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STATE BOARD OF WATER ENGINEERS C. S. Clark, Chairman A. H. Dunlap, Member J. W. Pritchett, Member

* * *

GRIMES COUNTY, TEXAS

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

* * *

by Samuel F. Turner

Mimeographed by WORKS PROGRESS ADMINISTRATION PROJECT 10443

* * *

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

* * *

Austin, Texas April 10, 1939

GRIMES COUNTY, TEXAS

* * *

Introduction by Samuel F. Turner Associate Hydraulic Engineer United States Department of the Interior Geological Survey

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

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

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

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

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

| | | ί. | Principal water-be | paring beds are | sand | or gra | aver.) | | |
|----------------|----|----------------|--------------------|-----------------|--------|--------|--------|--------|-----------|
| | | | | | 1 | | | | al water |
| No. | | Distance from | Owner | Driller | Data | Deoth | Diam- | | ng bed |
| | | Navasota | | | com- | of | eter | Depth | Thick- |
| | | | | | - · 10 | well | of | to top | ness |
| | | | | | ted | (ft.) | woll | of bod | (ft.) |
| | | | | | | | (in.) | (ft.) | |
| e/ | 1 | At Navasota | Missouri Pacific | McMasters & | 1926 | 334 | | 254 | 37 |
| | | | Ry. | Pomeroy | 1 | | | 301 | 12 |
| | 2 | 43 miles | Gulf Coast & | Layno-Texas | 1930 | 406 | 8 | 41 | 22 |
| | | southeast | Santa Fo Ry. | Co. | | | | 98 | 45 |
| | | | | | | | | 156 | 17 |
| 0/ | 3 | 6 miles | R. B. Templomon | Dearing & | 1931 | 4,559 | | | |
| • | | south | well l | Noble | | | | | |
| e / | 4 | 10 miles south | W. J. Lylus | | 1929 | 23 | | | |
| | | southeast | | | t [| | | | |
| | 5 | 8 miles east | State Highway | | | | | | |
| | | southeast | | | 1 | | | | |
| e/ | 6 | 112 miles east | T. B. Stoncham | | | 22 | 36 | | |
| | | southeast | | | | | | | |
| | 7 | do. | do. | | | 15 | 8 | | , may man |
| | | | | | | | | | |
| | 8 | 13 miles east | State Highway | ~~~ | | | | | ** |
| | | southeast | | | | | | | |
| | 9 | 14 miles east | J. A. Greenwood | ~_ | 1910 | 20 | 36 | | **** |
| | | southeast | | | | | | | |
| | 10 | 142 miles east | J. A. Neely | *= | | 25 | 30 | | |
| | | southeast | | | | | | | |
| <u>e/</u> | 11 | do. | P. B. Bookman | Cullen & West | 1930 | 3,452 | 10 | | |
| | | | well l | | | | | | |
| | 12 | do. | B. T. Williams | B. T. Williams | | 29 | 6 | | |
| | | | | 1 | 1 | 1 | 1 | 1 | |

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

b/ A, air; J, jack; B, bucket; G, gasoline engine; W, windmill; H, hand.

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

| No. bench mark Below Date of Pump and Use Remarks above (+) bench measure- ground mark ment of power 2/ 1 RR See driller's log. 2 $3\frac{7}{2}$ 22.5 A RR At Wood Station. Casing; 235 feet of 8- inch. Screens set at 39 to 60, 94 to 1366 and 151 to 170 feet. See driller's 3 B.H D.S Dug well. Two miles southeast of Courtact between sand and clay in read 6 1 8.7 Apr. 14, B.H D.S Dug well. At Stoneham. 8 None S Contact between sand and clay in read 6 1 8.7 Apr. 14, B.H D.S Dug well. At Stoneham. 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in read 9 J., W.G, D.S Dug well. At Plantersville. 10 J., W.G, D.S Dug well. At Plantersville. 11 J., W.G, D.S Dug well. At Plantersville. 11 S. B.H D.S Dug well. At Plantersville. 12 B.H D.S Dw and ono-half miles south of Planters- | - | | | | · ···································· | | |
|---|-----|-----------------------|-------|----------|--|-----------|---|
| above (+) bench measure- kind and of amount water of power c/ (ft.) a/ (ft.) b/ b/ 1 RR See driller's log, 2 31/2 22.5 A, - RR At Wood Station, Casing; 235 feet of 8-inch. Screens set at 39 to 60, 94 to 136 and 151 to 170 feet. See driller's log, 3 0il test. See driller's log, log, 4 B,H D,S Dug well. Two miles southeast of Courtney. 5 None S One mile wost of Yarborough. Spring at contact between sand and clay in road 6 1 8.7 Apr. 14, B,H D,S Dug well. At Stoneham. ditch. 7 21/2 8.1 do. B,H D,S Dug well. At Plantersville. ditch. 9 J, W, G, D,S Do. ditch. ditch. 10 J, G, D,S Do. ditch. ditch. 11 B,H D,S Do. ditch. 12 | | Height of Water_level | | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | No. | | 1 | | | ł - | Remarks |
| $(ft.) a/$ $(ft.)$ of power $c/$ 1RRSee driller's log.2 $3\frac{1}{2}$ 22.5 A, -RRAt Wood Station. Casing; 235 feet of 8- inch. Screens set at 39 to 60, 94 to 136 and 151 to 170 feet. See driller's340il test. See driller's log.log.40il test. See driller's log.log.5B, HD,SDug well. Two miles southeast of Courtney.5NoneSOne mile wost of Yarborough. Spring at contact between sand and clay in road618.7 Apr. 14, 1931B, HD, SDug well. At Stoneham.7 $2\frac{1}{2}$ 8.1do.B, HD, SAt Stoneham.8J, Y, G, $2\frac{1}{2}$ Dug well. At Plantersville.ditch.10J, G, $2\frac{1}{2}$ Do.21110il test, see driller's log. Two miles south of Plantersvills.12B, HD, STwo and ono-half miles south of Plantersvills. | | 1 | 1 | 1 | kind and | of | |
| 1 $$ $$ $b/$ $$ 2 $3\frac{1}{2}$ 22.5 A, -RRAt Wood Station, Casing; 235 feet of 8-inch. Screens set at 39 to 60, 94 to 136 and 151 to 170 feet. See driller's log. 3 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 4 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 4 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 5 $$ $$ $$ B, H D, S $Dug well.$ Two miles southeast of Courtney. 5 $$ $$ $$ None S $One mile west of Yarborough. Spring atcontact between sand and clay in road618.7 Apr. 14,1931B, HD, SDug well. At Stoneham.ditch.72\frac{1}{2}8.1do.B, HD, SAt Stoneham.ditch.72\frac{1}{2}8.1do.B, HD, SDug well. At Plantersville.ditch.72\frac{1}{2}8.1do.B, SDug well.At Plantersville.ditch.10Cil test, see driller's log. Two milessouth of Plantersvills.121010$ | | | | | amount | water | |
| 1 $$ $$ $b/$ 2 $3\frac{1}{2}$ 22.5 A, -RRAt Wood Station. Casing; 235 feet of 8- inch. Screens set at 39 to 60, 94 to 136 and 151 to 170 feet. See driller's log. 3 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 4 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 4 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 4 $$ $$ $$ $$ $0il$ test. See driller's log. \log_2 5 $$ $$ $$ B, H D, S Dug well. Two miles southeast of Courtney. 5 $$ $$ $$ None S $One mile wost of Yarborough. Spring atcontact between sand and clay in road618, 7 Apr. 14,1931B, HD, SDug well. At Stoneham.ditch.72\frac{1}{8}8, 1do.B, HD, SAt Stoneham.8NoneSTwo miles east of Stoneham. Spring atcontact between sand and clay in road9J, \Im, G,D, SDug well.At Plantersville.10J, \Im, G,D, SDo.11Oil test, see driller's log. Two milessouth of Plantersvills.12$ | | (ft.) <u>a</u> / | (ft.) | | of power | <u>c/</u> | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | 1 | ĺ | b/ | | |
| d/ 1930 inch. Screens set at 39 to 60, 94 to 136 and 151 to 170 feet. See driller's original distribution 3 0il test. See driller's log. log. 4 0il test. See driller's log. log. 4 B,H D,S Dug well. Two miles southeast of Courtney. log. 5 None S One mile wost of Yarborough. Spring at contact between sand and clay in road 6 1 8.7 Apr. 14, 1931 B,H D,S Dug well. At Stoneham. 7 2½ 8.1 do. B,H D,S Two miles east of Stoneham. Spring at contact between sand and clay in road 8 J,W,G, D,S Dug well. At Plantersville. 10 J,G, D,S Do. 11 Cil test, see driller's log. Two miles south of Plantersvillo. 12 B,H D,S Two and ono-half miles south of Plantersvillo. | 1 | | | | | RR | See driller's log. |
| d/ 1930 inch. Screens set at 39 to 60, 94 to 136 and 151 to 170 feet. See driller's original distribution 3 0il test. See driller's log. log. 4 0il test. See driller's log. log. 4 B,H D,S Dug well. Two miles southeast of Courtney. log. 5 None S One mile wost of Yarborough. Spring at contact between sand and clay in road 6 1 8.7 Apr. 14, 1931 B,H D,S Dug well. At Stoneham. 7 2½ 8.1 do. B,H D,S Two miles east of Stoneham. Spring at contact between sand and clay in road 8 J,W,G, D,S Dug well. At Plantersville. 10 J,G, D,S Do. 11 Cil test, see driller's log. Two miles south of Plantersvillo. 12 B,H D,S Two and ono-half miles south of Plantersvillo. | | | | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | 2 | 32 | 22,5 | | A,- | RR | At Wood Station, Casing; 235 feet of 8- |
| 3 136 and 151 to 170 feet. See driller's log. log. 4 0il test. See driller's log. log. 4 B,H D,S Dug well. Two miles southeast of Courtney. 5 None S One mile wost of Yarborough. Spring at contact between sand and clay in road 6 1 8.7 Apr. 14, B,H D,S Dug well. At Stoneham. ditch. 7 2½ 8.1 do. B,H D,S At Stoneham. 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in road 9 J.W.G, D.S Dug well. At Plantersville. ditch. 10 J.G, D.S Do. 2½ 11 S Do. 11 0il test, see driller's log. Two miles south of Plantersvillo. 12 B,H D,S Two and one-half miles south of Plantersvillo. | | ~ | d/ | 1930 | | | inch. Screens set at 39 to 60, 94 to |
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| 6 1 8.7 Apr. 14, B,H D,S Dug well. At Stoneham. Iditch. 7 2½ 8.1 do. B,H D,S At Stoneham. Iditch. 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in road 9 J,W,G, D,S Dug well. At Plantersville. Iditch. 10 J,G, D,S Do. 2½ 11 Oil test, see driller's log. Two miles south of Plantersvills. 12 B,H D,S Two and ono-half miles south of Plantersvills. | | | | | | | - |
| 6 1 8.7 Apr. 14, B,H D,S Dug well. At Stoneham. ditch. 7 $2\frac{1}{2}$ 8.1 do. B,H D,S At Stoneham. ditch. 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in road 9 J,W,G, D,S Dug well. At Plantersville. ditch. 10 J,G, D,S Do. 2 $\frac{1}{2}$ 11 11 0il test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and ono-half miles south of Plantersville. | 5 | | | | None | S | One mile west of Yarborough, Spring at |
| 6 1 8.7 Apr. 14, 1931 B,H D,S Dug well. At Stoneham. ditch. 7 2½ 8.1 do. B,H D,S At Stoneham. ditch. 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in road 9 J,W,G, D,S Dug well. At Plantersville. ditch. 10 J,G, D,S Do. 2½ 11 Oil test, see driller's log. Two miles south of Plantersvills. 12 B,H D,S Two and one-half miles south of Planters- | | | | | | | contact between sand and clay in road |
| 19317 $2\frac{1}{2}$ 8.1do.B,HD,SAt Stonsham.8NoneSTwo miles east of Stoneham. Spring at contact between sand and clay in road9J,W,G,D,SDug well. At Plantersville.10J,G,D,SDo.11Oil test, see driller's log. Two miles12B,HD,STwo and one-half miles south of Plantersville. | 6 | 1 | 8.7 | Apr. 14, | B,H | D,S | |
| 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in road 9 J,W,G, D,S Dug well. At Plantersville. ditch. 10 J,G, D,S Do. 11 Oil test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | | | | | | | |
| 8 None S Two miles east of Stoneham. Spring at contact between sand and clay in road 9 J,W,G, D,S Dug well. At Plantersville. ditch. 10 J,G, D,S Do. 11 Oil test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | 7 | 2불 | 8.1 | do. | B.H | D.S | At Stoneham, |
| 9 J,W,G, D,S Dug well. At Plantersville. ditch. 10 J,G, D,S Do. 11 Cil test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | | ~ | | | | | |
| 9 J,W,G, D,S Dug well. At Plantersville. ditch. 10 J,G, D,S Do. 11 Oil test, see driller's log. Two miles south of Plantersvillo. 12 B,H D,S Two and one-half miles south of Planters- | 8 | | | | None | S | Two miles east of Stoneham. Spring at |
| 9 J,W,G, 3 D,S Dug well. At Plantersville. ditch. 10 J,G, 2½ D,S Do. 11 Oil test, see driller's log. Two miles south of Plantersvills. 12 B,H D,S Two and one-half miles south of Planters- | | | | | | | |
| 3 10 J,G, D,S Do. 21/2 21/2 Dianterstriller's log. Two miles 11 12 B,H D,S Two and one-half miles south of Planters- | 9 | | | | J.W.G. | D.S | |
| 2½ 11 0il test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | | | | | | | |
| 2½ 11 0il test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | 10 | | | *** | J. G. | D.S | Dò. |
| 11 Oil test, see driller's log. Two miles south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | | | | | | | |
| south of Plantersville. 12 B,H D,S Two and one-half miles south of Planters- | 11 | | | | | | Oil test, see driller's log. Two miles |
| 12 B,H D,S Two and one-half miles south of Planters- | | | | | | | |
| | 12 | | | | B,H | D,S | |
| | | | | | - | | ville. |

c/ RR, railroad; D, domestic; S, stock. d/ Reported by driller. e/ No field tests made on water from this well.

-2-

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

| | 1 | | 1 | Depth |] | 1 | |
|------|-------|-------------|--------------|------------------|----------------------|----------|----------|
| Well | | Owner | Date of | of | Hardness | Chloride | Sulphate |
| No. | | | collection | well | as CaCO ₃ | (C1) | (S04) |
| | | | | (ft_{\bullet}) | 8 | | b/ |
| 2 | G.C. | & S. F. Ry. | - | 406 | 230 | 100 | 50 |
| 5 | State | Highway | - | - | 30 | 45 | 10 |
| 7 | T. B. | Stoneham | Apr.14, 1931 | 15 | 110 | 8 | 15 |
| 8 | State | Highway | | - | 25 | 20 | 10 |
| 9 | J. A. | Greenwood | | 20 | 110 | 45 | 10 |
| 10 | J. A. | Neely | | 25 | 200 | 230 | 10 |
| 12 | В. Т. | Williams | = | 29 | 110 | 180 | 10 |

a/ Hardness as calcium carbonate by the soap method.

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

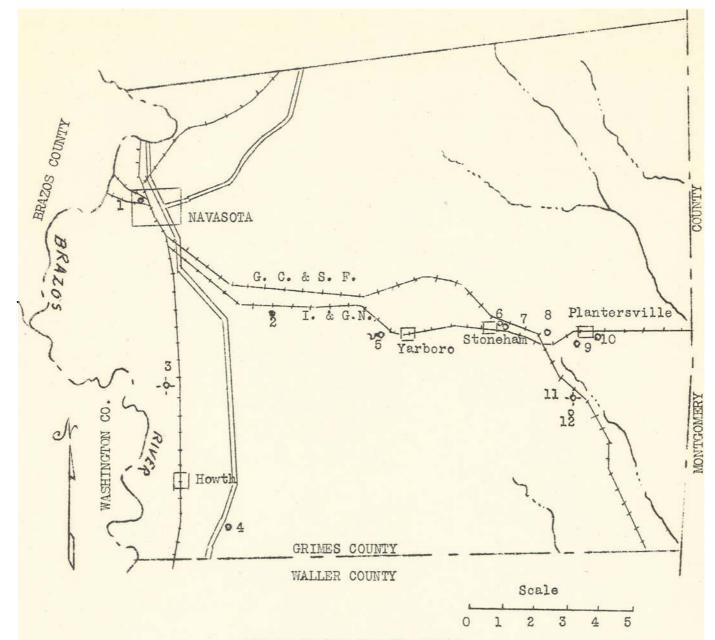
-4-Table of Drillers' Logs, Grimes County, Texas

| Thicknes | s Depth | Thickness Depth |
|--|----------|--|
| (feet |) (feet) | (feet) (feet |
| | | |
| Driller's log of well 1 | | Driller's log of well 3Continued |
| Missouri Pacific Railway, owner. | | Water sand 4 517 |
| Surface soil 10 | 1 10 | Hard shale 14 531 |
| Send and muck 65 | 75 | Gumbo 7 538 |
| Yellow clay 95 | 170 | Sticky shale 8 546 |
| Gurmy lime 49 | 219 | Sand 18 564 |
| Hard rock 1 | 220 | Gumbo 16 58(|
| Elue sand and shale 34 | 254 | Sticky shale 15 595 |
| Good water sand 37 | 291 | Green sand 17 612 |
| Gumbo 10 | 31 | Sticky shale 37 649 |
| Good water sand and gravel 12 | 31.3 | Sand and grivel 18 667 |
| Gumbo 21 | 324 | Sticky shale 8 675 |
| Guinoo – – – – – Sa | | Gumbo, lime and shale - 15 690 |
| Driller's log of well 2 | | Sticky shale 99 789 |
| | ormon | Gumbo 25 814 |
| Gulf Coast and Sarte Fe Railway, Soil 3 | | Sandy shale 20 834 |
| | 13 | Gumbo and shale $ 82$ 916 |
| $-\Delta y$ | | Limey shale 66 982 |
| Sand 14 | 27 | |
| Clay 14 | | Brown, blue and sandy shale 58 1040 |
| wand 22 | 63 | 01101-1 |
| bendy clay 35 | | Shale and boulders - 18 1058 |
| oend 45 | 143 | Sandy shale 27 1083 |
| Clay 12 | 155 | Sticky shale 12 1:97 |
| Rock 1 | | Shale 10 1107 |
| oend 17 | | Sandy shale 9 111 |
| Clay 5 | 173 | Gumbo 15 1133 |
| sand 4 | 182 | Gray sand 13 1144 |
| Cley 11 | 193 | Blue shale and sticky |
| Hard shale 19 | 212 | sand 19 1163 |
| Elue sandy shale 12 | 224 | Gumbo – – – – 13 1176 |
| Rock $ -$ 1 | 1 | TOTAL DEPTH 4559 |
| Sendy shale 31 | | |
| Shale 44 | | Driller's log of well 11 |
| Gumbo 12 | i. | P. B. Bookman Number 1. |
| Shale 26 | 1 | Clay 18 18 |
| | 1 | Yellow sand 61 79 |
| | | Gumbo 4 85 |
| | 4 | Yellow gumbo |
| <u>Gumbo 3</u> | 2510 | Sand and streaks of gumbo 10 13' |
| | | Sand and gravel 18 148 |
| Dril.er's log of well 3 | | Soft white gumbo 14 162 |
| R. B. Templemen Number 1. | | <u> </u> |
| Clay 20 | | |
| Sand and gravel 69 | 1 | |
| Shale 47 | 1 | Sand and boulders - 113 297 |
| Gravel 11 | 1 | Gumbo and boulders - 72 363 |
| Shale 12 | 1 | Sand and boulders - 29 398 |
| Send 9 | 1 | Shale and boulders - 62 46" |
| Shele 42 | f (| Gumbo 104 564 |
| oend 10 | | Gumbo with sandy streaks- 26 59" |
| Shele 179 | | Blue shale 28 618 |
| Gumbo 19 | 411 | Loose sand and boulders - 22 640 |
| Sticky shale 66 | 477 | Gumbo and sand 19 659 |
| Serd and gravel 14 | 431 | Tough gumbo 72 731 |
| shell rock l | 1 | Blue and pink gumbo - 48 779 |
| Hard shale and gravel - 11 | 1 | Gumbo 61 844 |
| Hard shale 10 | 1 | (Continued on next page) |
| | , | |

-5-Table of Drillers' Logs, Grimes County--Continued

| | • | | Tł | ickness (feet) | Depth (feet) |
|----------------|------|----|------|-------------------|-----------------|
| | | | | | |
| Driller's | log | oſ | well | 11Cont | inued |
| Sand - | - | | - | 13 | 853 |
| Gumbo - | - | - | - | 21 | 874 |
| Sand or shale | | | ** | 5 | 879 |
| Coarse sand | - | | - | 16 | 895 |
| Slick hard sha | le | - | - | 32 | 927 |
| Gumbo | - | | | 59 | 986 |
| Hard sand - | | - | - | 4 | 990 |
| Hard green san | đ | - | - | 3 | 993 |
| Tough gumbo an | d li | me | | lu | 1003 |
| Soft sand - | | - | - | 4 | 1007 |
| Shale and lime | | | - | З | 1010 |
| | | | | | f |

| | | | Depth (feet) |
|-----------------------|-------|-------|-------------------------------------|
| Driller's log of wel | 1 11- | -Cont | aprilation and the same design that |
| Gumbo and lime | - | 61 | 1071 |
| Sand | - | 4 | 1075 |
| Tough gumbo and lime | | 67 | 1142 |
| Gumbo, shale and lime | - | 15 | 1157 |
| Sand | - | 15 | 1172 |
| Gumbo and lime | | 11 | 1183 |
| TOTAL DEP'IH | - | | 3452 |



MAP OF GRINES COUNTY, TEXAS, SHOWING LOCATIONS OF WATER WELLS

LEGEND

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