite	20	471
Sand	26	350	Sticky shale	8	479
Hard shale and lignite	90	440	Sandy shale	14	495
Sand	22	462	Hard sticky lime	67	560
Shale and lignite	35	495	Boulders	3	563
Record lost	35	530	Sticky shale	14	577
Shale	8	538	Sand broken with shale	47	624
Sand with layers of shale	45	583	Sticky shale	45	669
Shale and lignite	24	607	Sandy lime	70	739
Sandy shale	54	661	Fine-grained gray sand	10	749
White sand	72	733	Sticky lime	22	771
Shale and layers of sand	52	785	Boulders	1	772
Shale and sand	10	795	Sand	12	784
Tough shale	42	837	Sticky shale	42	826
Sand	12	840	<u>Well 259</u>		
Shale and boulders	49	898	City of Gladewater No. 2, in Gladewater. Layne-Texas Co., driller.		
Shale	43	946	Rotary to surface	2	2
Rock	2	948	Soil	2	4
Sand	4	952	Sandy clay	5	9
Rock	3	955	Fine-grained sand and streaks of clay	80	89
Shale and boulders	39	994			
Shale	90	1084	(Continued on next page)		

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)		
<u>Well 259--Continued</u>					<u>Well 265</u>		
Green and white sand	36	125	Sinclair-Prairie Oil Co. (W. H. York), $\frac{1}{2}$ mile southwest of Gladewater. Conway Bros., driller.				
Shale, lignite and boulders	46	171	Soil	3	3		
Coarse-grained white sand	22	193	Sand	19	22		
Shale and lignite	12	205	Quicksand	13	35		
Good gray sand	16	221	Blue shale	50	85		
Lignite and shale	41	262	White sand	25	110		
Shale and boulders	16	278	Lime	8	118		
Fine-grained muddy gray sand	38	316	Grey shale	62	130		
Gray sand, broken	40	356	Brown shale	5	185		
Shale and boulders	42	398	Sand	15	200		
Shale and streaks of sand	50	446	Brown shale	10	210		
Shale and sandy lime	83	531	Blue shale	35	245		
Streaks of sand and shale	44	575	Water sand	20	265		
Shale, lignite, and boulders	19	594	Brown shale	20	235		
Rock	2	596	Gray shale	40	325		
Shale, lignite and boulders	73	669	Brown shale	25	350		
Tough sticky shale	31	700	Water sand	10	360		
Sandy lime	25	725	Brown shale	80	440		
<u>Well 264</u>					<u>Well 275</u>		
City of Gladewater No. 3, in Gladewater. Layne-Texas Co., driller.			Water sand	40	480		
Clay	13	13	Shale	135	615		
Sand	16	29	Water sand	25	640		
Sandy shale and lignite	91	120	Shale	20	660		
Shale	35	155	Water sand	30	690		
Sand with lignite	22	177	Blue shale	22	712		
Shale	29	206	Broken sand	10	722		
Sandy shale	20	226	Blue shale	53	775		
Rock	5	231	Water sand	22	797		
Sandy shale	17	248	Broken sand	6	803		
Rock	1	249	Blue shale	4	807		
Sandy shale	31	280					
Rock	1	281					
Shale	152	433					
Shale and boulders	50	483	Surface material	3	3		
Sand with layers of shale	20	503	Red clay	8	11		
Sandy shale and lignite	57	530	Sandy clay	9	20		

(Continued on next page)

Table of Drillers' Logs, Greee County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 275--Continued</u>			<u>Well 285--Continued</u>		
Sand and lime	19	171	Sand and shale	40	480
Sand and shale	25	196	Gumbo	43	523
Shale	28	219	Hard rock	5	528
Sand	50	269	Gumbo	30	558
Soft sand	31	300	Shale and hard sand	32	590
Lime and hard sand	13	313	Hard sand	34	624
Shale	43	356	White sand	34	658
Sand	44	400	Gray sand	100	753
Shale	11	411	White sand	30	788
Sand	12	425	Sandy gumbo	17	805
Shale	71	494	Rock	4	809
Sand	4	498	Hard sand	27	836
Shale	62	560	Sand	37	873
Sand	18	578	Sandy shale	20	893
Shale	70	648	Gumbo	67	960
Sandy shale	82	730	Gumbo and lime	4	964
Sand	12	742			
Shale	43	785			
Lime	3	788			
Shale	28	816	<u>Well 290</u>		
Sand	12	826	Tide Water Associated Oil Co. (E. M. Nettleton "A"), 5½ miles east of Gladewater. Mid-Kansas Oil Co., driller.		
Shale	17	845	Clay	10	10
Sand	11	856	Sand, shale and boulders	632	642
Shale	4	860	Rock	2	644
Sand	10	870	Sand and shale	136	780
Lime	2	872	Water sand	63	843
<u>Well 285</u>			<u>Well 411</u>		
Gulf Oil Corp. (M. Smith), 7 miles east of Gladewater.			Sinclair-Prairie Oil Co. (M. T. Cole), 6½ miles northwest of Kilgore. Layne-Texas Co., driller.		
Surface clay	20	20	Sand	91	91
Sand	5	25	Blue clay	44	135
Shale	4	29	Sand	19	154
Rock	1	30	Sand rock	2	156
Packsand	15	45	Sand	14	170
Rock	1	46	Shale	17	187
Sandy shale	18	64	Sand	31	218
Sandy gumbo	5	69	Sticky lime	100	318
Hard sand	11	80	Sand	10	328
Rock	1	81	Sticky lime	4	332
Shale	39	120	Sand	32	364
Sand and boulders	18	138	Lignite	25	389
Sandy shale	71	209	Sand	11	400
Sticky shale	18	227	Lignite	18	418
Sand and lignite	30	257	Sand	36	454
Hard sand	26	283	Shale	69	523
Gumbo	4	287	Sand	11	534
Hard sand	42	329	Sticky lime	46	580
Sandy shale	32	361			
Shale	39	400			
Rock	1	401			
Sand and shale	39	440			

(Continued on next page)

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)		
<u>Well 411--Continued</u>					<u>Well 469</u>		
Shale	8	588	City of Kilgore No. 1, in Kilgore. Leyn Texas Co., driller.				
Clay	14	602	Surface material	1	1		
Sand	14	616	Clay	6	7		
Clay	1	617	Sandy clay	15	22		
Sand	16	633	Shale and boulders	56	78		
Clay	4	637	Shale, layers of sand	63	141		
Sand	12	649	Shale	64	205		
Sticky lime	53	702	Sand	21	226		
Sand	64	766	Shale	44	270		
Lime	18	784	Shale, streaks of hard sand	56	326		
Shale	4	788	Coarse-grained grey sand	18	344		
Lime	18	806	Shale and lignite	89	433		
Sand	20	826	Good sand	18	451		
Lime	4	830	Shale	4	455		
Sand	164	994	Sand	36	491		
Clay	14	1008	Shale, streaks of sand	87	578		
<u>Well 468</u>							
City of Kilgore No. 4, in Kilgore City Park. Layne-Texas Co., driller.							
Red clay	16	16	Sand	28	606		
Sand	10	26	Shale and boulders	35	641		
Sandy shale	51	77	Shale and lignite	76	717		
Rock	1	78	Sticky shale	32	749		
Sandy shale	38	116	White sand, good	126	875		
Shale	41	157					
Sandy shale	22	179	<u>Well 470</u>				
Shale, streaks of sand	51	230	City of Kilgore No. 3, in Kilgore. Layne-Texas Co., driller.				
Rock	1	231	Surface soil	1	1		
Shale	8	239	Clay	6	7		
Sandy shale	48	287	Sandy clay	12	19		
Fine-grained sand	16	303	Shale and layers of sand	15	34		
Shale, streaks of sand	76	379	Shale and boulders	41	75		
Shale	29	408	Sand rock	2	77		
Sandy shale	199	607	Sand, boulders and shale	80	157		
Sand	20	627	Shale and sand	66	223		
Sand and shale	113	740	Sandy shale	14	237		
Sand	40	780	Shale, sand and lignite	286	523		

(Continued on next page)

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 470--Continued</u>					<u>Well 607</u>
Sand	30	605	United Gas Public Service Co., 3 miles south of Longview, Layne-Texas Co., driller.		
Shale and boulders	32	637	Surface sand	3	3
Shale, boulders, lignite	77	714	Sandy yellow clay	34	37
Sticky shale	15	729	Shale	13	50
Sand	9	738	Sandy shale	12	62
Sticky shale	9	747	Rock	1	63
Sand	159	906	Shale	1	64
<u>Well 471</u>					<u>Well 640</u>
Humble Oil and Refining Co. (S. S. Laird "B"), $\frac{1}{2}$ mile south of Kilgore. Layne-Texas Co., driller.			Rock	1	65
Surface sand	3	3	Shale	8	75
Clay	15	18	Rock	1	74
Green sand	10	28	Shale	10	84
Shale and boulders	8	36	Sandy shale	21	105
Green sand and boulders	27	63	Fine-grained white sand	11	116
Rock	2	65	Sandy shale and water sand	144	230
Green sand	30	95	Sandy shale	37	297
Lignite	4	99	Sand, streaks of shale	25	322
Shale and sand	19	118	Sandy shale and lignite	30	352
Shale, lignite, and boulders	76	194	Sandy shale	26	378
Rock	4	198			
Green sand and shale	31	229			
Shale and lignite	28	257			
Green sand	26	283			
Shale and lignite	34	317			
Fine-grained gray sand and lignite	79	396			
Gray sand	38	434			
Lignite and sand	46	480			
Lignite	6	486			
Shale and lignite	62	548			
Rock	1	549			
Sandy shale and boulders	37	586			
Sticky shale	46	632			
Pock	1	633			
Sandy shale	58	691			
Lignite	18	709			
Shale and lignite	25	734			
Rock	1	735			
Shale	10	745			
Sand and lignite	22	767			
Lignite	17	784			
Sand, lignite, and shale	66	850			
Gray sand	12	862			
Sand and shale	20	882			
Shale	26	908			

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 75*</u>					<u>Well 643</u>
City of Gladewater No. 4, $1\frac{1}{2}$ miles northwest of Gladewater (in Upshur County). Layne-Texas Co., driller.					Gulf Oil Corp. (J. H. Bozeman), $2\frac{3}{4}$ miles northeast of Gladewater. R. L. Miles, driller.
Red clay	10	10	Surface sand	3	3
Sand	17	27	Red clay	7	10
Rock	1	28	Sandy clay	25	35
Black sand	20	54	Sandy clay and gravel	66	101
Rock	1	55	Sand and gravel	59	160
Sand	16	71	Rock	1	161
Shale and lime	69	140	Rock, sand, and gravel	74	235
Shale	68	208	Lignite	10	245
Sand	46	254	Fine-grained sand and gravel	54	299
Shale	43	300	Fine-grained sand	44	343
Blue shale	12	312	Fine-grained sand and gravel	131	474
Sand	25	337	Sand and boulders	65	539
Blue shale	118	455	Rock	2	541
*This well is located in Upshur County and is recorded in the Upshur County report; however, it is included here because it is one of the several wells used by the City of Gladewater.					Fine-grained sand
<u>Well 641</u>					Coarse-grained water sand
City of Gladewater No. 5, $\frac{1}{2}$ mile southwest of Gladewater. Layne-Texas Co., driller.					42
Surface sand	3	3	Fine-grained sand	57	650
Clay	10	13	Sandy shale	10	707
Shale	121	134	Fine-grained sand	33	717
Sand	24	158	Sand and lignite	62	750
Shale	50	203	Rock	1	812
Sand	60	268	Fine-grained sand	17	813
Sandy shale	11	279	Coarse-grained water sand and gravel	6	830
<u>Well 642</u>					Sandy shale
Tide Water Associated Oil Co. (W. H. Richey), $1\frac{3}{4}$ miles northeast of Gladewater. Johnson and Sitton, driller.					187
Sand, clay, and shale	45	45	<u>Well 645</u>		
Water sand	15	60	Gulf Oil Corp. (I. O. Sheppard), $2\frac{1}{2}$ miles southeast of Gladewater. H. L. Taylor, driller.		
Shale and shells	300	360	Surface soil	5	3
Water sand	15	375	Red clay	12	15
Shale	149	524	Blue shale	10	25
Water sand	76	600	Quicksand	15	40

(Continued on next page)

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 645--Continued</u>					
Sandy shale	14	83			
Hard sand rock	3	86			
Sandy shale	54	140			
Blue shale	100	240			
Gray sandy shale	21	261			
Brown shale	22	283			
Water sand	11	294			
Sandy shale	10	304			
<u>Well 646</u>					
Gulf Oil Corp. (M. O. Sheppard), $2\frac{1}{2}$ miles southeast of Gladewater. Bill Boling, driller.					
Clay	31	31			
Quicksand	14	45			
Gray shale	30	75			
Blue shale	20	95			
Gray shale	105	200			
Blue shale	25	225			
Brown shale	40	265			
Blue shale	15	280			
Water sand	25	305			
<u>Well 647</u>					
Gulf Oil Corp. (F. M. Fonville), $1\frac{3}{4}$ miles southeast of Gladewater. Bill Boling, driller.					
Surface sand	63	33			
Lime and shell	1	34			
Brown shale	8	72			
Blue shale	24	96			
Sandy gray shale	89	185			
Blue shale	32	217			
Water sand	28	245			
Brown shale	13	258			
<u>Well 648</u>					
Gulf Oil Corp. (E. L. Walker), $3\frac{1}{2}$ miles southeast of Gladewater. Bill Boling, driller.					
Sand	38	38			
Black shale	28	66			
Lime and shell	2	68			
Blue shale	12	80			
Water sand	19	93			
Gray shale	5	104			
<u>Well 649</u>					
Erle P. Halliburton, Inc. (W. D. Lacy "R"), $3\frac{1}{2}$ miles southeast of Gladewater. Dan Kerr, driller.					
Surface clay	45	45			
Red sand	20	65			
Shale and sand	25	90			
Sand rock	2	92			
Sand and boulders	8	100			
Gravel	26	126			
Sandy shale	26	152			
Rock	2	154			
Shale	11	165			
Shale and boulders	15	180			
Water sand	85	265			
Lignite	2	267			
Sand rock	2	269			
Lignite	2	271			
Hard shale	43	314			
Packsand	31	345			
Brown shale	15	360			
Sandy shale	22	382			
Hard sand	23	405			
Shale and boulders	33	438			
Water sand	31	469			
Sandy gravel	40	509			
Packsand	10	519			
Hard shale	28	547			
Packsand	13	560			
Hard shale	18	578			
Sand	20	598			
Hard shale	34	632			
Brown shale	39	671			
Water sand	52	723			
Sandy shale	42	763			
<u>Well 650</u>					
Gulf Oil Corp. (J. C. Judge), $5\frac{1}{2}$ miles southeast of Gladewater. H. L. Taylor, driller.					
Surface clay, sand and boulders	60	60			
Sandy shale	17	77			
Black shale and boulders	68	145			
Shale and boulders	6	151			
Sandy shale	83	234			
Water sand	15	249			
Coarse-grained water sand	7	256			

(Continued on next page)

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 650--Continued</u>					
Fine-grained hard sand	19	275			
Shale	3	278			
Coarse-grained hard sand	16	294			
Fine-grained hard sand	8	302			
<u>Well 651</u>					
Atlantic Refining Co., 5 miles southeast of Gladewater. J. C. Boling, driller.					
Surface soil	150	150			
Shale	138	288			
Water sand	14	302			
Shale	8	310			
Water sand	15	325			
Shale	15	340			
<u>Well 654</u>					
Sinclair-Prairie Oil Co. No. 2 (D. Moore), 5 miles southeast of Gladewater. W. A. Meller, driller.					
Surface sand and clay	17	17			
Surface sand	26	43			
Sand	54	97			
Gumbo and boulders	44	141			
Shale	28	169			
Water sand	55	224			
Shale, gumbo and boulders	116	340			
Water sand	11	351			
Gumbo	15	366			
Water sand	16	382			
Gumbo	33	415			
Water sand	8	423			
Gumbo	14	437			
Water sand	21	458			
Gumbo	18	476			
<u>Well 655</u>					
Sinclair-Prairie Oil Co. No. 3 (D. Moore), 5 miles southeast of Gladewater, W. A. Meller, driller.					
Surface clay	12	12			
Surface sand	35	47			
Shale and boulders	132	179			
Water sand	55	234			
Gumbo	7	241			
<u>Well 656</u>					
Sinclair-Prairie Oil Co. No. 4 (D. Moore), 5 miles southeast of Gladewater. W. A. Meller, driller.					
Surface clay and sand	13	13			
Surface sand	54	67			
Sandy shale	51	118			
Gumbo and boulders	68	186			
Shale and gumbo	148	334			
Water sand	19	353			
Gumbo	18	371			
Water sand	37	408			
Gumbo and shale	48	456			
<u>Well 657</u>					
Tide Water Associated Oil Co. (E. M. Nettleton "A"), 3½ miles west of Greggton. W. A. Meller, driller.					
Surface sand and clay	30	30			
Surface sand	32	62			
Rock	1	63			
Sand and rock	18	81			
Gumbo	4	85			
Sand	37	122			
Sandy shale	55	177			
Gumbo	8	185			
Rock	1	186			
Gumbo	16	202			
Sand and shale	68	270			
Blue sand	52	322			
Rock	1	323			
Blue sand	82	405			
Sand	38	443			
Herd shale	7	450			
Shale	7	457			
Well sanded up, could not pull casing, another well drilled at camp.					
<u>Well 658</u>					
Tide Water Associated Oil Co. No. 3 (E. M. Nettleton "A"), 3½ miles west of Greggton. Layne-Texas Co., driller.					
Sandy clay	15	15			
Sand	13	28			
Rock	1	29			
Sand	43	72			
Rock	1	73			
Hard sand	44	117			
Shale	22	139			

(Continued on next page)

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)		
<u>Well 658--Continued</u>							
<u>Well 663--Continued</u>							
Sand with shale breaks	23	162	Rock	1	240		
Hard shale	44	206	Herd sand, lime and rock layers	27	267		
Sandy shale	45	251	Shale and lignite	69	336		
Shale and lignite	23	274	Rock	1	337		
Good sand	22	296	Shale and lignite	27	364		
Sandy shale	22	318	Sand	18	382		
Sand rock	33	351	Shale	2	384		
Rock	2	353	Sandy shale	11	395		
Shale	8	361	Rock	1	396		
Good sand	80	441	Shale and lignite	9	405		
Shale	17	458	Rock	1	406		
<u>Well 661</u>							
Gulf Oil Corp. (Lacy-Snider), 3 miles northwest of Greggton. Bill Boling, driller.			Fine-grained hard sand	30	436		
Clay	25	25	Shale and lignite	13	449		
Quicksand	13	38	Rock	1	450		
Black shale	16	54	Shale and lignite	19	469		
Blue shale	26	80	Shale	15	484		
Grey shale	25	105	Shale and lignite	72	556		
Brown shale	15	120	Rock	2	558		
Blue shale	58	178	Shale and lignite	11	569		
Sandy lime	4	182	Sand and sandy shale	28	597		
Brown shale	13	195	Shale and lignite	25	622		
Water sand	25	220	<u>Well 664</u>				
Brown shale	8	228	Greggtx Gasoline Corp., 4½ miles north of Greggton. Bill Boling, driller.				
<u>Well 663</u>							
White Oak School No. 2, 4 miles north- west of Greggton. Layne-Texas Co., driller.			Red clay	12	12		
Soil and clay	13	13	Yellow sand, 2 gallons a minute	43	55		
Yellow sand	14	27	Shale	60	115		
Shale	16	43	Coarse-grained grey water sand	25	140		
Sand	52	95	Shale	21	161		
Rock	1	96	<u>Well 678</u>				
Sand and breaks of shale	23	119	Lone Star Gas Co., 2 miles southeast of Greggton. Layne-Texas Co., driller.				
Sandy shale and boulders	17	136	Soil	1	1		
Rock	1	137	Red sand, clay and iron boulders	15	16		
Sandy shale	24	161	Dark-grey shale	2	18		
Shale and lignite	36	197	Sharp grey sand	11	29		
Sandy lime and shale	24	221	Shale and fine-grained grey sand	39	68		
Shale and boulders	18	239	Gray sand with thin streaks of lignite	25	93		
			Grey sandy shale with layers of rock	20	113		

(Continued on next page)

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 678--Continued</u>					
Hard shale and lignite	9	122			
Sandy shale and lignite	5	127			
Shaly hard sand and lignite	9	136			
Sandy shale and lignite	17	153			
Gray sand	6	159			
Grey shale	35	194			
Sand and shale	63	257			
Shale	5	262			
Sand and shale	9	271			
Sand, hard layers of boulders	4	275			
Coarse-grained smooth gray sand	28	303			
Sharp light-gray sand and layers of shale	25	328			
Sharp sand and layers of shale	10	338			
Shale and streaks of sand	6	344			
Sand rock	3	347			
Shale and sand breaks	8	355			
Sand and streaks of shale	7	362			
Shale	4	366			
Clean sharp gray sand	15	381			
Shale	2	383			
Clean sharp gray sand	12	395			
Gray sand, few thin streaks of shale and lignite	7	402			
Clean sharp gray sand	20	422			
Breaks of sand, shale and lignite	3	425			
Gray sand	38	463			
Fine-grained hard gray sand with streaks of shale	54	517			
Fine-grained gray sand with thin layers of shale and lignite	26	543			
Shale, sand breaks and lignite	15	558			
<u>Well 680</u>					
(Deussen No. 365 a/)					
R. G. Brown, in Longview.					
Mount Selman formation:					
Sand and clay		90			90
Wilcox formation:					
Lignite		10			100
Shale		2			102
Blue sand		150			252
Interstratified rock and clay		100			352
Gray water sand; water did not rise to surface; cased off		98			450
Clay (?)		?			
Water-bearing sand		?			580
a/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.					
<u>Well 681</u>					
(Deussen No. 367 a/)					
Texas and Pacific Railway Co., in Longview. Texas and Pacific Railway Co., driller.					
Mount Selman formation:					
Clay		35			35
Limestone (probably sandstone)		10			45
Wilcox formation:					
Shale		31			76
Sand rock		72			148
Black shale		8			156
Shale		44			200
Sand rock		20			220
Shale		25			245
Sand rock		24			269
Shale		76			345
Slate		25			370
Shale		110			480
Slate		11			491
Sand rock		19			510
Sand		12			522
Shale		45			567
Pecksand		36			603
a/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.					

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)
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Well 682

Sabine School No. 3, 6½ miles northwest of Kilgore. O. B. Harris, driller.		
Shale	15	15
Quicksand	13	28
Sandy shale	42	70
Quicksand	32	102
Brown shale	23	125
Blue shale	17	142
Water sand	6	148
Brown shale	32	180
Blue shale	72	252
Water sand	8	260
Blue shale	135	395
Water sand	7	402
Brown shale	5	407

Well 683

North Chapel Colored School, 4½ miles northwest of Kilgore. J. C. Boling, driller.		
Surface material	35	35
Quicksand	60	95
Shale	125	220
Water sand	15	235
Shale	20	255

Well 688

Gulf Oil Corp. (M. E. Peterson), 2½ miles southwest of Kilgore (Rusk County). Leyne-Texas Co., driller.		
Surface soil	4	4
Clay	3	7
Sand	15	22
Clay	32	54
Shale	5	59
Sand	8	67
Shale	33	100
Rock	2	102
Shale	16	118
Sand	18	136
Shale	4	140
Rock	1	141
Shale	13	154
Sandy shale	9	163
Rock	2	165
Shale and boulders	25	190
Shale and layers of sand	23	213
Hard shale	20	233
Shale and lignite	29	262
Sand	15	277

	Thickness (feet)	Depth (feet)
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Well 688--Continued

Sandy shale	8	285
Sand	16	301
Sandy shale	45	346
Sand	94	440

Well 689

Tide Water Associated Oil Co. (Nat Bean "A"), 1½ miles southwest of Kilgore (Rusk County). Leyne-Texas Co., driller.		
Red clay	25	25
Rock	1	26
Gray sand	28	54
Rock	1	55
Soft brown shale	47	102
Soft gray shale and fine-grained sand	60	162
Soft gray shale	91	253
Fine-grained light-gray sand	39	292
Soft shale	5	297
Light-gray sand	55	352
Soft shale	7	359
Good water sand	10	369
Soft shale and thin layers of sand	28	397
Good water sand	16	413
Hard blue shale	24	437

Well 690

Tide Water Associated Oil Co. (J. B. Watson), ¾ mile west of Kilgore. Fred Fiedler, driller.		
Sandy clay	38	38
Shale and gumbo	232	270
Shale and lignite	15	285
Sand and boulders	15	300
Blue gumbo	40	340
Rock	2	342
Sand, shale and lignite	58	400
Gray shale	65	465
Sandy shale	75	540
Blue shale	134	674
Sand and shale	41	715
Water sand	217	932

Well 698

Tide Water Associated Oil Co. (M. G. Barton), 2½ miles north of Kilgore. Layne-Texas Co., driller.		
Yellow clay	25	25

(Continued on next page).

Table of Drillers' Logs, Gregg County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 698--Continued</u>					<u>Well 705</u>
Sand	3	28			
Shale	43	71			
Rock	2	73			
Sandy shale	5	78			
Rock	1	79			
Sandy shale	16	95			
Rock	1	96			
Hard shale	251	347			
Sand and breaks of shale	27	374			
Shale	9	383			
Sand and breaks of shale	49	432			
Sandy shale	69	501			
Sand	25	526			
Sandy shale	43	569			
<u>Well 701</u>					
M. B. Hughey, $3\frac{3}{4}$ miles north of Kilgore. Bill Boling, driller.					
Surface clay and shale	240	240			
Sand	15	255			
Shale	21	276			
<u>Well 703</u>					
A. B. Spear, 3 miles northeast of Kilgore. Layne-Texas Co., driller.					
Red sandy clay	10	10			
Red sand	3	13			
Yellow clay	15	28			
Rock	1	29			
Sand	10	39			
Rock	1	40			
Sand	5	45			
Rock	1	46			
Sand	9	55			
Rock	2	57			
Sand	56	113			
Shale	5	118			
Lignite and shale	46	164			
Hard shale	42	206			
Sandy shale	14	220			
Rock	1	221			
Sand rock	9	230			
Sandy shale	46	276			
Good sand	45	321			
Shale	30	351			
Rock	1	352			
Good sand	69	421			
Shale	12	433			

Partial analyses of water from wells in Gregg County, Texas

Analyzed at The University of Texas under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry, and W. W. Hastings, Assistant Chemist, U. S. Department of the Interior, Geological Survey. Results are in parts per million. Well numbers correspond to numbers in table of well records.

Well	Owner (Lessor)	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal- cium (Ca)	Magne- sium (Mg)
30	Tide Water Associated Oil Co. (J. J. Flewellen)	812	Mar. 23, 1936	2,299	12	4
62	Humble Oil and Refining Co. (G. W. Willingham)	390	June 15, 1936	323	c/	4
84a	Judson Grove School	394	July 29, 1936	50	-	-
112	Magnolia Petroleum Co. (W. E. Jones)	811	Mar. 19, 1936	1,983	12	3
178	Dr. -- Hurst	348	June 1, 1936	128	28	26
214	Humble Oil and Refining Co. (W. W. Holland)	1,084	Mar. 31, 1936	967	6	4
258	City of Gladewater No. 1	826	Apr. 27, 1936	1,199	5	6
259	City of Gladewater No. 2	388	do.	663	6	-
259	do.	388	--	-	-	-
264	City of Gladewater No. 3	213	Mar. 30, 1936	854	6	4
265	Sinclair Prairie Oil Co. (W. H. York)	807	Apr. 29, 1936	2,427	c/	-
275	Stanolind Oil and Gas Co. (L. E. Pearsons)	872	Apr. 6, 1936	2,575	5	9
285	Gulf Oil Corp. (W. Smith)	964	Oct. 7, 1941	1,738	c/	5.1
290	Tide Water Associated Oil Co. (E. M. Nettleton "A")	843	Mar. 27, 1936	1,725	c/	3
411	Sinclair-Prairie Oil Co. (M. T. Cole)	1,008	Apr. 29, 1936	1,981	-	4
468	City of Kilgore No. 4	780	Apr. 14, 1936	1,688	6	a/
468	do.	780	Oct. 8, 1941	1,595	c/	-
469	City of Kilgore No. 1	375	Apr. 14, 1936	1,683	6	4
469	do.	875	-	1,732	10	-
469	do.	-	-	-	-	-
469	do.	875	Oct. 3, 1941	1,777	-	3.9
470	City of Kilgore No. 3	906	Apr. 14, 1936	2,084	6	9
470	do.	906	Oct. 3, 1941	1,826	-	5.1
471	Humble Oil and Refining Co. (S. S. Laird "B")	908	Apr. 15, 1936	732	6	3
471	do.	908	-	951	15	3
471	do.	-	-	-	-	-
476	Shell Oil Co., Inc. (W.W.Elder)	500	Apr. 13, 1936	448	-	4
503	D. H. Jones	467	June 30, 1936	2,028	c/	4
525	Magnolia Pipe Line Co.	218	Apr. 24, 1936	536	c/	4
531	Atlantic Pipe Line Co.	365	do.	680	-	-
607	United Gas Public Service Co.	378	June 24, 1936	1,111	7	6
d/641	City of Gladewater No. 5	279	Jan. 22, 1942	687	11	a/
*75	City of Gladewater No. 4	294	Apr. 4, 1940	766	-	-
*75	do.	294	Jan. 22, 1942	871	32	6.1
644	J. H. Bozeman	400	Sept. 18, 1941	102	11	5.1
645	Gulf Oil Corp. (J. O. Sheppard)	304	Sept. 2, 1941	550	12	a/

a/ Less than 3 parts per million.

b/ Less than 20 parts per million.

c/ Less than 5 parts per million.

Well	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as CaCO_3 (calc.)
30	872	360	-	1,234	-	-	47
62	120	159	19	98	-	-	27
84a	-	36	-	13	-	-	-
112	777	463	-	960	-	-	40
178	-	6	8	63	-	-	176
214	372	244	40	425	-	-	32
258	473	537	21	430	-	-	39
259	266	402	23	170	-	-	15
259	-	-	30	132	-	-	20
264	337	513	35	220	-	-	32
265	973	573	-	1,170	-	-	4
275	1,020	775	-	1,160	-	-	50
285	696	726	3	670	1.8	-	33
290	698	757	-	650	-	-	17
411	800	751	8	800	-	-	16
468	678	720	8	640	-	-	27
468	636	604	23	630	0.5	-	27
469	674	720	-	645	-	-	32
469	665	677	60	588	-	-	25
469	-	588	10	595	-	-	2
469	711	598	27	740	0.7	-	17
470	826	743	-	880	-	-	50
470	728	586	23	780	0.6	-	23
471	295	604	29	102	-	-	27
471	335	639	34	155	-	-	30
471	-	-	25	140	-	-	12
476	184	457	21	14	-	-	16
503	808	555	-	940	-	-	22
525	217	525	37	18	-	-	22
531	292	732	8	20	-	-	1
607	439	665	42	290	-	-	44
641	267	451	34	150	0.4	b/	37
*75	311	394	26	238	0	3.0	28
*75	311	427	30	282	0.2	b/	104
644	21	31	2	48	.3	b/	48
645	216	512	31	36	.6	b/	36

d/ Analyses of water from selected wells are given in milligram equivalents per liter on page 34.

* This well is located in Upshur County, and is recorded in the Upshur County report; however, it is included here because it is one of the several wells used by the City of Gladewater.

Partial analyses of water from wells in Gregg County--Continued

Well	Owner (Lessor)	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)
d/646	Gulf Oil Corp. (J. C. Sheppard)	305	Jan. 22, 1942	276	47	4.9
647	Gulf Oil Corp. (F. N. Fonville)	258	do.	488	6.0	7.3
d/649	E. P. Halliburton Inc. (W. D. Lacy "B")	485	do.	455	c/	a/
650	Gulf Oil Corp. (J. C. Judge)	302	Aug. 28, 1941	462	c/	a/
651	Atlantic Refining Co. (Martin Hays)	340	do.	505	c/	a/
652	Atlantic Refining Co. (S. C. Fishburn)	214+	Sept. 23, 1941	801	c/	a/
d/653	Superior Oil Co. (W. E. Pasture)	512	Sept. 18, 1941	815	c/	a/
654	Sinclair-Prairie Oil Co. No. 2 (D. Moore)	476	Aug. 27, 1941	667	8.4	3.9
655	Sinclair-Prairie Oil Co. No. 3 (D. Moore)	241	do.	469	c/	a/
656	Sinclair-Prairie Oil Co. No. 4 (D. Moore)	456	do.	669	c/	a/
d/658	Tide Water Associated Oil Co. No. 2 (E. M. Nettleton "A")	458	Aug. 28, 1941	538	8.4	a/
659	Texas-Empire Pipe Line Co. (E. M. Nettleton "A")	375	Oct. 21, 1941	680	7.2	3.4
660	Atlantic Refining Co. (P. B. Harris)	362	Sept. 17, 1941	630	6.0	a/
661	Gulf Oil Corp. (Lacy-Snider)	228	Jan. 22, 1942	475	11	a/
d/663	White Oak School No. 2	470	Aug. 29, 1941	706	c/	3.9
d/664	Greggtex Gasoline Corp.	161	Jan. 22, 1942	161	14	8.5
665	do.	410	do.	1,147	13	6.1
d/666	do.	420	do.	1,175	24	6.1
d/667	Mabee Oil and Gas Co. (H. F. Whitehurst)	320	Nov. 20, 1941	400	c/	a/
668	Leroy Ziegler	148	Sept. 19, 1941	183	21	12
669	H. C. Pederson	20	Aug. 29, 1941	22	c/	a/
d/670	Magnolia Petroleum Co.	425	Sept. 11, 1941	1,350	8.8	5.1
672	LeBus Rotary Tool Works	250	Sept. 10, 1941	1,335	20	3.9
674	Royal Crown Bottling Co.	350	do.	1,584	12	3.9
676	Humble Oil and Refining Co. (E. B. Robertson)	300+	Sept. 8, 1941	100	6.4	a/
d/678	Lone Star Gas Co.	423	Oct. 1, 1941	1,673	6.4	a/
679	Humble Oil and Refining Co.	300+	Sept. 8, 1941	723	c/	3.9
682	Sabine School No. 3	407	Sept. 11, 1941	376	c'	a'
d/683	North Chapel Colored School	255	do.	186	19	5.1
d/684	Midfield Oil Co. (Benson "A")	900±	Sept. 25, 1941	696	c/	a/
685	Danciger Oil and Refining Co. (McNeeley)	625	do.	368	12	a/
d/687	Jacob H. Wood	625	Sept. 3, 1941	411	8	a/
688	Gulf Oil Corp. (M. E. Peterson)	440	Aug. 28, 1941	359	8	a/
689	Tide Water Associated Oil Co. (Nat Bean "A")	437	Oct. 4, 1941	389	c/	a/
d/693	Malcom Crim	312	Jan. 21, 1942	424	c/	a/
694	Doug Godfrey	272	Sept. 3, 1941	461	c/	a/
696	Houston Oil Co. (J. S. Elder)	116	Jan. 19, 1942	1,950	117	60
d/698	Tide Water Associated Oil Co. (M. G. Barton)	569	Sept. 25, 1941	513	c/	a/
d/700	Hughey School	190	Sept. 11, 1941	456	c/	a/

Well	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)
646	52	207	52	18	.2	b/	138
647	187	451	30	36	.1	b/	45
649	187	433	25	24	-	b/	11
650	185	445	31	20	-	b/	22
651	207	506	10	31	.9	b/	22
652	336	634	12	140	-	b/	1
653	336	610	18	158	-	b/	12
654	267	592	14	83	-	b/	37
655	189	397	27	52	.2	b/	16
656	279	604	14	74	.9	b/	10
658	213	506	31	34	-	b/	32
659	273	586	15	93	.2	b/	32
660	255	506	16	102	-	b/	21
661	187	482	15	22	.3	b/	36
663	291	580	12	113	.7	b/	17
664	37	122	20	21	.1	b/	70
665	429	250	20	550	.2	b/	69
666	433	250	26	562	.3	b/	84
667	165	293	8	80	.5	b/	5
668	29	37	27	76	-	b/	103
669	2.3	13	2	3.0	-	b/	16
670	520	262	27	660	-	b/	43
672	502	226	27	670	-	b/	67
674	615	336	2	785	-	b/	47
676	26	37	31	16	-	b/	27
678	662	427	2	790	.3	b/	27
679	297	616	5	110	1.2	b/	22
682	155	354	31	14	.4	b/	5
683	48	146	20	22	.1	b/	68
684	297	708	15	35	1.0	b/	1
685	134	305	35	34	.2	b/	42
687	163	421	23	8.0	-	b/	26
688	140	354	27	8.0	-	b/	26
689	158	372	38	6.0	-	b/	10
693	172	397	41	10	.4	b/	11
694	184	421	54	10	-	b/	16
696	443	250	1,104	102	.3	b/	537
698	207	506	35	15	-	b/	22
700	185	415	46	16	1.0	b/	11

Partial analyses of water from wells in Gregg County--Continued

Well	Owner (Lessor)	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal- cium (Ca)	Magne- sium (Mg)
	701 M. B. Hughey	276	Sept. 11, 1941	502	c/	a/
	703 A. B. Spear	433	Sept. 5, 1941	565	7.6	a/
d/	704 Danville School	19	Sept. 2, 1941	102	12	9.7
d/	705 Gregg County Air Port	603	do.	673	c/	5.1
**	176 J. W. Johnson (H. W. Norvell)	20	Oct. 27, 1941	86	7.6	6.1
**	481 Tide Water Associated Oil Co. (J. M. Blackman)	955	--	1,507	0.4	2.7

a/ Less than 2 parts per million.

b/ Less than 20 parts per million.

c/ Less than 5 parts per million.

Well	Sodium and Potassium (Na + K) (calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Fluor- ide (F)	Ni- trate (NO ₃)	Total hardnes- as CaCO ₃ (calc.)
701	201	476	42	18	-	b/	22
703	231	573	31	13	.4	b/	20
704	8.5	37	46	8.0	.1	b/	71
705	272	549	38	86	.5	b/	23
176	8.7	6	3	14	0.1	b/	44
463	607	622	31	560	-	0	12

d/ Analyses of water from selected wells are given in milligram equivalents per liter on page 34.

* This well is in Upshur County, and is recorded in the Upshur County report; however, it is included here because it is one of the several wells used by the City of Gladewater.

** Well records in Gregg County publication for February 15, 1937.

Chemical Analyses--Continued

Results are in milligram equivalents per liter

Well	Owner (Lessor)	Depth of well (ft.)	Date of collection	Al-	Magne-	Sodium and	Bicar-	Sul-	Chlor-	Fluor-	Ni-	Total	
				cium (Ca)	sium (Mg)	Potassium (Na + K) (calc.)	Bonate (HCO ₃)	fate (SO ₄)	Ride (Cl)	ide (F)	trate (NO ₃)	hardness as CaCO ₃ (calc.)	
641	City of Gladewater	No. 5	279	Jan. 22, 1942	0.54	0.20	11.61	7.40	0.72	4.23	0.02	0	0.74
646	Gulf Oil Corp. (M. O. Sheppard)		305	do.	2.36	0.40	2.25	3.40	1.092	0.51	0.01	0	2.76
649	F. P. Halliburton		485	do.	0.12	0.10	8.12	7.10	0.52	0.68	-	0.04	0.22
653	Superior Oil Co. (S. C. Fishburn)		512	Sept. 18, 1941	0.02	0.22	14.59	10.00	0.37	4.46	-	-	0.24
658	Tide Water Associated Oil Co. No. 2		458	Aug. 28, 1941	0.42	0.22	9.26	8.30	0.64	.96	-	-	0.64
663	White Oak School No. 2		470	Aug. 29, 1941	0.02	0.32	12.64	9.50	0.25	3.19	0.04	-	0.34
664	Greggtex Gasoline Corp.		161	Jan. 22, 1941	0.70	0.70	1.62	2.00	0.42	0.59	0.005	0	1.40
666	do.		420	do.	1.18	0.50	18.84	4.10	0.546	15.85	0.015	0	1.58
667	Mabee Oil and Gas Co.		320	Nov. 20, 1941	0.06	0.04	7.12	4.80	0.17	2.26	0.03	0.02	0.10
670	Magnolia Petroleum Co.		425	Sept. 11, 1941	0.44	0.42	22.61	4.30	0.56	18.61	-	-	0.36
678	Lone Star Gas Co.		423	Oct. 1, 1941	0.32	0.22	28.78	7.00	0.04	22.28	0.015	-	0.54
683	North Chapel Colored School		255	Sept. 11, 1941	0.94	0.42	2.08	2.40	0.42	0.62	0.005	-	1.36
687	Jacob H. Wood (McNeeley)		625	Sept. 3, 1941	0.40	0.12	7.09	6.90	0.48	.23	-	-	0.52
693	Malcom Crim		312	Jan. 21, 1942	0.12	0.10	7.46	6.50	0.858	0.28	0.02	0.02	0.22
698	Tide Water Associated Oil Co. (M.G.Barton)		569	Sept. 25, 1941	0.22	0.22	9.00	8.30	0.72	0.42	-	-	0.44
700	Hughey School		190	Sept. 11, 1941	0.10	0.12	8.04	6.80	0.96	0.45	0.05	-	0.22
704	Danville School		19	Sept. 2, 1941	0.62	0.80	0.37	0.60	0.96	.23	0.005	-	1.42
705	Gregg County Air Port		603	do.	0.04	0.42	11.80	9.00	0.80	2.43	0.03	-	0.46

**MAP OF GREGG COUNTY, TEXAS
SHOWING WATER WELLS LISTED IN THIS REPORT
(SUPPLEMENTAL TO WELLS LISTED IN REPORT OF FEB. 15, 1937)**

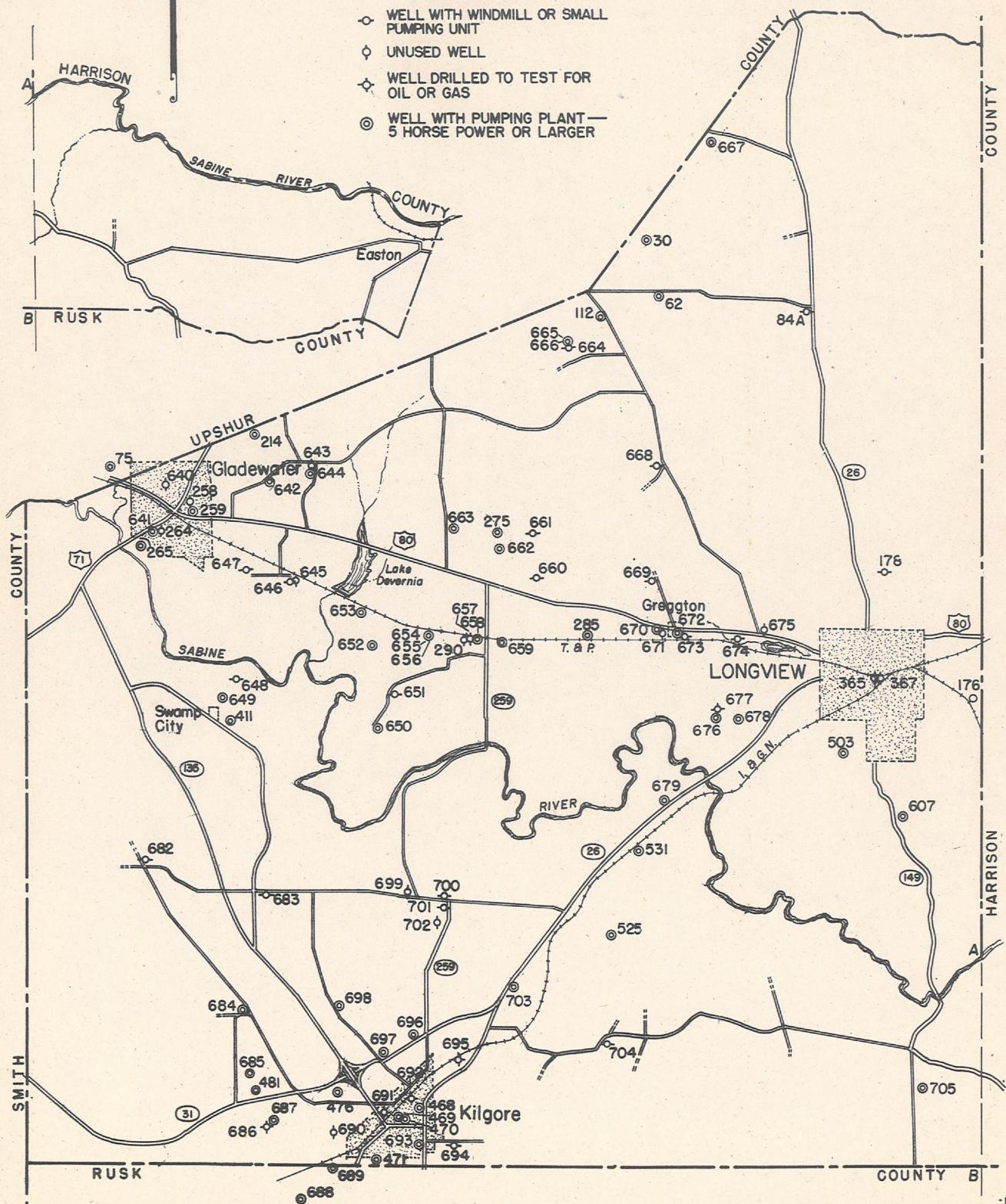
(SUPPLEMENTAL TO WELLS LISTED IN REPORT OF FEB. 15, 1937)

A horizontal scale bar with tick marks at 0, 1, 2, 3, and 4. The word "SCALE" is written above the bar, and "MILES" is written below the 4 mark.

TEXAS BOARD OF
WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY

—EXPLANATION—

- Ⓐ WELL WITH WINDMILL OR SMALL PUMPING UNIT
 - ∅ UNUSED WELL
 - ❖ WELL DRILLED TO TEST FOR OIL OR GAS
 - Ⓑ WELL WITH PUMPING PLANT—5 HORSE POWER OR LARGER



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7-2-42.