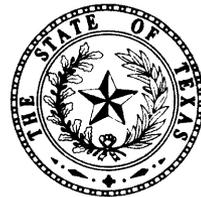


*TEXAS
WATER
DEVELOPMENT
BOARD*



Report 195

*GROUND WATER RESOURCES OF
PART OF CENTRAL TEXAS WITH
EMPHASIS ON THE ANTLERS AND
TRAVIS PEAK FORMATIONS*

VOLUME 2

*RECORDS OF WELLS; DRILLERS' LOGS; WATER LEVELS IN WELLS;
CHEMICAL ANALYSES OF GROUND WATER; CHEMICAL ANALYSES
OF OIL-FIELD BRINES; AND WELL LOCATION MAPS*

January 1976

TEXAS WATER DEVELOPMENT BOARD

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TEXAS WITH EMPHASIS ON THE ANTLERS
AND TRAVIS PEAK FORMATIONS

Volume 2

Records of Wells; Drillers' Logs; Water Levels in Wells;
Chemical Analyses of Ground Water; Chemical
Analyses of Oil-Field Brines; and Well
Location Maps

By

William B. Klemt, Robert D. Perkins,
and Henry J. Alvarez

January 1976

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PREFACE

This report is prepared in two volumes. Volume 1 contains interpretive information presented as text and related figures and tables, Volume 2 contains basic data on the occurrence and availability of ground water including well location maps, records of wells, drillers' logs, water levels in wells, and chemical analyses of water. These data are supportive to the interpretive information contained in Volume 1. A full explanation of the well-numbering system used herein may be found in the first volume.

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BELL COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests.

Type Log: D, Drillers'; E, Electric; S, Sample.
 Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
AX-40-45-903	A. B. Johnson	Howard No. 1	1951	2,262	740	E
51-801	—	Ed Huess No. 1	1943	910	980	D
59-801	Gilchist Drilling Co., et al.	Curb Fee No. 1	1949	2,022	825	E
901	Shell Oil Co.	Massie No. 1	1955	1,714	608	E
63-801	Pryor Dillard	Simek No. 1	1951	1,114	443	E
58-02-102	F. A. Dunham	Hunt No. 1	1954	3,960	765	S
07-401	Hobsco, Inc.	N. P. Moeller No. 1	1941	2,004	485	E
14-401	M. A. Romero and T. M. Murchinson	Dallas Skinner No. 1	1958	1,210	535	E
802	do.	Robert Bunker No. 1	1958	1,225	520	E

BELL COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-51-801			Well AX-40-51-801—Continued		
Owner: Ed Huess Driller: Ralph Roberts			Lime and sand		
Yellow clay	18	18		14	792
Hard rock and yellow clay	10	28	Lime	18	810
Hard white lime	37	65	Blue shale	5	815
Slate	65	130	Red beds	6	821
Blue shale	45	175	Lime	10	831
Lime	6	181	Blue shale	11	842
Blue shale	29	210	Blue shale	28	870
Lime, shells and slate	40	250	Brown shale	10	880
Blue slate	40	290	Blue shale	10	890
Gray slate	30	320	Red beds	10	900
Gray slate	30	350	Sand and slate	10	910
Shale	5	355	Well AX-40-53-102		
Water sand, little water	5	360	Owner: U.S. Army Corps of Engineers Driller: Ward and Ward Drilling Co.		
Shale	10	370	Surface	4	4
Lime	15	385	White lime	28	32
Shale	15	400	Blue lime	148	180
Lime, shale	25	425	Blue shale	60	240
Sand, lime, shale	25	450	Blue lime	442	682
Sandy lime	50	500	Soft lime	203	885
Lime, shale	20	520	Sand, Trinity	32	917
Sandy lime, shale	15	535	Well AX-40-53-201		
Shale	55	590	Owner: Temco Feed Co. Driller: R. A. Adams and Son		
Sandy shale	55	645	Soil and chunk rock	4	4
Blue shale	15	660	Chalk	8	12
Sandy shale	25	685	Blue lime	39	51
Brown sand	20	705	Shale	4	55
Blue shale	25	730	White lime	35	90
Lime	38	768	Dark gray lime	85	175
Blue shale	6	774	Shale	12	187
Sand, water	3	777	Dark gray lime	14	201
Gravel	1	778			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-53-201—Continued			Well AX-40-53-201—Continued		
Shale	5	206	Blue sandy shale	22	1,047
Lime and shale	18	224	Red, green and blue shale	9	1,056
Shale	4	228	Red shale	2	1,058
Shale and lime	6	234	Red beds	22	1,080
Dark gray lime	16	250	Red and green shale	7	1,087
Shale	5	255	Sand and water	20	1,107
Dark gray lime	45	300	Well AX-40-53-504		
Lime and shale	19	319	Owner: U.S. Army Corps of Engineers Driller: Ward and Ward Drilling Co.		
Shale	3	322			
Dark gray lime	38	360	White lime	5	5
White lime, little water - 1 gpm	42	402	Cave	1	6
Dark gray lime (little water - good drilling)	20	422	White lime	21	27
White lime	13	435	Blue lime	101	128
Dark gray lime	47	482	Blue shale with lime streaks	162	290
Glen Rose lime	157	639	Soft lime	572	862
Shale	3	642	Sand, Trinity	17	879
Glen Rose lime	84	726	Well AX-40-53-703		
Dark gray lime	34	760	Owner: U.S. Army Corps of Engineers Driller: J. L. Myers Sons		
Glen Rose lime	12	772			
Shale	5	777	Surface	1	1
White lime	6	783	Lime	59	60
Dark gray sticky lime	34	817	Shale	67	127
Blue shale	11	828	Lime	64	191
Lime	57	885	Lime and shale	277	468
Sandy lime	12	897	Lime	139	607
Blue shale	7	904	Lime and shale	43	650
Sand and water	51	955	Sandy lime	22	672
Blue sandy shale	26	981	Lime	98	770
Green sandy shale	7	988	Shale	8	778
Lime	7	995	Sand	33	811
Green shale	9	1,004	Lime and shale	146	957
Blue shale	18	1,022	Sand	44	1,001
Red shale	3	1,025			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-53-704			Well AX-40-53-706—Continued		
Owner: J. G. Nash Driller: J. L. Myers Sons			Shale, breaks	60	630
No record	871	871	White lime	75	705
Lime and shale	147	1,018	Gray lime	80	785
Lime	3	1,021	Shaly lime	19	804
Sand	37	1,058	Sandy lime	11	815
Rock	4	1,062	Hard and soft sand	40	855
Sand	10	1,072			
Rock	9	1,081	Well AX-40-53-901		
			Owner: Temple Municipal Airport Driller: Wiegand Brothers Drilling Co.		
Well AX-40-53-705			Rotary space	2	2
Owner: U.S. Army Corps of Engineers Driller: J. L. Myers Sons			Hard lime	8	10
Lime	74	74	Gray shale	40	50
Lime and shale	394	468	White lime	12	62
Lime	228	696	Broken lime	33	95
Lime and shale	92	788	Lime	110	205
Sandy lime	35	823	Shale	7	212
Lime and shale	110	933	Lime	8	220
Sand and shale	24	957	White lime	30	250
Sand	38	995	Sticky shale	20	270
Sandy shale	6	1,001	Lime	10	280
			Gray shale	15	295
Well AX-40-53-706			Lime	35	330
Owner: U.S. Army Corps of Engineers Driller: James Mathew Adams			Gray shale	15	345
Soil	1	1	Sandy lime	25	370
Lime	27	28	Sandy lime, shale	50	420
Lime, hard	22	50	Hard white lime	25	445
Lime	51	101	White lime	41	486
Blue clay	12	113	Sandy lime	24	510
Blue lime	23	136	White lime	10	520
Blue lime and clay	54	190	Gray shale	15	535
Gray-white lime	40	230	Broken lime	230	765
Blue gray lime	25	255	White lime	25	790
White lime	315	570	Broken lime	50	840
			White lime	25	865

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-55-701—Continued			Well AX-40-59-102—Continued		
Lime	578	1,638	White gray lime	10	548
Shale and lime	145	1,783	Water-bearing sand	20	568
Broken lime	93	1,876	Blue gumbo and some sand	76	644
Lime	87	1,963	Red bed	31	675
Broken lime	202	2,165	Lime and shale	13	688
Sand	55	2,220	Gray lime	10	698
Broken lime	18	2,238	Gray lime and mixture of red bed	10	708
Shale and lime	69	2,307	Coarse gravel, some sand, all colors	7	715
Broken lime	120	2,427	Mixture chocolate and red shales	15	730
Sandy lime	26	2,453	Chocolate and yellow shale	20	750
Broken sand	107	2,560	Hard blue lime with gray streaks	22	772
Sand and gravel	53	2,613			
Sand and shale	39	2,652			
Well AX-40-59-102			Well AX-40-59-301		
Owner: City of Killeen Driller: A. N. Edwards			Owner: Harvey Bacon, Jr. Driller: Fowler Drilling Co.		
Clay and gravel	14	14	Gray limestone	676	676
Shale and gumbo	14	28	Water sand	32	708
Black rock and shale	14	42			
Light gray lime	33	75	Well AX-40-59-701		
White lime	10	85	Owner: Wineford Cospser Driller: J. B. Farquharson		
Light gray lime and some crystal	15	100	Yellow clay	20	20
White lime	17	117	Sandy lime	12	32
Light gray lime	128	245	Austin Chalk	38	70
Lime and some sand, first water, 1 bailer	11	256	Austin Chalk with bentonite streaks	310	380
Light gray lime	89	345	Sand	7	387
Lime and water sand, second water	7	352	Austin Chalk with bentonite streaks	193	580
Mixture lime and sand	8	360	Sand	21	601
Hard gray lime	67	427	White lime	5	606
Blue and gray lime mixture	20	447	Sand	17	623
Gray lime	83	530	Austin Chalk with lime streaks	7	630
Hard white lime	8	538	Yellow shale	10	640

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-60-302			Well AX-40-60-601—Continued		
Owner: U.S. Army Corps of Engineers Driller: J. L. Myers Sons			Hard lime	38	340
Open hole no record	433	433	Lime with shale streaks	60	400
Lime and shale	145	578	Lime with shale streaks	46	446
Lime	133	711	Lime with shale streaks	30	476
Sandy lime	9	720	Lime with shale streaks	29	505
Sand	18	738	Sandy shale and lime shells	25	530
Sandy lime	64	802	Lime with sticky shale	43	573
Lime	26	828	Sandy shale	76	649
Lime and shale	38	866	Sandy shale	2	651
Shale	23	889	Lime	27	678
Sand	12	901	Sandy shale with sand streaks	10	688
Sandy shale	12	913	Sand and shale	2	690
Sand	43	956	Sand and shale (core)	20	710
Well AX-40-60-501			Lime	4	714
Owner: Dog Ridge Water Supply Corp. Driller: J. L. Myers Sons			Sand (water)	33	747
Lime	206	206	Rock	3	750
Lime with streaks of shale	664	870	Streaks of sand shale and lime	12	762
Shale	10	880	Shale with lime shells	34	796
Sand with streaks of shale	272	1,152	Sandy shale with lime streaks	65	861
Well AX-40-60-601			Lime and shale	33	894
Owner: U.S. Army Corps of Engineers Driller: Layne Texas Co.			Lime and shale	12	906
Surface soil	19	19	Sand	14	920
Lime and shale with hard streaks	62	81	Sand and shale	10	930
Shale with lime streaks	19	100	Sand	7	937
Shale with lime shells and streaks of gravel	30	130	Hard	1	938
Lime with shale streaks	37	167	No record	10	948
Lime with shale streaks	36	203	Core	17	965
Lime and shale	30	233	Well AX-40-60-701		
Lime with shale streaks	69	302	Owner: T. E. Sanderford Driller: J. L. Myers Sons		
			Surface soil	3	3
			Rock	90	93

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-60-701—Continued			Well AX-40-60-801—Continued		
Lime	114	207	Sand and shale	21	932
Rock	312	519	Shale and lime (red clay)	8	940
Lime	29	548	Red clay	8	948
Sandy lime	38	586			
Sand	37	623	Well AX-40-60-901		
Sandy lime	8	631	Owner: U.S. Army Corps of Engineers Driller: Wiegand Brothers Drilling Co.		
Shale and lime	75	706	Rotary space	5	5
Sandy lime	29	735	Surface soil and clay	17	22
White shale	35	770	Gravel	3	25
Red bed	17	787	Limestone	11	36
Sand	38	825	Gravel	2	38
Well AX-40-60-801			Sand	4	42
Owner: U.S. Army Corps of Engineers Driller: Wiegand Brothers Drilling Co.			Hard limy shale and rock	48	90
Surface clay	22	22	Lime with shale streaks	25	115
Gravel	5	27	Sand and boulders	9	124
Lime rock and gravel	14	41	Gravel	3	127
Lime rock and clay	24	65	Lime, hard sand	89	216
Lime and blue shale	25	90	Lime, shale streaks	15	231
Lime rock and shale	135	225	Rock	3	234
Shaly lime	94	319	Lime, shale streaks	104	338
Shaly lime	226	545	Lime, shale streaks	138	476
Lime shale streaks	22	567	Lime and shale	27	503
Lime, sandy shale	97	664	Lime, shale streaks	77	580
Sand and sandstone	30	694	Lime, sand streaks	20	600
Limestone and shale	34	728	Lime and shale	115	715
Hard lime and sandstone	27	755	Shale with lignite	5	720
Lime and streaks of shale	76	831	Shale and sand (core)	4	724
Cored: shale sand and lime	19	850	Soft sand	32	756
Hard lime	2	852	Lime and shale	74	830
Lime, streaks of shale and sand	22	874	Shale with lime shells	30	860
Lime streaks and shale	6	880	Soft shale	10	870
Sand (cored)	31	911	Shale and lime	19	889
			Lime and shale	5	894

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-60-901—Continued			Well AX-40-60-903		
Core: fully recovered	18	912	Owner: U.S. Army Corps of Engineers Driller: Wiegand Brothers Drilling Co.		
Red bed	18	930	Soil	4	4
Sand	36	966	Clay and gravel	41	45
Sand (cored)	16	982	Sand and gravel	61	106
Red shale (cored)	17	999	Rock	3	109
Well AX-40-60-902			Limestone	5	114
Owner: U.S. Army Corps of Engineers Driller: Wiegand Brothers Drilling Co.			Sand gravel	40	154
(Complete drillers' log not shown)			Limestone	33	187
			Lime, sand, gravel streaks	44	231
Topsoil	15	15	Lime	119	350
River red sand	21	36	Shaly lime	40	390
Lime and shale	13	49	Lime - broken gravel	61	451
Hard lime, shale and boulders	24	73	Lime, rock	32	483
Lime, rock and shale	59	132	Lime, shale streaks	122	605
Hard shale, rock and lime	4	136	Limestone	15	620
Lime and shale	80	216	Lime and shale	63	683
Shale, lime, rock	80	296	Hard sand and shale	43	726
Lime and shale	280	576	Limestone	8	734
Shale - rock and streaks of lime	28	604	Sticky shale and lime shells	17	751
Shale, rock and lime	72	676	Cored	10	761
Shale, rock and lime, sandy shale	20	696	Sticky shale	14	775
Cored: shale, sand rock, sandy shale and lime	8	704	Lime, shale streaks	87	862
Sand	5	709	Sand (cored)	25	887
Sandy shale	6	715	Soft gray sand, loose	6	893
Rock	3	718	Firm sand (red)	2	895
Cored: sand, thin layers of shale and lignite	19	737	Sandy red clay	9	904
Sandy shale and sand	8	745	Very course sand	8	912
Hard lime and thin layers of sand	47	792	Red clay (drilled)	7	919
			Red clay (core)	4	923
			Cored	9	932

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-60-904			Well AX-40-60-904—Continued		
Owner: U.S. Army Corps of Engineers Driller: Wiegand Brothers Drilling Co.			Red bed	4	906
			Sand, shale breaks	38	944
Rock and clay	28	28	Sand and shale	7	951
Rocks and shale	12	40	Sand (good)	12	963
Hard black shale rock	12	52	Hard lime and shale	5	968
Hard black shale rock	133	185			
Rock and shale breaks	20	205	Well AX-40-60-905		
Shale and rock breaks	20	225	Owner: U.S. Army Corps of Engineers Driller: Wiegand Brothers Drilling Co.		
Shale, rock, layers of lime	28	253	Hard, limy shale	52	52
Shale and lime rock	40	293	Limy shale with hard streaks	377	429
Shale and lime	84	377	Shale and hard shells	55	484
Blue shale, rock and lime	16	393	Lime	41	525
Shale and hard lime	20	413	Shale and shells	22	547
Hard lime, blue shale	13	426	Shale and lime	143	690
Hard shale and lime	7	433	Sand	23	713
Lime and shale	120	553	Shale with streaks of hard lime	10	723
Lime, shale breaks and sand	22	575	Sandstone	3	726
Shale, lime rock	15	590	Sandy shale	20	746
Sandy shale and lime	37	627	Sticky shale with hard streaks	24	770
Blue shale	20	647	Sandy shale	50	820
Rock and shale	35	682	Sand and shale	21	841
Lime rock	6	688	Sand	8	849
Lime rock and shale	20	708	Limy shale and sand	5	854
Sandy shale	12	720	Red clay	5	859
Sandy rock, shale	13	733	Sandy shale	22	881
Sand, cored 740 to 754	34	767	Sand (soft)	24	905
Shale	4	771	Sand (hard)	14	919
Cored 4 feet, sandy shale and sand	6	777	Sand (soft)	15	934
Hard shale	30	807	Sand (hard)	5	939
Sand, shale, lime	17	824	Red bed	16	955
Shale, sand streaks	7	831	Hard sandstone	1	956
Sandy shale, fine sand	48	879			
Cored, sand rock and shale, sandy shale	20	899			
Hard shale	3	902			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-60-907			Well AX-40-60-908—Continued		
			Lime	81	838
			Lime	34	872
Surface soil	5	5	Lime	8	880
Porous rock	63	68	Sand	12	892
Rock	74	142	Rock	4	896
Shale	93	235	Sand	37	933
Rock	48	283	Shale with streaks of sand	6	939
Shale and lime rock	20	303	Sandy shale	4	943
Rock	12	315	Sand	11	954
Shale and lime rock	35	350	Lime	16	970
Rock soft	120	470			
Rock hard	270	740	Well AX-40-61-105		
Glen Rose sand	25	765	Owner: U.S. Army Corps of Engineers Driller: J. L. Myers Sons		
Shale	30	795	Open hole no record	523	523
Rock	86	881	Lime	305	828
Trinity Sand	41	922	Lime and shale	31	859
Shale	94	1,016	Sand	7	866
Sand	9	1,025	Sandy lime	7	873
Shale	45	1,070	Lime and shale	152	1,025
Sand	30	1,100	Sand	55	1,080
Shale	10	1,110			
			Well AX-40-61-107		
Well AX-40-60-908			Owner: Bob James and Lee Curtis Driller: J. L. Myers Sons		
			Surface soil	1	1
Rock	125	125	Rock	5	16
Lime	118	243	Lime	100	116
Lime	48	291	Lime - shale	66	182
Rock	101	392	Sand	13	195
Lime	122	514	Broken lime - caliche	498	693
Lime	81	595	Lime	139	832
Lime	61	656	Lime - shale	12	844
Lime	66	722	Sand - shale	46	890
Sand	8	730	Lime - shale	126	1,016
Lime	27	757			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-61-107—Continued			Well AX-40-61-401—Continued		
Shale	14	1,030	Broken shale and rock	50	391
Sand	59	1,089	Shale and lime	19	410
Lime	4	1,093	Hard lime	48	458
Well AX-40-61-301			Lime	36	494
Owner: Dr. P. M. Bassel Driller: J. L. Myers Sons			Hard lime	33	527
Soil	5	5	Lime	18	545
Broken limestone and shale	85	90	Lime and shale	43	588
White rock	22	112	Broken lime and chalk rock	59	647
Gerogetown Limestone	80	192	Lime and shale	54	701
Goodwin Limestone	66	258	Broken lime and chalk	69	770
Hard limestone	94	352	Lime	64	834
Limestone	80	432	Lime	22	866
Broken limestone and shale	299	731	Sand	68	934
Broken limestone and sand	161	892	Broken shale and lime	11	945
Sandy limestone and limestone	418	1,310	Lime	19	964
Sand	25	1,335	Sandy lime	16	980
Sandy limestone	100	1,435	Shale	13	993
Sand	25	1,460	Lime and shale	22	1,015
Hard sandrock	24	1,484	Sand	150	1,165
Limestone	3	1,487	Gravel and sand	4	1,169
Well AX-40-61-401			No record	8	1,177
Owner: City of Belton Driller: J. L. Myers Sons			Sand	10	1,187
			Shale	3	1,190
			Well AX-40-61-403		
Surface soil	3	3	Owner: City of Belton Driller: Unknown		
Gravel	4	7	Soil	22	22
Sand	8	15	Sand and lime	26	48
Rock	11	16	Lime chalk	44	92
Sand and gravel	9	25	Lime	23	115
Rock	45	70	Lime	20	135
Hard lime	74	144	Shale gray	45	180
Rock	156	300	Shale dark	15	195
Broken shale and lime	41	341			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-61-403—Continued			Well AX-40-61-404—Continued		
Lime	5	200	Sand rock with iron pyrites (hard)	10	450
Lime shale broken	60	260	Limestone (Glen Rose)	100	550
Gray shale and lime shells	35	295	White mud (Glen Rose)	25	575
Lime	35	330	White limestone (Glen Rose)	250	825
Gray shale and lime	85	415	White mud	25	850
Lime chalk	117	532	Sandstone	40	890
Lime chalk	66	598			
Lime shale broken	64	662			
Lime	48	710	Well AX-40-61-501		
Lime shale broken	55	765	Owner: City of Belton Driller: J. L. Myers Sons		
Shale blue	13	778	Surface soil	32	32
Lime	69	847	Rock	265	297
Trinity Sand no. 1	23	870	Broken shale	346	643
Sandy shale	5	875	Broken lime	146	789
Trinity Sand	12	887	Lime	141	930
Sand water	33	920	Sandy shale	210	1,140
Shale dark	28	948	Sand	78	1,218
Sandy lime	17	965	Lime and shale	44	1,262
Shale blue	2	967			
Sand lime	8	975	Well AX-40-61-502		
Blue shale	109	1,084	Owner: Taylor Bedding Manufacturing Co. Driller: Layne Texas Co.		
Red shale	2	1,086	Topsoil and clay	21	21
Trinity Sand no. 2	44	1,130	Rock	15	36
Sand	36	1,166	Rock and layers of shale	54	90
Sand and gravel	4	1,170	Hard shale and lime	137	358
Shale blue	2	1,172	Shale and lime	123	481
			Hard shale and lime	58	539
			Hard shale and lime	378	917
			Top Trinity Sand	72	989
			Hard sand and shale and lime	36	1,025
			Sandy layers of shale and sandy lime	59	1,084
			Shale and lime	20	1,104
			Sandy shale and shell	23	1,127
Well AX-40-61-404					
Owner: City of Belton Driller: Unknown					
Soft limestone	25	25			
Blue marl or slate	300	325			
Blue limestone	50	375			
White putty or mud	15	390			
White limestone (soft)	50	440			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-61-502—Continued			Well AX-40-61-504—Continued		
Hard sand and shale breaks	19	1,146	Rock	187	211
Blue and pink shale	10	1,156	Rock and shale	148	359
Coarse sand and fine gravel	56	1,212	Rock	25	384
Hard shale and lime	9	1,221	Broken shale and rock	57	441
Sand	3	1,224	Broken shale and lime	58	499
Hard rock and lime	2	1,226	Broken shale and rock	70	569
No record	35	1,261	Broken shale and lime	72	641
Well AX-40-61-503			Lime	65	706
Owner: Brazos River Electric Co-op. Driller: J. L. Myers Sons			Broken shale and lime	45	751
			Lime with shale streaks	83	834
Surface soil	5	5	Broken	67	901
Clay	12	17	Lime	32	933
Sand and gravel	10	27	Sandy lime	15	948
Rock	103	130	Sand	34	982
Rock and shale	290	420	Broken sand and lime	32	1,014
Lime and shale	94	514	Sandy lime and shale	77	1,091
Broken shale	76	590	Lime	47	1,138
Rock	52	642	Sandy	18	1,156
Lime rock	56	698	Sand	92	1,248
No record	20	718	Rock	8	1,256
Lime and shale	231	949	Well AX-40-61-507		
Sand	10	959	Owner: City of Temple Driller: Layne Texas Co.		
Sand and shale	96	1,055	Soil, clay and lignite layers	31	31
Lime	91	1,146	Brown lime	70	101
Sandy lime and shale	42	1,188	Hard, gray lime	51	152
Broken lime	10	1,198	Gray lime and shale	33	185
Broken sand	145	1,343	Gray shale and lime	12	197
Rock	12	1,355	Blue shale	18	215
No record	10	1,365	Blue shale and lime	12	227
Well AX-40-61-504			Blue shale	21	248
Owner: Brazos River Electric Co-op. Driller: J. L. Myers Sons			Gray lime and blue shale layers	76	324
Surface soil	12	12			
Gravel	12	24			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-61-507—Continued			Well AX-40-61-509—Continued		
Gray lime and shale	94	418	Hard, brown lime	105	152
Gray shale and lime	505	923	Hard, gray lime and rock	16	168
Brown and blue candy shale	60	983	Blue shale and lime	50	218
Gray lime and blue shale	52	1,035	Blue shale	30	248
Gray shale and lime	63	1,098	Gray lime and blue shale	71	319
Gray and blue shale and lime	22	1,120	Gray lime and shale	50	369
Gray and blue sandy shale	27	1,147	Blue shale	20	389
Sand with shale layers (good)	16	1,163	Hard, gray lime	44	433
Hard shale - lime and candy shale	10	1,173	Gray lime and blue shale	135	568
Hard, candy shale	16	1,189	Hard, gray lime and shale	54	622
Hard, coarse sand	27	1,216	Gray lime	43	655
Hard, coarse candy shale and gravel	13	1,229	Gray lime and shale	47	712
Red, blue and yellow shale	6	1,235	Hard, gray lime and shale	39	751
Shale (hard)	3	1,238	Gray lime	22	773
Well AX-40-61-508			Hard, gray lime and shale	132	905
Owner: City of Temple Driller: J. L. Myers Sons			Gray lime	46	951
Clay	6	6	Sandy brown shale	47	998
Clay and gravel	16	22	Gray lime and blue shale	80	1,078
Lime	29	51	Hard, gray and blue shale and sandy shale layers	23	1,101
Lime and shale	69	120	Hard, sandy shale and shale and lime	35	1,136
Lime	511	631	Hard shale and sandy shale	24	1,160
Shale	341	972	Coarse sand and shale	31	1,191
Sand and shale	45	1,017	Coarse sand	21	1,212
Lime	147	1,164	Coarse sand and blue shale and gravel	17	1,229
Sand	81	1,245	Sand, shale, gravel, and lime	22	1,251
Hard, sandy lime	36	1,281	Hard lime and shale	10	1,261
Well AX-40-61-509			Well AX-40-61-510		
Owner: City of Temple Driller: Layne Texas Co.			Owner: Belton Sand and Gravel Co. Driller: J. L. Myers Sons		
Rock and gravel	16	16	Surface soil	4	4
Hard, blue shale and rock	31	47	Sand and gravel	12	16
			Shale	59	75

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401			Well AX-40-62-401—Continued		
Owner: Veterans Administration Hospital Driller: J. L. Myers Sons (Complete log not shown; all descriptions are from cuttings unless indicated otherwise. Description of samples by Helen Jeanne Plummer.)			Pale bluish-gray chalk in small medium fragments. Strata becoming somewhat harder and more massive.	10	100
Austin Formation			Very pale bluish-gray chalk in very fine fragments. Strata probably rather soft and thinly laminated. Microfossils frequent.	10	110
Soft, white, weathered chalk in small particles; <i>Inoceramus</i> prisms, few ostracode, rare forams.	10	10	Pale bluish-gray finely broken chalk. Few microfossils.	10	120
Soft, white, and yellowish chalk in small fragments; <i>Inoceramus</i> prisms, few microfossils. Subsurface layers probably thinly stratified or laminated, since material broke up into thin small fragments.	10	20	Pale bluish-gray chalk in uniformly small fragments.	10	130
			Pale bluish-gray chalk in uniformly very small fragments.	10	140
			Pale bluish-gray chalk in very small to fine fragments.	10	150
Unweathered, pale bluish-gray chalk in fine fragments. Subsurface layers probably thinly laminated. Few ostracodes and forams.	10	30	Very pale bluish-gray chalk in uniformly small fragments.	10	160
			Pale bluish-gray chalk in uniformly small fragments, some of which carry many minute grains of green glauconite and some mica.	10	170
Pale bluish-gray, finely laminated chalk in small uniform fragments. <i>Inoceramus</i> prisms, few ostracodes, few forams.	10	40	Bluish-gray chalk in uniformly small fragments, of which more than half are fairly rich in grains of green glauconite and a trace of mica.	10	180
Pale bluish-gray, finely laminated chalk that broke up into uniformly fine fragments in drilling. Forams numerous; few ostracodes, echinoid spines.	10	50	Pale gray and white chalk in small fragments, few scattered fragments of yellow quartz. More than half the fragments of chalk carry numerous grains of green glauconite.	10	190
Pale bluish-gray and little yellowish chalk in uniformly fine fragments indicating probable thinly laminated layers of chalk in subsurface. Numerous forams and few ostracodes.	10	60	Bluish-gray and white chalk in uniformly small fragments, of which some are rich in glauconite. Scattered grains of yellow quartz.	10	200
Pale bluish-gray, finely broken chalk that points to thinly laminated strata in subsurface. Few microfossils.	10	70	Pale bluish-gray chalk, much of it carrying considerable glauconite. Scattered grains of yellow chert or quartz.	10	210
Very pale bluish-gray, thinly laminated chalk, which broke up into small uniform fragments in drilling with few larger angular fragments.	10	80	Pale bluish-gray chalk in very fine fragments carrying sparsely scattered grains of green glauconite.	10	220
Laminated, pale bluish-gray chalk in small fragments, not so uniform in size as in much of above section. Subsurface layers slightly more massive.	10	90			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Bluish-gray and white chalk in uniformly small fragments somewhat larger than those of many of the samples above. Glauconite frequent in many fragments. Microfossils abundant in chalk but not many loose specimens of forams or other microfossils.	10	230	Pale gray to white chalk in uniformly small fragments, some of which carry considerable glauconite. Scattering of yellow chert and quartz.	10	320
Pale bluish-gray to almost white chalk in moderately small fragments. Glauconite grains frequent to common in many fragments. Microfossils abundant.	10	240	Gray to white chalk up to fragment size of nearly half an inch. Some fragments are slightly argillaceous.	10	330
Pale bluish-gray chalk in uniformly small fragments of size somewhat larger than those found in many of above samples.	10	250	White chalk in fragments of various sizes up to half an inch.	10	340
Pale bluish-gray chalk in uniformly rather small fragments. Some of which carry scattered grains of glauconite and abundance of microfossils. Scattering of yellow chert or quartz.	10	260	White chalk in large fragments.	10	350
Pale bluish-gray chalk in fragments of rather uniform size but considerably larger than those in most preceeding samples. Considerable yellow chert. One specimen of Hamulus.	10	270	White chalk in large fragments.	10	360
Pale gray to white chalk in rather large fragments of uniform size. Scattering of yellow chert and quartz.	10	280	White and light-gray chalk in large fragments.	10	370
Pale bluish-gray to white chalk in small to moderately large fragments.	10	290	White and light-gray chalk in large fragments.	10	380
Pale gray to white chalk in fragments from very small to moderately large. Some fragments carry scattered grains of glauconite; few are rich in finely divided pyrite.	10	300	White and light-gray chalk in large fragments.	10	390
Pale gray to very white chalk in fragments up to nearly half an inch. Very little glauconite in some fragments; finely divided pyrite frequent.	10	310	Light-gray and white chalk in fragments of diverse sizes.	10	380
			White and light-gray chalk in diverse sizes of fragments.	10	390
			Light-gray and white chalk in diverse sizes of fragments up to more than half an inch. Few shell fragments.	10	400
			Light-gray and white chalk in all sizes of fragments up to half an inch. Scattering of pyrites. Trace of shells.	10	410
			Light-gray and white fragments of chalk up to more than half an inch.	10	420
			Light-gray and white chalk in diverse sizes of fragments.	10	430
			White and light-gray chalk in diverse sizes of fragments.	10	440
			Light-gray and white chalk in diverse sizes of fragments, up to nearly an inch.	10	450
			White and considerable gray chalk in diverse sizes of fragments. The gray tone of many of these fragments is obviously due to a trace of argillaceous matter, whereas the paler gray of much of the chalk in the overlying section was due to disseminated glauconite or to an abundance of calcitized fossils that absorbed the light.	10	460

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
White chalk with considerable distinctly gray chalk, which under magnification shows argillaceous matter in minute streaks along the planes of lamination, or it may be diffused through the material.	10	470	Small fragments of dark-gray, very finely laminated, carbonaceous shale, considerable calcitic matter, numerous bundles of short <i>Inoceramus</i> prisms, trace of fish remains.	10	560
White and gray chalk in fragments of all sizes up to nearly an inch. The gray fragments are distinctly slightly argillaceous, and a few black carbonaceous particles can be observed. Pyrite is frequent.	10	480	Gray, very minutely laminated, microscopically mottled (salt-and-pepper) shale with abundance of disseminated carbonaceous matter. Few chips of greenish shale.	10	570
			Typical Eagle Ford gray shale with carbonaceous matter.	10	580
Eagle Ford Formation, top at about 485'			Typical dark, finely laminated, salt-and-pepper shale with considerable carbonaceous matter. Abundance of amber-colored, short <i>Inoceramus</i> prisms in stout bundles; considerable calcitic matter in irregular fragments.	10	590
Mixture of white chalk, gray argillaceous chalk, some light greenish-gray calcareous hard shale. Scattering of pyrite.	10	490			
Some white chalk, considerable greenish-gray, hard, dense shale; all fragments small. Few fragments are typical of the Eagle Ford Formation in texture and color.	10	500	Buda Formation absent		
			Del Rio Formation, top at about 600'		
Finely broken bluish-green, dense shale and considerable chalk, which has probably fallen from above. Considerable pyrite. Some of shale very finely laminated and carries a trace of carbonaceous matter.	10	510	Wet sample carried much finely divided argillaceous matter that was almost a slime, a characteristic of Del Rio shales. Washed sample looks much like above Eagle Ford but carries a trace of dull-gray thinly laminated splintery shale with a greasy sheen. In fine material no Del Rio forams found.	10	600
Finely broken gray shale, considerable chalk, scattering of pyrite. Texture of shale fragments is characteristic of Eagle Ford but carbonaceous matter is very subordinate.	10	520	Wet sample rich in fine slimy matter. Washed sample carries numerous fragments of a dull lead-gray, splintery shale of very smooth texture. In fine material are thin lenticular pellets of shale with a greasy sheen. No Del Rio forams.	10	610
Finely broken, greenish-gray and gray shale, some particles rich in carbonaceous matter.	10	530			
Finely broken, gray shale fragments with considerable carbonaceous matter. Some pyrite.	10	540	Dull-gray, fine-textured, splintery shale abundant. In fine material the thin lenticular pellets common. One characteristic Del Rio foram; <i>Gyroidina nitida</i> .	10	620
Gray shale in very small fragments; scattering of chalk probably from above.	10	550			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Much "oolitic" yellow limestone as above described. One small test of a <i>Dictyoconus</i> . Several small rotund sponges.	10	850	Sample largely splintery gray shale of very smooth texture; little dense white limestone.	10	1,000
			No description.	10	1,010
Richly "oolitic" yellow limestone.	10	860	Sample almost wholly thinly laminated, dull-gray shale of fine smooth texture.	10	1,020
Buff "oolitic" yellow limestone.	10	870	Sample largely splintery dull-gray, fine-grained shale and an appreciable amount of light-gray to buff and white limestone fragments many of which appear to have fallen from above.	10	1,030
Highly "oolitic" yellow limestone.	10	880			
"Oolitic" buff limestone. Sponges, miliolids, <i>Globotruncana</i> , <i>Globigerina washitaensis</i> .	10	890	Splintery dull-gray shale with numerous small fragments of limestone, some of which may represent breaks in the shale section. Numerous very small heavy shell fragments indicate a shell bed has been penetrated.	10	1,040
"Oolitic" buff limestone.	10	900			
Granular, sugary, gray-buff to white limestone with deteriorated fossil fragments as white splotches on rock surfaces.	10	910	Great abundance of dull-brownish and translucent angular fragments of shells, probably <i>Gryphaea</i> , mixed with some shale and small amount of limestone.	10	1,050
Grayish-buff, sugary, crystalline limestone. One fine test of <i>Dictyoconus walnutensis</i> .	10	920			
Walnut Formation					
Mixed with the buff to white sugary limestone is a small amount of splintery, slightly greenish-gray shale.	10	930	Great abundance of finely broken shells (<i>Gryphaea</i>) some shale, very little limestone.	10	1,060
Considerable splintery shale, slightly greenish-gray, very smooth texture, some dense white limestone different from any above and probably constituting a limestone break in the shale section at this point.	10	940	Glen Rose Formation		
			Some broken shells; large amount of dense, white limestone carrying fragments of heavy shells.	10	1,070
Considerable greenish, splintery shale mixed with dense, white limestone.	10	950	Much dense, hard, white limestone in small fragments, the surfaces of which are well marked by limestone and splotches representing imbedded fossils. Few loose shells; very little splintery shale.	10	1,080
Splintery shale and white limestone.	10	960			
Dense white limestone and splintery greenish-gray shale.	10	970	Great abundance of dense white limestone mostly finely broken; few larger fragments. Limestone marked by numerous fossil inclusions and some mineral matter. Some dull-gray splintery shale.	10	1,090
Dense white limestone and some splintery greenish-gray to dark-gray shale.	10	980			
Mostly dense white limestone with appreciable amount of greenish-gray shale.	10	990			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Sample about 2/3 dense, white limestone and 1/3 gray, splintery shale, much of which seems to have washed down from above, since the fine portion carries frequent Del Rio forams, and some of the shale surfaces reveal imbedded tests of <i>Gumbelina</i> , which do not belong so low in the section as Glen Rose, so far as present records indicate.	10	1,100	Much dense, hard, white, mottled limestone and considerable bluish-gray shale.	10	1,190
Much dense, white limestone in finely ground condition. Considerable gray splintery shale, much of it from above.	10	1,110	Much dense, white, hard, crystalline, mottled limestone, some fragments being a microscopic coquina in which miliolids are frequent. Some gray shale; some bluish-green shale.	10	1,200
Much finely broken, dense, hard, white limestone rich in fossil fragments. Considerable shale that looks suspiciously as if much had fallen from above.	10	1,120	Much hard, dense, white, crystalline, mottled limestone; some fragments a microscopic coquina. Some bluish-green shale.	10	1,210
Much finely broken, hard, white limestone rich in imbedded fossil matter. Considerable gray splintery shale much of which looks like contamination.	10	1,130	Dense, hard, crystalline, mottled, white limestone carrying numerous miliolids. A few fragments are slightly sugary. Blue-green shale common.	10	1,220
Much dense, white limestone and considerable dull gray splintery shale. Many limestone fragments comprise a fine coquina. Some of the shale present probably belongs to this section, as the greenish color is now.	10	1,140	Dense, hard, crystalline, mottled white limestone and considerable blue-green shale.	10	1,230
Dense white limestone and considerable splintery shale.	10	1,150	Dense, hard, crystalline, mottled limestone, some fragments rich in miliolids and other fossil fragments. Bluish-green shale common.	10	1,240
Very finely broken, dense, white, crystalline limestone with abundance of dark inclusions giving the surfaces a mottled appearance. Many finely broken shell fragments are imbedded in the limestone. Dull-gray splintery shale abundant.	10	1,160	Mostly dense, hard, crystalline, mottled and coquina-like white limestone with miliolids and other fossil material. Little splintery gray and blue-green shale.	10	1,250
Much dense, white, hard limestone rich in dark inclusions giving a mottled appearance to the fragments. Considerable splintery shale.	10	1,170	Dense, hard, crystalline, mottled limestone and abundance of splintery gray and greenish shale.	10	1,260
Much dense, crystalline, mottled, white limestone and shell fragments. Much dull-gray, splintery shale and bluish-green splintery shale.	10	1,180	Dense, hard, crystalline, mottled, white limestone; some rich in miliolids. Few fragments of white sugary limestone. Considerable gray and greenish shale.	10	1,270
			Dense, hard, crystalline, mottled, white limestone, many fragments with miliolids. Considerable gray and greenish splintery shale.	10	1,280

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Dense, hard, mottled crystalline, white limestone with many rotund miliolids. Considerable gray and greenish, splintery shale.	10	1,290	About equal proportions of white crystalline mottled limestone and splintery greenish-gray shale.	10	1,410
Hard, white, mottled limestone that is largely a microscopic coquina. Considerable gray and greenish shale.	10	1,300	About equal proportions of hard, mottled, crystalline or coquina-like white limestone and greenish-gray and gray shale.	10	1,420
Hard, crystalline, white limestone and much highly mottled white and dark-gray limestone, as the dark inclusions increase in proportion. Many dark stains and irregularly distributed streaks and patches carry a resinous sheen. Greenish shale abundant.	10	1,310	White limestone broken down in drilling almost to a sand grade in the sample, which comprises largely the component microfossils of the original probably lightly cemented mass of material in the coquina-like limestone. "Sand" comprises to a large extent separate miliolid tests. Very little shale.	10	1,430
Hard, crystalline limestone, some fragments a white coquina, others rich in dark-gray mottled areas and inclusions in a dense matrix. Greenish shale common.	10	1,320	Sample is a limestone "sand" as the result of drilling the coquina-like limestone composed of microfossils and small fragments as well as small granules of calcareous matter. Many of the grains are miliolids.	10	1,440
Mostly white limestone, much of it mottled by imbedded fossils and gray inclusions. Streaks of pyrite and some loose crystals of pyrite. Bluish-green shale.	10	1,330	"Lime sand" composed of minute fossils and fossil fragments as well as granules of white limestone. Many of the grains are miliolids.	10	1,450
Mottled, crystalline, hard, white limestone. Much bluish-green shale.	10	1,340	Sample is almost a perfectly uniform "lime sand" in grade, composed of small granules of limestone, miliolids, and other fossil fragments. In acid the material dissolves almost entirely leaving a faint trace of dark argillaceous matter, probably the dark inclusions of the mottled limestone, so common throughout this limestone formation.	10	1,460
Hard, mottled, crystalline, dense, white limestone rich in miliolids. Much gray and slightly greenish shale.	10	1,350	Finely broken, angular limestone fragments and very little shale. Limestone is hard, crystalline, mottled, and some fragments are sugary and somewhat porous.	10	1,470
White limestone and much greenish-gray splintery shale. Miliolids abundant.	10	1,360	Finely broken, hard, crystalline, mottled, white limestone and some sugary white limestone; very little shale. Miliolids abundant; also other forams (as yet unnamed) are frequent.	10	1,480
Great abundance of white coquina-like mottled limestone and dense crystalline mottled limestone with miliolids. Some splintery greenish shale.	10	1,380			
Hard, crystalline, dense and coquina-like mottled limestone and much greenish shale.	10	1,390			
About equal proportions of white hard limestone and greenish-gray splintery shale.	10	1,400			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Sample composed largely of fine "lime sand" with few angular chips of hard, white limestone. "Sand" consists of grains of broken limestone or components of the granular limestone as well as miliolids and other forams.	10	1,490	Hard, dense, mottled, white limestone; large proportion of blue to greenish splintery shale.	10	1,600
Finely broken limestone in angular chips and much of the "sand" encountered above. Very little shale.	10	1,500	Hard, dense, crystalline, mottled, white limestone and much bluish-green to gray shale.	10	1,610
Hard, dense, crystalline, mottled, white limestone and considerable bluish-green shale.	10	1,510	Hard, dense, crystalline, mottled, white limestone and some sugary white limestone; considerable splintery greenish-gray shale.	10	1,620
Hard, dense, crystalline, mottled, white limestone and little sugary limestone. Considerable blue-green shale.	10	1,520	Hard, dense, crystalline, white limestone full of fossil remains; some sugary porous white limestone. Some splintery bluish to greenish shale.	10	1,630
Dense, hard, crystalline, mottled, white limestone and coquina-like limestone. Much blue-green shale. Few scattered fragments of sugary limestone.	10	1,530	Hard, dense, crystalline, mottled, white limestone; some sugary porous limestone. Some greenish shale.	10	1,640
Finely broken, hard, white, crystalline, mottled limestone and coquina-like limestone. Considerable blue-green shale.	10	1,540	Hard, dense, crystalline, mottled, white limestone; some sugary white limestone likely to be porous in places. Some bluish and greenish shale. Miliolids.	10	1,650
Hard, crystalline, dense, white limestone and coquina-like limestone with many miliolids. Considerable blue-green shale.	10	1,550	Dense, hard, crystalline, mottled, white limestone and some sugary white porous limestone. Considerable splintery gray shale.	10	1,660
Hard, white, mottled, crystalline limestone and coquina-like white limestone. Considerable blue-green splintery shale. Few shell fragments.	10	1,560	Hard, dense, crystalline, mottled limestone and some sugary limestone. Considerable dark-gray shale and little bluish-greenish shale.	10	1,670
Hard, white, mottled, coquina-like limestone with miliolids; much blue and greenish shale.	10	1,570	Sample is white and mottled limestone ground to sand grade with few scattered angular chips. Much of limestone is sugary but most is dense and granular. Miliolids common. Some splintery shale.	10	1,680
Hard, crystalline, mottled, dense, white limestone with miliolids; considerable bluish-green shale.	10	1,580	Finely broken white and mottled limestone with some fair-sized chips. Both hard, dense, white limestone and sugary limestone. Some bluish-green, splintery shale.	10	1,690
Hard, crystalline, mottled, white limestone; much blue-green shale. Miliolids common.	10	1,590			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Dense, hard, mottled, white limestone; few sugary fragments.	10	1,700	Porous, sugary, light-brown limestone; some dense, mottled, white limestone, which may have washed down from above, thick section. Few loose quartz grains. Very little shale.	10	1,830
Hard, dense, mottled, white limestone; some sugary, porous limestone. Very little shale.	10	1,710	Abundance of light-brown, porous, sugary limestone, considerable dense, mottled, white limestone in the finer grade of sample. Little bluish shale. Very few quartz grains.	10	1,840
Hard, dense, crystalline, mottled, white limestone; some sugary porous limestone. Very little shale.	10	1,720	Finely ground, dense, mottled, white limestone and light-brown sugary limestone. Almost no shale.	10	1,850
Finely ground, white limestone with some small chips of large size. Almost no shale.	10	1,730	Great abundance of light-brown, porous, sugary limestone; little dense, white, mottled limestone. Very small amount of shale.	10	1,860
Very finely ground, white limestone, or "lime sand." Almost no shale.	10	1,740	Much light-brown, porous, sugary limestone and some dense, mottled, white limestone. Very little shale.	10	1,870
Hard, dense, mottled, white limestone and some sugary limestone. Very little shale.	10	1,750	Considerable dense, white, mottled limestone and almost an equal amount of light-brown sugary, porous limestone. Considerable shale.	10	1,880
Hard, dense, crystalline, mottled, white limestone; considerable porous sugary limestone. Little splintery shale.	10	1,760	Finely broken and ground limestone, both the dense white and the brown sugary types. Numerous large splinters of shale.	10	1,890
Both dense and porous, white limestone. Some splintery shale.	10	1,770	Finely ground limestone, both the dense, mottled white type so abundant in above section and the light-brown sugary type frequent in the lower portion of the above section. Considerable splintery bluish-green shale.	10	1,900
Porous, sugary limestone more abundant than in previous samples. Little shale.	10	1,780	Abundance of sugary, porous, light-brown limestone with generous portion of dense white mottled limestone in finer portion of sample, possibly washed down from above. Very little shale.	10	1,910
Sugary, porous, somewhat brownish limestone abundant together with mottled, dense, white limestone. Few quartz grains. Very little shale.	10	1,790			
Light-brown sugary limestone, very porous and composed of minute calcite crystals. Most of it highly cavernous. Few angular quartz grains.	10	1,800			
No record	10	1,810			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401 --Continued			Well AX-40-62-401—Continued		
Numerous thin plates of laminated, very fine grained, light-gray sandstone accompanied by the usual ground limestone fragments. Considerable pyrite and shale.	10	1,920	Much ground limestone and considerable greenish shale; little fine-grained sandstone.	10	2,020
Core: (1,922-1,926 ft.)			Much limestone and shale; little fine-grained sandstone.	10	2,030
Micaceous, friable, laminated, gray silt with argillaceous matter in thin streaks and pockets in zones. (25 in.) Hard, calcareous silt with considerable mica and little shale. (4 in.) Finely laminated gray shale with partings and thin streaks of micaceous silt; calcareous zone in portions of this length. (18 in.) Almost wholly blue-green, splintery shale. Trace of fine-grained sandstone.	10	1,930	Ground limestone and shale with little fine-grained, gray sandstone.	10	2,040
Largely greenish, splintery shale with some very fine-grained, light-gray sandstone.	10	1,940	Much loose quartz sand; considerable splintery shale.	10	2,050
Largely greenish, splintery shale with some fine-grained, light-gray sandstone.	10	1,950	Loose sand in abundance; considerable splintery, gray and greenish shale.	10	2,060
Largely greenish, splintery shale and some fine-grained, light-gray sandstone.	10	1,960	Much loose quartz sand; considerable splintery green shale.	10	2,070
Mostly greenish, splintery shale, some fine-grained sandstone, some hard, white mottled limestone.	10	1,970	Fine, light-gray quartz sand, some thinly laminated shale.	10	2,080
Dominantly greenish, splintery shale, little fine-grained, gray sandstone, considerable finely-ground white limestone possibly washed down from above.	10	1,980	Core: (2,080-2,090 ft.)		
Much greenish, splintery shale, little fine-grained sandstone, considerable finely-ground limestone.	10	1,990	Dense, bluish-green shale with few silty and micaceous partings and irregularly distributed calcareous zones and areas. (7 in.) White, friable, fine sand. (3 in.) Very dense, blue-green shale with few silty partings in places, irregularly distributed calcareous areas. (21 in.) Friable, fine, white sand not particularly well bedded. (18 in.) Fine to coarse quartz sand and fine gravel. Trace of shells; very little shale. Large fragments of angular quartz fragments of small gravel sizes are to a large extent probably ground-up pebbles.	10	2,090
Largely splintery, greenish shale; trace of fine-grained sandstone, little finely-ground limestone.	10	2,000	Mixture of fine to coarse sand and small gravel, which is angular and probably ground-up pebbles. Considerable thinly laminated, gray shale.	10	2,100
Greenish, splintery shale; fine-grained, gray sandstone; little ground limestone (perhaps washed down from above.)	10	2,010	Fine to coarse sand, little small gravel or possibly ground-up pebbles. Much thinly laminated gray shale.	10	2,110
			Fine gray sand, coarse sand, fine gravel; considerable thinly laminated gray shale. Much of the so-called small gravel is probably ground-up pebbles of a conglomeratic layer.	10	2,120

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401—Continued			Well AX-40-62-401—Continued		
Largely fine gray sand, some coarse sand and fine gravel, which may be ground-up pebbles in conglomeratic layers.	10	2,130	Fine to coarse quartz material, much of it representing pebbles in a layer somewhere in the penetrated section. Fine to coarse sand.	10	2,235
Some fine and much coarse sand, little small gravel, which is probably largely ground-up pebbles. Little thinly laminated dark-gray shale.	10	2,140	Coarse sand and some shale. Coarse yellow to pink quartz grains of considerable size, much of it ground-up boulders. Fine to coarse sand.	10	2,245
Almost wholly very coarse sand or very small gravel. Trace of shale.	10	2,150	Core: (2,250-2,256 ft.)		
Largely coarse sand with some very fine gravel. Considerable laminated dark-gray shale.	10	2,160	Sample in pint jar consists of partially cemented fine gravel and sand. Coarse quartz fragments and little laminated shale. Fine to coarse sand.	10	2,260
Core: (2,161-2,166.5 ft.)			Coarse quartz fragments, some of them ground-up pebbles in a conglomeratic layer. Fine to coarse sand.	10	2,270
Core completely lost, except for a small handful of rounded pebbles from size of a pea to size of small egg. Pebbles consist of hard greenish siltstone, chert, quartz. Fine to coarse sand about half the sample; rest, laminated dark-gray shale.	5	2,165	No record.	5	2,275
Fine to coarse sand, few small fragments dark-gray, laminated shale.	3	2,168	Core: (2,275-2,281 ft.)		
Fine sand to coarse sand, considerable fine gravel that is probably to a large extent ground-up pebbles.	10	2,178	"Core from bottom of core head, sand and conglomerate." A jar of soft material and packages of hard material. The soft sample in the jar consists of clayey gravel that ranges from small and rather large quartz pebbles. In packages are three portions, one boulder of gray siltstone loosely bound by a calc cement; another a rather fine conglomerate in a matrix of well-cemented sand; the third a large irregular boulder of a pale-gray, "chalky," slightly micaceous, soft, and fine silt, which is represented also in the hard core taken at 2,288.6-2,291 ft.		
Fine to coarse sand and fine gravel, which is quite obviously the result of grinding up pebbles.	10	2,188			
Fine to coarse sand and small gravel, of which much is apparently ground-up pebbles.	10	2,198		6	2,281
Very coarse quartz fragments that must be ground-up pebbles in a conglomeratic layer. Considerable fine to coarse sand.	10	2,208	No record.	7	2,288
Very coarse quartz fragments that are undoubtedly ground-up pebbles. Fine to coarse sand.	7	2,215	Core: (2,288-2,288.6 ft.)		
Very coarse quartz fragments that are probably ground-up pebbles. Fine to coarse sand.	10	2,225	A box of several portions of the core and a jar of some soft, loose material submitted for study. The several portions packaged consist of squeezed dark gray shaly silt and pockets of white coarse sand carrying few pebbles. One		

Table 3.--Drillers' Logs of Selected Wells in Bell County--Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-40-62-401--Continued			Well AX-40-62-801--Continued		
portion carries a large white boulder of thinly laminated, shaly, white material that looks like highly altered chert. Material in jar consists of few hard quartz boulders and some dark, laminated, gray silty shale.	.6	2,288.6	Sandy lime	25	2,005
			Shale - lime	65	2,070
			Shale - sand streaks	140	2,210
			Sand (Hosston Sand)	65	2,275
			Sand and shale (Hosston Sand)	60	2,335
			Sand (Hosston Sand)	20	2,355
			Sandy - shale - gravel	11	2,366
Core: (2,288.6-2,291 ft.)					
Representative portions of the core packed in jar and in two small packages. Two portions consist of a coarse conglomerate composed of a heterogeneity of material in all sizes of boulders from fine and coarse sand in the matrix upward to gravel from size of a pea to almost egg dimensions. Boulders are largely quartz, jasper, and flint with a few gray siltstones and several deeply imbedded, irregular boulders of a soft, chalky, pale-gray clay. The portion in the jar is a soft gray, somewhat silty clay.	2.4	2,291	Well AX-58-02-301		
			Owner: --Bissett Driller: Layne Texas Co.		
			Air	4	4
			Soil	7	11
			Clay and sandy clay	8	19
			River bed and sand	14	33
			White rock and lime	13	46
			Blue shale	7	53
			Lime rock - hard	3	56
			Hard lime and shale	14	70
			Rock	20	90
			Lime rock and hard shale	32	122
			Rock and hard gray shale	154	276
			Rock and breaks of shale	18	294
			Hard white lime	25	319
			Hard sandy lime and shale	19	338
			Hard sandy lime and shale	20	358
			Blue shale	44	402
			Sandy shale	7	409
			Sandy lime and shale	53	462
			Hard lime and shale breaks	10	472
			Hard shale pink	25	497
			Hard blue and brown and pink shale and streaks of lime	46	543
			Hard rock	14	557
			Hard blue and brown shale	36	593
Well AX-40-62-801					
Owner: Bell County WCID No. 1 Driller: J. L. Myers Sons					
Yellow clay	35	35			
Chalk rock	400	435			
Chalk	110	545			
Shale	305	850			
Lime	145	995			
Shale and lime streaks	35	1,030			
Lime	170	1,200			
Shale	35	1,235			
Lime	5	1,240			
Shale - lime	58	1,298			
Lime	422	1,720			
Lime - shale	150	1,870			
Lime	75	1,945			
Sand	35	1,980			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-58-02-301—Continued			Well AX-58-04-803 ✓		
Hard limerock	7	600	Owner: Texas Highway Department Driller: Hervey Meadows and Son Well Driller		
Hard black shale and layers of lime	28	628	Black dirt	6	6
Well AX-58-04-602 ✓			Clay	17	23
Owner: Salado Water Supply Corp. Driller: Hervey Meadows and Son Well Driller			Hard blue rock	66	89
Black soil	2	2	Hard gray lime	30	119
Red soil	6	8	Hard sand	21	140
White rock	10	18	Hard limestone glass	35	175
Blue rock	24	42	Brown lime	5	180
Brown water sand	54	96	Well AX-58-05-202		
Blue rock	9	105	Owner: Armstrong Water Supply Corp. Driller: Watts Drilling Co.		
Well AX-58-04-603			Topsoil	1	1
Owner: Salado Water Supply Corp. Driller: Hervey Meadows and Son Well Driller			White soapstone	35	36
Soil	.5	.5	Blue slate	6	42
White chalk	3	3.5	Chalk lime <i>Austin</i>	107	149
White rock	13.5	17	Blue shale <i>EF</i>	201	350
Blue rock	17	34	White lime <i>B...</i>	34	384
Hard broken lime	51	85	Lime and shale	134	518
Blue rock	25	110	Lime (hard)	68	586
Brown water sand	50	160	Shale and lime streaks	186	772
Well AX-58-04-802 ✓			Lime (hard)	16	788
Owner: Texas Highway Department Driller: Hervey Meadows and Son Well Driller			Lime and shale	230	1,018
Black dirt	6	6	Glen Rose lime and sand	176	1,194
Clay	10	16	Shale and lime	124	1,318
Blue rock	24	40	Sand, shale, and small lime streaks	162	1,480
White and gray lime	49	89	Lime (hard)	28	1,508
Hard white and brown lime	45	134	Shale and lime	48	1,556
Limestone glass and sand	41	175	Shale and lime	48	1,604
Brown lime	5	180	Lime, shale, and sand streaks	28	1,632
			Shale	74	1,706
			Sand and gravel	32	1,738
			Lime (hard)	2	1,740

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-58-05-402			Well AX-58-05-402—Continued		
Owner: Ellis Holland Driller: Trim and Son Contractors			Hard lime and granite	41	731
Surface	1	1	Chalky lime	7	738
Chalk	7	8	Hard white lime	12	750
Chalk and lime	12	20	Gray lime - hard	30	780
Chalk and shale, seep water 30 ft.	15	35	Soft gray lime	2	782
Gray shale and lime (pyrites)	40	75	Gray shale (trace oil)	2	784
Hard lime	3	78	Hard lime	9	793
Chalk, lime, and marl	203	281	Gray shale	3	796
Black shale (pyrites)	14	295	Hard lime	8	804
Hard lime	5	300	Gray shale	7	811
Black shale (pyrites)	10	310	Hard lime	16	827
Lime	11	321	Gray shale	8	835
Black shale (pyrites)	76	397	Soft lime	14	849
Lime shell (Buda)	5	402	Gray shale	8	857
Black shale (pyrites)	18	420	Hard lime	6	863
Lime shale (Buda)	3	423	Black shale	6	869
Black shale (480 ft. trace oil)	80	503	Broken lime and gray shale	106	975
Pyrite shell	1	504	White and gray hard lime - few black lime stratas Fresh water stratas 1,075 ft.	455	1,430
Black shale (pyrites)	21	525	Blue gray shale	7	1,437
Lime (Georgetown)	27	552	Hard gray lime - fresh water 1,495 ft.	83	1,520
Gray marl	2	554	Gray shale	2	1,522
Lime	10	564	Gray sand - fresh water	68	1,590
Gray marl shale (570 ft. trace oil)	16	580	Gray shale	4	1,594
Lime	12	592	Gray lime	9	1,603
Gray shale	13	605	Gray shale and lime	97	1,700
Hard lime (Edwards)	12	617	Gray sand	5	1,705
Soft lime (trace oil)	8	625	Gray sandy shale	42	1,747
Hard lime	13	638	Gray sand - fresh water	18	1,765
Lime gravel (good water)	12	650	Hard lime	10	1,775
Flint	1	651	Sandy shale	18	1,793
Yellow lime (bottom Edwards)	31	682	Hard gray lime	12	1,805
Sandy lime	8	690	Soft gray sand - fresh water	15	1,820

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-58-05-402—Continued			Well AX-58-05-901—Continued		
Hard gray sand	5	1,825	Gumbo with clay	90	990
Hard lime shell	2	1,827	Water sand, sulphur water (Edwards lime)	54	1,044
Well AX-58-05-403			Lime (2 ft. sand) little water shown	22	1,066
Owner: Leon River Farms			Gumbo white clay	49	1,115
Driller: Hervey Meadows and Son Well Driller			Water sand	5	1,120
Soil	1	1	Gray lime	20	1,140
White rock	21	22	Lime shows little water	90	1,230
Blue rock	52	74	Blue shale	18	1,248
White rock	142	216	White lime	102	1,350
Black shale	274	490	Lime streaks white clay (water)	150	1,500
White lime	220	710	Lime	250	1,750
Blue shale	95	805	Lime	45	1,795
White rock	35	840	Gumbo	5	1,800
Black shale	150	990	Water sand	5	1,805
Glen Rose lime	590	1,580	Lime streaks white clay	107	1,912
Trinity Sand	50	1,630	Trinity water sand	53	1,965
Well AX-58-05-901			Gumbo	5	1,970
Owner: City of Holland			Black gumbo	23	1,993
Driller: K. E. Edwards			Well AX-58-07-701		
Soil	8	8	Owner: City of Rogers		
Yellow clay (surface water)	17	25	Driller: Layne Texas Co.		
Yellow clay blue shale rock	6	31	Surface soil	4	4
Gray gumbo	44	75	Yellow clay	12	16
Gumbo	75	150	Black shale	82	98
Lime	50	200	Gray shale	238	336
Blue limestone	50	250	Black shale	203	539
Lime	110	360	Gray shale	49	588
Lime streaks, blue clay	170	530	Chalk	283	871
Gumbo	95	625	Chalk and shale	10	881
Black shale	82	707	Shale	16	897
Gray limestone	13	720	Chalk and shale	35	932
Blue shale, lime shells	86	806	Chalk	182	1,114
Gray limestone (Georgetown)	30	836			
Gumbo with clay	64	900			

Table 3.—Drillers' Logs of Selected Wells in Bell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well AX-58-07-701—Continued			Well AX-58-07-701—Continued		
Chalk and shale	57	1,171	Lime and shale	73	2,568
Black shale	62	1,233	Soft lime	21	2,589
Lime and shale	10	1,243	Lime	160	2,749
Shale	22	1,265	Shale and lime	16	2,765
Lime	82	1,347	Porous lime	11	2,776
Lime and shale	30	1,377	Lime and shale	62	2,838
Lime	120	1,497	Lime	5	2,843
Lime and shale	27	1,524	Sand and shale	15	2,858
Lime	215	1,739	Sand	8	2,866
Shale	3	1,742	Shale and sandy shale	30	2,896
Lime and shale	24	1,766	Lime and shale	14	2,910
Lime	123	1,889	Sand with few layers of shale	100	3,010
Lime and shale	250	2,139	Hard shale	11	3,021
Shale and lime	18	2,157	Sand and gravel	86	3,107
Lime	222	2,379	Shale	6	3,113
Lime and shale	56	2,435	Sand	59	3,172
Shale and lime	32	2,467	Hard shale	6	3,178
Lime	28	2,495			

BOSQUE COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: E, Electric.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
BB-32-58-301	American Liberty Oil Co.	Elmer Smith No. 1	1950	5,855	1,122	E
40-02-103	do.	Clanton No. 1	1949	4,468	980	E
701	American Republic Corp.	F. T. Shaffer No. 1	1950	5,246	1,136	E
10-102	Shell Oil Co.	Mathews No. 1	1965	840	1,160	E
12-403	do.	Ellie Moore No. 1	1966	675	700	E
404	do.	Ellie Moore No. 2	1966	701	729	E
13-302	SouthLand Oils and American Liberty Co.	R. T. Greenwade No. 1	1949	7,240	664	E
20-702	O. C. Proffitt	J. W. Henry No. 1	1953	6,222	933	E
21-101	American Liberty Oil Co.	Herbert Reichert No. 1	1948	7,706	850	E

BOSQUE COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-32-58-502			Well BB-32-61-102—Continued		
Owner: Flat Top Ranch Driller: C. Glenn Wallen and Son			Shale	37	109
Gray lime	30	30	Sand	11	120
Blue lime	50	80	Shale	10	130
Blue sandy shale	20	100	Paluxy sand	10	140
Hard sand rock, water 8 gpm	15	115	Rock	325	465
Hard blue shale	35	150	Shale	7	472
Hard blue sand lime	50	200	Rock	53	525
Gray hard lime	2	202	Glen Rose sand	22	547
Hard gray sandy lime	225	427	Rock	14	561
Soft blue shale	20	447	Water sand	22	583
Coarse sand (water)	68	515			
Well BB-32-59-402			Well BB-32-61-401		
Owner: City of Walnut Springs Driller: J. L. Myers Sons			Owner: U.S. Army Corps of Engineers Driller: Ward and Ward Drilling Co.		
Rock	131	131	Surface soil	22	22
Sand	15	146	Sandy clay and gravel	25	47
Rock	22	168	Rock	26	73
Sand	12	180	Shale	47	120
Rock	14	194	Upper Paluxy sand	16	136
Green putty sand	26	220	Shale	22	158
Chalk rock	16	236	Lower Paluxy sand	10	168
Lime	248	484			
Shale	8	492	Well BB-32-61-701		
Sandy lime	14	506	Owner: Bogey Estill Driller: Rufus Hampton Smith		
Sandy shale	7	513	Gravel	20	20
Sand	12	525	Blue shale	10	30
Shale	15	540	White rock	120	150
Sand	46	586	Blue shale	15	165
Gravel	24	610	Paluxy sand	15	180
Rock	1	611	Glen Rose lime with streaks of shale and lime	340	520
Well BB-32-61-102			First Trinity	50	570
Owner: U.S. Army Corps of Engineers Driller: Ward and Ward Drilling Co.			Red bed	110	680
Clay	10	10	Second Trinity	100	780
Gravel	8	18	Red and blue shale	45	825
Rock	40	58			
Sand	14	72			

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-32-61-703			Well BB-32-61-705—Continued		
Owner: Lakeside Water Supply District Driller: J. L. Myers Sons			Sand	10	750
			Shale	7	757
Lime and clay	6	6			
Broken lime	136	142	Well BB-32-61-706		
Shale	18	160	Owner: Bestview Water Association Driller: Leon Drilling Co.		
Sand	48	208	Soil and gravel	5	5
Lime	381	589	Gray lime	20	25
Lime and shale	31	620	Lime shells and shale	140	165
Sand	13	633	Sandy lime	5	170
Broken sand	8	641	Sandy shale	10	180
Sand	19	660	Water sand	40	220
Broken sand	6	666	Sandy shale - lime	2	222
Sand	24	690			
Broken sand	32	722	Well BB-32-61-707		
Red bed	24	746	Owner: U.S. Army Corps of Engineers Driller: Unknown		
Well BB-32-61-704			Rock	145	145
Owner: Lakeside Water Supply District Driller: J. L. Myers Sons			Shale	48	193
			Rock	49	242
Surface soil	2	2	Shale and rock streaks	13	255
Rock	37	39	Sand and sandstone	11	266
Broken lime and shale	51	90	Shale and rock streaks	11	277
Rock	40	130	Sandy shale	5	282
Shale	54	184	Sandy shale	12	294
Sand	16	200	Sand	11	305
Rock	414	614	Rock	333	638
Sand	120	734	Shale and rock streaks	30	668
Lime and shale	30	764	Rock	10	678
Well BB-32-61-705			Shale and rock	15	693
Owner: Lakeside Water Supply District Driller: C. M. Stoner Drilling Co.			Rock	10	703
			Shale and rock streaks	10	713
Soil	1	1	Sandy shale	10	723
Lime	194	195	Shale and rock streaks	15	738
Sand	35	230	Light colored sandy shale	10	748
Lime	378	608	Red shale	15	763
Sandy lime and shale	70	678	Sand	9	772
Sand	32	710	Red shale and rock streaks	11	783
Shale	12	722	Sand	10	793
Sand	12	734	Hard sand and sandstone	20	813
Shale	6	740	Red shale	37	850

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-32-61-801			Well BB-40-02-102		
Owner: U.S. Army Corps of Engineers Driller: Ward and Ward Drilling Co.			Owner: City of Iredell Driller: Unknown		
Surface soil	29	29	Soil	20	20
Rock	19	48	Limestone	10	30
Shale	124	172	Soft blue marl	80	110
Water sand	46	218	Blue marl	6	116
			Soft white stone	50	166
			Sandstone, limestone and marl	100	266
			Soft sand rock, hard sand rock	45	311
Well BB-40-01-302					
Owner: O. H. McGavock Driller: Iredell Drilling					
Topsoil and clay	35	35	Fine grained sandstone	6	317
Large gravel	15	50	Pack sand (flow of water)	18	335
Limestone and blue clay	150	200			
Paluxy sand	20	220			
Blue shale and lime	35	255			
Trinity sand	35	290			
			Well BB-40-02-104		
			Owner: B. F. Strong Driller: Iredell Drilling		
			Topsoil and gravel	25	25
			Shale	15	402
			Lime and shale breaks	160	200
			Blue shale	18	218
Well BB-40-01-303					
Owner: H. F. Myers Driller: Iredell Drilling					
Topsoil	18	18	Sandy shale	14	232
Lime	124	142	Sand	7	239
Blue shale	40	182	Blue shale	4	243
Sand (fine)	15	197	Sand and shale breaks	14	257
Blue shale	15	212	Rock	3	260
Sand (fine)	20	232	Sand	37	297
Blue shale	30	262	Sand and gravel	23	320
Sand (coarse with washed gravel)	53	315	Red clay	10	330
			Sand and clay	30	360
			Red clay	50	410
Well BB-40-02-101					
Owner: City of Iredell Driller: Rufus Hampton Smith					
Sand	4	4			
Yellow clay	7	11			
Blue shale	9	20	Topsoil and gravel	26	26
Glen Rose lime with streaks of sand	220	240	Blue shale	14	40
Lime with streaks of shale	35	275	Lime	160	200
Water sand (Trinity)	50	325	Sand	10	210
			Well BB-40-02-105		
			Owner: City of Iredell Driller: Iredell Drilling		
			Topsoil and gravel	26	26
			Blue shale	14	40
			Lime	160	200
			Sand	10	210

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-02-105—Continued			Well BB-40-03-601—Continued		
Shale and lime strips	60	270	Rock	1	551
Sand and gravel	56	326	Shale	32	583
Well BB-40-02-106			Gumbo	4	587
Owner: Elliott Ensminger			Shale	21	608
Driller: Iredell Drilling			Rock	2	610
Topsoil and clay	20	20	Gray shale	5	615
Silica sand	15	35	Gumbo	11	626
Shale and lime	95	130	Shale	10	636
Fine sand	20	150	Rock	1	637
Lime and shale	150	300	Shale	8	645
Shale	75	375	Sand	79	724
Gravel and sand	50	425	Sand and gravel	9	733
Well BB-40-03-601			Lime	1	734
Owner: City of Meridian			Shale	25	759
Driller: J. L. Myers Sons			Well BB-40-03-603		
Surface soil	10	10	Owner: City of Meridian		
Gravel	2	12	Driller: C. M. Stoner Drilling Co.		
Lime	24	36	Chalk rock	6	6
Rock	8	44	Shell rock	164	170
Sand	10	54	Sand	20	190
Rock	16	70	Lime rock	370	560
Shale	11	81	Sandy lime	25	585
Rock	10	91	Sand	46	631
Sandy shale	4	95	Green shale	4	635
Sand	10	105	Red shale	17	652
Lime rock	6	111	Sand	8	660
Chalk rock	189	300	Red bed	25	685
Lime rock	158	458	Broken red and gray shale	45	730
Chalk rock	2	460	Sand	108	838
Lime	15	475	Well BB-40-03-802		
Sandy shale	5	480	Owner: Texas Parks and Wildlife Department		
Sand	10	490	Driller: Watts Drilling Co.		
Sandy shale	20	510	Lime and caliche	45	45
Water sand	7	517	Lime	75	120
Rock	4	521	Lime and blue shale	180	300
Sandy shale	5	526	Sand	20	320
Sand	10	536	Lime	360	680
Shale	14	550	Sand	10	690
			Lime and shale	20	710

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-04-803—Continued			Well BB-40-05-701		
Rock	8	818	Owner: Ronnie Jones Driller: J. L. Myers Sons		
Red bed	22	840	Rock	126	126
Hard sand	14	854	Lime	274	400
Lime and streaks of sand	22	876	Sand	8	408
Red bed	26	902	Lime	454	862
Sand	36	938	Sandy lime	28	890
Lime and streaks of shale	33	971	Lime	4	894
Well BB-40-05-301			Sand	18	912
Owner: U.S. Army Corps of Engineers Driller: Watts Drilling Co.			Red bed	36	948
Topsoil and clay	3	3	Green shale	13	961
Lime	117	120	Lime	9	970
Lime and blue shale	140	260	Rock	3	973
Lime gravel and sand	25	285	Red bed	19	992
Lime and blue shale	455	740	Shale and streaks of sand	36	1,028
Gravel and sand	10	750	Sand	55	1,083
Red clay	175	925	Hard rock	3	1,086
Sand-water bearing	52	977	Sand	21	1,107
Well BB-40-05-401			Well BB-40-05-704		
Owner: James Walker Driller: Iredell Drilling			Owner: N. P. Powell Ranch Driller: J. L. Myers Sons		
Topsoil	10	10	Surface soil	1	1
Surface rock	5	15	Rock	264	265
Limestone	35	50	Lime	631	896
Blue shale	35	85	Sand	42	938
Limestone	5	90	Red bed	24	962
Blue shale	5	95	Sand and shale	23	985
Blue rock	5	100	Red bed	15	1,000
Blue shale	25	125	Hard sand and shale	105	1,105
Lime and blue shale	50	175	Streaks shale and sand	60	1,165
Sandy shale and water	35	210	Rock	22	1,187
Lime	25	235	Well BB-40-05-905		
Lime and sandy shale	55	290	Owner: U.S. Army Corps of Engineers Driller: Watts Drilling Co.		
Lime solid	150	440	Yellow lime	6	6
Brown lime and blue shale	230	670	White lime	12	18
Trinity sand	21	691	Gray lime	130	148

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-05-905—Continued			Well BB-40-10-802—Continued		
Shale and lime	41	189	Fine sand	12	620
Lime	89	278	Red shale	7	627
Sand and shale	44	322			
Lime and shale	500	822	Well BB-40-11-401		
Red bed	88	910	Owner: J. Bruce Parks Driller: Clarence Erickson		
Sand and gravel	170	1,080	Yellow clay and gravel	20	20
Shale	20	1,100	Hard shell rock	30	50
			Blue gumbo	10	60
Well BB-40-10-802			Paluxy sand	20	80
Owner: City of Cranfills Gap Driller: R. A. Adams and Son			Very hard lime	15	95
Yellow clay	45	45	Blue shale	3	98
Blue gumbo	55	100	Hard gray lime	302	400
Blue lime and gumbo streaks	10	110	Blue shale	15	415
Blue lime	30	140	Green sandy shale	20	435
Gray lime	30	170	Trinity sand and water	35	470
Blue shale	12	182	Red clay	5	475
Blue lime and shale streaks	10	192	Red rock	3	478
Paluxy sand - water	28	220			
Glen Rose lime	3	223	Well BB-40-11-402		
Glen Rose lime (hard)	167	390	Owner: Clarence Fields Driller: Clarence Erickson		
Lime and shale streaks	7	397	Yellow clay	35	35
Hard lime	8	405	Blue soapstone	2	37
Soft lime	2	407	Sandy clay	10	47
Lime	73	480	White rock and clay	4	51
Green shale and lime streaks	7	487	Sand rock	9	60
Soft sticky lime	28	515	Paluxy sand	18	78
Blue shale	8	523	Rock	12	90
Hard lime	7	530	Blue shale	2	92
Black shale	5	535	Very hard rock	18	110
Sandy lime	10	545			
Sandy shale	5	550	Well BB-40-12-101		
Hard sand	7	557	Owner: Mildred Hogstel Driller: Clarence Erickson		
Green shale	10	567	Coarse gravel	26	26
Hard sand rock	7	574	Blue shale	8	34
Beach sand and water	16	590	Hard white rock	46	80
Hard sand rock	5	595	Blue gumbo	10	90
No record	2	597	Hard blue shell	5	95
Trinity sand, gravel and water	11	608	Sandy blue shale	13	108

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-12-101—Continued			Well BB-40-12-802		
Green sand	2	110	Owner: City of Clifton Driller: E. E. Erickson		
Paluxy sand (lots of water)	18	128	Gravel	30	30
White lime rock	2	230	Blue shale or soapstone	12	42
Well BB-40-12-703			Lime	40	82
Owner: City of Clifton Driller: J. L. Myers Sons			Blue shale	4	86
Lime	115	115	Hard lime	12	98
Broken lime	133	248	Blue shale	10	108
Walnut shell bed	15	263	Hard caprock	2	110
Hard sandrock	2	265	Green sand	4	114
Sandy shale	31	296	Paluxy sand (lots of water)	18	132
Lime	116	412	Gumbo	5	137
Broken lime	48	460	White lime	60	197
Lime	242	702	Honeycomb lime (more water)	15	212
Broken lime	31	733	White lime with a few breaks	338	550
Sand	31	764	Very hard lime	11	561
Broken sand	12	776	Shale and gumbo	26	587
Red bed	46	822	Black gumbo	3	590
Sand	18	840	Hard caprock	3	593
Broken sand	20	860	Green shale and green sand	7	600
Sand	22	882	Sand (flowing lots of water)	46	646
Broken sand	30	912	Well BB-40-12-803		
Sand	24	936	Owner: City of Clifton Driller: E. E. Erickson		
Shale	6	942	Gravel	35	35
Well BB-40-12-704			Rock	55	90
Owner: W. L. Gauntt Driller: Frank Baker Place			Black gumbo	3	93
Yellow clay	40	40	Green shale	2	95
Blue rock	215	255	Paluxy sand	25	120
White rock	15	270	Black gum	3	123
Soapstone	45	315	Rock	15	138
Paluxy sand	10	325	Black gum	2	140
Black shale	15	340	Lime rock	43	183
Lime rock	430	770	Honeycomb lime	4	187
Green shale	5	775	Lime rock	343	530
Hard sand	5	780	Shale and gravel sand	10	540
Trinity sand	32	812	Green shale	28	568
			Shale and sand	2	570

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-12-803—Continued			Well BB-40-12-805—Continued		
Caprock	—	—	Lime	40	82
Trinity sand	40	610	Blue shale	4	86
Green shale	10	620	Hard lime	12	98
White and red clay	2	622	Blue shale	10	108
Red rock	56	678	Hard caprock	2	110
Water sand	8	686	Green sand	4	114
Shale and gray gum	12	698	Paluxy sand (lots of water)	18	132
			Gumbo	5	137
Well BB-40-12-804			White lime	60	197
Owner: City of Clifton			Honeycomb lime (more water)	15	212
Driller: Clarence Erickson			White lime with a few breaks	338	550
Gravel	35	35			
Blue rock	55	90	Very hard lime	11	561
Black gumbo	4	94	Shale and gumbo	26	587
Green gumbo	2	96	Black gumbo	3	590
Paluxy sand and water	25	121	Hard caprock	3	593
Black shale	3	124	Green shale and sand	7	600
White rock	13	137	Trinity sand (lots of water)	46	646
Black gumbo	2	139	Red bed	10	656
Hard rock	1	140	Sand	131	787
Hard lime	160	300			
Green shale	10	310	Well BB-40-13-301		
White rock	90	400	Owner: Lake Whitney Enterprises		
			Driller: J. L. Myers Sons		
Granite lime	27	427	Rock	151	151
Gray lime	103	530	Lime	51	202
Granite	20	550	Broken lime	160	362
Green gumbo	25	575	Lime	2	364
Coarse sand Trinity water	40	615	Sand	17	381
Green gumbo	2	617	Hard lime - sand	127	508
Hard brown lime	5	622	Sandy lime	245	753
Hard brown lime	4	626	Lime	127	880
Green and white clay	2	628	Sand	18	898
Red gumbo and red rock	56	684	Mixed shale	75	973
Coarse sand and water	13	697	Sandy shale	41	1,014
Gray and black shale	5	702	Sand	19	1,033
			Hard sand	25	1,058
Well BB-40-12-805			Sand	89	1,147
Owner: City of Clifton			Lime	26	1,173
Driller: Clarence Erickson					
Gravel	30	30			
Blue shale or soapstone	12	42			

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-13-303			Well BB-40-19-402—Continued		
			Shell rock	145	185
			Broken shell rock and shale	30	215
Surface	1	1	Sandy shale	5	220
Lime	174	175	Sand	5	225
Lime and shale	171	346	Sandy shale	15	240
Sand	21	367	Lime rock	372	612
Lime	467	834	Sand	20	632
Sand	48	882	Sandy shale	6	638
Lime and shale	196	1,078	Sand	55	693
Sand	64	1,142	Red bed	77	770
			Sand	10	780
Well BB-40-13-801			Shaly sand	30	810
			Sand	20	830
Soil and yellow clay	37	37	Brown shale	5	835
Blue rock	118	155	Sand	5	840
White lime	60	215	Yellow shale	15	855
Blue shale and lime	160	375			
White lime	15	390	Well BB-40-20-303		
Blue shale and soapstone	60	450	Owner: A. L. Haster Driller: Frank Baker Place		
Paluxy sand	15	465	Soil and yellow clay	24	24
Black shale	5	470	Blue rock	201	225
Glen Rose lime	430	900	White rock	20	245
Sandy lime	50	950	Blue shale and soapstone	50	295
Trinity sand	50	1,000	Paluxy sand	25	320
			Black shale	2	322
Well BB-40-18-303			Glen Rose lime	393	715
			Blue shale	5	720
Soil	2	2	Glen Rose lime	56	776
Clay	10	12	Hard sand	14	790
Rock with shale streaks	134	146	Soft sand (Trinity)	25	815
Limestone	386	532			
Broken sand and shale	5	537	Well BB-40-20-703		
Sand with rock streaks	33	570	Owner: Mosheim Water Supply Corp. Driller: Hervey Meadows and Son Well Driller		
Shale	5	575	Soil	1	1
			Rock and clay	4	5
Well BB-40-19-402			Yellow clay	2	7
			White rock	22	29
			Blue rock	6	35
Soil	2	2	Edwards limestone (fossils)	305	340
White rock	38	40			

Table 3.—Drillers' Logs of Selected Wells in Bosque County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BB-40-20-703—Continued			Well BB-40-21-202—Continued		
Shale	320	660	Broken white lime and blue shale	190	300
Glen Rose limestone	20	680	Paluxy sand	25	325
Sand and shale	20	700	Black shale	2	327
Glen Rose limestone and fine sand	97	797			
Top of first Trinity	53	850	Well BB-40-21-702		
Sand and black shale	6	856	Owner: City of Valley Mills Driller: Frank Baker Place		
			Soil and Clay	25	25
Well BB-40-20-901			Blue rock	62	87
Owner: Fred Billings Driller: Frank Baker Place			Blue shale	33	120
Soil and yellow clay	16	16	Gray lime	44	164
Blue shale	94	110	Soapstone	44	208
White lime	20	130	Paluxy sand	12	220
Blue shale and soapstone	35	165	Dark shale	8	228
Paluxy sand	40	205	Gray lime	238	466
White lime	90	295	Blue shale	14	480
Porous (water)	5	300	White lime	225	705
White lime	10	310	Green shale	3	708
			Hard sand (Trinity)	32	740
Well BB-40-21-202			Soft sand	20	760
Owner: Edwin McMillan Driller: Frank Baker Place			Red bed (hard)	1	761
Soil and yellow clay	19	19			
Blue rock	91	110			

BROWN COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

D, Drillers'; E, Electric; S, Sample.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
BR-31-57-530	Coastal States Gas Producing Co.	S. L. Rankin No. 1	1960	3,009	1,737	E
921	Coal Tullous and Co.	Ben Moore No. 1	—	1,394	1,755	S
41-02-401	C. W. Phayer	Ross No. 1	1950	2,833	1,850	E
19-132	Clarence F. Chang and Associates	Sallie Baker No. 1	1950	1,972	1,520	D

BROWN COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BR-41-01-234			Well BR-41-19-132—Continued		
Owner: May Water Supply Corp.			Shale and shell	80	430
Driller: Curtis Alford Drilling and Well Service			Blue shale and sandy lime	42	472
Soil and caliche	5	5	Lime	3	475
Blue soapstone	15	20	Gray shale and black	45	520
Yellow and brown shale	13	33	Lime shell	4	524
Sandy (little water)	37	70	Sand slight salt water	68	592
Sand	25	95	Shale and shell	20	612
Gravel and sand	5	100	Sand and sand shale, salt water increase	68	68
Soapstone, blue and gray	18	118	Dark shale with sandy streaks and lime shells	289	969
Well BR-41-19-132			Sandy lime and black shale	156	1,125
Owner: Sallie Baker			Lime	73	1,198
Driller: Clarence F. Chang and Associates			Sandy shale	51	1,249
Surface clay	5	5	Sandy lime	11	1,260
Blue shale	18	23	Black shale	15	1,275
Sandy lime	9	32	Black slate	384	1,659
Sand	19	51	Shale and sandy lime	26	1,685
Lime and broken lime	54	105	Lime black and brown	131	1,816
Shale	4	109	Black slate and shells	84	1,900
Fresh water sand	8	117	Sandy lime	10	1,910
Red bed	41	158	Lime and chert	62	1,972
Sandy lime	6	164			
Broken shale and sandy lime	186	350			

BURNET COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

D, Drillers'; E, Electric.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
BT-58-01-301	E. A. Dunnam	John Hunt No. 1	1958	1,245	915	E
302	E. A. Dunnam and Henson Drilling Co.	Day No. 1	1955	4,793	909	E
601	Parker Petroleum Co. Inc.	Williams No. 1	1956	3,559	968	E
602	Bur-Tex Oil Co.	W. C. Dillingham No. 1	1929	1,071	1,065	D

BURNET COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BT-57-08-801			Well BT-57-15-740		
Owner: Bill Bryson Driller: Twin City Oil and Gas Co. (Complete log not shown)			Owner: M. K. Orman Driller: Smart Drilling and Supply		
White and yellow clay	25	25	Yellow clay	14	14
White soft lime	15	40	Gray shale	8	22
Gray hard lime	22	62	Soft sandy	3	25
Gray lime and shells	63	125	Gray sandy rock	5	30
Gray clay and shells	115	240	Sandy shale	10	40
Gray sand (water at 264 ft)	80	320	Hard rock	2	42
White soft sand	26	346	Soft	3	45
Gray hard lime	10	356	Sandy rock	10	55
Gray shale	10	366	Hard and soft sandrock	15	70
Gray shells	14	380	Red bed	15	85
Red clay	5	385	White rock	5	90
Gray hard shells	40	425	Gravel granite	5	95
Gray sand (water at 435 ft)	20	445	Hard rock	5	100
White hard lime	15	460	Yellow	13	113
Black hard lime	28	488	Hard - water	7	120
Black soft slate	5	493	Hard	8	128
Black hard lime	57	550	Well BT-57-16-801		
Black soft slate	25	575	Owner: Burnet County WCID No. 1 Driller: Wright Drilling Co.		
Brownish gray lime coarse	15	590	No record	310	310
Light gray lime fine	60	650	Sand	5	315
White sandy lime fine	25	675	Sand	115	430
White soft lime coarse	25	700	Good sand	30	460
White lime fine	105	805	Cap rock	8	468
Light gray lime coarse	45	850	Sand	5	473
Light gray lime medium	5	855	Cap rock	29	502
Brownish grayish lime coarse	20	875	Sand	5	507
White lime fine	40	915	Well BT-57-24-101		
Brownish gray lime	25	940	Owner: City of Bertram Driller: Wright Drilling Co.		
Gray lime medium	10	950	Black loam top soil	2	2
Brownish gray lime medium	45	995	White limestone	4	6
Brownish gray lime coarse	35	1,030	Caliche	15	21
Gray lime medium	20	1,050	White limestone	10	31
Brownish gray coarse	22	1,062	Blue shale	16	47
Light brownish gray lime medium	18	1,090	Sugar sand - some water	17	64
Gray fine lime	3	1,093			

Table 3.—Drillers' Logs of Selected Wells in Burnet County--Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BT-57-24-101--Continued			Well BT-57-24-202--Continued		
Blue shale	7	71	Soft sandy shale	10	300
Layers of limestone and shale	164	235	Broken formations	25	325
Dry sand	5	240	Green shale	2	327
Shale	16	256	Fine sand - little water	8	335
Coarse sand and water	11	267	Gray sandy shale	3	338
Shale	23	290	Water sand - rock ledges	22	360
Sand	6	296	Coarse water sand - crystal rock	10	370
Layers of sand and limestone	52	348	Green sandy shale	13	383
Limestone	47	395	Shell bed - crystal rock	2	385
Sand rock	45	440	Green shale - shells - sticky	5	390
Coarse sand	11	451	Light green sandstone	10	400
Gray shale	29	480	Coarse sand	2	402
Well BT-57-24-202			Green sandstone - crystal rock	31	433
Owner: Burnet County WCID No. 1 Driller: Layne Texas Co.			Hard sandstone	7	440
Top soil	1	1	Crystal rock with some shale	13	453
White limestone	16	17	Hard blue lime rock	4	457
Soft gray shale	3	20	Sticky green shale	12	469
Rock ledges, sand shale	32	52	Well BT-57-24-204		
Green sandy shale	7	59	Owner: City of Bertram Driller: Unknown		
Water sand, very fine	10	69	White limestone, water	33	33
Sand rock	1	70	White limestone	6	39
Shale rock ledges - 6 in. thick	8	78	White limestone and shale	40	79
Hard shell bed	3	81	Fine grain sand, water	11	90
Broken formation - shale rock	69	150	Shale, limestone	160	250
Sand shale	5	155	Gray limestone	73	323
Broken formation shale shell beds	70	225	Blue shale	20	343
Hard rock	7	232	Gray limestone	62	405
Sandy shale	5	237	Gray mud	5	410
Shell beds	7	244	Hard rock	5	415
Crystal rock (white)	16	260	Break	1	416
Shell and shale	15	275	Gray limestone	22	438
Hard rock	5	280	Gray limestone	9	447
Sticky shale	4	284	Fine grain water sand	3	450
Crystal rock	6	290			

Table 3.—Drillers' Logs of Selected Wells in Burnet County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BT-57-24-204—Continued			Well BT-57-24-204—Continued		
Dark gray limestone	10	460	Hard shale and rock	10	1,410
Water	4	464	Soft shale	17	1,427
Dark gray limestone	6	470	Hard shale	340	1,767
Shale, limestone	15	485	Schist (core showed quartzite)	628	2,395
Dark gray limestone	10	495			
Green shale	8	503	Well BT-58-01-501		
Shale and limestone	30	533	Owner: Ray Cowan		
Red bed	27	560	Driller: Central Texas Drilling Co., Inc.		
Brown limestone	8	568	Soil and alluvium	20	20
Gray limestone	37	605	Limestone (Glen Rose)	86	106
Tan colored	35	640	Sand (Hensell)	22	128
Red shale and limestone	10	650	Very hard limestone (Ellenberger or Cow Creek)	2	130
Dark limestone	4	654			
Shale caves badly	141	795	Well BT-58-01-502		
Hard shale	35	830	Owner: Ray Cowan		
Hard shale with soft spots	60	890	Driller: Central Texas Drilling Co., Inc.		
Sandy shale	15	905	Soil	5	5
Sandy rock	15	920	Clay and caliche	10	15
Lead soft and sticky	2	922	Loose caving gravel	6	21
Blue rock	3	925	Limestone and dolomite	55	76
Sticky shale	6	931	Limestone with breaks of fine sand	24	100
Boulders and shale	17	948	Limestone with 1 to 2 in. cavities	33	133
Shale	3	951			
Boulders and shale	5	956	Well BT-58-01-503		
Hard and soft shale	134	1,090	Owner: Ray Cowan		
Sandstone and shale	25	1,115	Driller: Central Texas Drilling Co., Inc.		
Shale	19	1,134	Soil	10	10
Hard shale	4	1,138	Gravel	15	25
Shale	12	1,150	Blue shale	9	34
Slate and shale	10	1,160	Lime	56	90
Shale	30	1,190	Broken limestone (water)	35	125
Slate and shale	10	1,200	Limestone	20	145
Shale and slate	61	1,261	Well BT-58-01-602		
Hard rock	13	1,274	Owner: W. C. Dillingham		
Shale and slate	46	1,320	Driller: Bur-Tex Oil Co.		
Hard rock	9	1,329	Surface soil	5	5
Sandy shale	21	1,350	Light gray lime	335	340
Hard sandy shale	50	1,400	Dark gray lime	5	345

Table 3.—Drillers' Logs of Selected Wells in Burnet County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BT-58-01-602—Continued			Well BT-58-01-602—Continued		
Gray water sand, contains water	10	355	Hard conglomerate lime, beds of large gravel	5	592
Light gray lime, shows oil asphalt	5	360	Hard brown and gray sand, contains water	8	600
Hard gray lime	40	400	Conglomerate of sandy lime, beds of large gravel	28	628
Lime and shale	60	460	Red mud	7	635
Green sandy shale	5	465	Dark gray shale	22	657
Gray lime	7	472	Hard gray sand (dry)	39	696
Glassy water sand had a thin streak of gray sand at 500 ft., shows oil	43	515	Hard black shale	14	710
Light gray lime	28	543	Hard gray sand, contains small amount water	16	726
Gray sand (dry)	5	548	Hard black shale, small showing oil at 757 ft	345	1,071
Gray lime	12	560			
Red sandy shale, shows rainbows	27	587			

CALLAHAN COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: E, Electric.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
BX-30-46-901	Frank Ausanka, et al.	Caldwell No. 2	1954	2,781	2,194	E
54-301	Star Oil Co.	Caldwell No. A-1	1949	1,808	2,037	E
55-301	Sunray Oil Co.	C. E. Aspin No. 1	1948	4,151	1,994	E
601	Irvin Producing Co. and Western Natural Gas Co.	Ben Lester No. 1	1960	2,850	1,793	E
701	Harding Brothers	Cornelouis No. 1	1954	1,790	1,797	E

CALLAHAN COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well BX-30-55-502			Well BX-30-55-913		
Owner: W.A. Gill Driller: J and L Drilling Co.			Owner: City of Cross Plains Driller: J and L Drilling Co.		
Sill	2	2	Caliche and gravel	15	15
Pack sand	18	20	Yellow sandy clay	25	40
Sand water	20	40	Sand with some gravel	20	60
Shale	8	48	Red shale	10	70

COMANCHE COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: D, Drillers'; E, Electric; R, Radioactive; S, Sample.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
DY-31-57-607	Lone Star Gas Co.	J. C. Watkins No. 1	1940	2,796	1,590	S
41-02-602	Frank Gilliam	C. C. Ross No. 1	1950	2,589	1,490	E
604	John W. Bartlett	D. E. Steel No. 1	1955	2,714	1,480	R
03-501	Orville H. Parker	Ferrill No. 1	1949	2,870	1,508	E
11-201	Texas Crude Oil	Dudley Ranch No. 1	1950	2,775	1,704	S
301	Sun Oil Co.	E. E. Bryson No. 1	1929	3,135	1,520	D
411	Lloyd N. Smith	Gail Dudley No. 1	1950	2,684	1,834	E
802	Humble Oil and Refining Co.	J. M. Foreman No. 1	1955	4,380	1,667	E
901	Jack C. Staley, et al.	R. M. Ratlife No. 1	1955	3,005	1,654	E
13-501	J. J. Lynn	R. E. Manning No. 1	1949	4,002	1,176	E
14-401	Humble Oil and Refining Co.	Macksville Oil Unit	1956	4,300	1,126	E
19-301	United North and South Development Co.	J. B. Aldridge, et al. No. 1	1950	4,913	1,680	E
20-201	Humble Oil and Refining Co.	Mrs. Frankie W. Durham No. 1	1957	3,319	1,445	E
21-301	Placid Oil Co.	Pettit No. 1	1942	3,276	1,445	E

COMANCHE COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-51-308			Well DY-31-51-604—Continued		
Owner: Robert C. Atchison Driller: Continental Water Well Drilling Co.			Sand and gravel	19	44
Sand - sandy clay	20	20	Yellow clay	2	46
Sand - sandstone	40	60	Pink clay	10	56
Blow - sand	50	110	Blue shale	2	58
Sand - sandstone	32	142	Well DY-31-51-605		
Sandstone	18	160	Owner: R. A. Barnett Driller: N. L. Box Drilling Contractor		
Well DY-31-51-309			Soil	3	3
Owner: Robert C. Atchison Driller: Continental Water Well Drilling Co.			Sand	7	10
Sand	15	15	Sandstone	5	15
Sandy clay	21	36	Sand	12	27
Sand	74	110	Water gravel	12	39
Sand - gravel	5	115	Sand and clay	14	53
Sand - sandstone	67	182	Gravel	18	71
Gray sandstone	15	197	Yellow clay	3	74
Blue shale	3	200	Blue shale	1	75
Well DY-31-51-603			Well DY-31-51-608		
Owner: George Warren Driller: N. L. Box Drilling Contractor			Owner: Mrs. Rainey Driller: Robert Lee-Bob-Barnhill		
Soil	3	3	Topsoil - sand	2	2
Yellow clay	3	6	Shale, yellow	31	33
Sand	9	15	Sand rock - white	2	35
Gravel and clay	30	45	Shale, yellow	7	42
Yellow clay	10	55	Sand, soft white, water	22	64
Blue shale	1	56	Red shale	11	75
Well DY-31-51-604			Coarse sand (water)	16	91
Owner: George Warren Driller: N. L. Box Drilling Contractor			Yellow shale	14	105
Soil	3	3	Well DY-31-51-609		
Sand and clay	16	19	Owner: R. A. Barnett Driller: N. L. Box Drilling Contractor		
Gravel	4	23	Soil	5	5
Lime	2	25	Sand - water (10 gpm)	7	12
			Lime	2	14

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-51-609—Continued			Well DY-31-61-612—Continued		
Sand and gravel	14	28	Sand and gravel	25	38
Lime	8	36	Blue and yellow clay	7	45
Broken lime and gravel	16	52			
Gravel	14	66	Well DY-31-51-613		
Tight coarse sand	6	72	Owner: Arnold Butler Driller: Continental Water Well Drilling Co.		
Blue shale	6	78	Sand	3	3
			Clay	9	12
Well DY-31-51-610					
Owner: R. A. Barnett Driller: N. L. Box Drilling Contractor			Sand - gravel - (water)	8	20
			Sandstone	2	22
Sand	10	10	Clay	2	24
Water sand	10	20	Sandstone - clay stringers	4	28
Tight gravel	4	24	Clay	10	38
Lime	2	26	Sandstone	26	64
Tight gravel	8	34	Blue shale	2	66
Tight sand	4	38	Sandstone	22	88
Tight sand and gravel	22	60	Blue shale	12	100
Blue shale	3	63			
			Well DY-31-51-805		
			Owner: Ray Williams Driller: Sam H. Smith Drilling Contractor		
			Sand	3	3
Sand	6	6	Clay	7	10
White sand - little water	6	12	Sand and gravel	2	12
Lime and sand	12	24	Sandy clay	83	95
Gravel	2	26	Conglomerate	65	160
Tight sand and gravel	17	43	Clay	10	170
Tight sand and gravel	11	54			
Sand and gravel	16	70	Well DY-31-51-806		
Blue shale	5	75	Owner: J. B. Hodges Driller: M. and L. Drilling Co.		
			Red sandy clay	15	15
Well DY-31-51-612			Yellow clay	25	40
Owner: George Warren Driller: N. L. Box Drilling Contractor			Water sand	15	55
Soil	2	2	Sand and shale	10	65
Clay	6	8	Clay	5	70
Sandstone	5	13	Blue shale	58	128

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-51-806—Continued			Well DY-31-52-405—Continued		
Sand	12	140	Sand - water - 30 gpm	8	15
Broken sand	10	150	Lime	1	16
Sand	15	165	Red shale	4	20
Blue shale	10	175	Sand - water - 20 gpm	25	45
Blue gumbo shale	55	230	Small gravel - 35 gpm	7	52
Black shale	6	236	Blue shale	6	58
Sandy lime	14	250			
Shale	1	251	Well DY-31-52-406		
			Owner: Herman Gilder Driller: Lightfoot and McCrum		
Well DY-31-52-403					
			Owner: Cedric Bettis Driller: A. L. Varner		
			Soil	1	1
			Yellow and blue clay	16	17
Sand	3	3	Lime	5	22
Clay	12	15	Red clay	14	36
Sand and gravel	5	20	Sand and gravel (water)	10	46
Red bed	32	52	Lime	4	50
Lime	11	63	Sand and gravel (water)	10	60
Water sand and gravel	5	68	Sandy lime	2	62
Lime	4	72	Sandy and gravel (water)	5	67
Sand and gravel	8	80	Red clay	3	70
Lime	5	85	Yellow and blue clay	10	80
Yellow clay	10	95			
			Well DY-31-52-407		
			Owner: Herman Gilder Driller: Ardean Kimmell Irrigation Service		
			Surface	6	6
Sand	3	3	Sandy shale	12	18
Clay	22	25	Sand and gravel	17	35
Sand	20	45	Sand	13	48
Sand and gravel	15	60	Hard sand	8	56
Yellow clay	9	69	Gravel	11	67
Blue shale	1	70	Conglomerate	11	78
Well DY-31-52-405			Well DY-31-52-408		
			Owner: N. B. Gilbreath Driller: Lightfoot and McCrum		
Soil	3	3	Sandy soil	2	2
Red and blue clay	4	7	Blue sand, clay	18	20

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-52-408—Continued			Well DY-31-52-501		
Water sand	4	24	Owner: N. L. Box Driller: N. L. Box Drilling Contractor		
Sandy lime	2	26	Soil and clay	10	10
Red clay	2	28	Red bed	20	30
Sandy blue clay	6	34	Sand	12	42
Red bed	14	48	Water gravel	6	48
Lime	2	50	Lime	2	50
Blue sandy clay	10	60	Hard lime	3	53
Gravel (water)	11	71	Broken lime	5	58
Yellow clay	9	80	Water gravel	6	64
Well DY-31-52-409			Yellow clay	6	70
Owner: N. B. Gilbreath Driller: Lightfoot and McCrum			Sandstone	7	77
Sand	1	1	Yellow clay	13	90
Red and blue clay	17	18	Well DY-31-52-502		
Water sand	7	25	Owner: Clarence Craig Driller: N. L. Box Drilling Contractor		
Lime	2	27	Sand and sandstone	11	11
Red sandy clay	8	35	Water sand	3	14
Red bed	5	40	Red clay	16	30
Sand	5	45	Sand and clay	12	42
Red bed	10	55	Sand and white clay	13	55
Blue and white clay	5	60	Tight sand (water)	17	72
Sand and gravel (water)	13	73	Water gravel	13	85
Yellow and blue clay	11	84	Yellow clay	6	91
Well DY-31-52-410			Well DY-31-52-503		
Owner: N. B. Gilbreath Driller: Lightfoot and McCrum			Owner: N. L. Box Driller: N. L. Box Drilling Contractor		
Red and blue clay	7	7	Sand and clay	20	20
Blue sandy clay	8	15	Water sand	3	23
Lime	2	17	Red bed	17	40
Sandy clay (red)	10	27	Sand	5	45
Red clay	8	35	Sand, clay, and lime	15	60
Sand	7	42	Sand, gravel, and lime	20	80
Red bed	13	55	Yellow and blue clay	3	83
Sand and gravel (water)	16	71			
Yellow clay	9	80			

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-52-504			Well DY-31-52-507—Continued		
Owner: Clyde Setzler Driller: N. L. Box Drilling Contractor			Sandy clay	2	61
Red clay	32	32	Sand and gravel (water)	3	64
Sand, dry	5	37	Clay	1	65
Water sand and gravel	27	64	Well DY-31-52-605		
Yellow clay	10	74	Owner: B. E. Hanson Driller: J. T. Carson		
Well DY-31-52-506			Soil	5	5
Owner: George Guest Driller: Alford James Price			Dry sand	30	35
Topsoil	4	4	Water sand	35	70
Red clay	29	33	Clay	18	88
Sand	10	43	Well DY-31-52-606		
Soapstone	3	46	Owner: B. E. Hanson Driller: Lightfoot and McCrum		
Sand and gravel (water)	6	52	Red clay	15	15
Yellow clay	3	55	Sandy clay	10	25
Red shale	6	61	Sand (hard)	5	30
Yellow clay	9	70	Lime	3	33
Sandy oil shale	3	73	Sand	5	38
Blue shale	14	87	Water sand	40	78
Well DY-31-52-507			Yellow clay	4	82
Owner: George Guest Driller: Alford James Price			Blue shale	22	104
Topsoil	2	2	Well DY-31-52-607		
Sandy clay	5	7	Owner: B. E. Hanson Driller: J. T. Carson		
Dry sand	3	10	Soil	2	2
Rock	1	11	Clay	10	12
Yellow clay	5	16	Sandy shale	10	22
Red clay, shale	5	21	Lime	5	27
Dry sand	3	24	Sand	13	40
Yellow clay	3	27	Lime	5	45
Rock	2	29	Water sand	40	85
Red shale	5	34	Clay and shale	10	95
Dry sand	5	39	Well DY-31-52-609		
Sand and gravel (water)	7	46	Owner: C. H. George Driller: Robert Lee-Bob-Barnhill		
Soapstone	2	48	Sand and gravel, water	28	28
Red shale	5	53	Hard sand	2	30
Soapstone	3	56	Gravel, water	13	43
Sand (water)	3	59			

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-52-609—Continued			Well DY-31-52-612—Continued		
Red shale	11	54	Brown shale	22	58
Sand and shale	9	63	Light blue shale	7	65
Sand	24	87	Sand	8	73
Red shale	3	90	Gravel	9	82
Gravel	8	98	Brown shale	10	92
Hard sand	8	106			
Shale	25	131			
			Well DY-31-52-613		
			Owner: L. V. Park		
			Driller: Ardean Kimmell Irrigation Service		
Well DY-31-52-610					
Owner: B. E. Hanson			Sand	4	4
Driller: Lightfoot and McCrum			Conglomerate	5	9
Red clay	15	15	Sand	36	45
Sandy clay	10	25	Shale	4	49
Sand - hard	5	30	Hard gravel	4	53
Lime	3	33	Shale	17	70
Sand	5	38	Sand	22	92
Water sand	40	78	Brown shale	4	96
Yellow clay	4	82	Sand	9	105
Blue shale	22	104	Hard sand	3	108
			Light blue shale	8	116
Well DY-31-52-611			Well DY-31-52-701		
Owner: L. V. Park			Owner: R. Robinson		
Driller: Ardean Kimmell Irrigation Service			Driller: N. L. Box Drilling Contractor		
Sand	2	2	Clay, sand, and sandstone	21	21
Brown shale	4	6	Red bed	26	47
Sand	9	15	Sand - little water	7	54
Gravel	20	35	Sand and gravel	13	67
Sand	10	45			
Gravel	11	56			
Hard gravel	4	60	Well DY-31-52-704		
Brown shale	10	70	Owner: Claude DeVoll		
Blue shale	7	77	Driller: Lightfoot and McCrum		
			Red clay	15	15
			Blue sandy clay	10	25
Well DY-31-52-612			Sandy lime	1	26
Owner: L. V. Park			Blue clay	4	30
Driller: Ardean Kimmell Irrigation Service			Lime	2	32
Surface	5	5	Sand	15	47
Brown shale	5	10	Sand (water)	10	57
Gravel	8	18	Sandy lime	4	61
Sand	9	27	Gravel (water)	11	72
Gravel	9	36	Blue clay	8	80

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-52-705			Well DY-31-52-708—Continued		
Owner: Claude DeVoll Driller: Lightfoot and McCrum			Sand	11	64
Red clay	20	20	Sand, rock	2	66
Sandy clay (red)	4	24	Sand	3	69
Lime	1	25	Gravel	9	78
Sand	18	43	Shale	7	85
Lime	1	44	Well DY-31-52-709		
Sand (water)	16	60	Owner: Dale George Driller: Lightfoot and McCrum		
Lime	1	61	Sand	21	21
Red sandy clay	10	71	Red clay	11	32
Sand and gravel (water)	36	107	White sand	13	45
Yellow clay	9	116	Hard sand	4	49
Blue clay	3	119	Sand	11	60
Well DY-31-52-707			Red clay	3	63
Owner: Dale George Driller: Robert Lee-Bob-Barnhill			Gravel and sand (water)	16	79
Soil	2	2	Sand (water)	6	85
Gravel	4	6	Sandy lime	12	97
Shale	6	12	Blue sandy clay	6	103
Sand and gravel, water at 26 ft	18	30	Blue shale	7	110
Sand	22	52	Well DY-31-52-801		
Sand, rock	1	53	Owner: Cedric Bettis Driller: N. L. Box Drilling Contractor		
Sand, soft	14	67	Sand and clay	26	26
Hard sand	1	68	Water sand	5	31
Gravel	7	75	Red bed	10	41
Shale	7	82	Sand and clay	9	50
Well DY-31-52-708			Sand	6	56
Owner: Dale George Driller: Robert Lee-Bob-Barnhill			Coarse sand	9	65
Soil	2	2	Coarse sand	17	82
Gravel	5	7	Red bed	2	84
Sandy shale	5	12	Lime and gravel	9	93
White shale	16	28	Coarse sand	8	101
Sand and water	7	35	Yellow clay	6	107
Red sand	9	44	Well DY-31-52-802		
Sand, red - oil	1	45	Owner: E. Joiner Driller: N. L. Box Drilling Contractor		
Sand	7	52	Sand and clay	12	12
Sand, rock	1	53	Sand and gravel, dry	8	20

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-52-806—Continued			Well DY-31-52-906—Continued		
Clay	5	109	Brown shale	7	80
Gravel	14	123	Sand and gravel	23	103
Gravel	17	140	Sand	11	114
Clay	6	146			
Well DY-31-52-901			Well DY-31-52-907		
Owner: R. L. George Driller: N. L. Box Drilling Contractor			Owner: Ray Joiner Driller: Johnny Weir Drilling		
			Soil	5	5
Sand and gravel	18	18	Gravel	15	20
Water, sand and gravel	16	34	White clay	10	30
White clay	5	39	Gray sand	10	40
Red bed	8	47	Lime rock	10	50
Lime, sand, and white clay	17	64	Red clay	20	70
Water sand	5	69	Lime	5	75
Coarse sand	4	73	Gravel	9	84
White clay	3	76	Lime	6	90
Coarse sand	6	82	Red sand and gravel	5	95
Broken lime	15	97	Lime, very hard	5	100
Purple clay	5	102	Gravel	3	103
			Clay	7	110
Well DY-31-52-903			Well DY-31-52-908		
Owner: R. L. George Driller: N. L. Box Drilling Contractor			Owner: Ray Joiner Driller: Johnny Weir Drilling		
Sand and gravel	16	16	Soil	5	5
Yellow clay	14	30	Sand and gravel	10	15
Light blue clay	16	46	Lime	8	23
Water sand	20	66	Sand	12	35
Sand and gravel	11	77	Lime	25	60
Water sand	16	93	Red clay	25	85
Blue shale	8	101	Gravel	9	94
			Hard lime	4	98
Well DY-31-52-906			Well DY-31-52-908		
Owner: Alvis Kimmell Driller: Ardean Kimmell Irrigation Service			Owner: Ray Joiner Driller: Johnny Weir Drilling		
Sand	2	2	Gravel	2	100
Brown shale	8	10	Yellow and blue clay	11	111
Sand and gravel	17	27			
Sand	8	35	Well DY-31-53-407		
Shale, gray	22	57	Owner: Ardean Kimmell Driller: N. L. Box Drilling Contractor		
Sand	16	73	Clay and gravel	14	14
			Sand and clay	4	18
			Red bed	4	22

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-53-407—Continued			Well DY-31-53-410—Continued		
Sand and clay (little water)	5	27	Water sand - soft	35	65
Sand and gravel, 12 gpm	5	32	Hard sand	14	79
Sand and clay	12	44	Sand and gravel	6	85
Water sand and white clay	16	60	Brown shale	12	97
Water gravel (bailed 60 gpm)	21	81	Blue shale	2	99
Broken lime	11	92	Well DY-31-53-414		
Hard lime and gravel	4	96	Owner: Ardean Kimmell Driller: Ardean Kimmell Irrigation Service		
Hard broken sand	12	108	Surface	3	3
Hard sand	10	118	Red clay	3	6
Blue shale	2	120	Sand and gravel	19	25
Well DY-31-53-408			Sand and shale	10	35
Owner: Ardean Kimmell Driller: Ardean Kimmell Irrigation Service			Gravel	3	38
Sand and clay	28	28	Brown shale	17	55
Fine sand	2	30	Sand	37	92
Fine sand	30	60	Gravel	13	105
Medium sand - clay	12	72	Shale (blue)	10	115
Coarse sand and gravel	20	92	Well DY-31-53-701		
Well DY-31-53-409			Owner: James D. Gardner Driller: N. L. Box Drilling Contractor		
Owner: Alvis Kimmell Driller: Ardean Kimmell Irrigation Service			Sand, gravel, clay	30	30
Sand	2	2	Red and blue clay	8	38
Red clay	6	8	Sand and clay	5	43
Gravel	11	19	Sandstone and clay	24	67
Sand, rock	5	24	Broken lime	7	74
Red clay	6	30	Water sand and lime	13	87
Sand, hard	15	45	Gray lime	5	92
Sand, soft	40	85	Water gravel	5	97
Gravel	15	100	Lime	2	99
Shale	3	103	Gravel and blue clay	11	110
Well DY-31-53-410			Yellow and red clay	6	116
Owner: Ardean Kimmell Driller: Ardean Kimmell Irrigation Service			Well DY-31-53-702		
Surface	6	6	Owner: James D. Gardner Driller: N. L. Box Drilling Contractor		
Gravel	5	11	No record	93	93
Heavy sand	8	19	Lime and sand	7	100
Brown shale	11	30	Gravel	7	107
			Blue clay	4	111

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-53-702--Continued			Well DY-31-53-719—Continued		
Yellow and red clay	2	113	Lime	2	41
Yellow and blue clay	7	120	Sand and clay	19	60
Well DY-31-53-704			Water sand	19	79
Owner: James D. Gardner			Lime	2	81
Driller: N. L. Box Drilling Contractor			Hard sand, little gravel	4	85
Sand, clay, and gravel	18	18	Lime and gravel	6	91
Dry gravel	21	39	Lime and clay	7	98
Water gravel	2	41	Gravel	13	111
White clay	6	47	Lime	3	114
Broken lime	13	60	Yellow clay	4	118
Red bed	3	63	Well DY-31-53-720		
Red, blue shale and lime	22	85	Owner: Deryl Johnson		
Sand water	15	100	Driller: Lightfoot and McCrum		
Sand and clay	5	105	Soil	4	4
Broken lime	12	117	Sand and gravel	22	26
Sand and gravel	6	123	Lime	4	30
Lime	2	125	Red clay	15	45
Yellow clay	5	130	Sand and water gravel	12	57
Well DY-31-53-705			Lime	1	58
Owner: James D. Gardner			Water gravel	10	68
Driller: N. L. Box Drilling Contractor			Lime	1	69
Sand and clay	8	8	Water gravel	17	75
Sand and gravel, seep at 39 ft	31	39	Blue green clay	2	77
White clay and lime	16	55	Water sand and gravel	21	98
Red, blue shale and lime	29	84	Yellow and blue clay	18	116
Water sand	9	93	Well DY-31-53-721		
Blue clay	4	97	Owner: Dale Johnson		
Water gravel	24	121	Driller: Lightfoot and McCrum		
Yellow clay	5	126	Soil	1	1
Well DY-31-53-719			Clay (red)	2	3
Owner: James D. Gardner			Caliche	5	8
Driller: N. L. Box Drilling Contractor			Sandy clay, white	12	20
Sandy clay	6	6	Sand	5	25
Gravel and sand, little water	21	27	Sand and gravel (water)	15	40
Sand and clay	7	34	Red bed	11	51
Sand water	5	39	Sandy lime	1	52
			Sandy clay, white	8	60

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-53-721—Continued			Well DY-31-53-726		
Sand (water)	37	97	Owner: P. R. George		
Blue clay	8	105	Driller: N. L. Box Drilling Contractor		
Well DY-31-53-722			Soil and clay	10	10
Owner: Dale Johnson			Sand clay	5	15
Driller: Lightfoot and McCrum			Gravel	15	30
Sand and gravel	34	34	Red bed	3	33
Red clay	28	62	Blue clay	7	40
Sand and gravel (water)	14	76	Sand and water	10	50
Sandy lime	2	78	Sandstone, hard	7	57
Sand and gravel (water)	8	86	Sand and gravel	38	95
Blue green clay	2	88	Blue shale	7	102
Gravel (water)	17	105	Well DY-31-53-727		
Blue clay	7	112	Owner: P. R. George		
Well DY-31-53-724			Driller: N. L. Box Drilling Contractor		
Owner: Alvis Kimmell			Sand and clay	8	8
Driller: Ardean Kimmell Irrigation Service			Sandy clay	12	20
Surface	5	5	Gravel and sand - little water	10	30
Sand and gravel	15	20	Red bed	3	33
Sand	6	26	Gravel and clay	12	45
Brown shale	16	42	Sand and gravel	20	65
Conglomerate	5	47	Hard sandstone	13	78
Brown shale	11	58	Gravel and sand	17	95
Sand	15	73	Blue shale	7	102
Conglomerate	4	77	Well DY-31-53-728		
Gravel	8	85	Owner: William L. Owens		
Conglomerate	11	96	Driller: N. L. Box Drilling Contractor		
Well DY-31-53-725			Soil	1	1
Owner: Alvis Kimmell			Clay and gravel	15	16
Driller: Ardean Kimmell Irrigation Service			Sand and clay	6	22
Surface	5	5	Yellow clay	2	24
Gravel	10	15	Sand and clay	8	32
Yellow clay	5	20	Water sand	28	60
Brown shale	12	32	Gravel and clay	21	81
Sand	8	40	Purple clay	2	83
Brown shale	16	56	Well DY-31-53-729		
Sand	8	64	Owner: William L. Owens		
Hard gravel	10	74	Driller: N. L. Box Drilling Contractor		
Brown shale	6	80	Soil and clay	3	3
			Lime	2	5

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-53-729--Continued			Well DY-31-57-605--Continued		
Gravel and clay	7	12	Water sand	20	80
Sand (water at 20 ft)	13	25	Gravel	5	85
Gravel	7	32	White shale	6	91
Gravel and clay	31	63	Gravel	12	103
Purple clay	3	66	Gray lime	2	105
Well DY-31-53-730			Well DY-31-58-703		
Owner: Dale Johnson Driller: Lightfoot and McCrum			Owner: T. E. Simonton Driller: T. E. Simonton		
Soil	1	1	Surface soil, sand	5	5
Red clay	8	9	Shale	25	30
Sand and gravel	21	30	Sand	10	40
Water sand and gravel	5	35	Shale	10	50
Sand	11	46	Sand	16	66
Red bed	9	55	Gravel	2	68
Sand	29	84			
Blue green clay	1	85	Well DY-31-59-203		
Sand and gravel	18	103	Owner: Dean Pounds Driller: Carl A. Taylor		
Blue shale	7	110	Soil	15	15
Well DY-31-53-731			Sand rock	10	25
Owner: Deryl Johnson Driller: Lightfoot and McCrum			Sand and sand rock ledges	13	38
Soil	1	1	Sand rock	17	55
Sand	26	27	Conglomerate	20	75
Sandy lime	4	31	Well DY-31-59-204		
Red bed	9	40	Owner: Dean Pounds Driller: Carl A. Taylor		
Water sand and gravel	30	70	Soil	16	16
Blue green clay	2	72	Sand rock	9	25
Sand and gravel	16	88	Crushed lime, soft	15	40
Sandy lime	2	90	Sand rock	15	55
Sand and gravel	6	96	Conglomerate	20	75
Blue shale	6	102	Well DY-31-59-301		
Well DY-31-57-605			Owner: Tom Johnson Driller: N. L. Box Drilling Contractor		
Owner: Oscar White Driller: Windham and Michael			Sand	10	10
Surface soil	10	10	Water sand	2	12
Shale	4	14	Red bed	8	20
Sandy shale	8	22	Blue shale	109	129
Dry sand	38	60	Sandy lime	14	143

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-59-301—Continued			Well DY-31-59-307		
Blue shale	24	167	Owner: Tom Johnson Driller: Lightfoot and McCrum		
Water sand	46	213	Soil	2	2
Blue shale	6	219	Red and blue clay	13	15
Well DY-31-59-303			Lime	2	17
Owner: L. E. Farley Driller: Lightfoot and McCrum			Sand	2	19
Soil	2	2	Lime	1	20
Sand	6	8	Sand (water)	12	32
Sand (water)	2	10	Blue and yellow clay	73	105
Sand	12	22	Blue shale	22	127
Blue clay	88	110	Gray sandy lime	25	152
Blue shale	15	125	Blue shale	17	169
Lime	1	126	Water sand (hard) water	28	197
Blue shale	64	190	Blue shale	8	205
Well DY-31-59-305			Well DY-31-59-601		
Owner: Wendell Pounds Driller: Carl A. Taylor			Owner: Herbert W. Buchanan Driller: N. L. Box Drilling Contractor		
Soil	3	3	Soil	4	4
Sandy clay	22	25	Purple clay	40	44
Sand rock	20	45	Lime, trace of water	1	45
Sand rock, hard	30	75	Blue clay	7	52
Sand rock, shells	10	85	Lime	12	64
Sand rock	5	90	Water sand	23	87
Sand rock, soft	5	95	Blue clay	8	95
Shale	5	100	Well DY-31-60-201		
Well DY-31-59-306			Owner: C. W. Crawford Driller: N. L. Box Drilling Contractor		
Owner: Wendell Pounds Driller: Carl A. Taylor			Sand and clay	21	21
Soil	3	3	Broken lime	4	25
Sand rock	52	55	Sand and clay	17	42
Hard sand rock	15	70	Lime	3	45
Soft sand rock	10	80	Sandy clay	5	50
Hard sand rock	10	90	Water gravel	5	55
Soft sand rock	5	95	Lime	3	58
Shale	5	100	Gravel	3	61
			Red clay	2	63
			Water gravel	7	70
			Yellow clay	4	74

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-60-202			Well DY-31-60-204—Continued		
Owner: C. W. Crawford Driller: N. L. Box Drilling Contractor			Clean sand and fine black gravel	13	78
Sand and clay	23	23	Rock	1	79
Lime	2	25	Coarse sand and some large gravel	2.5	81.5
Sand and clay	10	35	Yellow clay	2.5	84
Sand (little water)	17	52	Gray clay	1	85
Lime	6	58			
Broken lime	3	61	Well DY-31-60-206		
Water gravel	9	70	Owner: Bill Dendy Driller: N. L. Box Drilling Contractor		
Yellow clay	4	74	Clay and sand and gravel	30	30
Well DY-31-60-203			Dry gravel	15	45
Owner: L. M. Richman Driller: L. M. Richman			Water sand and gravel	17	62
Pack sand, soft sand, only small seep at 50 ft	50	50	Lime	2	64
Red clay	18	68	Red bed	7	71
Sand with 1 gpm water	3	71	Well DY-31-60-213		
Hard rock, 2 ft red rock	4	75	Owner: Bill Wilkerson Driller: N. L. Box Drilling Contractor		
Sand and gravel (6 gpm)	5	80	Clay	6	6
Hard rock	1	81	Sand and clay	16	22
Coarse sand, more water	5	86	Lime	1	23
Hard rock	1	87	Water sand	12	35
Sand and gravel	7.5	94.5	Lime	2	37
Rock	1	95.5	Broken lime and sand	25	62
Sand and gravel	7	102.5	Red bed	10	72
Rock	1.5	104	Water gravel	19	91
Yellow clay, brown clay to blue clay	11	115	Yellow clay	7	98
Well DY-31-60-204			Well DY-31-60-214		
Owner: L. M. Richman Driller: L. M. Richman			Owner: N. L. Box Driller: N. L. Box Drilling Contractor		
Soft sand rock	41	41	Clay	12	12
Hard rock	5	46	Sand	14	26
Gray clay	2	48	Broken lime	3	29
Fine white sand	6	54	Red bed	13	42
White sand, 2 in. rock	1	55	Sand and sandstone (water)	7	49
Rock	4	59	Sand	6	55
Brown sand and fine gravel	1	60	Sand and gravel	12	67
No record	5	65	Sandy clay	3	70
			Lime	1	71

Table 3.--Drillers' Logs of Selected Wells in Comanche County--Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-60-214--Continued			Well DY-31-60-218--Continued		
Sand and small gravel	16	87	Clay - sandy, silty, red, gray and yellow	3.5	46
Purple clay	13	100	Sand - fine to medium grain, thin clay lenses present, loose to consolidated, gray	9	55
Well DY-31-60-215			Sand - fine to coarse grain, thin sandstone lenses present, loose to consolidated, poor sorting, gray		
Owner: N. L. Box Driller: N. L. Box Drilling Contractor					
Soil	1	1		9	64
Clay	4	5	Clay - silty, green	2	66
Broken lime	9	14	Sand - see sand (64 ft)	5	71
Sand and clay	6	20	Sandstone - fine to very coarse grain, pebbly, poor sorting, gray	3	74
Sand (water)	11	31			
Red bed	13	44	Sand - fine to very coarse grain, pebbly, poor sorting, gray	2	76
Sand	21	65			
Gravel	29	94	Conglomerate - see conglomerate (15 ft)	.5	76.5
Blue shale	6	100	Clay - sandy, silty, gray to green	1.5	78
Well DY-31-60-218			Sandstone - fine to coarse grain pebbly well cemented, poor sorting, gray		
Owner: N. L. Box Driller: Texas Water Development Board			1		
Sand - fine to medium grain, silty, clayey, brown and yellow			3	3	79
Sand - fine to coarse grain, pebbly, brown and red			3	6	79.33
Sand - see sand (6 ft) red			2	8	79.5
Conglomerate - pebble size, sandy, well to poorly cemented, multi-colored, white, pink, black, mineral composition - quartz varieties (rose and smokey quartz, and chert)			7	15	80
Sandstone - fine grain, poorly cemented, yellow			1	16	82
Conglomerate - see conglomerate (15 ft)			2	18	83
Sand - fine to medium grain, clayey gray and yellow			14	32	86
Sandstone - fine to medium grain, calcareous cement, well cemented, gray			1	33	88
Clay - sandy, silty, red and gray			4	37	90
Sandstone - fine grain, gray			2	39	93
Clay - sandy, silty, red and gray			3	42	95
Sandstone - see sandstone (39 ft)			.5	42.5	96.5
					97
					101

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-60-303			Well DY-31-60-325—Continued		
Owner: Fred Cuze			Gravel	16	74
Driller: N. L. Box Drilling Contractor			Yellow clay	4	78
Sand and clay	17	17	Gravel	7	85
Shells and sand, little water	8	25	Yellow clay	9	94
Red clay	16	41	Well DY-31-60-326		
Dry sand	5	46	Owner: J. J. Mathis		
Tight sand, white	3	49	Driller: Ardean Kimmell Irrigation Service		
Broken lime	9	58	Surface	4	4
Red and blue clay	6	64	Sand	7	11
Yellow clay	17	81	Brown shale	14	25
Red bed	8	89	Sand	38	63
Hard lime	10	99	Gravel	14	77
Blue shale and shells	11	110	Brown shale	10	87
Well DY-31-60-305			Well DY-31-60-327		
Owner: City of DeLeon			Owner: J. J. Mathis		
Driller: Unknown			Driller: Ardean Kimmell Irrigation Service		
Sand and gravel	2	2	Surface	4	4
Clay and gravel	10	12	Brown shale	20	24
Packed sand and clay	14	26	Sand	31	55
White sand rock	3	29	Gravel	20	75
Packed sand	20	49	Brown shale	11	86
Sand rock	3	52	Well DY-31-60-328		
Red bed, clay, and shale	12	64	Owner: J. J. Mathis		
Packed sand	8	72	Driller: Ardean Kimmell Irrigation Service		
Concrete rock	5	77	Surface	4	4
Sand and gravel	4	81	Yellow clay	8	12
Blue shale	19	100	Sand	23	35
Blue sand rock	4	104	Gravel	29	64
Blue shale	30	134	Sand and gravel	6	70
Blue sand and rock	12	146	Brown shale	10	80
Sandy shale and blue rock	32	178	Well DY-31-60-401		
Well DY-31-60-325			Owner: O. G. Gilchrist		
Owner: J. J. Mathis			Driller: N. L. Box Drilling Contractor		
Driller: Ardean Kimmell Irrigation Service			Sand and clay	9	9
Surface	5	5	Sand (little water at 20 ft)	11	20
Sand	10	15	Sand and limestone	6	26
Brown shale	17	32	Red clay	16	42
Conglomerata	14	46	Blue clay	2	44
Sand	12	58	Yellow clay	11	55

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-60-501			Well DY-31-60-603—Continued		
Owner: Billy Gray Driller: N. L. Box Drilling Contractor			Sand and gravel	10	55
Soil	4	4	Gravel	13	68
Sand and clay	15	19	Brown shale	10	78
Sand and gravel	7	26	Well DY-31-60-604		
Lime and gravel	31	57	Owner: Fred Williams Driller: Edwin Davis and Iredell Drilling		
Clay	3	60	Red bed - red shale	20	20
Sand and gravel	19	79	Sand, very fine with streaks of sandy shale	20	40
Blue shale	6	85	Sand, very fine with increased sandy shale	5	45
Well DY-31-60-601			Sand, very fine - some shale	5	50
Owner: Elmon Kerby Driller: Ardean Kimmell Irrigation Service			Sand and small gravel	5	55
Surface	6	6	Sand and small gravel	5	60
Red - brown shale	18	24	Sand and red shale	5	65
Soft sand	6	30	Sand	5	70
Conglomerate	6	36	Sandy shale	5	75
Sand	14	50	Sand - sandy shale - some gravel	5	80
Gravel	24	74	Sand and gravel	5	85
Brown shale	19	93	Sand and increase gravel	5	90
Yellow clay	30	123	Gravel - pick up first blue shale	5	95
Blue shale	1	124	Blue - red brown shale	5	100
Well DY-31-60-602			Red - brown shale	20	120
Owner: Elmon Kerby Driller: Ardean Kimmell Irrigation Service			Well DY-31-60-605		
Surface	5	5	Owner: Tommy Taylor Driller: Smith and Wolf Drilling Co.		
Gravel	7	12	Topsoil	3	3
Brown shale	13	25	Gray clay	7	10
Sand	8	33	Sandy shale	12	22
Brown shale	9	42	Sand	19	41
Sand	8	50	Rock	2	43
Sand and gravel	14	64	Water sand	30	73
Yellow clay	4	68	Clay	7	80
Brown shale	7	75	Well DY-31-60-606		
Well DY-31-60-603			Owner: Tommy Taylor Driller: Smith and Wolf Drilling Co.		
Owner: Elmon Kerby Driller: Ardean Kimmell Irrigation Service			Surface	6	6
Surface	5	5	Gray clay	6	12
Brown shale	30	35			
Sand	10	45			

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-60-606—Continued			Well DY-31-60-805		
Rock	2	14	Owner: Gayle McGinnis		
Blue clay	3	17	Driller: N. L. Box Drilling Contractor		
Rock	3	20	No record	13	13
Red bed	11	31	Coarse gravel	16	29
Sandy shale	27	58	Fine water sand	9	38
Water sand	24	82	Blue clay	1	39
Gray clay	8	90	Well DY-31-61-103		
Well DY-31-60-607			Owner: Robert Hodges		
Owner: Tommy Taylor			Driller: N. L. Box Drilling Contractor		
Driller: Smith and Wolf Drilling Co.			Sand and clay	28	28
Red clay	8	8	Dry gravel	8	36
Brown sandy clay	17	25	Clay	6	42
Rock	9	34	Lime	1	43
Red clay	21	55	Clay	5	48
Water sand	8	63	Water sand	5	53
Brown clay	7	70	Sand and white clay	17	70
Layer of rock	17	87	Water sand	6	76
Yellow clay	11	98	Tight coarse sand	6	82
Well DY-31-60-608			Tight gravel and sand	11	93
Owner: Tommy Taylor			Broken lime	5	98
Driller: Smith and Wolf Drilling Co.			Broken lime and clay	15	113
Red sandy clay	9	9	Purple clay	3	116
Rock	10	19	Well DY-31-61-104		
Gray sandy clay	12	31	Owner: Robert Hodges		
Gray sand	17	48	Driller: N. L. Box Drilling Contractor		
Rock	5	53	Soil	2	2
Clay	9	62	Red clay	4	6
Rock	12	74	Brown clay	9	15
Clay	6	80	Sand and clay	34	49
Yellow clay	5	85	Red bed	8	57
Well DY-31-60-801			Sand	10	67
Owner: Gayle McGinnis			Coarse sand	12	79
Driller: N. L. Box Drilling Contractor			Clay	7	86
Sand and clay	18	18	Well DY-31-61-105		
Gravel	7	25	Owner: Robert Hodges		
White clay	2	27	Driller: N. L. Box Drilling Contractor		
Gravel	7	34	Soil	2	2
Yellow clay	4	38	Clay	8	10

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-61-105—Continued			Well DY-31-61-108		
Sand and gravel, little water	18	28	Owner: Robert Hodges		
Sand and white clay	20	48	Driller: N. L. Box Drilling Contractor		
Gravel	17	65	Sand and clay (little water at 20 ft)	20	20
Sand and gravel	13	78	Sand - increase in water at 30 ft	32	52
Yellow clay	12	90	Gravel and sand - water	23	75
Sandstone	3	93	Yellow and blue clay	8	83
Mixed clay	90	183	Well DY-31-61-109		
Sandy shale	2	185	Owner: Robert Hodges		
Blue shale	2	187	Driller: N. L. Box Drilling Contractor		
Well DY-31-61-106			Soil and clay	8	8
Owner: Robert Hodges			Sandy clay	7	15
Driller: N. L. Box Drilling Contractor			Dry sand	11	26
Soil	2	2	Hard sand	4	30
Red clay	11	13	Sandy clay and gravel	7	37
Gravel	2	15	Hard sand	3	40
White clay	8	23	Water sand and gravel	47	87
Sand and clay	21	44	Blue shale	10	97
Water sand	11	55	Well DY-31-61-110		
Sand and clay	7	62	Owner: Robert Hodges		
Sand	6	68	Driller: N. L. Box Drilling Contractor		
Sand and clay	7	75	Soil	2	2
Coarse sand	11	86	Clay	6	8
Yellow clay	6	92	Sand and clay	12	20
Well DY-31-61-107			Sand and gravel	15	35
Owner: Robert Hodges			Sand and gravel - water	15	50
Driller: N. L. Box Drilling Contractor			Hard sand	10	60
Sand and clay	8	8	Sand and gravel	32	92
Dry gravel	7	15	Blue shale	8	100
Clay	2	17	Well DY-31-61-111		
Sand, little water	3	20	Owner: Robert Hodges		
Gravel	17	37	Driller: N. L. Box Drilling Contractor		
Sand and gravel	13	50	Soil and clay	10	10
Sand	6	56	Sandy clay	15	25
Sand and gravel	5	61	Dry sand and gravel	20	45
Sand	4	65	Sand water	10	55
Tight sand	8	73	Gravel and sand	43	98
Gravel	17	90	Blue shale	7	105
Clay	5	95			

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-61-112			Well DY-31-61-116		
Owner: Bill Wood Driller: Lightfoot and McCrum			Owner: Bill Wood Driller: Lightfoot and McCrum		
Red and blue clay	12	12	Red clay	6	6
Sandy clay	6	18	Red and blue sandy clay	14	20
Sand	7	25	White sand and clay	23	43
Sandy clay	5	30	Water sand and gravel	12	55
Sand	13	43	Yellow clay	14	69
Water sand and gravel	14	57			
Blue and yellow shale	8	65	Well DY-31-61-117		
			Owner: Bill Wood Driller: Lightfoot and McCrum		
Well DY-31-61-113			Red clay	5	5
Owner: Bill Wood Driller: Lightfoot and McCrum			Red and blue sandy clay	13	18
Red clay	4	4	Sand	13	31
Gravel	4	8	Sand (water)	5	36
Red clay	4	12	Sand and gravel (water)	14	50
Red and blue sandy clay	15	27	Yellow clay	11	61
Lime	1	28			
Red and blue sandy clay	12	40	Well DY-31-61-119		
Sand and gravel	17	57	Owner: Bill Wood Driller: Comco Drilling Co.		
Blue and yellow shale	9	66	Limestone	2	2
			Sand and clay stringers	23	25
Well DY-31-61-114			Sand	10	35
Owner: Bill Wood Driller: Lightfoot and McCrum			Gravel and sand	11	46
Red clay	12	12	Yellow shale	14	60
Red sandy clay	15	27			
Sand and clay	10	37	Well DY-31-61-120		
Lime	1	38	Owner: P. R. George Driller: N. L. Box Drilling Contractor		
Water sand and gravel	16	54	Soil and clay	10	10
Yellow and blue shale	9	63	Sand and clay (little water)	40	50
			Hard sand	10	60
Well DY-31-61-115			Sand and gravel	34	94
Owner: Bill Wood Driller: Lightfoot and McCrum			Blue shale	6	100
Red clay	10	10			
Red and blue sandy clay	15	25	Well DY-31-61-201		
White sandy clay	15	40	Owner: George Caraway Driller: N. L. Box Drilling Contractor		
Sand	5	45	Clay and sand	22	22
Sand and marl (water)	10	55	Dry sand and gravel	21	43
Yellow clay	12	67	Water sand and gravel	6	49

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-61-201—Continued			Well DY-31-61-706—Continued		
White clay	2	51	Sand and gravel	8	28
Water gravel	6	57	Yellow clay	11	39
Clay	4	61	Fine sand	6	45
Well DY-31-61-405			Shale and rock	6	51
Owner: Humble Pipeline Co.			Sand streaks	21	72
Driller: N. L. Box Drilling Contractor			Clay streaks	24	96
Surface soil	1	1	Rock	2	98
Red clay	1	2	Yellow sand	4	102
Gravel	4	6	Sand streaks	14	116
Sandy clay	10	16	Rock	2	118
Hard, sandy lime	2	18	Coarse sand	17	135
Clay	8	26	Yellow clay and shale	5	140
Sand, small amount water 36 to 41 ft (2 gpm)	10	36	Well DY-31-61-801		
Broken lime	5	41	Owner: E. G. McKinnon		
Red clay	5	46	Driller: N. L. Box Drilling Contractor		
Sand and clay	12	58	Sand and clay	23	23
Fine grained white sand	6	64	Lime and sand	9	32
Coarse sand	17	81	Sand and clay	11	43
Gravel - water	22	103	White sand	17	60
Yellow clay	6	109	Sand, limy clay	23	83
Well DY-31-61-705			Red clay	10	93
Owner: Henry Van Terrell			Sand and clay	11	104
Driller: Lightfoot and McCrum			Gravel	4	108
Sandy clay	2	2	Yellow clay	2	110
Red clay	8	10	Gravel	5	115
Sand and sandy clay	35	45	Sandy lime	1	116
Sandy lime	5	50	Gravel	9	125
Sand	5	55	Yellow clay	2	127
Lime	2	57	Well DY-31-61-902		
Sand	11	68	Owner: Lee Campbell		
Water sand	12	80	Driller: J. T. Brown Water Well Driller		
Gravel	20	100	Brown soil	3	3
Blue and yellow clay	10	110	White clay	5	8
Well DY-31-61-706			Yellow clay	24	32
Owner: John H. Foley			White sand	8	40
Driller: Petit and Kight Driller Co.			Yellow sand	20	60
Sand rock	15	15	Red and green clay	8	68
Clay	5	20	Gray clay	7	75

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-31-61-902—Continued			Well DY-41-03-601—Continued		
Red clay	2	77	Sand, water	31	125
Green clay	13	90	Brown shale	25	150
White sand	20	110	Brown shale	40	190
White sand and gravel	35	145	Shale	8	198
Yellow sand and clay clods	15	160	Lime	4	202
White sand and gravel	15	175	Blue shale	63	265
Red and green clay	5	180	Lime	2	267
			Blue shale	13	280
Well DY-41-02-901					
Owner: D. C. Fry Driller: Harris Drilling Co.			Blue shale with sand	120	400
			Shale and sand, dry	32	432
Soil	3	3	Shale and sand, dry	32	464
Blue shale	61	64			
Well DY-41-03-903					
Dry sand and sandy shale	17	81	Owner: W. C. Chilton Driller: Hoff Irrigation Co.		
Water sand	21	102			
Sand rock	3	105	Surface soil	5	5
Water sand	3	108	Caliche	17	22
Blue shale	3	111	Red rock	6	28
			Red rock with sand	7	35
Well DY-41-03-201			Sandy shale	10	45
Owner: B. E. Hanson Driller: Comco Drilling Co.			Sand with water	48	93
Sand and sandy clay	35	35	Shale and brown, yellow lime	10	103
Sand and gravel (water)	15	50	Sandy shale	10	113
Shale	20	70			
Sand (water)	20	90	Well DY-41-04-501		
Shale	11	101	Owner: Elton McDonald Driller: Hoff Irrigation Co.		
Well DY-41-03-601			Soil, red bed, caliche	17	17
Owner: L. L. Hart Driller: Watt Foster			Sand rock	7	24
			Shale	4	28
Soil	5	5	Sand rock	11	39
Light shale	20	25	Sandy shale	6	45
Red shale	30	55	Colored gravel	5	50
Sand	9	64	Water	10	60
Red shale	8	72	Shale	4	64
Sand, small amount water	1	73			
Red shale	7	80	Well DY-41-04-502		
Gravel, water	13	93	Owner: Elton McDonald Driller: Jack Leonard Drilling Co.		
Lime	1	94	Sand	22	22
			Lime	2	24

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-04-502—Continued			Well DY-41-04-505—Continued		
Yellow clay	4	28	White sandy shale	13	57
Lime	3	31	White water sand	5	62
Sand with shale streaks	29	60	Yellow sandrock	12	74
Sand with small gravel (water)	11	71	Yellow sandy shale	16	90
Sand with shale streaks	25	96	White sandy shale	6	96
Lime	1	97	Sand and gravel	12	108
Water sand	5	102	Yellow shale	6	114
Water gravel	8	110	Well DY-41-04-506		
Yellow clay	6	116	Owner: R. H. Skurlock Driller: Harris Drilling Co.		
Well DY-41-04-504			White sandy shale	18	18
Owner: Lloyd Biggs Driller: Pickett Drilling Co.			Brown water sand	7	25
Top, sand	3	3	Rock	2	27
Sandy clay	17	20	Red sandy shale and red bed	13	40
Clay	10	30	Water sand	5	45
Sand	10	40	White sandy shale	15	60
Red shale	2	42	White water sand	5	65
Sand rock	4	46	Yellow sand rock	10	75
Red clay	14	60	Yellow sandy shale	15	90
Sand and small gravel, water	18	78	White sandy shale	6	96
Sand rock	2	80	Sand and gravel	12	108
Gravel	7	87	Yellow shale	5	113
Yellow clay	5	92	Well DY-41-04-601		
Red rock	2	94	Owner: Rhea T. Hoff Driller: Hoff Irrigation Co.		
Gravel, water	26	120	Soil	1	1
Clay	6	126	Red clay	3	4
Well DY-41-04-505			White clay	15	19
Owner: R. H. Skurlock Driller: Harris Drilling Co.			Red clay and some sand	14	33
White, sandy shale	18	18	Sand rock	8	41
Brown water sand	4	22	Gravel	2	43
Rock	1	23	Gray sandy shale	9	52
Water sand	2	25	Yellow lime	1	53
Rock	1	26	Dry sand rock	4	57
Red sandy shale and red bed	13	39	Red bed	13	70
Water sand	5	44	Sand	9	79
			Gravel	1	80

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-04-601—Continued			Well DY-41-04-603—Continued		
Red bed	1	81	Light shale	1	102
Gray sandy shale	5	86	Sand to coarse gravel	18	120
Lime	5	91	Light shale	3	123
Sand	7	98	Yellow clay	7	130
Gravel	2	100			
Sandy lime	5	105	Well DY-41-04-604		
Broken lime, sandy shale, and red bed	5	110	Owner: Rhea T. Hoff Driller: Hoff Irrigation Co.		
Gravel	10	120	Surface and red bed	25	25
Hard sandy lime	5	125	Lime shells	9	34
			Shale	6	40
Well DY-41-04-602			Sand	13	53
Owner: Rhea T. Hoff Driller: Hoff Irrigation Co.			Yellow shale	1	54
No record	30	30	Sand and gravel	28	82
Shale - sand	15	45	Green shale	4	86
Red bed - red rock	15	60	Well DY-41-04-701		
Gray shale - lime shale and sand rock	11.5	71.5	Owner: Comanche Public School Driller: Hoff Irrigation Co.		
Gray shale - sandrock	10.5	82	Surface	3	3
Red rock	2	84	Gravel	7	10
Light shale	6	90	Red clay	10	20
Sand - gravel	30	120	Gray shale	12	32
Yellow and purple gumbo	10	130	Water sand	20	52
Well DY-41-04-603			Red bed	6	58
Owner: Rhea T. Hoff Driller: Hoff Irrigation Co.			Sandy shale	19	77
Soil	2	2	Sand	5	82
Clay and shale	8	10	Sandy shale	3	85
Sand	8	18	Lime	2	87
Shale	16	34	Shale	1	88
Lime	4	38	Well DY-41-05-105		
Shale	4	42	Owner: U.S. Army Corps of Engineers Driller: J. L. Myers Sons		
Sand	4	46	Surface soil	8	8
Shale with coal and gravel	2	48	Clay	12	20
Sand	5	53	Sand	2	22
Red bed	17	70	Sand rock	24	46
Gray shale	7	77	Shale	12	58
Sand and lime	23	100	Gravel	5	63
Red bed	1	101	Lime	3	66

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-05-105—Continued			Well DY-41-05-211—Continued		
Clay	4	70	Sand (water)	10	85
Sand	12	82	Gravel (water)	10	95
Shale	93	175	Sand and clay	6	101
Well DY-41-05-204			Gravel (water)	14	115
Owner: Joe Dorsey			Yellow and blue clay	11	126
Driller: N. L. Box Drilling Contractor			Well DY-41-05-214		
Sand and clay	13	13	Owner: Joe Dorsey		
Broken lime and gravel	8	21	Driller: Holdridge Drilling Co.		
Water sand and gravel	8	29	Sand	2	2
Red bed	8	37	Brown clay	14	16
Sandstone and lime	9	46	Lime, gravel, and sand	9	25
Sand and clay	9	55	Sandstone and lime	3	28
Limy sand and gravel	26	81	Sand and gravel	8	36
Yellow clay	16	97	Gravel and shale	4	40
Well DY-41-05-210			Red clay	20	60
Owner: Mary Kay Hamlett			Sand	8	68
Driller: Lightfoot and McCrum			Sand rock	2	70
Sand	2	2	Sand	20	90
Sandy clay (red)	17	19	Sand rock and gravel	4	94
Sand (white) (water)	21	40	Brown and blue clay	11	105
Red clay	5	45	Well DY-41-05-502		
Sand (water)	5	50	Owner: R. W. Evans		
Blue and yellow clay (sand)	10	60	Driller: Curtis Alford Drilling and Well Service		
Red clay	2	62	Soil	4	4
Sand (water)	23	85	Sand and caliche	11	15
Sand and gravel (water)	29	114	Sand	9	24
Yellow and blue clay	11	125	Sand rock	2	26
Well DY-41-05-211			Sand	14	40
Owner: Mary Kay Hamlett			Sand rock	11	51
Driller: Lightfoot and McCrum			Water sand	36	87
Sand	1	1	Lime shell	3	90
Red clay	14	15	Water sand and gravel	32	122
Sand	15	30	Blue shale	18	140
Sand (water)	8	38	Well DY-41-06-601		
Red clay	8	46	Owner: W. A. Springer		
Blue clay (sand)	9	55	Driller: J. T. Brown Water Well Driller		
Sand (water)	10	65	Topsoil	1	1
Blue clay	10	75	White clay and shale rock	6	7

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-06-601—Continued			Well DY-41-07-701—Continued		
Yellow clay and flat rock	11	18	Dry sand	7	73
Blue clay and flat rock	37	55	Sand	7	80
Gray clay	90	145	Broken rock and sand	20	100
Red and green clay	25	170	Soapstone	3	103
White sand	42	212	Sandy shale	5	108
Green clay	1	213	Soapstone	2	110
			Dry sand	4	114
Well DY-41-06-901				4	118
			Shale		
Owner: Sherman Henson Driller: Tatum Drilling Co.			Well DY-41-11-301		
				Owner: E. E. Bryson Driller: Sun Oil Co.	
Caliche	23	23			
Blue shale	37	60			
Gray sandy shale	8	68	Yellow clay	10	10
Crystalized sandstone	2	70	Gray shale	30	40
Green sandy clay	10	80	Broken lime	25	65
Red water sand	8	88	Blue shale	10	75
Green sandy clay	6	94	Broken lime	5	80
Red bed	11	105	Blue shale	20	100
Blue clay	17	122	Sand (4 bwph)	45	145
Water sand	13	135	Shale	5	150
Crystalized sandstone	1	136	Sand (20 bwph)	10	160
Water sand	10	146	Pink shale	10	170
Blue shale	4	150	Sandy shale	35	205
			Sand	20	225
Well DY-41-07-701				10	235
			Red rock		
			Water sand	20	255
			Sandy shale	70	325
Topsoil	5	5	Gray shale	75	400
Red clay	2	7	Broken lime	10	410
Caliche	3	10	Light shale	15	425
Rock	3	13	Broken lime	5	430
Dry sand	4	17	Lime	10	440
Yellow clay	2	19	Blue shale	45	485
Dry yellow clay	2	21	Gritty lime	20	505
Yellow clay	6	27	Gritty shale	155	660
Sand	11	38	Blue shale	155	815
Blue sandy shale	4	42	Lime	5	820
Blue sand (little water)	2	44	Blue shale	25	845
Coal, black	11	55	Sand	5	850
Sandy blue shale	11	66			

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-11-301—Continued			Well DY-41-11-301—Continued		
Shale	85	935	Black lime	48	2,450
Sand	55	990	Lime	45	2,495
Blue shale	15	1,005	Black lime	135	2,630
Broken lime	15	1,020	White lime	250	2,880
Sandy shale	20	1,040	Sand	25	2,905
Sand	10	1,050	Brown lime	20	2,925
Sandy shale	25	1,075	White sand	15	2,940
Dark shale	45	1,120	White lime	20	2,960
Sandy shale	10	1,130	White sand	15	2,975
Sandy lime	30	1,160	White lime	25	3,000
Sandy shale	15	1,175	White sand, water	15	3,015
Sandy lime	20	1,195	White lime	5	3,020
Sand (1 bwph)	65	1,260	Dark sand	5	3,025
Sandy shale	30	1,290	Sand (water)	15	3,040
Dark shale	10	1,300	White sand	5	3,045
Sandy shale	5	1,305	White sand	5	3,050
Lime	100	1,405	Lime	5	3,055
Sand	10	1,415	White lime	5	3,060
Broken lime	15	1,430	White sand	28	3,088
Sand	15	1,445	Lime	2	3,090
Dark shale	25	1,470	Sand, water	45	3,135
Sand	25	1,495			
Sandy shale	15	1,510	Well DY-41-12-101		
Sand	15	1,525	Owner: City of Comanche Driller: George Bolton		
Sandy lime	35	1,560	Soil	8	8
Sand	45	1,605	Sand and gravel	12	20
Blue shale	5	1,610	Blue clay	70	90
Sandy lime	20	1,630	Coal and fine sand	7	97
Sandy shale	45	1,675	Blue clay	26	123
Sand	10	1,685			
Dark shale	30	1,715	Well DY-41-13-301		
Sandy shale	75	1,790	Owner: Gustine Water Supply Corp. Driller: Andrews and Foster		
Dark shale	450	2,240	Rock	12	12
Black shale	45	2,285	Sand	6	18
Dark shale	70	2,355	Shale	20	38
Soft dark shale	5	2,360	Rock	2	40
Black lime	34	2,394	Shale and rock	10	50
Black shale	8	2,402	Shale	8	58

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-13-301—Continued			Well DY-41-14-107—Continued		
Sand	12	70	Red rock and clay	44	143
Rock	6	76	Rock	7	150
Shale and sand breaks	4	80	Sand and gravel streaks	10	160
Red bed	53	133	Sand and gravel	20	180
White shale	3	136	Blue shale	3	183
Shale	4	140			
Sand	8	148	Well DY-41-14-108		
Rock	2	150	Owner: Brent Daniel Driller: Iredell Drilling		
Shale	2	152	Surface sand	15	15
Sand and gravel	8	160	Sand and rock shelf	15	30
Rock and shale breaks	20	180	Hard sand and shale	55	85
Shale and rock	25	205	Red clay	45	130
Rock	50	255	Sandy shale	2	132
			Sand and gravel and rock layers	34	166
Well DY-41-14-106			Green shale	14	180
Owner: U. L. Kingsbury Driller: Petit and Kight Drilling Co.					
No record	20	20	Well DY-41-14-302		
Sand	17	37	Owner: Glen McGlothlin Driller: Roy Michael		
Blue shale	59	96	Surface soil	9	9
Red clay and rock	16	112	Sandy red clay	3	12
Coarse sand	8	120	Sand and gravel - weak water	6	18
Lime rock	7	127	White caliche - shale breaks	7	25
Gray clay	21	148	Red clay	5	30
Rock	7	155	White shale	5	35
Shale and gravel streaks	11	166	Blue shale - light color	7	42
Gravel	14	180	Water sand - weak	3	45
Blue shale	2	182	Hard sandstone	5	50
			Water sand	10	60
Well DY-41-14-107			Blue sandy shale	2	62
Owner: U. L. Kingsbury Driller: Petit and Kight Drilling Co.			Red clay	23	85
No record	16	16	Blue shale	5	90
Sand and sand rock	17	33	Red clay	12	102
Blue clay and shale	17	50	Blue shale	2	104
Hard sand streaks	12	62	Water sand - good water	3	107
Blue clay	6	68	Blue shale	5	112
Red clay	21	89	Water sand	1	113
Blue clay	3	92			
Shale and lime rock	7	99			

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-14-302—Continued			Well DY-41-14-303		
Hard limerock	4	117	Owner: Euel Eddleman Driller: Curtis Alford Drilling and Well Service		
Blue-green shale	8	125	Soil	2	2
Hard limerock	8	133	Red clay	3	5
Blue shale	7	140	Brown and yellow shale	16	21
Sand and gravel - good sand	23	163	Sand	7	28
Hard limerock	2	165	Gravel	4	32
Hard sand	5	170	Hard lime rock	2	34
Blue sandy shale	27	197	Gravel and sand	30	64
Black shale	9	206	Hard lime	1	65
Blue sandy shale	9	215	Gravel and sand	10	75
Black shale	5	220	Blue shale	5	80
Blue sandy shale	10	230	Hard lime	5	85
Black shale	5	235	Blue sand	10	95
Blue sandy shale	15	250	Hard red sand	10	105
Black shale	30	280	Hard red sand rock	19	124
Hard sandy shale	4	284	Water sand	14	138
Black shale	22	306	Lime rock	3	141
Light blue shale	32	338	Red bed	9	150
Hard gray sand - 1 barrel salt water (rainbowed)	152	490	Well DY-41-14-304		
Black shale	60	550	Owner: Roscoe White Driller: Tatum Drilling Co.		
Light sandy shale	15	565	Caliche and limestone	18	18
Black shale	43	608	Blue shale	47	65
Sandy blue shale	127	735	Water sand	13	78
Gray sand - light gas show	28	763	Sandy shale	7	85
Black shale	9	772	Water sand	22	107
White sand (6 barrels salt water)	9	781	Blue shale	5	112
Sandy shale	9	790	Well DY-41-14-305		
Black shale (real black)	8	798	Owner: J. N. Thompson Driller: Tatum Drilling Co.		
Light blue shale	32	830	No record	72	72
White sand (dry)	18	848	Sand and gravel	10	82
Hard gray sand	8	856	Sandy clay and sandstone	8	90
Black shale - coal black	15	871	Sandy clay	16	106
Hard sand with layers blue shale	29	900	Limestone	4	110
			Red and blue clay	23	133
			Water sand	10	143

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-14-305—Continued			Well DY-41-14-803		
Crystal sandstone - hard	3	146	Owner: Elsie M. Rea Driller: L. W. Little Drilling Co.		
Red and blue clay	14	160	Surface	2	2
Coarse water sand	8	168	Hard white limestone	88	90
Limestone	2	170	Green shale	8	98
Sand and gravel	8	178	Hard white limestone	38	136
Limestone	6	184	Fine dark sand	10	146
Green sandy clay	4	188	Black shale	2	148
Well DY-41-14-402			Blue green shale	20	168
Owner: Russell Hayes Driller: Iredell Drilling			White sand	9	177
Topsoil and clay	15	15	Hard blue limestone	13	190
Sand and rock shelf	15	30	Red shale	22	212
Hard sand rock	55	85	Sand	18	230
Red clay	45	130	Hard white flint rock	8	238
Sandy shale	2	132	Red shale, hard	17	255
Sand and gravel with rock breaks	35	167	Well DY-41-15-101		
Green shale	18	185	Owner: H. C. Aytes Driller: Leon Drilling Co.		
Well DY-41-14-701			Soil	4	4
Owner: Gayle Isham, Jr. Driller: Tatum Drilling Co.			Caliche - gravel	16	20
Topsoil and pack sand	10	10	Sandy shale	30	50
Yellow caliche	8	18	Water sand	20	70
Brown sand	12	30	Hard sand	5	75
Yellow sand	14	44	Sand - gravel - water	15	90
Gray shale	119	163	Hard sand	10	100
Sandy shale	6	169	Sand - gravel - water	25	125
Gray shale	24	193	Sand - lime - hard	5	130
Sandy shale	28	221	Lime shells - red shale	18	148
Water sand	13	234	Water sand	24	172
Soapstone	8	242	Lime - sandy	4	176
Hard rock	3	245	Well DY-41-15-401		
Sandy shale	27	272	Owner: F. L. Stephens Driller: Tatum Drilling Co.		
Red bed	11	283	Sandy red clay	30	30
Sand and water sand	42	325	Crystal limestone	2	32
Soapstone	10	335	Water sand	13	45
			Sandy clay	8	53
			Water sand (12 gpm)	34	87

Table 3.—Drillers' Logs of Selected Wells in Comanche County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well DY-41-15-401—Continued			Well DY-41-15-401—Continued		
Red and blue clay	68	155	Sand and gravel	9	196
Fine sand	8	163	Red and blue clay	6	202
Red bed	24	187	Yellow rock	3	205

COMANCHE COUNTY

Table 6.—Chemical Analyses of Oil-Field Brines

(Analyses are given in parts per million except pH)

SYSTEM	PRODUCING ZONE	FIELD	AVERAGE DEPTH (FT)	AREA SHOWN ON FIGURE 18, VOLUME I	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	BICARBONATE (HCO ₃)	SULFATE (SO ₄)	CHLORIDE (Cl)	TOTAL DISSOLVED SOLIDS	pH
_ a	—	Smith-Morgan	—	K-6	1,360	313	8,300	83	4	15,300	26,300	7.3

^a Analyses obtained by Texas Water Development Board.

CORYELL COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: D, Drillers'; E, Electric; R, Radioactive; S, Sample.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
HB-40-25-501	Amerada Petroleum Corp.	N. F. Tate No. 1	1949	4,868	976	E
27-801	Gulf Oil Corp.	V. L. Turner No. 1	1965	6,010	1,062	R
28-403	Shell Oil Co.	Rabbe No. 1	1965	970	970	E
41-501	do.	Saunders No. 1	1965	490	965	E
801	Smith and Leonard	W. D. Bowlin No. 2	1965	3,493	831	E
45-201	General Crude Oil Co.	Ernest Day No. 1	1957	3,035	720	E
49-201	Gulf Oil Corp.	Virgil Lockhart, et al. No. 1	—	—	940	D
801	—	J. K. Summers No. 1	1962	1,550	1,040	R
51-501	N. A. Schwald, Sugarloof Mountain Oil Co.	Thomas Young No. 1	1920	2,895	845	D
41-39-602	Shell Development Co.	Leslie Sheldon No. 1	—	150	1,310	S

CORYELL COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-19-803			Well HB-40-25-902—Continued		
Owner: Curtis Watson Driller: Clarence Erickson			Red bed with green shale	37	482
Large hitch rocks	6	6	No record	106	588
Clay	2	8	Well HB-40-26-101		
Hard blue rock	72	80	Owner: R. A. Adams Driller: R. A. Adams and Son		
White crystal-like lime	80	160	No record	37	37
White lime	90	250	Glen Rose lime	303	340
Hard blue rock	30	280	Trinity sand and shale	83	423
Shell rock and layers shale	15	295	Well HB-40-26-102		
Green gum	11	306	Owner: Jonesboro Water Supply Corp. Driller: C. M. Stoner Drilling Co.		
Paluxy sand and water	22	328	Soil	1	1
Black gum	2	330	Rock and clay	9	10
Hard lime	4	334	Clay	10	20
Well HB-40-25-401			Rock	20	40
Owner: Joe Faubion Driller: R. A. Adams and Son			Sand	5	45
Surface soil	2	2	Rock	315	360
Yellow clay	20	22	Sandy shale and lime	45	405
Shale and lime	8	30	Sand	15	420
Sand and water	20	50	Sandy shale and lime	20	440
Glen Rose lime	57	107	Broken sand and sandy shale	70	510
Well HB-40-25-902			Sand	10	520
Owner: Levita Water Supply Corp. Driller: James Mathew Adams			Hard red sand rock	20	540
Sand - clay	20	20	Red bed	25	365
Lime	176	196	Green sand shale	5	570
Shale breaks	12	208	Sand	42	612
Coarse lime sand - water	74	282	Gravel	6	618
Shale	13	295	Yellow shale	4	622
Lime and shale (green)	65	360	Well HB-40-26-401		
Brown lime	20	380	Owner: R. L. Campbell Driller: R. A. Adams and Son		
White lime	15	395	Surface soil and yellow clay	12	12
Red bed - green shale	40	435	Blue lime	28	40
White sand	10	445			

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-26-401—Continued			Well HB-40-27-102—Continued		
Black shale	2	42	Lime	18	351
Lime	23	65	Blue lime	248	599
Sand	3	68	Shale	69	668
Sand - little water	7	75	Sand	2	670
Water and sand	10	85	Lime	59	729
Water and sand	5	90	Sand	28	757
Glen Rose lime	30	120	Sandy shale	5	762
			Sand	12	774
Well HB-40-26-702			Sandy shale	9	783
Owner: E. E. Vermillion			Sand	10	793
Driller: James Mathew Adams			Red bed	79	872
No record	6	6	Shale (broken sand)	40	912
Glen Rose lime	239	245	Sand	28	940
Gray shale	14	259	Shale	63	1,003
Glen Rose lime	39	298			
Trinity sand	2	300	Well HB-40-28-402		
Brown lime	25	325	Owner: Joe Tubbs		
Red bed - green shale	19	344	Driller: Frank Baker Place		
Hard white sand	23	367	No record	110	110
Red bed - green shale	9	376	Broken white lime and blue shale	195	305
Second Trinity sand - gravel	23	399	White lime	25	330
Red bed - green shale	7	406	Blue shale and soapstone	50	380
Hard gray sand	10	416	Paluxy sand	10	390
Red bed green shale	13	429	Black shale	2	392
Gray sand - coarse	19	448	White lime	18	410
Red bed	22	470	Well HB-40-35-103		
Brown sand	15	485	Owner: Gatesville State School for Boys		
Yellow lime	3	488	Driller: Kenton Preston		
Small gravel sand	6	494	Sandy soil	5	5
Yellow lime	15	509	Gravel	10	15
			Yellow clay	5	20
Well HB-40-27-102			Blue shale	20	40
Owner: Turnersville Water Supply Corp.			Gray shale	40	80
Driller: J. L. Myers Sons			Blue shale	40	120
Soil	1	1	Gray shale	15	135
Blue limestone	303	304	Austin chalk	123	258
Sand	29	333	Blue shale	2	260

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-35-403—Continued			Well HB-40-35-404—Continued		
Lime (chalky)	430	500	Sand	15	710
Sand, 10 bph	15	515	Sand, gravel, and shale	20	730
Shale (green)	10	525	Hard sand and gravel	5	735
Red bed	125	650	Yellow clay	7	742
Red bed (broken)	20	670	Blue shale	13	755
Red bed (sandy)	20	690			
Red sand	5	695			
Sand (water)	10	705	Well HB-40-35-405		
Sand and gravel - water	97	802	Owner: City of Gatesville Driller: R. A. Adams and Son		
Yellow clay - sandy	13	815	Solid clay sand	12	12
Yellow clay	13	828	Gray lime	348	360
			Sandy lime	20	380
Well HB-40-35-404			Gray lime	5	385
Owner: City of Gatesville Driller: Layne Texas Co.			Shale	5	390
Surface soil	2	2	Sandy lime	33	423
Gravel	2	4	Sand	14	437
Yellow clay and caliche	16	20	Sandy shale	10	447
Blue shale	25	45	Water sand	19	466
Lime	5	50	Sandy shale	4	470
Sand (water)	6	56	Red bed (sand and gravel)	70	540
Blue shale	2	58	Water sand	10	550
Sand	12	70	Pink shale	33	583
Lime	5	75	Water sand	8	591
Lime (white)	115	190	Sandy shale	39	630
Sand	20	210	Water sand	23	653
Lime (white)	40	250	Red bed	17	670
Gray shale	100	350	Shale	30	700
Lime and shale	110	460			
			Well HB-40-35-409		
Shale and sandy lime	33	493	Owner: City of Gatesville Driller: Layne Texas Co.		
Sand (water)	32	525	Rocky lime	20	20
Red bed	85	610	Blue gray shale	169	189
Red shale	20	630	Sandy shale	4	193
Red bed	34	664	Lime and rock	172	365
Gray sand	11	675	Brown shale and lime	116	481
Gray sand and lime	10	685	Hard shale	40	521
Sand and gravel	10	695	Broken shale	15	536

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-35-409—Continued			Well HB-40-35-701—Continued		
Hard shale and lime	75	611	Sand	5	623
Broken shale	5	616	Red bed	11	634
Hard shale and lime	14	630	Sand	5	639
Sand and lime	39	669	Red bed	19	658
Lime layers - sand and gravel	33	702	Sand	8	666
Hard shale	8	710	Red bed	31	697
Red sandy clay and shale	11	721	Sand	21	718
Hard shale	2	723	Red bed	3	721
Red sandy clay and lime	50	773	Sand	20	752
Hard sandy lime	22	795	Red bed	4	756
Lime	5	800	Sand	22	778
Hard sandy shale	4	804	Red bed	7	785
Hard shale	2	806	Sand	15	800
Sand, shale layers - gravel	45	851	Blue black shale	21	821
Hard lime	4	855	Well HB-40-35-801		
Hard sand and gravel	14	869	Owner: U.S. Army Driller: Layne Texas Co.		
Hard shale, breaks, sandy shale	47	916	Surface sand	2	2
Well HB-40-35-701			Sandy red clay	6	8
Owner: Fort Gates Water Supply Corp. Driller: J. B. Farquharson			Quicksand	10	18
Yellow clay	18	18	Yellow sand and clay	2	20
Blue shale	20	38	Clay and gravel	20	40
Chalky lime with blue shale streaks	7	45	Clay and gravel	15	55
Shale with lime streaks	37	82	Shale	3	58
Blue shale with sand and lime streaks	38	120	Blue shale	2	60
Chalky lime with shale, bentonite, and sand streaks	324	444	Gray lime	65	125
Chalky lime	113	557	Lime and shale	85	210
Blue gumbo shale	13	570	Lime and shale	85	295
Sand	18	588	Lime and shale	65	360
Red bed	2	590	Lime and shale	50	410
Sand	20	610	Shells and lime	10	500
Red bed	8	618	Lime	5	505
			Lime	10	515
			Shell	5	520

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-35-801—Continued			Well HB-40-35-802—Continued		
Lime and shale (top of first Trinity sand)	2	522	Soft water sand (bottom of first Trinity sand)	57	540
Sand	13	535	Red bed	45	585
Sandy lime	15	550	Red bed	60	645
Shale	20	570	Water sand	17	662
Red bed	40	610	Hard broken lime	5	667
Red bed	50	660	Gravel and sand (bottom second Trinity sand)	13	680
Red bed	20	680	Red bed	10	690
Red bed (top second Trinity sand)	5	685			
Sand	30	715	Well HB-40-35-803		
Sand	25	740	Owner: U.S. Army Driller: Layne Texas Co.		
Broken sand	5	745	Surface soil	1	1
Dark shale	10	755	Red clay	7	8
			Sand and gravel	17	25
Well HB-40-35-802			Sand and gravel	25	50
Owner: U.S. Army Driller: Layne Texas Co.			Lime and shale	65	115
Surface soil	15	15	Lime and shale	40	155
Gravel and water sand	12	27	Lime and shale	105	260
Lime	3	30	Lime and shale	50	310
Sand (dry)	25	55	Lime and shale	40	350
Broken lime and shale	25	55	Lime and shale	55	405
White lime	40	95	Lime and shale	40	445
Shale	35	130	Lime and shale	40	485
Lime	35	165	Sandy shale	9	494
Gray shale and shells	40	205	Sandy shale (top first Trinity sand)	2	496
Broken lime	20	225	Sand	5	501
White lime	45	270	Sand	6	507
Gray shale	45	315	Sand (bottom first Trinity sand)	10	517
Broken lime	40	355	Sandy shale	13	530
Lime	10	365	Red bed	5	535
Shale	40	405	Red bed	20	555
Gray shale and shells	10	415	Red rock and shale	20	575
Gray shale (top of first Trinity sand)	40	455	Red rock and shale	22	597
			Red rock and shale	13	610
	28	483	Red rock and shale	25	635

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-35-803--Continued			Well HB-40-35-805—Continued		
Sand, shale (top second Trinity sand)	30	665	Gray lime and shell	85	125
			Lime and shale	395	520
Sand (bottom second Trinity sand)	45	710	Sandy lime	7	527
Dark shale	11	721	Sandy shale (top first Trinity sand)	11	538
Well HB-40-35-804			Sand	2	540
Owner: Jack Fry Driller: Layne Texas Co.			Sand (bottom first Trinity sand)	7	547
Surface soil	4	4	Lime	4	551
Yellow clay and gravel	6	10	Red rock	5	556
Yellow clay	10	20	Red bed	119	675
Blue rock	11	31	Hard, sandy shale (top second Trinity sand)	25	700
Lime and shale	88	119	Sand	48	748
Broken lime and shale	31	150	Shale	11	759
Glen Rose sand lime	36	186	Well HB-40-36-602		
Lima and shale	297	483	Owner: Oglesby Water Supply Corp. Driller: Key Water Well Drilling-Development Co.		
Sandy lime	15	498	Lime	424	424
Shale (top first Trinity sand)	6	504	Sandy lime	314	738
Sand	31	535	Sand	382	1,120
Sand and shale (bottom first Trinity sand)	8	543	Hard lime	100	1,220
Red bed	80	623	Well HB-40-41-601		
Sand	17	640	Owner: Johnny Woodlief Driller: J. B. Farquharson		
Red bed	20	660	Yellow clay	25	25
Sandy shale (top second Trinity sand)	20	680	Sandy shale and shale streaks	45	70
Sand (bottom Trinity sand)	51	731	Sandy lime	3	73
Broken shale	4	735	Chalky lime with shale streaks	37	110
Dark shale	10	745	Chalky lime	85	195
Well HB-40-35-805			Black shale	1	196
Owner: U.S. Army Driller: Layne Texas Co.			Chalky lime with very few shale stringers	198	394
Surface soil (black)	5	5	Blue shale	4	398
Yellow clay	10	15	Chalky lime	4	402
Yellow clay and gravel	10	25	Good water sand	14	416
Blue shale and shells	15	40	Hard lime and flint rock	27	443

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-41-601—Continued			Well HB-40-43-201		
Chalky lime	17	460			
Blue shale with lime streaks	22	482			
Red bed	84	566	Yellow clay and rock	60	60
Water sand	14	480	Gray lime and shell	266	326
Red bed	20	600	Hard gray lime	34	360
Blue shale	4	604	Gray lime	65	425
Lime	9	613	Gray lime and breaks of shale	45	470
Well HB-40-41-702					
Owner: N. C. Storm and Joe Perkins Driller: J. B. Farquharson			Sandy lime (top of first Trinity sand)	35	505
Black dirt	2	2	Sand	3	508
Yellow clay	6	8	Sand	30	538
Hard lime	6	14	Sand (bottom of first Trinity sand)	14	552
Chalky lime	11	25	Shale	13	565
Austin chalk	33	58	Red rock	10	575
Sand	4	62	Shale	25	600
Austin chalk	168	230	Shale	5	605
Sand	6	236	Sand	5	610
Austin chalk	102	338	Red bed	30	640
Trinity sand	14	352	Blue shale	25	665
Lime	6	358	Red rock	5	670
Red bed	6	364	Hard shale	5	675
Well HB-40-41-903					
Owner: Ernest Pendleton Driller: Fowler Drilling Co.			Red rock (top of second Trinity sand)	18	693
Yellow clay	15	15	Sand	8	701
White rock	20	35	Gravel sand	30	731
Gray limestone	40	75	Shale and broken sand	4	735
Gray mud	15	90	Sand (bottom of second Trinity sand)	13	748
Gray limestone	125	215	Blue shale	9	757
Gray mud	7	222	Dark shale	3	760
Gray limestone	33	255	Dark shale	5	765
Hard, brown rock	5	260			
Sand	11	271			
			Well HB-40-43-202		
			Owner: U.S. Army Driller: Layne Texas Co.		
			Yellow clay	14	14
			Hard lime	35	49

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-43-202—Continued			Well HB-40-43-202—Continued		
Blue shale	27	76	Water sand and gravel (second Trinity sand)		
Lime	64	140		34	762
Broken lime	30	170	Red bed	10	772
Shale and lime shells	20	190	Well HB-40-43-203		
Broken sand and shale	8	198	Owner: U.S. Army Driller: Layne Texas Co.		
Sand and shells	17	215	Yellow shale	20	20
Broken lime	45	260	Blue shale	53	73
White lime	15	275	Lime	4	77
Broken lime	45	320	Blue shale	13	90
Blue shale	15	335	Broken lime	15	105
Broken lime and shale	30	365	Blue shale	10	115
Lime	31	396	Lime	54	169
Shale	4	400	Lime and shale	13	182
Lime	25	425	Lime	6	188
Sandy shale and shells	30	455	Broken lime	42	230
Blue shale	5	460	Hard lime	30	260
Broken lime	20	480	Broken lime	21	281
Shale	10	490	Lime and shale	29	310
Lime	25	515	Lime	139	449
Broken lime	10	525	Hard lime	28	477
Shale and lime	23	548	Lime	17	494
Blue shale (top of first Trinity sand)	4	552	Hard lime	6	500
Water sand	14	566	Broken lime	15	515
Sand and gravel (bottom of first Trinity sand)	34	600	Lime	41	556
Gray shale	5	605	Broken lime	15	571
Red bed	40	645	Lime	2	573
Lime	13	658	Gray shale	6	579
Broken lime and shale	7	665	Gray sand	4	583
Blue shale	5	670	Shale	2	585
Red gumbo	25	695	Blue shale	5	590
Red bed	10	705	Broken sand	6	596
Blue shale	14	719	Sand and gravel	49	645
Red bed	9	728	Red, sticky shale	3	648
			Red shale	5	653
			Blue shale	10	663
			Gray shale	2	665
			Red shale	15	680

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-43-203—Continued			Well HB-40-43-205—Continued		
Blue shale	10	690	Quicksand	23	30
Red bed	22	712	Blue rock	10	40
Red shale	44	756	Lime and shale	460	500
Red and blue shale	9	765	Shell	10	510
Sand, second Trinity	20	785	Lime and shale (top of first Trinity sand)	7	517
Red bed	10	795	Sand	8	525
Well HB-40-43-204			Broken sand	5	530
Owner: U.S. Army Driller: Layne Texas Co.			Sand	3	533
Red and yellow clay	20	20	Lime	4	537
Lime and blue shale	55	75	Red rock and lime	133	670
Gray lime and shale	90	165	Broken sand	2	672
Lime and shale	120	285	Sandy shale (top of second Trinity sand)	3	675
Gray lime and shale	60	345	Sand	55	730
Gray lime and shale	15	360	Shale (break in sand)	5	735
Lime	25	385	Coarse sand	10	745
Lime and shale	148	533	Sandy shale	5	750
Shale (top of first Trinity sand)	15	548	Dark shale	5	755
Red bed	7	555			
Sandy shale	10	565	Well HB-40-43-206		
Red rock	10	575	Owner: U.S. Army Driller: Layne Texas Co.		
Shale	20	595	Yellow clay and gravel	30	30
Sandy shale	5	600	Blue shale	30	60
Red bed	35	635	Sand	15	75
Red bed (hole caving)	15	650	Lime	12	87
Red bed	35	685	Sandy lime and shale	43	130
Sand (top of second Trinity sand)	27	712	Broken lime	20	150
Shale	1	713	Blue shale	20	170
Red rock	12	725	Sand	5	175
Sand	23	748	Sandy shale	7	182
Sandy lime	5	753	Sandy shale and lime	8	190
Sand	5	758	Lime (soft)	45	235
Well HB-40-43-205			Gray shale	20	255
Owner: U.S. Army Driller: Layne Texas Co.			Blue shale and shells	5	260
Sandy soil	2	2	Gray shale	10	270
Sandy clay	5	7			

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-43-206—Continued			Well HB-40-43-207--Continued		
Sand	5	275	Gray lime and shale	40	100
Gray shale	33	308	Gray lime and shale	130	230
Hard lime	7	315	Lime and shale	265	495
Broken lime	25	340	Sandy lime	10	505
Hard lime	7	347	Sandy shale (top of first Trinity sand)		
Hard lime	23	370		13	518
Sandy shale and shells	32	402	Sand	32	550
Lime	8	410	Sand, coarse (bottom of first Trinity sand)	12	562
Broken lime and shale	15	425	Shale	3	565
Broken lime	35	460	Bed rock and shale	55	620
Gray shale	5	465	Shale (top of second Trinity sand)		
Lime	10	475		40	660
Sandy shale and shells	30	505	Sand	5	665
Broken sand and shale	30	535	Broken sand	25	690
Sand (water)	27	562	Sand	35	725
Sand	15	577	Sand, coarse (bottom of second Trinity sand)	10	735
Red bed	28	605	Shale	10	745
Lime	5	610			
Blue shale	5	615	Well HB-40-43-603		
Blue shale	15	630	Owner: Flat Water Supply Corp. Driller: Hervey Meadows and Son Well Driller		
Red bed	10	640	Soil	3	3
Red bed	18	658	Rock and chalk	17	20
Blue shale	5	663	Blue rock	40	60
Red bed	5	668	Lime	55	115
Blue shale	14	682	Shale mixed with lime	380	495
Sand and shale	8	690	Glen Rose lime	293	788
Soft water sand	15	705	Hensell sand	85	873
Sand and gravel	15	720	Red bed - peat gravel	22	895
Brown shale	15	735	Red bed, peat gravel, quartzite, pyrites, and shale	75	970
Well HB-40-43-207			Hosston sand	20	990
Owner: U.S. Army Driller: Layne Texas Co.			Shale	3	993
Surface soil	2	2			
Yellow clay	5	7			
Yellow lime	18	25			
Blue rock	35	60			

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-44-502			Well HB-40-49-201—Continued		
Owner: Temco Feed Mills Driller: R. A. Adams and Son			Lime, shale, and sand	10	460
Soil and chunk rock	3	3	Limestone, shale, and sand	10	470
Gray lime	42	45	Limestone, shale, and sand	10	480
Dark shale	5	50	Shale, lime, and sand	10	490
Gray lime	140	190	Shale, lime, and sand	10	500
Shale	8	198	No record	10	510
Lime	73	271	Hard shale and sand	10	520
White lime	109	380	Sand, lime, and shale	10	530
Shale	24	404	Sand, lime, and shale	10	540
Glen Rose lime	86	490			
Shale	1	491	Well HB-40-49-403		
Lime	101	592	Owner: G. H. Cassens Driller: Fowler Drilling Co.		
Shale	2	594	Yellow clay	20	20
Lime	181	775	Blue shale and fine sand	50	70
Shale	20	795	Gray rock	10	80
Lime	63	858	Gray lime	55	135
Blue sandy shale	8	866	Blue clay	7	142
Sand	6	872	Gray lime	48	190
Sandy lime	6	878	Gray clay	10	200
Sand and gravel	25	903	Gray lime	30	230
Black shale	2	905	Blue clay	10	240
Well HB-40-49-201			Gray lime	75	315
Owner: Gay Lockhart Driller: Gulf Oil Corp. (Complete log not shown)			Blue rock	20	335
No record	260	260	Brown limestone (water)	15	350
Lime	20	280	Blue mud	5	355
Lime and sand	20	300	White mud and sand	33	388
Lime	20	320	Hard brown rock	15	403
Lime and sand	30	350	Red bed (shale and sand)	93	496
Lime and shale	50	400			
Lime, sand, and shale	10	410	Well HB-40-51-501		
Lime, sand, and shale	10	420	Owner: Thomas Young Driller: Sugarloaf Mountain Oil Co. (Complete log not shown)		
Lime and sand	10	430	Yellow clay	28	28
Lime and sand	10	440	Lime	8	36
Lime and sand	10	450			

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-51-501—Continued			Well HB-40-57-302		
Blue slate	14	50	Owner: City of Copperas Cove Driller: Layne Texas Co.		
White lime	10	60	Shale and rock	15	15
Blue slate	40	100	Yellow shale - hard layers	11	26
White lime	5	105	Shale and shells	220	246
Blue slate	295	400	Gray shale and hard layers lime rock	17	263
Lime	12	412	Gray shale	22	285
White slate	58	470	Gray shale and layers hard lime	35	320
White lime	12	482	Shale	11	331
White slate	18	500	Shale and lime	15	346
White lime, water	55	555	Lime and shale	121	467
Hard lime	9	564	Lime	17	484
White slate	36	600	Shale and lime	6	490
Red slate	10	610	Shale and thin layers sand	12	502
White slate	20	630	Sandy lime and shale	4	506
White sand 630 ft little water	6	636	Lime and shale	18	524
White shale 636 ft	6	642	Sandy lime and shale	14	538
White sand, little water	8	650	Hard shale and lime	16	554
Red shale	10	660	Hard lime and pink shale	34	588
White lime	5	665	Gray shale (soft)	14	602
Blue shale	5	670	Lime and shale (hard)	25	627
Lime	5	675	Sandy lime	8	635
Red shale	10	685	Lime and shale	11	646
Lime	15	700			
Blue shale	10	710	Well HB-40-57-303		
Hard lime	5	715	Owner: Sam Millsap Driller: J. L. Myers Sons		
White paste	2	717	Caliche	19	19
Hard lime	13	730	Shale with lime streaks	22	41
White lime	28	758	Broken lime (caliche)	17	58
Red shale	3	761	Shale and lime chalk	13	71
Gray lime	3	764	Broken lime	5	76
Yellow shale	8	772			
Sand	6	778			
Lime	6	784			
Gray slate	5	789			
Lime	6	795			
Brown lime	35	830			
Gray lime	8	838			

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-40-57-303—Continued			Well HB-40-57-305—Continued		
Shale and lime streaks	34	110	Solid blue	12	45
			Gray, pretty hard	65	110
Sand and lime shale	8	118	Soft sand rock (cavey)	10	120
Lime shale (broken)	20	138	Hard, gray shale	1	121
Shale and streaks of lime	51	189	Hard, brown lime (some water)	352	473
Lime shale, gray	29	218	Hard	57	530
Shale, gray	7	225	White soft	20	550
Limy shale	13	238	Soft pink	11	561
Gray shale	7	245	Red	5	566
Limy shale	13	258	Gray dark shale	4	570
Shale and lime streaks	112	370			
Limy shale	25	395			
Shale, gray	7	402			
Shale and lime	16	418	Rock	14	14
Shale, gray	8	445	Clay	9	23
Limy shale	16	461	Rock and shale	17	40
Sandy lime	8	469	Rock	5	45
Lime	14	483	Sandy shale	25	70
Lime, broken and shale	15	498	Lime and shale	50	120
Sandy lime	14	512	Shale and rock	49	169
Shale soft white	1	513	Chalk rock	131	300
Sandy lime	6	519	Shale and rock	35	335
Sandy shale	4	523	Mixed shale	15	350
Lime, soft	2	525	Lime rock	10	360
White sandy shale	12	537	Lime	66	426
Shale red	2	539	Sandy shale	4	430
White sandy shale	7	546	Sand	5	435
Sandy shale and sand	8	554	Sandy shale	9	444
Red shale	3	557	Shale	11	455
Sandy shale red	6	563	Sandy lime	23	478
Shale red	10	573	Rock and lime	28	506
			Rock	4	510
			Shale	22	532
Well HB-40-57-305			Well HB-41-39-303		
Owner: Willie Groth Driller: Smart Drilling and Supply			Owner: L. S. Passmore Driller: J. L. Myers Sons		
Yellow	25	25			
Gummy blue	8	33	Caliche	18	18
			Blue shale	24	42
Well HB-41-40-202			Owner: Floyd Elam Driller: Tatum Drilling Co.		

Table 3.—Drillers' Logs of Selected Wells in Coryell County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well HB-41-40-202—Continued			Well HB-41-40-902—Continued		
Brown water sand	10	52	Lime	34	474
Gray shale	43	95	Red shale	28	502
Well HB-41-40-901			Brown lime	3	505
Owner: R. A. Manning			Red shale	37	542
Driller: Edwin Dyson			Brown lime	3	545
Clay - rock	120	120	Red shale	7	552
Paluxy sand	10	130	Sand	13	565
Gray lime	250	380	White lime	5	570
Sandy shale	10	390	Well HB-41-48-102		
Gray lime	25	415	Owner: Gerald Cummings		
Sandy shale	5	420	Driller: Fowler Drilling Co.		
Hard, gray lime	15	435	Fine sand and blue mud	570	570
Blue shale	5	440	Brown limestone	100	670

EASTLAND COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: D, Drillers'; E, Electric; R, Radioactive; S, Sample.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
JD-30-56-201	Haynes B. Ownby Drilling Co.	Mrs. Lelia Clark No. 1-A	1953	2,858	1,733	E
412	Kerlyn Oil Co.	Fentem No. A-1	1945	3,785	1,775	S
701	Durham and Young Oil Co.	H. L. Vestal No. 1	1949	2,571	1,813	E
802	Jake T. Lake Trustee	A. A. Tyler No. 1	1949	2,501	1,705	R
903	A. R. Dillard and Frank Wood	Pearl Dill No. 1	1948	3,204	1,736	D
31-43-905	Great Western Drilling Co.	Roane No. 1	1964	3,087	1,401	R
44-604	H. M. Gogle	Lone Star Producing Co. No. 1	1955	1,876	1,505	E
605	Grace Oil Co.	Letha King No. 1	1955	1,839	1,491	E
811	Standard Oil of Texas	L. E. Clark No. 1	1954	2,803	1,327	E
49-703	Smart and Brooks	P. C. Larkin No. 1	1940	3,165	1,679	S
57-202	Coastal States Gas Producing Co.	J. E. Watkins No. 2	1961	3,006	1,654	E
203	Trumter Petroleum Corp.	W. S. Carter, et al. No. 1	1953	1,756	1,658	E
303	Coastal States Gas Producing Co.	Bertha Beal No. 1-A	—	2,790	1,532	S

EASTLAND COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JD-30-48-902			Well JD-31-35-602		
Owner: D. D. Jackson Driller: Jack Leonard Drilling Co.			Owner: Morris Campbell Driller: Robert Lee-Bob-Barnhill		
Sand	6	6	Soil	3	3
Sandy clay	40	46	Sand and gravel (water at 18 ft)	20	23
Gravel with clay streaks	6	52	Gravel	7	30
Coarse sand	9	61	Yellow shale	7	37
Blue shale	2	63	Blue shale	13	50
Well JD-30-56-103			Well JD-31-35-604		
Owner: W. B. Holcomb Driller: J. and L. Drilling Co.			Owner: Morris Campbell Driller: Robert Lee-Bob-Barnhill		
Soil	10	10	Soil	3	3
Sand	20	30	Sand	15	18
Water sand	18	48	Gravel (water)	20	38
Yellow	4	52	Yellow shale	6	44
Brown	10	62	Blue shale	6	50
Red	3	65			
Well JD-30-56-510			Well JD-31-36-702		
Owner: Oscar Schaefer Driller: Jack Leonard Drilling Co.			Owner: Bob Rebels Driller: Robert Lee-Bob-Barnhill		
Topsoil	4	4	Soil	3	3
White sandy clay	8	12	Gravel	15	18
Hard sand	19	31	Hard sand	1	19
White and blue clay	4	35	Gravel (water)	19	38
Sand and gravel	23	58	Red shale	12	50
Red bed	1	59	Hard sand	3	53
			Soft sand	5	58
			Brown shale	10	68
			Purple shale	12	80
Well JD-31-35-601			Well JD-31-42-505		
Owner: Morris Campbell Driller: Robert Lee-Bob-Barnhill			Owner: W. H. Hoffmann Driller: W. H. Hoffmann		
Soil	2	2	Sandy soil	15	15
Shale	4	6	Sand and streaks of shale	20	35
Sand	11	17	Sand (little water)	7	42
Gravel (water)	2	19	Sand and gravel (water)	7	49
Coarse sand	9	28	Red bed	23	72
Gravel	3	31			
Shale	19	50			

Table 3.—Drillers' Logs of Selected Wells in Eastland County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JD-31-42-505—Continued			Well JD-31-42-509		
Sand and gravel (water)	11	83	Owner: R. G. Lyerla Driller: W. F. Smith Drilling Co.		
Lime	7	90	Topsoil	3	3
Blue shale	3	93	Pack sand	12	15
Lime	23	116	Sand rock	5	20
Shale	2	118	Water sand	10	30
Broken lime and shale	5	123	Shale	1	31
Gray shale	27	150	Well JD-31-42-901		
Well JD-31-42-507			Owner: Rollo Tinkler Driller: Robert Lee-Bob-Barnhill		
Owner: W. H. Hoffmann Driller: W. H. Hoffmann			Soil	2	2
Sandy soil	6	6	Red shale	8	10
Gray sand	12	18	Sand (water at 38 ft)	32	42
Yellow sand	7	25	Hard sand	2	44
Yellow sandy clay	17	42	Gravel (water)	20	64
Gravel	8	50	Shale	21	85
Red bed	6	56	Well JD-31-42-902		
Gray lime	4	60	Owner: Rollo Tinkler Driller: Robert Lee-Bob-Barnhill		
Gray shale	13	73	Soil	2	2
Gray lime	5	78	Shale red	10	12
Sand and red sandy soil	13	91	Sand (water at 34 ft)	24	36
Red sandy shale	21	112	Shale red	8	44
Blue shale	13	125	Sand hard	5	49
Gray sandy shale	53	178	Gravel (water)	19	68
Gray - blue water sand	13	191	Shale tan	5	73
Lime	4	195	Sand hard	9	82
Blue shale	7	202	Shale brown	10	92
Well JD-31-42-508			Well JD-31-42-903		
Owner: R. G. Lyerla Driller: W. F. Smith Drilling Co.			Owner: J. F. Guy Driller: J. T. Carson		
Topsoil	2	2	Clay	10	10
Clay	2	4	Gravel	2	12
Pack sand	25	29	Hard sand	18	30
Water sand and gravel	6	35	Sandy lime	5	35
Shale	8	43	Water sand and gravel	50	85
			Blue shale	6	91

Table 3.—Drillers' Logs of Selected Wells in Eastland County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JD-31-43-704—Continued			Well JD-31-43-904—Continued		
Red rock	11	31	Yellow clay	2	72
Sand and gravel	44	75	Blue shale	12	84
Blue shale	13	88	Sandy lime	13	97
			Gray shale	8	105
Well JD-31-43-804			Pink shale	20	125
Owner: Durwood Burgess			Gray shale	3	128
Driller: Curtis Alford Drilling and Well Service			Sandy lime	3	131
Soil and sand	10	10	Pink shale	13	144
Sand rock	4	14	Lime	9	153
Gray sand	6	20	Gray shale	7	160
Sand, little water	6	26	Sandy shale	15	175
Hard rock	2	28	Brown shale	12	187
Sand and gravel	20	48	Sandy shale	13	200
Sandy, red	14	62	Gray shale	5	205
Yellow, sandy	1	63	Sandy lime	20	225
Sandy water	14	77	Sand, salt water	12	237
Red	3	80			
Well JD-31-43-903			Well JD-31-44-501		
Owner: Norman Parks			Owner: Sam Powers		
Driller: N. L. Box Drilling Contractor			Driller: N. L. Box Drilling Contractor		
Sand	14	14	Red clay	3	3
Water sand	6	20	Sand and clay	13	16
Gravel	3	23	Tight sand 44 to 51 ft (water, 8 gpm)	35	51
Gravel and clay	7	30	Sand and clay	19	70
Lime	2	32	Coarse sand and gravel	13	83
Gravel and clay	22	54	Fine sand	22	105
Red bed	5	59	Gravel	10	115
Yellow clay	15	74	Yellow clay	5	120
Lime	1	75	Brown and blue shale	5	125
Blue shale	2	77			
Well JD-31-43-904			Well JD-31-44-601		
Owner: Norman Parks			Owner: Felix Sparks		
Drilling: N. L. Box Drilling Contractor			Driller: N. L. Box Drilling Contractor		
			Clay	6	6
Soil	2	2	Sand - little water at 28 ft	22	28
Red clay	3	5	Sand and clay, increase water 38 ft	10	38
Water sand	12	17	Sand and clay	8	46
Sand and gravel	27	44	Water sand	14	60
Yellow clay	2	46	Sand and gravel	9	69
Sand and gravel	24	70			

Table 3.—Drillers' Logs of Selected Wells in Eastland County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JD-31-44-601—Continued			Well JD-31-44-805—Continued		
Lime and gravel	4	73	Red clay	16	35
Gravel and clay	9	82	White sand	10	45
Yellow clay	51	133	Hard sand	3	48
Broken lime	5	138	Gravel	23	71
Blue shale	49	187	Yellow and blue clay	9	80
Well JD-31-44-801			Well JD-31-51-103		
Owner: Magnolia Petroleum Co. Driller: Unknown			Owner: T. H. Birdsong III Driller: Curtis Alford Drilling and Well Service		
Topsoil	1	1	Soil	2	2
Mixed clay	21	22	Gray shale	6	8
Water sand - 1 bph	6	28	Sandy	16	24
Red clay	12	40	Sand rock	1	25
Water sand - 50 bph	26	66	Sandy lime	13	38
Yellow clay	44	110	Lime and sand	14	52
Blue shale	93	203	Gravel and sand water	12	64
Lime	11	214	Yellow and red shale	18	82
Blue shale	16	230	Well JD-31-51-104		
Lime	7	237	Owner: T. H. Birdsong III Driller: Curtis Alford Drilling and Well Service		
Water sand - 3 bph	12	249	Sand	27	27
Blue shale	34	283	Sand rock	1	28
Well JD-31-44-804			Sand, little water	11	39
Owner: L. E. Sharp Driller: Lightfoot and McCrum			Hard sand rock	2	41
Sand	1	1	Sand and gravel water	9	50
Red clay	5	6	Hard, sandy lime rock	2	52
Sand and gravel	13	19	Gravel and sand water	14	66
Red clay	16	35	Yellow and red shale	15	81
White sand	10	45	Well JD-31-51-105		
Sandy lime	2	47	Owner: —Preston Driller: Robert Lee-Bob-Barnhill		
Gravel	24	71	Sand	6	6
Yellow and blue clay	8	79	Yellow shale	6	12
Well JD-31-44-805			Sand (water at 17 ft)	5	17
Owner: L. E. Sharp Driller: Lightfoot and McCrum			Lime	10	27
Sand	1	1	Shale, white	5	32
Red bed	4	5	Sand (increase of water)	8	40
Sand and gravel	11	16	Shale, blue	10	50
Water sand	3	19			

Table 3.—Drillers' Logs of Selected Wells in Eastland County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JD-31-52-104—Continued			Well JD-31-57-118—Continued		
Blue shale	4	50	Sand and gravel - water	15	80
Brown shale	6	56	Hard lime rock	9	89
Blue shale	13	69	Yellow and brown shale	6	95
Well JD-31-57-118			Well JD-31-57-429		
Owner: City of Rising Star			Owner: Weldon Fenter		
Driller: Curtis Alford Drilling and Well Service			Driller: Curtis Alford Drilling and Well Service		
Soil	4	4	Soil	.5	.5
Red clay	6	10	Red clay	2.5	3
Sand	10	20	Sand	32	35
Water sand	10	30	Sand rock	2	37
Red bed	4	34	Water sand - little water	10	47
Blue soapstone	11	45	Sand and gravel (tested 12 gpm)	11	58
Soapstone	5	50	Red bed	6	64
Water sand	5	55	Sand rock	2	66
Sand and shale	5	60	Water sand - bailed 28 to 30 gpm	11	77
Sandy lime, hard	2	62	Lime rock	3	80
Hard sand - water	3	65			

ELLIS COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: E, Electric.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
JK-33-49-101	Lesco, Inc.	R. S. Lesage No. 1	1944	2,898	710	E
50-601	L. H. Hughey and S. L. Carpenter	Martha Cass Fester No. 1	1946	3,007	435	E
58-101	Geologic Enterprises	Bennett No. 1	1962	1,900	505	—

ELLIS COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JK-33-57-201			Well JK-33-57-201—Continued		
Owner: City of Milford Driller: R. H. Dearing and Son			Soapstone	19	2,136
			Sand, hard, mineral	9	2,145
Topsoil	3	3	No record	15	2,160
Rock, white	307	310	Sand, hard, mineral	8	2,168
Shale, blue	330	640	Shale, blue	7	2,175
Sand	9	649	Sand, hard, mineral	32	2,207
Shale	15	664	Limestone, hard	43	2,250
Sand	14	678	Shale	25	2,275
Shale	36	714	Limestone	10	2,285
Sand	6	720	Marl, red	19	2,304
Shale	25	745	Shale	36	2,340
Sand	53	798	Marl, red	25	2,365
Shale	178	976	Limestone	35	2,400
Limestone, hard	224	1,200	Marl, red	18	2,418
Marl, white	25	1,225	Sandrock	10	2,428
Limestone, hard	89	1,314	Marl, red	7	2,435
Marl, white	56	1,370	Sand	15	2,450
Limestone, hard	75	1,445	Marl, red	20	2,470
Shale	10	1,455	Sand, good	118	2,588
Sand rock, very hard	7	1,462	Sand rock, very hard	4	2,592
Sand, good	23	1,485			
Shale	7	1,492	Well JK-33-57-202		
Lime, hard	58	1,550	Owner: City of Milford Driller: J. L. Myers Sons		
Soapstone	15	1,565	Surface soil	4	4
Marl	55	1,620	Chalk, rock	311	315
Limestone, soft	30	1,650	Shale	351	666
Limestone, hard	174	1,824	Sand	19	685
Marl, white	11	1,835	Shale	63	748
Limestone, hard	160	1,995	Sand	15	763
Marl	7	2,002	Shale	4	767
Limestone, hard	26	2,028	Sand	27	794
Limestone, soft	47	2,075	Sand, broken	28	822
Soapstone	20	2,095	Sand	30	852
Limestone, hard	10	2,105	Sand and shale	8	860
Sand, mineral	5	2,110	Shale	40	900
Limestone, hard	7	2,117			

ERATH COUNTY

Table 2.—Selected Oil, Gas, and Stratigraphic Tests

Type Log: D, Drillers'; E, Electric; S, Sample.
Logs in Texas Water Development Board files

WELL	OPERATOR	LEASE AND WELL	DATE DRILLED	DEPTH (FT)	APPROXIMATE LAND SURFACE ELEVATION (FT)	TYPE LOG
JP-31-38-801	Coastal States Gas Producing Co.	Davis No. 1	1960	3,509	1,261	E
44-906	Foster Brothers	C. P. Putty No. 1	1948	2,935	1,411	S
47-403	W. H. Woods, Trustee	R. J. Sikes No. 1	1947	4,300	1,370	E
48-803	McCarthy Oil and Gas Corp.	W. C. Hendricks No. 1	1946	7,166	1,041	E
53-102	Leonard Refineries	J. E. Clayton No. 1	1948	3,067	1,373	E
413	Taxoline Co. Inc.	Jones No. 1	1965	3,580	1,445	E
602	Frank Buttram	Whitfield No. 1	1951	3,750	1,485	E
54-401	Arkansas - Louisiana Gas Co.	Treasure Rector No. 1	1962	3,899	1,493	E
802	Dale Smith and Louisiana Machine Co.	J. L. Kiker No. 1	1952	4,135	1,377	D,E
62-402	Haynes B. Ownby Drilling Co.	Robert C. Crouch No. 1	1949	3,859	1,516	E
64-202	Burgin Oil Co.	Mrs. M. W. Robertson No. 1	1956	2,365	1,137	E
501	do.	Nelms No. 1	1956	2,775	1,230	E
801	American Liberty Oil Co.	D. A. Fellers No. 1	1949	4,440	1,098	E
901	Humble Oil and Refining Co.	Wright No. 1	1956	2,479	1,149	E
32-57-403	Shell Development Co.	L. W. Weeks No. 1	—	165	1,193	S

ERATH COUNTY

Table 3.—Drillers' Logs of Selected Wells

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-39-502			Well JP-31-39-902—Continued		
Owner: — Fruehauf Driller: Terry Drilling and Supply Co.			Sand and gravel	4	24
Mixed Soil	32	32	Red shale	8	32
Red bed	10	42	Well JP-31-44-901		
Gray shale	24	66	Owner: Richard Krapf Driller: Terry Drilling and Supply Co.		
Hard sand	29	95	Mixed soil	7	7
Water sand	15	110	Caliche	24	31
Sand and gravel	5	115	Sand rock	32	63
Red bed	20	135	Water sand	8	71
Yellow shale	10	145	Blue shale	15	86
Gray shale	15	160	Lime shells	9	95
Sand rock (very hard)	15	175	Sand and gravel (hole full of water)	44	139
Blue shale	15	190	Blue shale	19	158
Sandy shale, blue	19	209	Sand rock	6	164
Sand	23	232	Blue shale	25	189
Blue shale	21	253	Red bed	30	219
Sandy lime	13	266	Well JP-31-46-203		
Sandy shale	7	273	Owner: Phillips Petroleum Co. Driller: Jones Drilling Co.		
Blue shale	5	278	Soil	3	3
Sandy shale, blue	4	282	Red clay	2	5
Blue shale, hard	9	291	Yellow clay	23	28
Broken lime shells	17	308	Sand and shale - seep water	64	92
Well JP-31-39-901			Blue shale	44	136
Owner: Morgan Mill Water Supply Corp. Driller: Jack Leonard Drilling Co.			Hard lime	36	172
Topsoil	3	3	Sand and shale	58	230
Gray sandy clay	13	16	Sand	60	290
Gray sand	6	22	Water sand	48	338
Coarse sand and gravel	9	31	Red clay	34	372
Red bed	4	35	Water sand	22	394
Well JP-31-39-902			Shale	3	397
Owner: Morgan Mill Water Supply Corp. Driller: Jack Leonard Drilling Co.			Well JP-31-46-204		
Topsoil	2	2	Owner: Phillips Petroleum Co. Driller: Jones Drilling Co.		
Gray sandy clay	13	15	Caliche	3	3
Small gravel	5	20	Clay	27	30

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-46-204—Continued			Well JP-31-47-402—Continued		
Sand - little water	65	95	Blue shale	25	382
Blue shale	35	130	Water gravel	8	390
Lime	40	170	Water	2	392
Sandy shale	60	230	Well JP-31-47-701		
Sand	57	287	Owner: Raymond Jarrett Driller: Jones Drilling Co.		
Sand and gravel - water	50	337	Soil	2	2
Red bed	33	370	Clay	3	5
Trinity water sand	25	395	Yellow clay	15	20
Shale	1	396	Gray shale	40	60
Well JP-31-46-901			Blue shale	11	71
Owner: L. L. Hopke Driller: Jones Drilling Co.			Gray shale	4	75
Sand and clay	40	40	Blue shale	90	165
Water sand	5	45	Red shale	10	175
Hard lime	105	150	Gray shale	5	180
Lime and shale	120	270	Red bed	12	192
Shale	27	297	Blue shale	11	203
Water sand (Paluxy)	77	374	Sandy shale	17	220
Lime and shale	14	388	Pack sand (water show)	13	233
Water sand (Trinity)	27	415	Sand (Paluxy)	50	283
Shale	5	420	Blue shale	15	298
Water sand	10	430	Broken lime shells	4	302
Shale	5	435	Red bed	18	320
Well JP-31-47-402			Sand (Travis Peak)	32	352
Owner: Kenneth Rucker Driller: Jones Drilling Co.			Red bed	3	355
Topsoil	1	1	Well JP-31-52-301		
Soil	2	3	Owner: Leon Barton Driller: N. L. Box Drilling Contractor		
Lime rock	12	15	Sand, clay, and sandstone	27	27
Red bed	29	44	Water gravel	11	38
Blue shale	37	81	White clay and sand	8	46
Sandy shale	32	113	Tight gravel	12	58
Lime rock	71	184	Tight sand and white clay	12	70
Blue shale	46	230	Coarse sand	10	80
Red bed	29	259	Red and yellow clay	15	95
Sticky shale	42	301			
Limestone	56	357			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-53-406			Well JP-31-53-503		
Owner: Wayne Keith Driller: J. T. Brown Water Well Drilling			Owner: B. W. Mathis Driller: J. T. Brown Water Well Drilling		
Brown topsoil	1	1	Red clay	6	6
Red clay	2	3	Brown sand	2	8
Yellow clay	22	25	Blue clay	5	13
White clay and sand	7	32	White sand and blue clay	7	20
Sand rock	10	42	Blue clay and lime rock	12	32
White sand	8	50	White sand	8	40
Gravel and sand	27	77	Sand, gravel, clay clods	11	51
Red clay	14	91	Sand and small gravel	5	56
Well JP-31-53-411			Gravel and sand	29	85
Owner: Mrs. Ross Decker Driller: Lightfoot and McCrum			Water gravel	11	96
Sand	1	1	Gravel and blue clay clods	6	102
Blue and yellow clay	7	8	Red bed	6	108
Sand and gravel	35	43	Gravel, sand, and sticky clay	30	138
Water gravel	7	50	Water gravel and sand	32	170
Blue clay	5	55	Yellow, green, and red clay	7	177
Water sand and gravel	60	115			
Red and blue clay	5	120	Well JP-31-53-508		
Sand	10	130	Owner: Wayne Keith Driller: J. T. Brown Water Well Drilling		
Sand and blue sandy clay	17	147	Top, brown sand	2	2
Sandy lime	4	151	Red clay	5	7
Blue shale	6	157	Yellow clay	18	25
Well JP-31-53-412			Yellow clay and gravel	5	30
Owner: Mrs. Ross Decker Driller: Lightfoot and McCrum			White sand	10	40
Sand	1	1	White sand and gravel	22	62
Blue and red clay	8	9	White sand, gravel, and water	13	75
Sand and gravel	37	46	Sand rock	8	83
Water sand and gravel	74	120	White sand and gravel	42	125
Blue and red clay	10	130	Red and green clay	10	135
Sand and blue clay	30	160			
Blue shale	9	169			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-53-509			Well JP-31-53-714		
Owner: Ray L. Baldwin Driller: J. T. Brown Water Well Drilling			Owner: S. E. Keith, Jr. Driller: J. T. Brown Water Well Drilling		
Brown sand	1	1	Top, brown sand	2	2
Red clay	6	7	Red clay	4	6
White clay and gravel	25	32	Yellow clay	19	25
White sand	11	43	Brown sand and gravel	7	32
White sand and gravel	17	60	Gravel	10	42
Blue clay clods and gravel	8	68	White sand, gravel, and clods	14	56
White sand and gravel	12	80	Red clay	22	78
Water gravel and sand	3	83	Well JP-31-53-715		
Water gravel and green clods	29	112	Owner: R. E. House Driller: N. L. Box Drilling Contractor		
Red clay	28	140	Clay	3	3
Gravel, green and blue clods	25	165	Sand and gravel	17	20
Brown clay	5	170	Sandstone	3	23
Well JP-31-53-601			Sand and gravel (little water) 28 to 32 ft	9	32
Owner: Ted Robbins Driller: N. L. Box Drilling Contractor			Sand and clay	13	45
Top, sand	4	4	Fine water sand (water 20 gpm)	5	50
White sand	5	9	Lime	3	53
Yellow clay	7	16	Red bed	22	75
Blue shale	5	21	Lime	11	86
Yellow and white clay	24	45	Coarse sand	23	109
Gray sand and limestone pack	16	61	Yellow clay	4	113
White lime rock	9	70	Well JP-31-53-716		
Blue and gray shale	60	130	Owner: R. E. House Driller: N. L. Box Drilling Contractor		
Dark gray clay	30	160	Clay	3	3
Dark gray sand	20	180	Sand and gravel	29	32
Black sand	32	212	Shells, sand, and clay	14	46
Gray sand	53	265	Red bed	8	54
Sand and gravel	32	297	Light gravel	5	59
Red clay	9	306	Red bed and tight sand	11	70
Sand, gravel, and blue clay	11	317	Fine sand	10	80
			Coarse sand	10	90

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-53-716—Continued			Well JP-31-53-803—Continued		
Gravel	17	107	White sand	15	50
Yellow and red clay	6	113	Red clay	10	60
			Trinity gravel	30	90
Well JP-31-53-732			Brown clay	11	101
Owner: Don Ray Keith Driller: Wilmer Ocie Davis			Well JP-31-53-804		
Surface soil	3	3	Owner: Bill Keith Driller: Lightfoot and McCrum		
Sandy clay	17	20	Black soil	5	5
Dry sand and gravel	25	45	Sand and sandy lime	3	8
Water sand and gravel	8	53	Sandy, blue clay	12	20
Hard, gray sand	12	65	Sand and gravel	8	28
Red shale	5	70	Blue green and yellow clay	3	31
Gray shale	10	80	Sandy clay and gravel	9	40
Red shale	15	95	Sand and gravel	20	60
Water sand and gravel	30	125	Water sand	6	66
Red clay	2	127	Red bed	32	98
Well JP-31-53-733			Sand and gravel (water)	25	123
Owner: Onie Keith Driller: Wilmer Ocie Davis			Blue shale	9	132
Red sandy shale	8	8	Well JP-31-53-806		
Quicksand	17	25	Owner: Bill Keith Driller: Lightfoot and McCrum		
Water sand	5	30	Blacksoil	4	4
Gray, sandy shale	15	45	Blue and red clay	13	17
Gray, sandy lime	10	55	Gravel	2	19
Red shale	45	100	Sand and gravel	34	53
Gray, sandy shale	5	105	Water gravel	14	67
Water sand	10	115	Red bed	38	105
Yellow shale	5	120	Sand	7	112
Well JP-31-53-803			Blue and red clay	38	150
Owner: J. P. Thiebaud Driller: J. T. Brown Water Well Drilling			Sand (hard)	5	155
Brown sand	4	4	Blue and yellow clay	5	160
White sand	4	8	Blue shale	20	180
Red clay	12	20			
White sand	4	24			
Blue rock	3	27			
Brown sand	8	35			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-53-807			Well JP-31-53-809—Continued		
Owner: P. T. Keith Driller: Lightfoot and McCrum			Red clay	10	115
Soil	3	3	Brown clay clods and sand	5	120
Sandy clay	7	10	Brown clay	15	135
Sand	40	50	Well JP-31-53-901		
Water sand and gravel	18	68	Owner: Joe Little Driller: J. T. Brown Water Well Drilling		
Red bed	30	98	Brown topsoil	3.5	3.5
Sand and gravel	17	115	Yellow clay, gravel, and sand	14.5	18
Blue and green clay	2	117	White soapstone clods	13	31
Sand and gravel	8	125	Yellow sand	25	56
Yellow and blue clay	10	135	Dark brown sand	5	61
Well JP-31-53-808			Blue clay	9	70
Owner: Bill Keith Driller: Lightfoot and McCrum			Dark gray sand	18	88
Sand	2	2	Red and green clay	13	101
Red clay	8	10	White sand	13	114
Sand and gravel	52	62	Travis Peak gravel and sand	114	228
Gravel (water)	5	67	Well JP-31-54-604		
Yellow clay	2	69	Owner: W. L. Payton and Frakes Driller: Jones Drilling Co.		
Red bed	35	104	Topsoil	1	1
Blue and yellow clay	2	106	Subsoil	5	6
Sand	5	111	Sandy soil	14	20
Sand and gravel	12	123	Sandy shale	40	60
Yellow and blue clay	11	134	Top water	5	65
Well JP-31-53-809			Blue shale	25	90
Owner: C. T. Keith Driller: J. T. Brown Water Well Drilling			Lime rock	140	230
Brown sand	2	2	Sandy shale	70	300
Red clay	6	8	Water sand	10	310
Brown clay and sand	10	18	Water gravel	15	325
White sand	27	45	No record	3	328
Gravel	20	65	Well JP-31-54-802		
Green clay	5	70	Owner: J. L. Kiker No. 1 Driller: Dale Smith and Louisiana Machine Co. (Complete log not shown)		
White clay clods and sand	15	85	Soil	6	6
Red clay	10	95	Clay	6	12
Brown clay and sand	10	105			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-54-802—Continued			Well JP-31-55-104		
Sand	5	17	Owner: City of Stephenville Driller: Jones Drilling Co.		
Shale, sandy	68	85	Soil	5	5
Shale, gray	105	190	Sandy loam	10	15
Shale, sandy	5	195	Broken lime and shale	166	181
Wood logs	11	206	Red bed	2	183
Shale, sandy	19	225	Red bed and shale	14	197
Sand	8	233	Sandy shale	50	247
Shale, red	10	243	Water sand	40	287
Shale, sandy	12	255	Water gravel	3	290
Sand, gravel, water	36	291	Sandy shale	29	319
Shale, brown	4	295	Gumbo clay	6	325
Shale, blue	5	300	Blue shale	20	345
Sand	15	315	Gumbo clay	4	349
Shale, red	5	320	Red and blue shale	16	365
Sand, hard, red, water	50	370	Sandy shale	13	378
Gravel	6	376	Water sand and gravel (Trinity)	22	400
Shale	66	442	Shale	2	402
Gravel and sand	11	453	Well JP-31-55-105		
Shale	2	455	Owner: City of Stephenville Driller: Texas Water Wells		
Gravel, sand, and shale	17	472	Ground level	3.5	3.5
Shale	100	572	Surface	4.5	8
Well JP-31-55-103			Rock	1	9
Owner: City of Stephenville Driller: Texas Water Wells			Caliche, clay	12	21
Ground level	3.5	3.5	Rock	2	23
Surface	3.5	7	Caliche, clay, rock	27	50
Clay	5	12	Sand and clay	5	55
Caliche and clay	8	20	Rock, clay	10	65
Sand with lime streaks	20	40	Sand, clay	10	75
Shale and lime streaks	30	70	Sand, rock	5	80
Lime, sand, and shale streak	174	244	Rock, clay	5	85
Sand - some gravel	24	268	Shale, lime	75	160
Rock	1	269	Shale streaks, red bed	20	180
Red bed	31	300	Sand, shale streaks	28	208
Sand - fine gravel	61	361	Sand, shale, clay	22	230
Shale clay	16	377	Sand, clay	20	250
Lime and clay	23	400			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-55-105—Continued			Well JP-31-55-107		
Shale, clay	20	270	Owner: City of Stephenville Driller: Fort Worth Drilling Co.		
Shale, red clay	10	280	Yellow	20	20
Red bed	20	300	Lime	5	25
Sand	20	320	Blue shale	5	30
Sand, shale	10	330	Lime	5	35
Sand, gravel	31	361	Blue shale	20	55
Clay and lime	31	392	White lime	25	80
Well JP-31-55-106			Brown, hard lime	5	85
Owner: City of Stephenville Driller: Fort Worth Drilling Co.			Gray shale	18	103
			White lime	2	105
Shale, blue	20	20	Blue shale	3	108
Lime	10	30	White lime	7	115
Shale, blue	5	35	Brown shale	5	120
Lime	20	55	White lime	40	160
Lime, white	15	70	Sandy shale	54	214
Lime, hard	10	80	Sand	23	237
Shale, gray	5	85	Water	21	258
Lime, white	21	106	Blue shale	2	260
Shale, blue	2	108	Red shale	10	270
Lime, white	7	115	Sandy shale	20	290
Shale, brown	5	120	White lime	5	295
Lime, white	15	135	Sandy shale	20	315
Shale, blue	5	140	Blue shale	5	320
Lime	10	150	Red shale	5	325
Shale, blue	20	170	Sand	10	335
Shale, sandy	44	214	Blue shale	10	345
Sand	23	237	Water sand	15	360
Water	7	244	Red shale	8	368
Sand	11	255			
Shale, blue	15	270	Well JP-31-55-111		
Shale, sandy	20	290	Owner: City of Stephenville Driller: — Hamilton		
Shale, blue	5	295	Soil	7	7
Shale, sandy	20	315	Lime	2	9
Shale, blue	26	341	Caliche	21	30
Sand	4	345	Blue shale	55	85
Sand	19	364	Water	5	90
Shale, blue	2	366			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-55-204			Well JP-31-55-301—Continued		
Owner: City of Stephenville Driller: J. B. Tatum			Red bed	6	60
Topsoil	6	6	Brown shale	15	75
Clay	6	12	Red bed	10	85
Lime	2	14	Sandy shale	27	112
Shale	21	35	Sand - water	4	116
Lime	7	42	Broken lime and blue shale	19	135
Sand and water	3	45	Blue shale	8	143
Shale	11	56	Broken lime and blue shale	5	148
Lime	4	60	Shale conglomerate	17	165
Broken lime	30	90	Broken lime	10	175
Shale	8	98	Sandy shale	13	188
Shale	17	115	Blue gumbo shale	7	195
Broken lime	23	138	Lime rock - hard	54	249
Shale	10	148	Gumbo shale, blue	1	250
Red bed	4	152	Lime rock and blue shale	50	300
Shale	16	168	Sandy shale	15	315
Lignite	2	170	Sand, dry	10	325
Dry sand	10	180	Sandy shale	17	342
Red rock	4	184	Sand and shale	3	345
Hard sand	26	210	Sand, water	50	395
Water	5	215	Sand and lime	10	405
Shale	5	220	Lime and red sand	15	420
Dry sand	20	240	Lime, gravel	15	435
Clay and sand	33	273	Sand	15	450
Red bed	3	276	Lime rock, shale	20	470
Sand and water	14	290	Red sand and lime	20	490
Blue shale	10	300	Water sand	7	497
Red bed	7	307	Gravel, water	16	513
Sand and gravel	44	351	Red bed	7	520
Well JP-31-55-301			Well JP-31-55-302		
Owner: H. S. Foster Driller: Terry Drilling and Supply Co.			Owner: H. S. Foster Driller: Unknown		
Topsoil and rock	3	3	Surface	5	5
Brown rock	19	22	Caliche	15	20
Broken lime and blue shale	23	45	Dry Sand	10	30
White lime	5	50	Sand rock	22	52
Green shale	4	54			

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-55-801—Continued			Well JP-31-62-104—Continued		
Sand and shale	62	392	Sand	8	310
Shale, red and gray lime	62	454	Coarse sand	10	320
Well JP-31-55-803			Sand and shale breaks	10	330
Owner: Mrs. Fowler Driller: Jones Drilling Co.			Gravel	17	347
Surface soil	3	3	Gravel and shale breaks	10	357
Yellow clay	12	15	Gravel	22	379
Shale and lime	69	84	Hard, sandy shale	18	397
Hard lime	1	85	Sand	65	462
Shale and lime streaks	85	170	Hard shale	7	469
Sandy shale	10	180	Well JP-31-62-201		
Shale	49	229	Owner: F. A. Knape Driller: Jones Drilling Co.		
Sandy shale	11	240	Sandy soil	5	5
Sand	6	246	Red clay	13	18
Water sand	28	274	Sand	62	80
Water gravel	10	284	Shale and lime	175	255
Shale	12	296	Pack sand	10	265
Red bed, shale	7	303	Water sand and gravel	43	308
Red bed	27	330	Streaks of water sand and shale	50	358
Trinity sand and gravel	30	360	Red clay	22	380
Well JP-31-62-104			Trinity water sand	28	408
Owner: City of Dublin Driller: Texas Water Wells			Well JP-31-62-301		
Rock and hard shale	29	29	Owner: Cottonwood Baptist Church Driller: J. T. Brown Water Well Drilling		
Hard shale	21	50	Sand	20	20
Fine sand	15	65	Yellow clay clods	3	23
Shale and sand breaks	27	92	Yellow clay	12	35
Hard shale	61	153	Gray shale	115	150
Rock and shale	59	212	Dark gray shale	15	165
Shale	6	218	Gray shale, clay	37	202
Hard shale	17	235	Red and green clay	10	212
Shale	35	270	Red clay	4	216
Sandy shale	10	280	White sand	9	225
Rock	2	282	Green and red clay	5	230
Shale	10	292	White sand	14	244
Sandy shale	10	302	Green and red clay	8	252
			White sand	4	256

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-31-62-501			Well JP-31-63-301		
Owner: Liston Wiggins Driller: Texas Irrigation Sales, Inc.			Owner: J. B. McConnell Driller: Bill Wolf and Son		
White caliche	12	12	Surface	16	16
White and blue sand, caliche rock	16	28	Broken rock - clay	5	21
Limestone and sand	30	58	Clay	1	22
Blue and white limestone and loose shale	30	88	Shale	4	26
Loose shale	78	166	Rock	15	41
Loose shale and sand	26	192	Sand rock	6	47
Loose shale and sand	14	206	Shale, sand, rock, clay (small layers)	50	97
Limestone and shale (small gravel)	10	216	Coal and clay layers	21	118
Sand (small gravel)	10	226	Sand gravel, small layers clay to rock	84	202
Red bed and sand	10	236	Well JP-31-64-301		
Red bed and sand	10	246	Owner: M. C. Lowry Driller: Terry Drilling and Supply Co.		
Small gravel and sand	10	256	Soil	5	5
Small gravel and sand	10	266	Sand	27	32
Small gravel and sand	10	276	Water sand	10	42
Sand, fine, white	10	286	Sand rock	8	50
Sand, fine, white	10	296	White lime (Glen Rose)	202	252
Sand, fine, white and larger gravel	10	306	Sand, water	34	286
Sand, white, larger	10	316	Lime shell	9	295
Sand and small gravel	10	326	Blue shale	5	300
Sand and small gravel, red bed	10	336	Red bed	10	310
Sand and small gravel, red bed	10	346	Blue shale	5	315
Red bed	10	356	Sand, gravel, water	32	347
Red bed	10	366	Red bed	6	353
Red bed	10	376	Well JP-32-41-103		
Red bed and lime	10	386	Owner: Stanley Allen Driller: A. L. Rodgers		
Red bed and lime	10	396	Surface sand and clay	35	35
Red bed and trace of sand	10	406	Water sand	10	45
Lime and trace of sand	10	416	Yellow clay	35	80
Red bed, limestone, small gravel	10	426	Gravel	5	85
Red bed, blue shale, and limestone	10	436	Red clay	20	105
			Water sand	35	140
			Blue shale	6	146

Table 3.—Drillers' Logs of Selected Wells in Erath County—Continued

	THICKNESS (FEET)	DEPTH (FEET)		THICKNESS (FEET)	DEPTH (FEET)
Well JP-32-49-501			Well JP-32-49-502		
Owner: E. L. Huffman Driller: Jones Drilling Co.			Owner: E. L. Huffman Driller: Jones Drilling Co.		
Surface soil	2	2	Surface sand	2	2
Yellow clay	13	15	Yellow clay	12	14
Sandy clay	30	45	Sand (water seep)	1	15
Water sand (55 gpm)	10	55	Sandy clay	45	60
Sandy shale	45	100	Lime and shell	204	264
Lime and shell	264	364	Water sand with shale breaks	100	364
Water sand with shale breaks	40	404	Red bed	21	385
Red bed	21	425	Water sand	10	395
Water sand	10	435	Red bed	18	413
Red bed	16	451	Water sand	79	492
Water sand	61	512			