

MORRIS COUNTY, TEXAS

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

TEXAS STATE BOARD OF WATER ENGINEERS

C. S. Clark, Chairman
A. H. Dunlap, Member
J. W. Pritchett, Member

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

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By

C. R. Follett

This publication contains records of 102 wells and springs, drillers' logs of 7 wells and the results of chemical analyses of water from 87 wells in Morris County, Texas. The records were collected from March 11 to 24, 1942 by C. R. Follett.

The analyses were made by chemists employed on Work Projects Administration Project No. 17276 under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry, The University of Texas and W. W. Hastings, Chemist of the Quality of Water Division of the Federal Geological Survey. The results of all of the analyses are tabulated in parts per million and 16 of them are also given in milligram equivalents per liter for the convenience of those who prefer this form of expressing the quality of water.

The records serve as a guide to land owners, well drillers and others who need information regarding wells, the depth to ground water in different parts of the county, and the quality and chemical character of water yielded by the wells. They provide useful information for more detailed investigations that are being made by the Texas State Board of Water Engineers in cooperation with the Federal Geological Survey in many parts of Texas.

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

This release was mimeographed by employees of the Work Projects Administration Project No. 17276.

Records of wells and springs in Morris County, Texas
All wells were dug unless otherwise stated in remarks

Well No.	Distance from Omaha	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
1	8 $\frac{1}{2}$ miles north	Dutch Love	1922?	65	8	1.4
2	7 $\frac{3}{4}$ miles north	C. W. Forsyth	--	39	8	3.2
3	8 miles north	C. D. Browne	1942	49	3	--
4	do.	do.	1941	96	3	--
5	8 $\frac{5}{8}$ miles north	do.	1937	5,014	13- 3/8	--
6	8 $\frac{1}{2}$ miles northeast	--	--	--	--	--
20	5 $\frac{1}{2}$ miles northeast	C. E. Heard	Old	30	24	--
21	3 $\frac{1}{4}$ miles northeast	Elic Norris Est.	1939	39	30	2.6
22	4 $\frac{1}{2}$ miles northeast	Mrs. H. J. Vissering	Old	22	36	2.1
23	In Naples	City of Naples No. 2	1935	450	13	--
24	do.	City of Naples No. 1	1925?	400 ⁺	12	--
25	5 $\frac{1}{2}$ miles northeast	J. A. Higgins	Old	30	36	--
40	1 $\frac{1}{2}$ miles east	Joe Parham	1922	17	24	2.1
41	In Omaha	Thomas & Ware Water Co.	1930	260	6	--
42	2 $\frac{1}{2}$ miles north	T. I. Pate	1930?	64	36	4.0
43	3 $\frac{1}{2}$ miles northwest	Mrs. R. H. Motley	1926?	27	30	2.9
44	3 $\frac{3}{4}$ miles north	Mrs. W. J. Moore	Old	39	42	1.4
45	5 $\frac{1}{2}$ miles north	Union Chapel School	1840?	26	30	3.2
46	5 $\frac{1}{2}$ miles northwest	B. Settles	1916?	43	30	2.7
47	5 $\frac{3}{4}$ miles northwest	J. W. Rogers	1935	36	6	1.6
48	3 $\frac{3}{4}$ miles northwest	Mrs. Annie L. Kline	1885?	25	36	--

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

b/ T, turbine; A, air or natural gas lift; C, cylinder; E, electric; W, windmill; H, hand. Number indicates horsepower.

Chemical analyses of water from most of these wells and springs are shown in a table of analyses on pages 15 to 19.

Well No.	Water level		Method of lift	Use of water	Remarks
	Below measuring point (ft.) a/	Date of measurement			
1	61.52	Mar. 17, 1942	H	D,S	Bored. Tile casing.
2	36.51	do.	H	D,S	Do.
3	--	--	None	N	Drilled; seismograph test hole. Water sand reported from 30 to 49 feet.
4	--	--	None	N	Drilled; seismograph test hole. Water sand reported from 30 to 49 and 85 to 96 feet.
5+		Mar. 17, 1942	Flows	N	Drilled; oil test. Estimated flow 5 gallons a minute 1 foot above ground.
6+d/		--	Flows	N	Drilled; oil test. Flow of salty water reported.
20	d/15	--	H	D,S	Brick curbing.
21	33.91	Mar. 18, 1942	H	D,S	Wood curbing.
22	5.67	do.	C,H	S	Tile curbing.
23	d/123	1935	T,E, 15	P	Drilled to 864 feet and plugged back. Layne-Texas Company drillers. Screens from 297 to 309, 310 to 354 and 397 to 430 feet. Underreamed to diameter of 30 inches and gravel packed from 25 to 450 feet. Drawdown reported 155 feet while pumping 88 gallons a minute when drilled. See log
24	--	--	None	N	Drilled. Screen at about 300 feet. Formerly supplied City of Naples.
25	d/ 20	--	H	D,S	
40	6.22	Mar. 20, 1942	C,E,H	D,S	Tile curbing.
41	d/ 60	--	A,E, 10	P	Drilled. Supplies City of Omaha. Casing perforated in lowermost 40 feet. Reported yield 100 gallons a minute. Temperature 66° F.
42	55	Mar. 18, 1942	H	D,S	No curbing.
43	24.51	Mar. 17, 1942	H	D,S	Brick curbing.
44	24.93	Mar. 18, 1942	H	S	Do.
45	8.50	Mar. 17, 1942	H	D,S,P	Do.
46	40.86	do.	H	D,S	Do.
47	60.97	do.	H	D,S	Bored. Tile casing.
48	--	--	H	D,S	Rock curbing.

c/ P, public supply; Ind, industrial; D, domestic; S, stock; N, none.
d/ Water level reported by owner or tenant.

Records of wells and springs in Morris County--Continued

Well No.	Distance from Omaha	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
49	2 $\frac{1}{4}$ miles northwest	S. Patterson	1935?	115	6	--
50	1 $\frac{1}{2}$ miles northwest	Sam Smith	--	19	8	2.1
51	1 $\frac{3}{4}$ miles northwest	Mrs. Annie Smith	1890?	76	30	0.0
52	3 $\frac{3}{4}$ miles northwest	A. W. Hays	1921?	48	6	4.0
70	2 $\frac{1}{2}$ miles southwest	W. B. Robertson	1900?	50	36	2.9
71	3 $\frac{1}{2}$ miles southwest	R. Curry	1900?	45+	36	--
72	5 miles southwest	Johnson's Chapel School	1932	17	36	2.9
73	5 $\frac{1}{4}$ miles southwest	T. C. Connor	1922?	23	36	6.5
74	3 miles southwest	Mrs. R. H. Talley	1922	22	36	5.0
75	2 miles southwest	B. J. Cason	1916	20	36	2.3
76	2 miles southeast	W. H. Witt	1903	37	36	--
77	3 miles southeast	William's Chapel School	--	19	42	2.8
78	4 $\frac{1}{2}$ miles south	I. Forsyth	Old	21	42	1.5
79	5 $\frac{1}{2}$ miles southeast	Rocky Branch School	Old	30	48	--
80	4 $\frac{1}{2}$ miles southeast	Kan Thigpen	1917?	25	36	2.8
81	3 $\frac{1}{2}$ miles southeast	Plainview School	--	26	36	2.6
82	3 miles east	W. M. and Clara Smith	1936	4,105	10	--
83	4 $\frac{1}{2}$ miles east	R. P. Lowery	--	20	36	3.2
84	4 $\frac{3}{4}$ miles east	Edwards Est.	Old	17	42	4.8
85	5 $\frac{3}{4}$ miles southeast	J. B. Irvin	1916	19	36	1.6

Well No.	Distance from Daingerfield	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
100	7 miles northwest	James Howel	--	18	36	3.0
101	6 miles northwest	Joe Justiss	1937	79	42	1.7

Well No.	Water level		Method of lift <u>b/</u>	Use of water <u>c/</u>	Remarks
	Below measuring point (ft.) <u>a/</u>	Date of measurement			
49	--	--	C,W	D,S	Drilled. Tile casing.
50	12.91	Mar. 20, 1942	H	D	Bored. Tile casing.
51	42.54	do.	None	N	Rock curbing.
52	41.14	Mar. 20, 1942	H	D,S	Bored. Tile casing.
70	4.69	Mar. 16, 1942	H	D,S	Rock curbing.
71	--	--	C,H	D,S	
72	10.58	Mar. 19, 1942	H	D,S,P	Brick curbing to 3 feet.
73	13.11	Mar. 16, 1942	H	D,S	Reported to fail during droughts.
74	17.71	do.	H	D,S	
75	6.91	do.	H	D,S	
76	<u>d/</u> 15	--	H	D,S	No curbing.
77	14.95	Mar. 20, 1942	H	P	Do.
78	13.63	Mar. 16, 1942	H	D,S	
79	--	--	C,H	P	Rock curbing.
80	14.39	Mar. 11, 1942	H	D,S	
81	15.19	do.	H	D,S	
82	--	--	None	N	Drilled; oil test, Stephen J. Rotond, driller. Electrical log from 600 to 1,751 feet, in files of Texas Board of Water Engineers, shows thin sand between 655 and 665 feet. See
83	5.35	Mar. 11, 1942	H	D,S	No curbing. partial driller's log.
84	8.68	do.	H	D,S	Do.
85	14.43	do.	H	D,S	

Well No.	Water level		Method of lift <u>b/</u>	Use of water <u>c/</u>	Remarks
	Below measuring point (ft.) <u>a/</u>	Date of measurement			
100	14.04	Mar. 19, 1942	H	D,S	
101	29.61	Mar. 16, 1942	H	D,S	Bored from 34 to 79 feet. Reported that no water was encountered below 30 feet. Supply reported rather small.

Records of wells and springs in Morris County--Continued

Well No.	Distance from Daingerfield	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
102	6 $\frac{1}{2}$ miles northwest	Hays Johnson	Old	22	48	3.2
103	5 $\frac{3}{4}$ miles northwest	Connor Bros.	1936?	--	--	--
104	5 $\frac{1}{4}$ miles northwest	do.	1920?	16	36	--
105	4 $\frac{1}{2}$ miles west	J. C. Tittle	1917	17	36	4.0
106	3 $\frac{1}{4}$ miles northwest	H. Thigpen	1922?	--	10	--
107	5 miles northwest	Sunview School	1938	25	36	2.4
108	4 miles northwest	Mrs. Sallie Sibley	1932	4,000	--	--
109	do.	Mount Moriah School	1935	20	36	3.1
110	5 $\frac{3}{4}$ miles northwest	T. C. Connor	1935	380	4	--
111	5 $\frac{1}{2}$ miles northwest	Connor Bros.	--	21	42	2.0
112	5 miles north	Mount Zion School	1935	26	24	2.5
113	4 miles northwest	W. C. Whitmore	1917?	27	42	2.5
114	2 miles northwest	Ed Wallace	--	27	42	3.0
115	2 $\frac{1}{4}$ miles north	Connor Bros.	Old	29	36	4.5
130	4 miles north	J. A. Martin	1937	21	36	2.7
131	5 $\frac{1}{2}$ miles northeast	Eugene Hall	1939	4,302	--	--
132	5 $\frac{3}{4}$ miles northeast	J. B. Hall	1920	18	30	4.4
133	4 $\frac{1}{2}$ miles northeast	Mrs. Gladys Wakefield	Old	19	36	5.0
134	3 $\frac{3}{4}$ miles northeast	T. E. Goodwin	1906	25	36	--
135	2 $\frac{1}{2}$ miles northeast	Irvin Bros.	Old	29	36	3.4
136	3 $\frac{3}{4}$ miles northeast	J. W. Smith	--	30	36	--
137	do.	do.	1928	27	30	2.6
138	3 miles northeast	Bradfield's Chapel School	--	22	36	3.1
139	3 $\frac{3}{4}$ miles east	J. G. Wallis	--	18	36	2.2

Well No.	Water level		Method of lift b/	Use of water c/	Remarks
	Below measuring point (ft.) a/	Date of measurement			
102	14.02	Mar. 23, 1942	H	D,S	No curbing. Reported to fail during droughts.
103	--	--	None	N	Drilled; oil test.
104	d/ 6	--	H	D,S	
105	14.30	Mar. 24, 1942	H	D,S	
106	+	Mar. 19, 1942	Flows	S	Drilled; oil test. Estimated flow 5 gallons a minute at ground level.
107	25.30	do.	H	P	Supply reported rather small.
108	--	--	None	N	Drilled; oil test; J. E. Crosbie Inc., driller See partial driller's log.
109	19.21	Mar. 23, 1942	H	P	
110	+	Mar. 16, 1942	Flows	S	Converted oil test. Drilled to 4,203 feet and plugged back. Estimated flow 30 gallons a minute in 1942. Temperature 67° F. See partial driller's log.
111	20.96	do.	H	D,S	No curbing.
112	22.93	do.	H	P	Brick and tile curbing.
113	22.98	do.	H	D,S	No curbing.
114	28.48	Mar. 23, 1942	H	D,S	Do.
115	30.67	do.	H	D,S	Do.
130	19.21	Mar. 20, 1942	C,E,H	D,S	Tile curbing from 12 to 21 feet.
131	--	--	None	N	Drilled; oil test. Electrical log from 200 to 1,047 feet, in files of Texas Board of Water Engineers, shows sands between 200 and 240, 305 and 315, 375 and 460, 495 and 505, and 570 and 620 feet.
132	11.74	Mar. 19, 1942	H	D,S	
133	13.23	Mar. 13, 1942	H	D,S	
134	d/ 5	--	H	D,S	No curbing.
135	19.56	Mar. 13, 1942	H	D,S	Do.
136	d/ 25	--	C,H	D,S	
137	9.79	Mar. 13, 1942	H	D,S	
138	19.62	do.	H	D,S	No curbing.
139	14.06	do.	H	D,S	

Records of wells and springs in Morris County--Continued

Well No.	Distance from Daingerfield	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
140	$3\frac{3}{4}$ miles east	J. G. Wallis	--	9	36	2.0
160	$3\frac{1}{4}$ miles southeast	Oak Grove School	--	21	36	2.0
161	4 miles southeast	Rock Hill School	--	19	36	2.7
162	$2\frac{1}{2}$ miles southeast	M. C. Hervey	--	Spring	--	--
163	$1\frac{3}{4}$ miles southeast	Daingerfield State Park	1935	493	6	--
164	$1\frac{3}{4}$ miles south	Oscar Irvin	1937?	36	36	2.9
165	$2\frac{1}{2}$ miles southwest	J. M. Holt	1902	65	36	--
166	do.	do.	--	Spring	--	--
167	1 mile southwest	M. F. Gaffney	Old	15	36	2.3
168	In Daingerfield	Thomas & Ware Water Co.	1924?	365	10	--
169	do.	do.	1939	385	10	--
170	do.	City of Daingerfield. No. 1	1939	386	$13\frac{7}{8}$	--
171	1 mile north	T. N. Jones	1926	25	42	--
180	In Cason	McGrede Est.	--	17	24	2.5
181	$5\frac{1}{2}$ miles southwest	C. S. Turner	--	23	42	2.8
182	$2\frac{1}{8}$ miles west	Connor Bros.	--	27	36	2.9
183	$2\frac{3}{4}$ miles southwest	Sycamore School	--	Spring	--	--
184	do.	do.	1938	23	26	1.0
185	$3\frac{1}{2}$ miles southwest	Connor Bros.	1931	4,004	10	--
186	$3\frac{3}{4}$ miles southwest	Miller Est.	--	51	36	2.8

Well No.	Water level		Method of lift b/	Use of water c/	Remarks
	Below measuring point (ft.) a/	Date of measurement			
140	5.46	Mar. 13, 1942	H	D,S	No curbing.
160	13.75	Mar. 24, 1942	H	P	
161	18.59	Mar. 12, 1942	H	D,S,P	Tile curbing from 11 to 19 feet.
162	+	Mar. 23, 1942	Flows	D	At head of gully near hilltop. Estimated flow 2 gallons a minute. Temperature 57° F.
163	d/ 90	1935	C,E, 5	P	Drilled. Cased to bottom; 40 feet of casing perforated at 403 to 460 feet. Reported drawdown 25 feet while pumping 100 gallons a minute when drilled. Formerly supplied CCC camp; now supplies park building at lake front. See log
164	36.17	Mar. 23, 1942	H	D,S	
165	--	--	C,H	D,S	Wood curbing from 53 to 65 feet.
166	+	Mar. 13, 1942	Flows	D,S	In creek bank. Measured flow 5 gallons a minute. Temperature 54° F.
167	13.29	do.	H	D,S	No curbing.
168	--	--	None	N	Drilled. Formerly supplied City of Daingerfield. Reported yield 80 gallons a minute.
169	--	--	T,E, 10	N	Drilled; J. C. Boling driller. Formerly supplied City of Daingerfield. Reported yield 110 gallons a minute. Cased to 385 feet; perforated from 305 to 365 feet. Gravel packed
170	d/ 210	1939	T,E, 15	P	Drilled to with 16 cubic yards of gravel. 654 feet and plugged back; Layne-Texas Company drillers. Screens from 253 to 279, 301 to 321 and 357 to 378 feet. Underreamed to diameter of 30 inches and gravel packed from 231 to 386 feet. Reported drawdown 47 feet while pumping 140 gallons a minute. Temperature 60° F. See log
171	d/ 20	--	C,E,	D,S	No curbing.
180	7.95	Mar. 13, 1942	C,E,H	D,S	Tile curbing.
181	18.56	do.	H	D,S	Wood curbing from 12 to 23 feet.
182	26.77	Mar. 24, 1942	H	D,S	Brick curbing to 3 feet; wood curbing from 22 to 27 feet.
183	+	Mar. 13, 1942	Flows	P	In creek bank. Estimated flow $\frac{1}{2}$ gallon a minute. Temperature 53° F.
184	5.20	do.	H	D,P	Tile curbing. Reported to fail during droughts
185	--	--	None	N	Drilled; oil test. See partial driller's log.
186	50.58	Mar. 12, 1942	H	D,S	Wood curbing from 35 to 51 feet.

Records of wells and springs in Morris County--Continued

Well No.	Distance from Daingerfield	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
187	4 $\frac{1}{4}$ miles southwest	W. H. Johnston	1922?	37	36	2.3
188	5 $\frac{1}{2}$ miles southwest	Rosenwald School	1927	22	24	2.7
189	6 $\frac{1}{4}$ miles southwest	Walcott Est.	1927	--	12	--
190	5 $\frac{1}{2}$ miles southwest	T. C. Connor	1941	--	--	--
191	6 miles southwest	do.	1936	16	24	0.3
210	4 $\frac{3}{4}$ miles south	Jenkins School	1915?	28	36	4.0
211	6 $\frac{3}{4}$ miles south	Arkansas-Louisiana Gas Co. No. 1	1937	336	6	--
212	do.	Arkansas-Louisiana Gas Co. No. 2	1937	333	4	--
213	7 $\frac{1}{2}$ miles south	J. C. Cook	1941	31	30	3.0
214	9 miles south	Marble Stone School	1935	40	36	3.7
215	6 $\frac{1}{2}$ miles south	Iron Bluff School	--	29	36	3.3
216	5 $\frac{1}{2}$ miles southeast	Charlie Jenkins	--	40	36	3.2
217	6 miles southeast	-- McCane	--	26	42	3.2
218	7 miles southeast	S. Turner	1920?	49	42	3.7
219	do.	do.	--	Spring	--	--

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

b/ T, turbine; A, air or natural gas lift; C, cylinder; E, electric; W, windmill; H, hand. Number indicates horsepower.

Well No.	Water level		Method of lift	Use of water	Remarks
	Below measuring point (ft.) a/	Date of measurement			
187	34.87	Mar. 12, 1942	H	D,S	Wood curbing from 21 to 37 feet.
188	21.43	do.	H	D,S,P	Tile curbing.
189 +		do.	Flows	D,S	Drilled; oil test. Estimated flow 3 gallons a minute 1 foot above ground. Temperature 66° F.
190	--	--	None	N	Drilled; oil test.
191	14.10	Mar. 12, 1942	H	D,S	Tile curbing.
210	26.62	Mar. 23, 1942	H	P	Brick curbing to 3 feet; tile curbing from 19 to 28 feet.
211	--	--	A	Ind	Drilled. Estimated yield 50 gallons a minute.
212	--	--	A,E	D,Ind	Drilled. In conjunction with well 211 supplies Terry compressor station.
213	30.31	Mar. 23, 1942	H	D,S	Wood curbing from 7 to 30 feet.
214	37.91	Mar. 12, 1942	H	P	
215	27.18	do.	H	D,S	No curbing.
216	24.22	do.	H	D,S	Wood curbing in bottom.
217	12.92	do.	H	D,S	
218	34.23	do.	H	D,S	No curbing.
219 +		do.	Flows	D,S	On bank of creek. Estimated flow 1 gallon a minute. Temperature 61° F.

c/ P, public supply; Ind, industrial; D, domestic; S, stock. N, none.

d/ Water level reported by owner or tenant.

Table of drillers' logs of wells in Morris County, Texas

	Thickness (feet)	Depth (feet)
<u>Well 23</u>		
City of Naples No. 2, in Naples.		
Red clay	10	10
Blue clay	51	61
Shale	46	107
Hard shale	50	157
Shale, lignite and fine-grained sand	91	248
Rock	1	249
Hard shale	49	298
Sand	10	308
Shale with layers of sand	38	346
Shale	57	403
Sand	33	436
Shale	40	476
Shale with layers of rock	51	527
Shale	66	593
Sand	7	600
Shale	264	864
Drilled and plugged back to 450 feet.		

<u>Well 82, partial log</u>		
W. M. and Clara Smith, 3 miles east of Omaha. Elevation, 430 feet.		
Soil and surface material	67	67
Sand and shale	573	640
Water sand	20	660
Sand, shale and boulders	1607	2267
Chalk, shale, gumbo and shells	1838	4105
TOTAL DEPTH		4105

<u>Well 108, partial log</u>		
Mrs. Sallie Sibley, 4 miles northwest of Daingerfield. Elevation, 334 feet.		
Clay	30	30
Sand and shale	310	340
Sand rock	1	341
Shale	24	365
Sand	9	374
Shale	266	640
Sand and gravel	40	680
Shale and shells	70	750
Sand rock	2	752
Shale, sand and shells	212	964
Shale	41	1005
Shale, sandy shale and shells	1414	2419
Chalk, shale, sandy shale and shells	1581	4000
TOTAL DEPTH		4000

	Thickness (feet)	Depth (feet)
<u>Well 110, partial log</u>		
T. C. Connor, 5 $\frac{1}{2}$ miles northwest of Daingerfield. Elevation, 294.		
Surface clay and sand	47	47
Sand rock	6	53
Rock	23	76
Lignite and hard broken shale	12	88
Soft coarse lime	12	100
Solid lignite	12	112
Shale and boulders	183	295
Water sand	29	324
Shale and boulders	305	629
Sandy shale and boulders	40	669
Shale	129	798
Rock	8	806
Shale	8	814
Shale and boulders	132	946
Shale, sandy shale and lime	1399	2345
TOTAL DEPTH DRILLED		4203
Drilled and plugged back to 380 feet.		

<u>Well 163</u>		
Daingerfield State Park, 1 $\frac{3}{4}$ miles southeast of Daingerfield.		
Red clay	43	43
Sandy red shale	22	65
Iron ore	1	66
Brown clay	21	87
Sand and gravel	20	107
Blue shale	45	152
Hard pack sand	8	160
Brown shale	65	225
Sandy shale	88	313
Brown shale	45	358
Sandy brown shale	23	381
Brown shale	22	403
Water sand	17	420
Hard sand	6	426
Water sand	15	441
Brown shale	9	450
Water sand	10	460
Hard sand	18	478
Shale	15	493

<u>Well 170</u>		
City of Daingerfield No. 1, in Daingerfield.		
Sandy red clay	25	25

(Continued on next page)

Table of drillers' logs of wells in Morris County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 170--Continued</u>			<u>Well 185, partial log</u>		
Sand	7	32	Connor Bros., $3\frac{1}{2}$ miles southwest of		
Yellow clay	37	69	Daingerfield. Elevation, 450.		
Black shale	23	92	Surface sand	20	20
Sandy shale	23	115	Shale	48	68
Sand and lignite	16	131	Shale and boulders	112	180
Shale	5	136	Packsand	210	390
Sand and lignite	25	161	Lime	15	403
Sand	21	182	Shale	77	480
Rock	1	183	Shale and shells	264	744
Shale	47	230	Lime	8	752
Sand	44	274	Shale	198	950
Rock	2	276	Sand	45	995
Sand	55	331	Rock	3	998
Hard pan	2	333	Shale and boulders	382	1380
Sand	53	386	Sticky shale	10	1390
Shale	23	409	Shale and boulders	68	1458
Sandy shale	66	475	Lignite and sand	32	1490
Rock	1	476	Shale, gumbo and sticky		
Hard blue shale	67	543	or sandy shale	1100	2590
Shale	27	570	Chalk, shale and shells	1414	4004
Rock	7	577	TOTAL DEPTH		4004
Black shale	77	654			
Drilled and plugged back to 386 feet.					

Partial analyses of water from wells and springs in Morris County, Texas

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (sum)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)
c/ 1	Dutch Love	55	Mar. 17, 1942	2,002	251	51	251	6	112	302	0.9	1,031	836
2	C. W. Forsyth	39	do.	1,046	134	50	129	12	584	143	.3	.0	541
3	C. D. Browne	49	do.	8,184	82	13	3,126	427	2	4,750	.9	-	258
c/ 20	C. E. Heard	30	Mar. 18, 1942	242	14	4.6	75	171	12	34	-	18	53
21	Flic Norris Est.	39	do.	141	20	7.1	21	67	18	28	-	14	79
22	Mrs. H. J. Vissering	22	do.	628	42	37	96	43	20	130	-	282	258
c/ 23	City of Naples No. 2	450	Mar. 11, 1942	459	4.8	1.0	183	317	20	94	.2	.0	16
25	J. A. Higgins	30	Mar. 20, 1942	28	2.8	1.0	5.8	6	8	7.0	-	.0	11
40	Joe Parham	13	do.	55	.8	2.2	17	6	3	28	-	1.0	11
c/ 41	Thomas and Ware Water Co.	260	Mar. 11, 1942	104	8.8	2.2	21	6	17	22	.0	30	31
42	T. I. Pate	64	Mar. 18, 1942	148	22	3.2	29	104	2	18	-	23	67
43	Mrs. R. H. Motley	27	Mar. 17, 1942	136	10	6.8	26	43	7	25	-	40	54
44	Mrs. W. J. Moore	39	Mar. 18, 1942	6,554	776	466	746	372	2,733	1,650	.1	-	3,857
45	Union Chapel School	26	Mar. 17, 1942	60	5.2	1.9	15	43	12	3.0	.2	1.0	21
46	B. Settles	43	do.	587	102	45	59	311	15	204	-	9.0	437
47	J. W. Rogers	86	do.	373	65	32	33	232	5	120	-	4.0	295
c/ 48	Mrs. Annie L. Kline	25	do.	78	7.2	3.4	20	79	2	5.0	-	1.0	32
50	Sam Smith	19	Mar. 20, 1942	59	4.8	2.2	12	12	2	14	-	18	21
52	A. W. Hays	48	do.	119	6.0	5.8	23	12	2	26	-	50	39
70	W. B. Robertson	50	Mar. 16, 1942	37	1.6	4.6	5.1	12	12	8.0	-	.0	23
71	R. Curry	45+	Mar. 17, 1942	136	22	5.8	16	43	18	29	-	24	79

a/ Less than 3 parts per million.

b/ Analyzed by the Texas State Board of Health.

c/ Analyses of water from selected wells and springs are given in milligram equivalents per liter on page 19.

Partial analyses of water from wells and springs in Morris County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (sum)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)
72	Johnson's Chapel School	17	Mar. 19, 1942	37	7.2	3.4	1.4	24	5	6.5	0.0	1.0	32
73	T. C. Connor	23	Mar. 16, 1942	47	1.2	3.4	11	12	7	12	.1	6.0	17
c/ 74	Mrs. R. H. Talley	22	do.	30	2.8	2.2	2.8	.0	2	6.0	-	14	16
75	B. J. Cason	20	do.	94	5.6	4.6	19	6	12	26	-	24	33
76	W. H. Witt	37	Mar. 20, 1942	90	7.6	3.2	14	6	2	10	-	50	32
77	William's Chapel School	19	do.	39	5.2	1.9	1.2	.0	26	3.5	.1	1.0	21
78	I. Forsyth	21	Mar. 16, 1942	268	16	16	40	.0	5	71	-	120	105
79	Rocky Branch School	30	Mar. 19, 1942	55	2.8	2.2	14	18	12	14	.1	.0	16
c/ 80	Kan Thigpen	25	Mar. 11, 1942	287	11	27	32	.0	15	98	-	104	137
81	Plainview School	26	do.	98	8.0	4.4	17	6	60	5.0	.1	.5	38
83	R. P. Lowery	20	do.	81	11	3.6	15	55	7	14	-	3.0	42
84	Edwards Est.	17	do.	306	7.6	13	81	.0	20	140	-	44	73
85	J. B. Irvin	19	do.	103	6.4	1.2	25	.0	2	30	-	38	21
100	James Howel	18	Mar. 19, 1942	51	6.0	5.8	2.1	6	26	7.5	-	1.0	39
101	Joe Justiss	79	Mar. 16, 1942	418	52	31	28	6	285	6.5	.2	12	259
102	Hays Johnson	22	Mar. 23, 1942	37	8.8	2.2	.7	12	5	10	-	4.5	31
104	Connor Bros.	16	Mar. 19, 1942	185	12	7.1	36	12	8	41	-	75	59
105	J. C. Tittle	17	Mar. 24, 1942	60	6.0	5.8	6.4	6	10	23	-	6.0	39
106	H. Thigpen	-	Mar. 19, 1942	369	7.2	3.4	145	378	3	24	.3	.0	32
107	Sunview School	25	do.	40	2.8	.7	10	18	12	3.0	-	1.5	10
109	Mount Moriah School	20	Mar. 23, 1942	46	.8	1.0	14	12	3	9.0	.1	12	6
c/ 110	T. C. Connor	380	Mar. 16, 1942	270	11	3.4	93	232	34	14	.1	.0	42
111	Connor Bros.	21	do.	127	13	8.0	20	12	2	54	-	24	65
112	Mount Zion School	26	do.	40	a/	1.0	15	31	3	5.5	.1	.0	4
113	W. C. Whitmore	27	do.	130	4.0	5.8	32	6	11	44	-	30	34

a/ Less than 3 parts per million.

b/ Analyzed by the Texas State Board of Health.

c/ Analyses of water from selected wells and springs are given in milligram equivalents per liter on page 19.

Partial analyses of water from wells and springs in Morris County--Continued

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (sum)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)
114	Ed Wallace	27	Mar. 23, 1942	-	a/	4.4	4.8	6	3	9.0	-	10	18
115	Connor Bros.	29	do.	84	4.4	8.3	9.2	.0	2	24	-	36	45
130	J. A. Martin	21	Mar. 20, 1942	50	4.8	2.2	11	31	3	9.0	-	5.0	21
c/132	J. B. Hall	18	Mar. 18, 1942	193	16	13	21	.0	5	38	-	100	93
133	Mrs. Gladys Wakefield	19	Mar. 13, 1942	22	.8	1.0	5.3	6	3	4.0	-	5.0	6
134	T. E. Goodwin	25	Mar. 19, 1942	75	2.8	1.0	20	12	7	10	-	28	11
135	Irvin Bros.	29	Mar. 13, 1942	473	14	31	87	.0	3	138	-	200	164
c/136	J. W. Smith	30	do.	74	2.8	2.2	20	.0	7	30	-	12	16
137	do.	27	do.	321	14	13	73	12	120	56	0.9	38	88
138	Bradfield's Chapel School	22	do.	19	a/	1.0	4.4	.0	2	3.0	.0	9.0	4
139	J. G. Wallis	18	do.	177	11	12	29	6	20	54	-	48	78
140	do.	9	do.	99	2.0	5.8	21	6	7	22	-	38	29
160	Oak Grove School	21	Mar. 24, 1942	25	2.8	2.2	2.8	12	5	2.5	.1	3.5	16
161	Rock Hill School	19	Mar. 12, 1942	24	1.2	3.4	1.6	6	2	4.0	.1	9.0	17
162	M. C. Hervey	Spring	Mar. 23, 1942	18	.8	1.0	3.7	6	2	2.0	-	5.0	6
c/163	Daingerfield State Park	493	Mar. 22, 1942	197	10	a/	70	177	26	3.5	.0	.0	26
164	Oscar Irvin	36	Mar. 23, 1942	35	3.2	3.4	3.2	6	2	10	-	10	22
166	J. M. Holt	Spring	Mar. 13, 1942	22	4.4	a/	3.9	12	3	4.5	.0	.0	11
167	M. F. Gaffney	15	do.	65	.8	3.6	17	12	10	18	-	10	17
b/170	City of Daingerfield No. 1	386	--	142	8.8	5.0	-	34	30	16	.4	.4	-
171	T. N. Jones	25	Mar. 23, 1942	32	1.6	4.6	3.0	18	5	4.0	-	5.0	23
c/180	McGrede Est.	17	Mar. 13, 1942	244	13	12	51	24	26	70	-	60	83
181	C. S. Turner	23	do.	290	14	9.7	65	6	86	52	.0	60	76
182	Connor Bros.	27	Mar. 24, 1942	175	3.2	3.4	48	18	5	34	-	72	22
183	Sycamore School	Spring	Mar. 13, 1942	82	4.0	5.8	15	6	2	28	.1	24	34
184	do.	23	do.	49	1.6	3.2	10	6	3	14	.0	14	17

a/ Less than 3 parts per million

b/ Analyzed by the Texas State Board of Health.

c/ Analyses of water from selected wells and springs are given in milligram equivalents per liter on page 19.

Partial analyses of water from wells and springs in Morris County--Continued

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (sum)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)
186	Miller Est.	51	Mar. 12, 1942	46	a/	1.2	15	6	7	16	-	3.5	5
c/187	W. H. Johnston	37	do.	158	0.4	1.2	51	18	13	34	-	49	6
188	Rosenwald School	22	do.	32	1.2	3.4	4.1	.0	7	7.5	0.1	9.0	17
189	Walcott Est.	-	do.	396	14	7.1	135	311	56	31	.1	.0	64
191	T. C. Connor	16	do.	118	2.8	2.4	37	18	30	34	-	3.0	17
210	Jenkins School	28	Mar. 23, 1942	45	.4	a/	16	6	8	12	.1	5.0	1
211	Arkansas-Louisiana Gas Co. No. 1	336	do.	252	11	3.4	89	244	12	16	.3	.0	42
c/212	Arkansas-Louisiana Gas Co. No. 2	333	do.	271	6.8	1.0	106	250	4	28	.3	2.0	21
213	J. C. Cook	31	do.	543	26	38	118	6	75	281	-	1.5	224
c/214	Marble Stone School	40	Mar. 12, 1942	34	2.8	1.0	9.4	18	2	10	.1	.0	11
215	Iron Bluff School	29	do.	40	2.8	1.0	8.5	12	2	2.0	.0	18	11
c/216	Charlie Jenkins	40	do.	95	3.6	4.6	21	6	5	28	-	30	28
217	-- McCane	26	do.	342	9.2	4.9	107	128	45	53	-	60	43
218	S. Turner	49	do.	74	4.8	3.6	16	.0	8	32	-	10	27
219	do. Spring		do.	29	2.8	2.2	4.6	12	7	6.0	.1	.0	16

a/ Less than 3 parts per million.

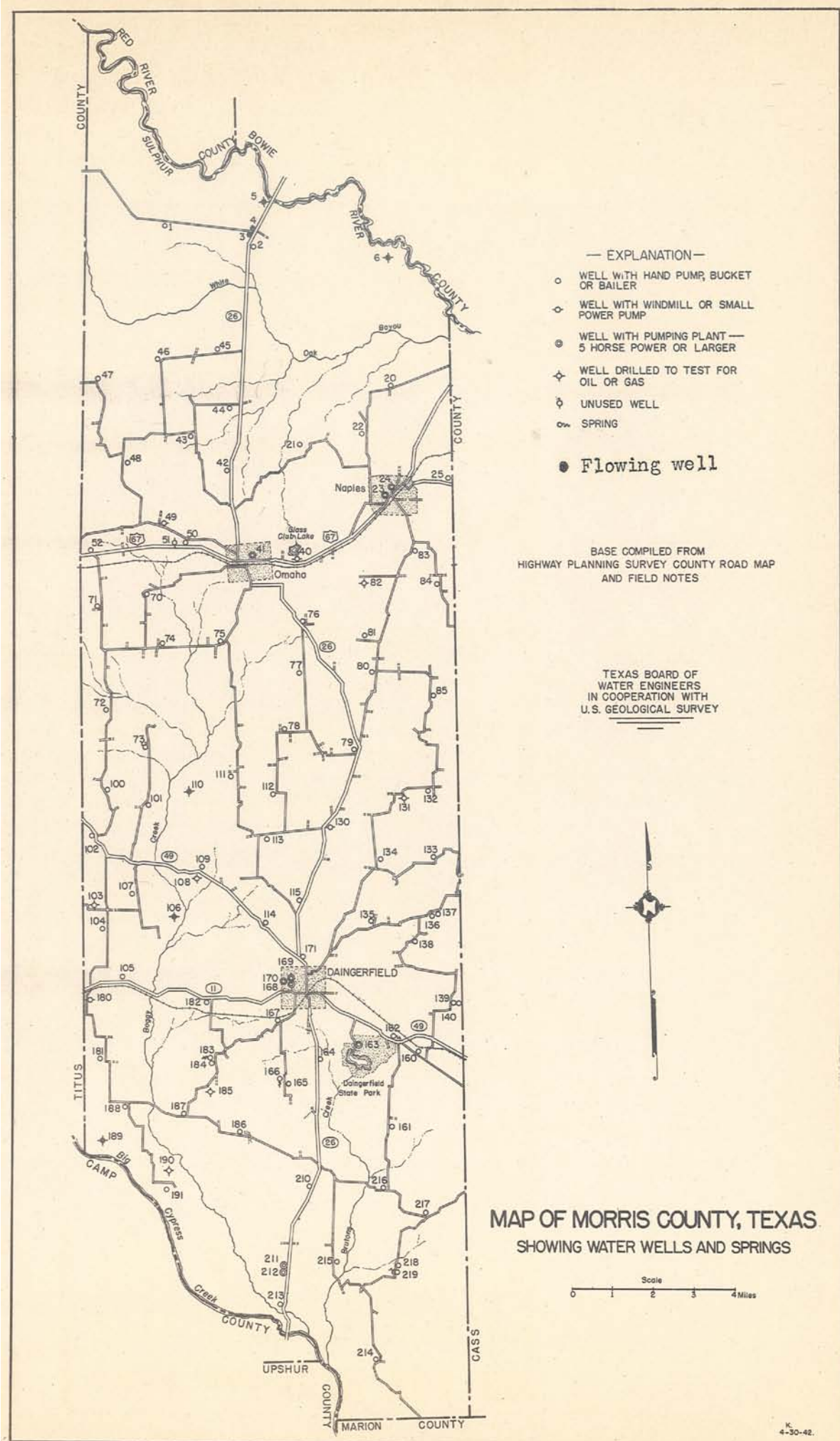
b/ Analyzed by the Texas State Board of Health.

c/ Analyses of water from selected wells and springs are given in milligram equivalents per liter on page 19.

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Chemical Analyses--Continued
Results are in milligram equivalents per liter

Well	Owner	Depth of well (ft.)	Date of collection	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)
1	Dutch Love	65	Mar. 17, 1942	12.56	4.16	10.92	0.10	2.34	8.52	16.63	0.05	16.72
20	C. E. Heard	30	Mar. 18, 1942	.68	.38	3.24	2.80	.25	.96	.29	-	1.06
23	City of Naples No. 2	450	Mar. 11, 1942	.24	.08	7.96	5.20	.42	2.65	0	.01	.32
41	Thomas and Ware Water Co.	260	do.	.44	.18	.93	.10	.35	.62	.48	0	.62
48	Mrs. Annie L. Kline	25	Mar. 17, 1942	.36	.28	.86	1.30	.04	.14	.02	-	.64
74	Mrs. R. H. Talley	22	Mar. 16, 1942	.14	.18	.12	0	.04	.17	.23	-	.32
80	Kan Thigpen	25	Mar. 11, 1942	.54	2.20	1.41	0	.31	2.76	1.68	-	2.74
110	T. C. Connor	380	Mar. 16, 1942	.56	.28	4.06	3.80	.70	.39	0	.01	.84
132	J. B. Hall	18	Mar. 18, 1942	.78	1.08	.92	0	.10	1.07	1.61	-	1.86
136	J. W. Smith	30	Mar. 13, 1942	.14	.18	.87	0	.15	.85	.91	-	.32
163	Daingerfield State Park	493	Mar. 22, 1942	.52	0	3.03	2.90	.55	.10	0	0	.52
180	McGrede Est.	17	Mar. 13, 1942	.66	1.00	2.23	.40	.55	1.97	.97	-	1.66
187	W. H. Johnston	37	Mar. 12, 1942	.02	.10	2.20	.30	.27	.96	.79	-	.12
212	Arkansas-Louisiana Gas Co. No. 2	333	Mar. 23, 1942	.34	.08	4.60	4.10	.08	.79	.03	.02	.42
214	Marble Stone School	40	Mar. 12, 1942	.14	.08	.41	.30	.04	.28	0	.01	.22
216	Charlie Jenkins	40	do.	.18	.38	.91	.10	.10	.79	.48	-	.56



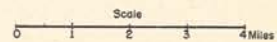
- EXPLANATION —
- WELL WITH HAND PUMP, BUCKET OR BAILER
 - ◊ WELL WITH WINDMILL OR SMALL POWER PUMP
 - ⊙ WELL WITH PUMPING PLANT— 5 HORSE POWER OR LARGER
 - ✦ WELL DRILLED TO TEST FOR OIL OR GAS
 - ◊ UNUSED WELL
 - ⊕ SPRING
- Flowing well

BASE COMPILED FROM
HIGHWAY PLANNING SURVEY COUNTY ROAD MAP
AND FIELD NOTES

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



MAP OF MORRIS COUNTY, TEXAS
SHOWING WATER WELLS AND SPRINGS



2074 35