

Please do not destroy or throw away this publication.
If you have no further use for it, write to the State
Board of Water Engineers, Austin, requesting return
postage.

* * *

TEXAS

* * *

STATE BOARD OF WATER ENGINEERS

C. S. Clark, Chairman

A. H. Dunlap, Member

J. W. Pritchett, Member

* * *

MONTGOMERY COUNTY, TEXAS

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

* * *

by

Penn Livingston

Mimeographed by
WORKS PROGRESS ADMINISTRATION
PROJECT 10443

* * *

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

* * *

Austin, Texas
April 10, 1939

MONTGOMERY COUNTY, TEXAS

* * *

Introduction

by

Samuel F. Turner

Associate Hydraulic Engineer

United States Department of the Interior

Geological Survey

This pamphlet contains records of wells in Montgomery County, Texas, with tables of well logs, well water analyses, and a map which shows all the wells described, each well having a number on the map corresponding to the number assigned to it in the well tables.

The records were obtained in the course of an investigation which was undertaken as part of a statewide study of the underground water resources of Texas. The investigation was made by the State Board of Water Engineers, in cooperation with the U. S. Department of the Interior, Geological Survey. The field work was carried out by Penn Livingston of the Geological Survey. The analyses were made in the laboratory of the Geological Survey at Washington by Margaret D. Foster. The field tests were made in Houston by Samuel F. Turner.

The well records serve as a guide to land owners and well drillers who may need information regarding wells and pumping plants, the depth to ground water in different parts of the county and the quantity and quality of water yielded by wells. They afford a basis for the more intensive investigation which is now being carried on.

These records were typed, assembled, and mimeographed by employees of Works Progress Administration Project 10443, which is sponsored by the Texas Board of Water Engineers in cooperation with the Geological Survey.

Records of wells in Montgomery County, Texas
 (All wells are drilled unless otherwise noted in "Remarks" column.)
 (Principal water-bearing beds are sand or gravel.)

No.	Distance from Conroe	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
1	20½ miles west northwest	Trinity & Brazos Valley R.R.	--	--	164	12	68 146	18 18
d/ 2	19½ miles west northwest	Stinson Est.	--	--	2,400+	6	--	--
3	19 miles west	Gulf Coast & Santa Fe R.R.	W. J. Giles	1913	746	8	520 695	40 51
4	18½ miles west northwest	The Texas Co.	Layne-Texas Co.	1907	109	9- 5/8	75	4
5	do.	do.	do.	1907	440	9- 5/8	190 237	35 23
6	12 miles northwest	J. H. Hall Well 2	Sprague Oil Co.	1924	4,316	--	410	30
7	8½ miles north	-- Shawver Well 1	Montgomery County Oil Co.	1924	3,515	--	--	--
d/ 8	7 miles north	F. W. Shawver	--	--	45	36	--	--
9	6½ miles north	State Highway	--	1931	27	--	--	--
10	6 miles north	-- Qualine	--	--	20	36	--	--
11	5¼ miles north	State Highway	--	1931	13	3	7	6
12	4¾ miles north	--	--	--	34	6	--	--
13	3¼ miles north northwest	--	--	--	30	6	--	--
14	3 miles north	W. B. Wood	--	1931	25	3	20	5
d/ 15	2½ miles north	Highway Spring	--	--	--	--	--	--
16	2¼ miles north	-- Hicks	--	--	20	6	--	--
17	1¾ miles north	State Highway	--	1931	29	3	26	3
18	1½ miles north	J. R. Grant	--	--	26	6	--	--
19	¾ mile north	L. S. Ross	--	--	37	30	--	--
20	At Conroe	State Highway	--	1931	20	3	--	--
21	do.	Gulf Coast & Santa Fe R.R.	R. C. Davant	1917	1,282	8	1,087 1,192	24 84
22	do.	City of Conroe	C. G. Hamil	1909	1,464	8	1,080	150

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base, or top of water pipe clamp.

b/ A, air; J, jack; F, artesian flow; B, bucket; E, electric motor; G, gasoline engine; O, oil engine; H, hand.

Records obtained by Penn Livingston and Samuel F. Turner
 (See "Table of field tests" for tests of hardness, chloride and sulphate.)

No.	Height of bench mark above (+) ground (ft.) a/	Water level		Pump and kind and amount of power b/	Use of water c/	Remarks
		Below bench mark (ft.)	Date of measurement			
1	--	--	--	--	RR	Casing; 86 feet of 12-inch and 78 feet of 8-inch. Screens set at 68 to 86 and 146
2	--	--	--	F,J,G, 5	D,S	Temperature 93° F. Estimated yield, 25 gallons a minute, April 14, 1931. to 164 feet.
3	--	--	--	--	RR	Casing; 582 feet of 8-inch and 184 feet of 6-inch. Screens set at 517 to 559 and 704 to 746 feet.
4	--	--	--	--	Ind	Casing; 85 feet of 9 5/8-inch. Screen set at 71 to 85 feet.
5	--	--	--	--	Ind	Casing; 440 feet of 9 5/8-inch. Screens set at 190 to 225, 297 to 309 and 427 to
6	--	--	--	--	--	Oil test, see driller's log. 440 feet.
7	--	--	--	--	--	Do.
8	0	43.8	Nov. 13, 1931	J,E	D,S	Dug well.
9	0	26.9	Dec. 22, 1931	None	N	Test well drilled by Geological Survey.
10	--	--	--	B,H	N	Dug well. Automatic water-stage recorder was maintained on this well for several months.
11	1/2	7.4	Nov. 17, 1931	None	N	Test well drilled by Geological Survey.
12	2	31.2	Nov. 11, 1931	B,H	D,S	Dug well.
13	2	29.5	Nov. 16, 1931	None	N	Do.
14	1/2	21.7	Nov. 17, 1931	None	N	Test well drilled by Geological Survey.
15	--	--	--	--	N	Seep spring at contact between sand and clay.
16	3	19.0	Nov. 13, 1931	None	N	Dug well.
17	1/2	28.3	Nov. 14, 1931	None	N	Test well drilled by Geological Survey.
18	2	15.9	Nov. 13, 1931	None	N	
19	2	35.2	do.	B,H	D,S	
20	1	5.1	Nov. 25, 1931	None	N	Test well drilled by Geological Survey.
21	2	-0.3	June 3, 1931	A,-	RR	Casing; 1,171 feet of 8-inch and 111 feet of 6-inch. Screens set at 1,070 to 1,170
22	2	1.4	do.	None	N	Casing; 185 and 1,202 to 1,282 feet. feet of 8 1/2-inch, and 6-inch set to bottom. Screen set at 1,125 to 1,272 feet.

c/ P, public; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

d/ See "Table of field tests" for tests of hardness, chloride and sulphate in water from this well.

Records of wells in Montgomery County--Continued

No.	Distance from Conroe	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
d/ 23	At Conroe	City of Conroe	Layne-Texas Co.	1924	1,221	8	1,060 1,186	106 35
d/ 24	do.	do.	--	--	205	6	--	--
25	do.	do.	--	--	205	6	--	--
26	2 miles northeast	J. H. Bennett	--	1926	50	36	--	--
27	$\frac{1}{2}$ mile south	-- Heath	--	1903	57	8	--	--
28	$\frac{3}{4}$ mile southwest	Delta Land & Timber Co.	Layne-Texas Co.	1914	1,172	14	1,050 1,111	41 41
29	$1\frac{1}{4}$ miles south	Brown Est.	--	--	25	48	--	--
d/ 30	$1\frac{1}{2}$ miles south	L. Johnson	--	--	33	48	--	--
d/ 31	$1\frac{3}{4}$ miles south	Hogg Bros.	--	1931	13	3	12	1
32	3 miles south	--	--	1931	13	3	10	3
d/ 33	$4\frac{1}{4}$ miles south	C. Johnson	--	--	60+	4	--	--
d/ 34	do.	do.	--	--	160+	5	--	--
d/ 35	$4\frac{3}{4}$ miles south	W. T. Peoples	Charlie Smith	1928	385+	3	--	--
36	5 miles south	J. T. Peoples	--	--	10	48	--	--
d/ 37	$3\frac{1}{2}$ miles east	J. Youens	--	1932	47	36	--	--
d/ 38	$3\frac{1}{2}$ miles southeast	Mother's Place	--	1932	45	48	--	--
39	11 miles east northeast	H. W. McMaster Well 2	McMaster Oil Co.	1919	3,825	--	--	--
d/ 40	$20\frac{1}{2}$ miles west southwest	J. H. Rodgeson	Mike Lee	1918	110	2	--	--
d/ 41	19 miles west southwest	I. & G. N. R.R.	McMasters & Pomeroy	--	1,452	10	1,307	30
42	10 miles southwest	-- Chase Well 1	Cullen & West Production Co.	1929	3,516	--	--	--
43	6 miles south	Pierce-Fordyce Oil Association	Layne-Texas Co.	1916	3,706	--	--	--
44	8 miles south	--	--	1931	30	3	22	8
d/ 45	$8\frac{1}{2}$ miles south	Blair Store	--	--	21	24	--	--
46	9 miles south	E. W. Castleschouldt	--	--	35	24	--	--
d/ 47	do.	L. A. Smith	--	1907	900+	4	--	--
d/ 48	do.	Thomas Falvey	--	1906	1,800	8	1,540	40
d/ 49	9 miles south southeast	T. J. Harper	--	--	--	6	--	--

Penn Livingston and Samuel F. Turner

No.	Height of bench mark above (+) ground (ft.) a/	Water level		Pump and kind and amount of power b/	Use of water c/	Remarks
		Below bench mark (ft.)	Date of measurement			
23	--	--	--	A	P	Casing; 1,221 feet of 8-inch. Screens set at 1,099 to 1,163 and 1,185 to 1,221 feet.
24	--	--	--	A	P	
25	--	--	--	A,E	N	
26	3	12.6	Nov. 17, 1931	None	N	Dug well.
27	--	--	--	None	N	An automatic water-stage recorder was maintained on this well for several
28	--	--	--	A,-	Ind	Casing; 950 feet of 10-inch and 6-inch to bottom. Screen set at 1,028 months.
29	2 $\frac{1}{2}$	27.0	Nov. 18, 1931	B,H	S	Dug well. to 1,148 feet.
30	0	26.2	June 3, 1931	B,H	D,S	Do.
31	$\frac{1}{2}$	9.8	Nov. 13, 1931	None	N	Test well drilled by Geological Survey.
32	$\frac{1}{2}$	11.4	Nov. 12, 1931	None	N	Do.
33	4	9.9	Nov. 18, 1931	None	N	
34	--	+	--	None	N	Flows about 1 gallon in 24 hours.
35	3	+	--	F	P,D,S	Temperature 73° F. Estimated yield 5 gallons a minute, June 3, 1931.
36	2 $\frac{1}{2}$	6.3	June 3, 1931	B,H	S	Dug well.
37	3	45	Aug. 24, 1932	B,H	D,S	Do.
38	3	42	do.	B,H	D,S	Do.
39	--	--	--	--	--	Oil test, see driller's log.
40	--	--	--	J,H	D,S	
41	--	--	--	J,C, --	RR, D,S	Casing; 1,307 feet of 10 and 8-inch, and 143 feet of 6-inch. Screen set from
42	--	--	--	--	--	Oil test, see 1,307 to 1,389 feet, driller's log.
43	--	--	--	--	--	Do.
44	$\frac{1}{2}$	27.3	Nov. 10, 1931	None	N	Test well drilled by Geological Survey.
45	2	17.3	June 2, 1931	B,H	D,S,P	Dug well.
46	2	31.8	do.	B,H	D	Do.
47	2	+	do.	F	D	Estimated yield, $\frac{1}{2}$ gallon a minute, June 2, 1931.
48	15	+	do.	F	D,P	Casing; 80 feet of 4-inch and 4-inch drill stem to bottom.
49	2	+	do.	F	D	Estimated yield 10 gallons a minute, June 2, 1931.

Records of wells in Montgomery County--Continued

No.	Distance from Conroe	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
d/ 50	10 miles south	Grogan's Mill	--	--	173+	6	--	--
51	10 $\frac{1}{2}$ miles south	--	--	1931	21	3	18	3
52	11 miles south	Sam Ashe School	--	--	50	30	--	--
53	12 $\frac{1}{2}$ miles south	H. T. Temple	--	--	25	48	--	--
d/ 54	13 $\frac{1}{2}$ miles south	C. L. Fitch	Brains et al	1927	2,285	4	--	--
55	17 miles east southeast	Wight-Schaedler Well 1	Black Hawk Oil Co.	1920	4,598	--	--	--
56	20 miles southeast	J. W. Reynolds Well 1	Rucker Oil & Refining Co.	1922	992	--	--	--

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base, or top of water pipe clamp.

b/ A, air; J, jack; F, artesian flow; B, bucket; E, electric motor; G, gasoline engine; O, oil engine; H, hand.

Penn Livingston and Saruel F. Turner

No.	Height of bench mark above (+) ground (ft.) a/	Water level		Pump and kind and amount of power b/	Use of water c/	Remarks
		Below bench mark (ft.)	Date of measurement			
50	1	24.2	June 2, 1931	J,H	D,S	
51	$\frac{1}{2}$	18.2	Nov. 12, 1931	None	N	Test well drilled by Geological Survey.
52	3	30.6	June 2, 1931	B,H	P	Dug well.
53	2	27.9	Nov. 8, 1931	B,H	D,S	Do.
54	$2\frac{1}{2}$	+	--	F	D,S	Yield 9.5 gallons a minute, June 1, 1931. Oil test, see driller's log.
55	--	--	--	--	--	Oil test, see driller's log.
56	--	--	--	--	--	Do.

c/ P, Public; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

d/ See "Table of field tests" for tests of hardness, chloride and sulphate in water from this well.

Records of field tests of samples from wells in Montgomery County, Texas
 (Analyzed by Samuel F. Turner. Parts per million. For records
 of wells see corresponding numbers in well tables.)

Well No.	Owner	Date of collection	Depth of well (ft.)	Hardness as CaCO ₃ a/	Chloride (Cl)	Sulphate (SO ₄) b/
2	Stinson Est.	-	2,400±	80	220	10
8	F. W. Shawver	Nov. 13, 1931	45	65	16	1
15	Highway Spring	-	-	40	15	15
23	City of Conroe	-	1,221	110	60	40
24	do.	-	205	35	30	5
30	L. Johnson	June 3, 1931	33	40	30	10
31	Hogg Bros.	Nov. 13, 1931	13	140	80	15
33	C. Johnson	Nov. 18, 1931	60+	150	50	10
34	do.	-	160±	100	55	5
35	W. T. Peoples	-	385±	110	35	10
37	J. Youens	Aug. 24, 1932	47	900	1,000	50
38	Mother's Place	do.	45	20	15	2
40	J. H. Rodgeson	-	110	45	65	10
41	I. & G. N. R. R.	-	1,452	25	30	15
45	Blair Store	June 2, 1931	21	40	30	30
47	L. A. Smith	do.	900±	100	65	10
48	Thomas Falvey	do.	1,800	30	60	50
49	T. J. Harper	do.	-	110	60	40
50	Grogan's Mill	do.	173±	100	40	10
54	C. L. Fitch	-	2,285	150	60	10

a/ Hardness as calcium carbonate by the soap method.

b/ Sulphate by turbidity method and may be as much as 25 per cent in error.

Table of Drillers' Logs, Montgomery County, Texas

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 3</u>		
Gulf Coast and Santa Fe Railroad, Owner		
Black dirt - - -	6	6
Yellow clay - - -	6	12
Sand, shale and gravel -	10	22
White lime rock - - -	2	24
Brown clay - - -	4	28
White lime rock - - -	2	30
Brown clay - - -	2	32
White lime rock - - -	3	35
Brown and white clay -	20	55
White lime rock - - -	3	58
Gray clay - - -	40	98
Brown sand - - -	16	114
Gray gumbo - - -	51	165
White lime rock - - -	3	168
Gray clay - - -	20	188
Gray gumbo - - -	12	200
Red shale - - -	12	212
Brown gumbo - - -	34	246
Blue packed sand - - -	31	277
Hard blue shale - - -	13	290
White lime rock - - -	21	311
Blue packed sand - - -	23	334
White lime rock - - -	6	340
Blue sand and shale - -	34	374
Blue gumbo - - -	23	397
Blue shale and sand - -	14	411
White lime rock - - -	8	419
Blue sand and shale - -	25	444
Hard blue shale - - -	33	477
Blue gumbo - - -	28	505
White lime rock - - -	2	507
Blue gumbo - - -	13	520
Water sand - - -	40	560
Brown gumbo - - -	26	586
White lime rock - - -	2	588
Fine blue sand - - -	4	592
White lime rock - - -	1	593
Gray shale - - -	19	612
White sand - - -	4	616
Sand rock - - -	3	619
Hard packed sand - - -	14	633
Sand and shale - - -	22	655
Sand rock - - -	2	657
Sand - - -	35	692
Sand rock - - -	3	695
Sand - - -	51	746

<u>Driller's log of well 6</u>		
Sprague Oil Company, J. H. Hall Number 2.		
Surface soil - - -	8	8
Sand - - -	40	48
Shale - - -	12	60
Sandy shale - - -	25	85
Sticky shale - - -	100	185

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 6--Continued</u>		
Shale and boulders - - -	65	250
Sticky shale - - -	60	310
Water sand artesian flow -	20	330
Sticky shale - - -	30	360
Hard sand - - -	24	384
Sticky shale - - -	64	448
Water sand artesian flow -	22	470
Shale and boulders - - -	40	512
Sticky shale - - -	108	620
Sandy shale - - -	130	750
Water sand artesian flow -	24	774
Shale - - -	46	820
Sticky shale - - -	130	950
Water sand - - -	22	972
Shale and boulders - - -	52	1024
Sticky shale - - -	76	1100
Sand - - -	12	1112
Sticky shale - - -	18	1130
Shale - - -	44	1174
Sand and boulders - - -	47	1221
Shale - - -	89	1310
Sticky shale - - -	90	1400
Water sand artesian flow -	24	1424
Shale - - -	30	1460
TOTAL DEPTH - - -	-	4316

<u>Driller's log of well 7</u>		
Montgomery County Oil Company, Shawver		
Number 1.		
Surface sand - - -	10	10
Clay - - -	15	25
Sand - - -	3	28
Gumbo - - -	30	58
Shale - - -	20	78
Sand - - -	5	83
Shale and boulders - - -	25	108
Sand and boulders - - -	8	116
Gumbo and shale - - -	71	187
Sand and boulders - - -	10	197
Gumbo - - -	31	228
Sand - - -	20	248
Rock - - -	1	249
Shale - - -	6	255
Rock - - -	3	258
Gumbo and boulders - - -	16	274
Rock - - -	1	275
Sandy shale - - -	3	278
Rock - - -	3	281
Gumbo and shale - - -	82	363
Sand - - -	35	398
Blue gumbo - - -	10	408
Shale - - -	13	421
Sand shale and boulders -	20	441
Shale - - -	20	461

(Continued on next page)

Table of Drillers' Logs, Montgomery County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 7--Continued</u>		
Sand - - - -	30	491
Gumbo - - - -	143	636
Shale - - - -	49	685
Sand rock - - - -	2	687
Sandy shale and boulders - - - -	12	699
Gumbo - - - -	48	747
Sand and boulders - - - -	50	797
Packed sand - - - -	20	817
Sand rock - - - -	33	850
Gumbo - - - -	48	898
sandy shale - - - -	9	907
Pecked sand and boulders - - - -	20	927
Gumbo - - - -	40	967
Shale - - - -	17	984
Gumbo - - - -	20	1004
Broken rock and sand - - - -	20	1024
Gumbo - - - -	90	1114
TOTAL DEPTH - - - -		3515

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 21</u>		
Gulf Coast and Santa Fe Railroad, owner.		
Sand and clay - - - -	14	14
Yellow clay - - - -	44	58
Coarse yellow sand - - - -	24	82
Yellow clay - - - -	99	181
Yellow sand - - - -	21	202
Tough red clay - - - -	33	235
Sand rock - - - -	6	241
Gray gumbo - - - -	55	296
sand rock - - - -	7	303
Gumbo - - - -	15	318
sand rock - - - -	16	334
Gumbo - - - -	42	376
Rock - - - -	2	378
Gumbo - - - -	85	463
Rock - - - -	2	465
Gumbo and shale - - - -	102	567
Lime rock - - - -	22	589
Pecked sand - - - -	9	598
Shale - - - -	33	631
Gumbo - - - -	51	682
Hard sand - - - -	13	695
Shale and gumbo - - - -	41	736
Red sand - - - -	29	765
Gumbo and shale - - - -	180	945
Rock - - - -	23	968
Tough blue shale and gumbo - - - -	18	986
Gumbo and shale - - - -	61	1047
Rock and sand - - - -	9	1056
Tough shale - - - -	5	1061
Rock - - - -	3	1064
Gumbo - - - -	23	1087
Coarse gray water sand - - - -	24	1111
Sand and rock - - - -	7	1118

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 21--Continued</u>		
Mixed shale and gravel - - - -	21	1139
Pecked sand and rock - - - -	7	1146
Tough shale and soft rock - - - -	46	1192
Coarse gray water sand - - - -	22	1214
Sand rock - - - -	29	1243
Coarse gray water sand - - - -	33	1276
Tough shale - - - -	6	1282

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 39</u>		
McMaster Oil Company, H. W. McMaster Number 2.		
Sand - - - -	5	5
Clay - - - -	19	24
Sand and gravel - - - -	12	36
Sticky shale - - - -	29	65
Water sand - - - -	305	370
Gumbo - - - -	38	408
Hard sand - - - -	12	420
Gumbo - - - -	52	472
Hard sand - - - -	10	482
Gumbo - - - -	18	500
Blue shale - - - -	24	524
Hard sand - - - -	9	533
Shale, gumbo and boulders - - - -	112	645
Red gumbo - - - -	17	662
Sand - - - -	43	705
Gumbo - - - -	35	740
Sand - - - -	35	775
Gumbo - - - -	90	865
Shale and boulders - - - -	30	895
Gumbo - - - -	93	988
Sand and boulders - - - -	30	1028
Gumbo and boulders - - - -	94	1122
Hard sand - - - -	63	1185
Gumbo - - - -	29	1214
Shale - - - -	24	1238
Sand - - - -	52	1290
Gumbo and boulders - - - -	22	1312
Chalk - - - -	6	1318
Sand - - - -	14	1332
Shale - - - -	26	1358
Sand - - - -	32	1390
Gumbo and boulders - - - -	70	1460
Broken sand - - - -	38	1498
Gumbo - - - -	92	1590
Coarse sand - - - -	62	1652
Gumbo - - - -	89	1741
TOTAL DEPTH - - - -		3025

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 41</u>		
International and Great Northern Rail- road, owner.		
Yellow clay - - - -	75	75

(Continued on next page)

Table of Drillers' Logs, Montgomery County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 41--Continued</u>		
Water sand - - -	21	95
Joint clay - - -	26	121
Water sand - - -	25	146
Packed sand - - -	42	188
Hard rock - - -	16	204
Sand and boulders - - -	74	278
Gumbo - - -	125	403
Rock - - -	2	405
Gumbo and boulders - - -	110	515
Hard packed sand - - -	89	604
Fine sand - - -	36	640
Brown shale - - -	67	707
Hard lime rock - - -	1	708
Brown shale - - -	10	718
Water sand - - -	23	741
Packed sand - - -	32	773
Gumbo - - -	10	783
Hard sand - - -	25	808
Brown shale - - -	20	828
Water sand - - -	7	835
Shale and gumbo - - -	148	983
Sand and shale - - -	45	1028
Gumbo - - -	37	1065
Sand and gravel - - -	20	1085
Gumbo - - -	97	1182
Shale and boulders - - -	10	1192
Tough gumbo - - -	108	1300
Sand and gumbo - - -	7	1307
Rock - - -	2	1309
Water sand - - -	12	1321
Lime rock - - -	4	1325
Water sand - - -	22	1347
Gumbo - - -	4	1351
Rock - - -	4	1355
Water sand - - -	28	1383
Gumbo, sand and lime - - -	6	1389
Packed sand - - -	41	1430
Blue shale - - -	16	1446
Tough gumbo - - -	6	1452

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 42</u>		
Cullen and West Production Company's Chase Number 1.		
Surface sand and clay - - -	32	32
Sand and clay - - -	133	165
Gumbo - - -	42	207
Sand - - -	250	257
Gumbo - - -	10	267
Sand - - -	33	300
Gumbo - - -	57	357
Sticky shale - - -	14	371
Sand and gravel - - -	20	391
Gumbo - - -	10	401
Sand and gravel - - -	16	417
Rock - - -	1	418

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 42--Continued</u>		
Sand and gravel - - -	17	435
Sticky shale - - -	75	510
Shale, lim and boulders - - -	50	560
Rock - - -	2	562
Gumbo - - -	34	596
Shale - - -	101	697
Sand and boulders - - -	32	729
Sticky shale - - -	23	752
Sand and boulders - - -	75	827
Gumbo - - -	22	849
Sand and boulders - - -	31	880
Gumbo - - -	20	900
Shale and gumbo - - -	148	1048
Sand - - -	4	1052
Hard sandy lime - - -	16	1068
Gumbo - - -	48	1116
Sand - - -	32	1148
Gumbo - - -	29	1177
Sand - - -	5	1182
Gumbo - - -	18	1200
Sticky shale - - -	30	1230
Rock - - -	1	1231
Sand and shale - - -	10	1241
Sticky shale - - -	23	1264
Sand - - -	25	1289
Gumbo and lime - - -	26	1315
Sand - - -	20	1335
Shale - - -	53	1388
Sand - - -	48	1436
Gumbo and lime - - -	76	1512
Sand - - -	3	1515
Sticky shale - - -	18	1533
TOTAL DEPTH - - -	-	3516

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 43</u>		
Layne-Texas Company's Pierce-Fordyce Oil Association Number 1.		
Clay and water sand - - -	104	104
Clay - - -	82	186
Water sand - - -	19	205
Yellow clay - - -	15	220
Sand - - -	25	245
Gravel - - -	20	265
Sand - - -	30	295
Sand rock - - -	3	298
Sand - - -	27	325
Clay - - -	50	375
Sand - - -	15	390
Clay - - -	45	435
Sand - - -	65	500
Clay - - -	70	570
Shale - - -	4	574
Gravel and boulders - - -	21	595
Clay - - -	20	615

(Continued on next page)

Table of Drillers' Logs, Montgomery County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 43--Continued</u>		
Sand rock - - -	4	619
Clay and shale - -	342	961
Sand and boulders -	19	980
Sand rock - - -	4	984
Gumbo and shale - -	84	1068
Sand and boulders -	4	1072
Gumbo - - -	135	1217
Soft rock - - -	2	1219
Pink shale - - -	30	1249
Shale - - -	82	1331
Soft rock - - -	11	1342
Shale and boulders -	6	1348
Lime, boulders and sand-	8	1356
Gumbo - - -	32	1388
Sand - - -	7	1395
Sand rock - - -	1	1396
Soft sand - - -	92	1488
Tough gumbo - - -	42	1530
Hard shale and boulders-	8	1538
Packed sand and gravel -	49	1587
Gumbo - - -	5	1592
TOTAL DEPTH - - -		3706

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 54</u>		
Brains et al Ash Number 1, C. L. Fitch, owner.		
Surface - - -	13	13
Clay - - -	7	20
White sand - - -	79	99
Clay - - -	3	102
White sand - - -	36	138
Clay - - -	11	149
Sand - - -	4	153
Gumbo - - -	37	190
Hard sand - - -	26	216
Shale and boulders -	40	256
Rock and gumbo - -	10	266
Rock and sand - -	13	279
Shale and boulders -	21	300
Red and brown shale -	68	368
Red gumbo - - -	11	379
Hard sand - - -	15	394
Pink gumbo - - -	102	496
Rock - - -	2	498
Brown shale - - -	32	530
Pink gumbo - - -	10	540
Brown shale - - -	12	552
Pink gumbo - - -	10	562
Rock - - -	2	564
Gumbo - - -	5	569
Rock - - -	1	570
Pink gumbo - - -	10	580
Sand and boulders -	8	588
Pink gumbo and boulders-	47	635
Blue shale - - -	15	650

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 54--Continued</u>		
Pink gumbo - - -	13	663
Sandy shale - - -	14	677
Pink gumbo - - -	51	728
Blue sand - - -	22	750
Blue water sand - -	15	765
Blue shale - - -	23	788
White sandy shale - -	4	792
Hard rock - - -	17	809
Blue shale - - -	17	826
Water sand - - -	92	918
Gumbo - - -	32	950
Sandy shale and boulders-	45	995
Gumbo - - -	15	1010
Sandy lime - - -	25	1035
Shale and gumbo - -	49	1084
Sandy shale and boulders-	16	1100
Gumbo and lime - -	95	1195
Blue shale and boulders -	15	1210
Gumbo - - -	8	1218
Water sand - - -	7	1225
Pink, blue and brown gumbo - - -	90	1315
Blue sand - - -	3	1318
Gumbo - - -	10	1328
Pink and blue shale - -	43	1371
Sand and boulders - -	16	1387
Blue shale - - -	15	1402
Packed sand and boulders-	32	1434
Blue shale - - -	6	1440
Hard white sand - - -	15	1455
Blue and white sand - -	13	1468
Gumbo - - -	62	1530
TOTAL DEPTH - - -		2285

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 55</u>		
Black Hawk Oil Company's Wight-Schaedler Number 1.		
Surface sand and clay -	45	45
White sand - - -	18	63
Red clay and streaks of sand - - -	20	83
White sand - - -	90	173
White gravel - - -	7	180
Yellow clay - - -	27	207
Gravel and sand - - -	19	226
Rock - - -	1	227
Yellow sandy clay - -	52	279
Rock - - -	3	282
Red clay - - -	28	310
Soft white sand - - -	18	328
Pack sand and gravel -	9	337
Rock - - -	1	338
Soft white sand - - -	48	386
White sand and gravel -	58	444

(Continued on next page)

Table of Drillers' Logs, Montgomery County--Continued

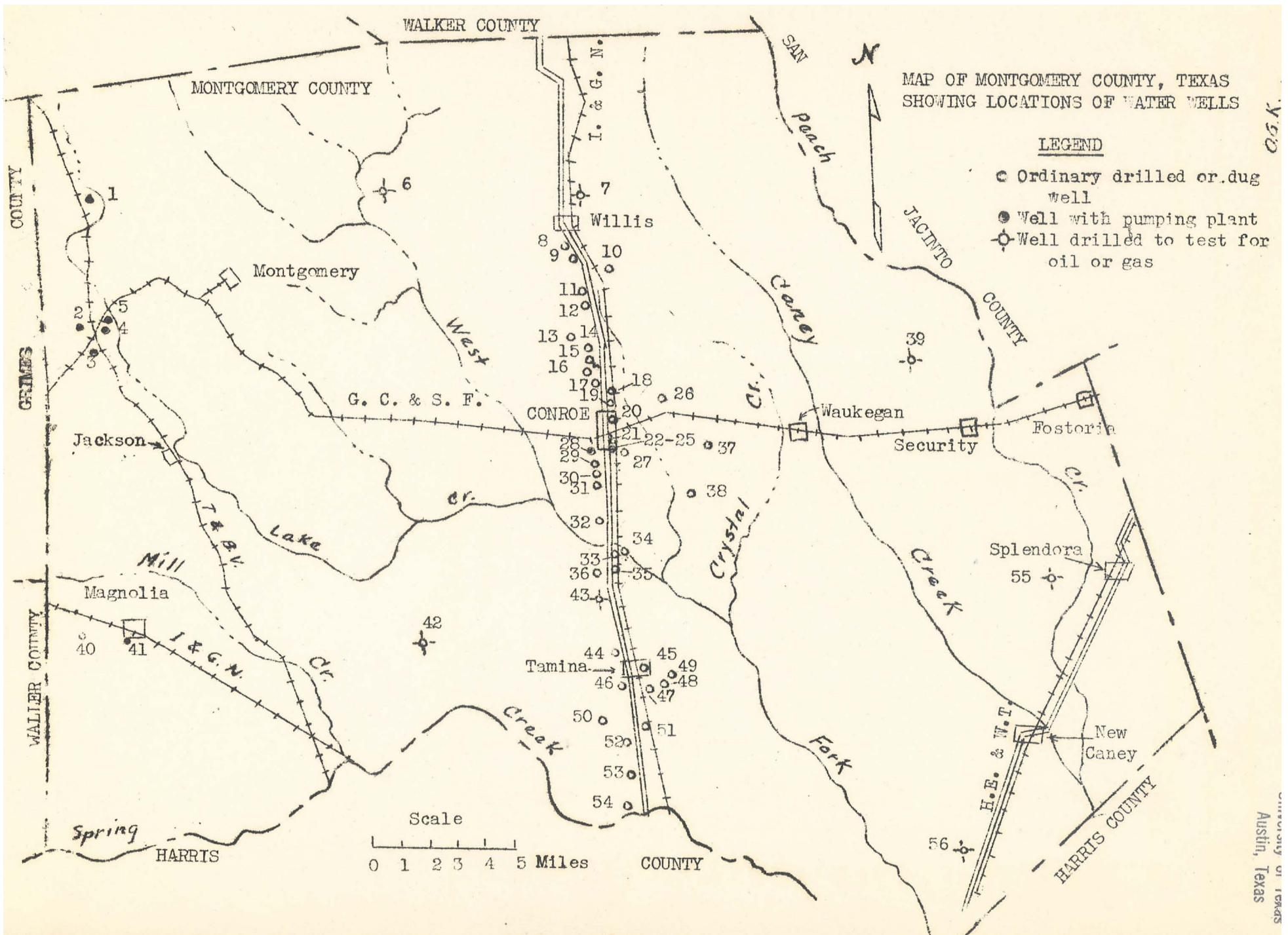
	Thickness (feet)	Depth (feet)
<u>Driller's log of well 55--Continued</u>		
Gumbo - - - -	28	472
Rock - - - -	2	474
Yellow clay and gravel - -	47	521
Gumbo - - - -	7	528
Yellow clay and gravel - -	45	573
Rock - - - -	2	575
Blue shale - - - -	75	650
Rock - - - -	2	652
Gumbo - - - -	37	689
Rock - - - -	3	692
Yellow gumbo and boulders	201	893
Rock - - - -	1	894
Hard lime rock - - - -	11	905
Blue shale - - - -	40	945
Gumbo and boulders - - -	9	954
White pack sand - - - -	10	964
Gumbo - - - -	26	990
Blue shale - - - -	11	1001
Gumbo and boulders - - -	109	1110
Tough gumbo - - - -	43	1153
White lime rock - - - -	4	1157
Blue sandy shale - - - -	6	1163
Pack sand - - - -	14	1177
Tough gumbo - - - -	72	1249
Sand rock - - - -	7	1256
Pack sand - - - -	4	1260
Rock - - - -	3	1263
TOTAL DEPTH - - - -		4598

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 56</u>		
Rucker Oil and Refining Company's J. W. Reynold's Number 1.		
Sand - - - -	130	130
Sand - - - -	20	150
Red clay - - - -	15	165
Sand and boulders - - -	25	190
Clay - - - -	15	205
Sand - - - -	45	250
Clay and gravel - - - -	30	280
Sand - - - -	45	325
Blue gumbo - - - -	15	340
Sand - - - -	55	395
Sandy clay - - - -	20	415
Clay - - - -	35	450
Sand - - - -	90	540
Clay - - - -	25	565
Sand - - - -	65	630
Clay - - - -	20	650
Sand - - - -	80	730
Gumbo - - - -	10	740
Sandy clay - - - -	26	766
Gumbo - - - -	20	786
Artesian water sand - - -	94	880
Tough gumbo - - - -	6	886
Gumbo - - - -	26	910
Sandy shale - - - -	22	932
Sand - - - -	3	935
Sandy shale - - - -	5	940
Sand - - - -	8	948
Shale - - - -	4	952
Sand - - - -	6	958
Gumbo - - - -	9	967
Sand - - - -	13	980
Gumbo - - - -	12	992

MAP OF MONTGOMERY COUNTY, TEXAS
SHOWING LOCATIONS OF WATER WELLS

LEGEND

- Ordinary drilled or dug well
- Well with pumping plant
- ⊕ Well drilled to test for oil or gas



C.S.K.

Montgomery County, Texas
Austin, Texas