

# TEXAS BOARD OF WATER ENGINEERS

C. S. Clark, Chairman  
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## JASPER AND NEWTON COUNTIES, TEXAS

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

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DECEMBER 1942

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# JASPER AND NEWTON COUNTIES, TEXAS

## Introduction

By

G. H. Cromack

This publication contains data on wells in Jasper and Newton Counties as follows:

Jasper County: well records, 161; drillers' logs, 22; water well analyses, 159.  
Newton County: well records, 121; drillers' logs, 7; water well analyses, 100.

It also includes a map, showing the location of the wells listed in both counties, each well being given a number on the map corresponding to the number assigned to it in the records. The field data were obtained by the writer in April and May 1942, in connection with a state-wide program of ground-water investigations in Texas conducted by the State Board of Water Engineers in cooperation with the United States Department of the Interior, Geological Survey.

The water analyses were made by L. W. Hastings, Assistant Chemist of the Quality of Water Division of the Federal Geological Survey, and by chemists employed by the Work Projects Administration under the supervision of Mr. Hastings, and Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry of The University of Texas. The results of the analyses, which relate only to the mineral constituents in the water, and not to its sanitary character are tabulated in parts per million for Jasper County on pages 25 to 30 and for Newton County on pages 46 to 49. For the convenience of those who prefer a different form of expression the analyses of 25 samples from Jasper County, and 27 samples from Newton County are given in milligram equivalents per liter on pages 31 and 50 respectively.

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

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

JASPER COUNTY, TEXAS

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

Records of wells in Jasper County, Texas

All wells are drilled unless otherwise stated in Remarks

| Well | Distance from Jasper   | Owner                | Driller                        | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|------------------------|----------------------|--------------------------------|----------------|---------------------|------------------------|--|
| 1    | 26 1/2 miles northwest | Mrs. -- Smith        | --                             | Old            | 19                  | 36                     | 3.0  |
| 2    | 25 miles northwest     | U. S. Government     | Lake Charles Naval Store Co.   | 1927           | 986                 | 12                     | --   |
| 3    | 22 miles northwest     | B. F. Boykin No. 2   | Black Gold Petroleum Co.       | 1932           | 155                 | 4                      | 1.5  |
| 4    | do.                    | do.                  | Midwest Co. of Texas           | 1940           | 1,996               | 9-7/8<br>6 1/2         | --   |
| 5    | 15 1/2 miles northwest | O. P. Pace           | --                             | 1930           | 22                  | 6                      | 3.5  |
| 6    | 15 miles northwest     | H. E. Primrose       | H. E. Primrose                 | 1916           | 17                  | 30                     | 1.5  |
| 7    | 11 1/2 miles northwest | J. M. Ryerly         | J. M. Ryerly                   | 1942           | 22                  | 7                      | 0  |
| 8    | 10 miles northwest     | Sol Pace             | Sol Pace                       | 1938           | 17                  | 30                     | 3.0  |
| 9    | 12 miles northwest     | I. S. Bean           | Cleveland & East Texas Oil Co. | 1903           | 1,400               | 6                      | --   |
| 10   | 12 1/2 miles northwest | F. Moody             | --                             | Old            | 17                  | 30                     | 2.5  |
| 11   | 15 miles northwest     | Geo. B. Dean         | --                             | 1936           | 86                  | 4                      | 0  |
| 12   | 14 miles northwest     | L. Mayes             | --                             | 1924           | 360                 | 6                      | 1.0  |
| 13   | 10 1/2 miles northwest | Archie Hamilton      | --                             | Old            | 19                  | 30                     | 2.5  |
| 14   | 8 1/2 miles northwest  | W. H. Hancock        | --                             | Old            | 31                  | 33                     | 2.5  |
| 15   | 6 1/2 miles northwest  | C. C. Woods          | --                             | Old            | 40                  | 30                     | 3.0  |
| 16   | do.                    | Shade Griffin        | --                             | Old            | 48                  | 30                     | 2.5  |
| 17   | 5 miles northwest      | A. A. DuBose         | A. A. DuBose                   | 1937           | 34                  | 36                     | 5.0  |
| 18   | 3 1/2 miles northwest  | Morgan and Lindsey   | J. D. Adams                    | 1935           | 1,366               | 0, 4                   | 0  |
| 19   | 5 miles northwest      | First State Bank     | --                             | Old            | 120                 | 6                      | 0  |
| 20   | 1 miles northwest      | Bill Limbrick        | Bill Limbrick                  | 1935           | 19                  | 30                     | 2.5  |
| 21   | 3 1/2 miles north      | Ennis McClelland     | Ennis McClelland               | 1939           | 22                  | 33                     | 3.0  |
| 22   | 0 1/2 miles north      | Texas Forest Service | --                             | 1936           | 84                  | 6                      | 1.0  |
| 23   | 10 1/2 miles north     | J. L. Cooper         | J. L. Cooper                   | 1937           | 32                  | 36                     | 3.0  |

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

b/ Pump or lift: T, turbine; A, air lift; C, cylinder; Cf, centrifugal; R, rope and bucket.

Power: E, electric; G, gasoline engine; W, windmill; H, hand. Number indicates horsepower.

Chemical analyses of water from most of these wells are shown in a table of analyses on pages 20 to 21.

| Well | Water level<br>Below measuring point (ft.) | Date of measurement | Method of lift | Use of water | Remarks  |
|------|--|---------------------|----------------|--------------|--|
|      | a/   |                     | b/             | c/           |  |
| 1    | 16.42                                      | May 8, 1942         | B,H            | D,S          | Dug well.  |
| 2    | -  | do.                 | Flows          | D,Ind        | Estimated flow 2 gallons a minute.   |
| 3    | +  | do.                 | Flows          | D,S          | Formerly supplied water for drilling oil tests. Estimated flow 5 gallons a minute.   |
| 4    | --   | --                  | --             | --           | Oil test. Electrical log in files of Texas State Board of Water Engineers shows sands at 230 to 270 feet and 840 to 860 feet. Bored well. See log.                               |
| 5    | 12.86                                      | May 5, 1942         | B,H            | D,S          | Bored well.  |
| 6    | 14.85                                      | do.                 | B,H            | D,S          | Dug well.  |
| 7    | d/ 15                                      | 1942                | C,H            | D,S          | Bored well.  |
| 8    | 11.53                                      | May 7, 1942         | B,H            | D,S          | Dug well.  |
| 9    | -  | May 22, 1942        | --             | S            | Oil test. Plugged and abandoned. Deussen No. 3219. Temperature 65° F. See log.   |
| 10   | 6.03                                       | May 7, 1942         | B,H            | D,S          | Dug well.  |
| 11   | d/ 10                                      | 1938                | None           | -            | Seismograph test.  |
| 12   | -  | May 7, 1942         | Flows          | D,S          | Estimated flow 3 gallons a minute. Formerly supplied sawmill and camp.   |
| 13   | 15.20                                      | do.                 | B,H            | D,S          | Dug well.  |
| 14   | 26.68                                      | do.                 | B,H            | D,S          | Do.  |
| 15   | 33.03                                      | do.                 | B,H            | D,S          | Do.  |
| 16   | 40.62                                      | do.                 | B,H            | D,S          | Do.  |
| 17   | 26.72                                      | do.                 | B,H            | D            | Do.  |
| 18   | d/ 48                                      | 1935                | A,E,<br>1      | D            | Casing: 6-inch and 4-inch. Screens from 1,040 to 1,055, 1,155 to 1,170 and 1,290 to 1,340 feet. Static water level reported as 14 feet below surface in sand at 480 to 514 feet. |
| 19   | d/ 100                                     | 1938                | --             | --           | Obstructed at 65 feet and abandoned. See log.  |
| 20   | 14.56                                      | May 14, 1942        | B,H            | D,S          | Dug well.  |
| 21   | 16.92                                      | do.                 | B,H            | D,S          | Do.  |
| 22   | 75.50                                      | do.                 | B,H            | D            |  |
| 23   | 23.68                                      | do.                 | B,H            | D,S          |  |

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

d/ Water level reported by owner or driller.

e/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 535, Alexander Deussen, 1914.

Records of wells in Jasper County--Continued

| Well | Distance from Jasper   | Owner                  | Driller         | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|------------------------|------------------------|-----------------|----------------|---------------------|------------------------|--|
| 24   | 13 miles north         | Kirby Lumber Corp.     | --              | Old            | 24                  | 30                     | 3.5  |
| 25   | 13 1/2 miles north     | J. P. Short            | J. P. Short     | 1912           | 24                  | 30                     | 3.0  |
| 26   | 15 1/2 miles northeast | Gilmer Lumber Co.      | Jake Giles      | Old            | 1,320               | 8                      | --   |
| 27   | 13 1/2 miles north     | Kirby Lumber Corp.     | --              | 1906           | 800                 | 8                      | --   |
| 28   | 12 1/2 miles northeast | J. Z. Ziegler          | --              | Old            | 17                  | 36                     | 3.0  |
| 29   | 12 miles northeast     | Mrs. S. P. Garlington  | --              | 1932           | 30                  | 30                     | --   |
| 30   | 9 1/2 miles northeast  | Roy Davis              | --              | 1930           | 41                  | 6                      | 1.0  |
| 31   | 7 1/2 miles northeast  | Magnolia Pipe Line Co. | --              | 1926           | 520                 | 6                      | 1.0  |
| 32   | 9 miles northeast      | J. E. Parker           | --              | Old            | 25                  | 28                     | 3.0  |
| 33   | 4 1/2 miles northeast  | Corrie Reese           | --              | 1940           | 10                  | 36                     | 3.0  |
| 34   | 5 1/2 miles northeast  | Kirby Lumber Corp.     | --              | 1918           | 360                 | 2                      | --   |
| 35   | 5 1/2 miles northeast  | Beaver Bishop          | --              | 1942           | 22                  | 30                     | 3.0  |
| 36   | 7 1/2 miles northeast  | E. R. Simmons          | --              | 1917           | 10                  | 36                     | 2.0  |
| 37   | 7 1/2 miles east       | Dave Adams             | --              | 1941           | 25                  | 30                     | 3.0  |
| 38   | 8 miles east           | Ellis Sidney           | --              | 1941           | 46                  | 30                     | 3.0  |
| 39   | 7 1/2 miles southeast  | Price Powell           | --              | Old            | 26                  | 34                     | 2.5  |
| 40   | 7 miles southeast      | W. H. Fortney          | --              | 1941           | 12                  | 9                      | 1.0  |
| 41   | 1 1/2 miles east       | B. G. Lindsey          | Lynco-Texas Co. | 1940           | 390                 | 6                      | 0  |
| 42   | 3 1/2 miles northeast  | Cliff Bishop           | --              | 1930           | 27                  | 24                     | 2.0  |
| 43   | 2 1/2 miles east       | C. E. Perkins          | J. E. Brown     | 1935           | 196                 | 17                     | --   |
| 44   | In Jasper              | City of Jasper         | Lynco-Texas Co. | 1930           | 581                 | 10, 3, 6               | 0  |
| 45   | 1 1/2 miles southwest  | J. E. Dodd             | --              | 1934           | 43                  | 30                     | 3.0  |
| 46   | 1 1/2 miles southwest  | Mrs. Corine Yates      | --              | 1955           | 17                  | 36                     | 2.7  |
| 47   | 4 miles southwest      | J. C. Yates            | --              | 1922           | 25                  | 24                     | 2.0  |
| 48   | 2 1/2 miles west       | A. B. Jolly            | --              | 1929           | 22                  | 0                      | 2.0  |



| Well | Water level<br>below<br>measuring<br>point<br>(ft.) a/ | Date of<br>measure-<br>ment | Method<br>of<br>lift<br>b/ | Use<br>of<br>water<br>c/ | Remarks   |
|------|--|-----------------------------|----------------------------|--------------------------|---|
| 24   | 21.21  | May 14,<br>1942             | C,H,S                      | D,S                      | Dug well.   |
| 25   | 15.58  | do.                         | B,H                        | D,S                      | Do.   |
| 26   | --   | --                          | --                         | --                       | Formerly supplied sawmill. Caved and abandoned. Reported yield 30 gallons a   |
| 27   | --   | --                          | --                         | --                       | minute. Deussen Co. 625 e/. See log.  |
| 28   | 11.23  | May 14,<br>1942             | C,H                        | D,S                      | Formerly used to supply sawmill camp.<br>Dug well. Casing pulled and hole abandoned.  |
| 29   | --   | --                          | --                         | D,S                      | Do.   |
| 30   | 29.00  | May 14,<br>1942             | C,H                        | D                        | Bored well.   |
| 31   | 104.90   | do.                         | A,-                        | D,S,<br>Ind              | Estimated yield 25 gallons a minute.  |
| 32   | 14.61  | do.                         | C,H                        | D,S                      | Dug well.   |
| 33   | 8.76   | do.                         | C,H                        | D,S                      | Do.   |
| 34   | --   | --                          | --                         | --                       | Formerly supplied sawmill and camp. Casing pulled and hole abandoned.   |
| 35   | 19.49  | May 13,<br>1942             | C,H                        | D,S                      | Dug well.   |
| 36   | 9.02   | do.                         | C,H                        | D,S                      | Do.   |
| 37   | 25.99  | do.                         | C,H                        | D,S                      | Do.   |
| 38   | 47.48  | do.                         | C,H                        | D,S                      | Do.   |
| 39   | 17.19  | do.                         | C,H                        | D,S                      | Do.   |
| 40   | 1.47   | do.                         | C,H                        | D,S                      | Bored well.   |
| 41   | 87   | Sept.<br>1940               | T,H,-                      | D,3r                     | Reported yield 60 gallons a minute. See log.  |
| 42   | 26.17  | May<br>1942                 | B,H                        | D,S                      | Dug well.   |
| 43   | 20   | 1936                        | A,H,<br>2                  | D,S                      | Casing: 176 feet of 2 1/2-inch. Screens from 176 to 196 feet.   |
| 44   | 70.0   | Aug. 8,<br>1930             | C,H,<br>25                 | ES                       | Casing: 177 feet of 10-inch; 283 feet of 6-inch; then 6-inch to bottom. Screens from 405 to 445 and 534 to 557 feet. Supplies City of Jasper. Reported yield 441 gallons a minute with 55 feet of drawdown during |
| 45   | 43.00  | May<br>1942                 | B,H                        | D,S                      | Dug well. pumping test. See log.  |
| 46   | 7.89   | do.                         | B,H                        | D,S                      | Do.   |
| 47   | 21.51  | May<br>1942                 | B,H                        | D,S                      | Do.   |
| 48   | 15.17  | May<br>1942                 | B,H                        | D,S                      | Bored well.   |

## Records of wells in Jasper County--Continued

| Well | Distance from Jasper     | Owner                    | Driller          | Date completed | Depth of well (ft.) | Diame-ter of well (in.) | Height of measuring point above ground (ft.) |
|------|--------------------------|--------------------------|------------------|----------------|---------------------|-------------------------|--|
| 49   | 5½ miles west            | Adam Byerly              | C. E. Brown      | 1935           | 137                 | 5                       | 0  |
| 50   | 4 miles west             | C. L. Bridges            | Frank Balcar     | 1936           | 230                 | 4                       | --   |
| 51   | do.                      | J. W. Campbell           | do.              | 1939           | 425                 | 2, 2½                   | 1.0  |
| 52   | 5½ miles west            | A. L. Kays               | do.              | 1925           | 209                 | 4                       | 0  |
| 53   | 6 miles northvest        | State Fish Hatchery      | do.              | 1931           | 300                 | 4                       | 1.5  |
| 54   | 3½ miles west            | Robert Shelby            | Seismograph Crew | 1940           | 100                 | 5                       | 0  |
| 55   | 6 miles west             | Ed Lynn                  | Frank Balcar     | 1923           | 338                 | 6                       | 0  |
| 56   | 7½ miles west            | Martin Dies              | do.              | 1940           | 411                 | 6                       | 0  |
| 57   | do.                      | do.                      | Lynn-Texas Co.   | 1941           | 364                 | 6                       | 2.0  |
| 58   | 4 miles southwest        | Hardy Durdin             | --               | 1939           | 17                  | 1½                      | --   |
| 59   | 7½ miles southwest       | P. K. Perkins            | Frank Balcar     | 1929           | 257                 | 4                       | 0  |
| 60   | 8 miles southwest        | Smith Dairy              | C. E. Brown      | 1935           | 125                 | 2½                      | 0  |
| 61   | do.                      | Jasper County Lumber Co. | --               | Old            | 22                  | 33                      | 3.0  |
| 62   | 12½ miles southwest      | M. R. Smith              | Seismograph Crew | 1936           | 35                  | 3                       | 0.5  |
| 63   | 5 miles southwest        | S. D. Jones              | --               | 1927           | 55                  | 24                      | 3.0  |
| 64   | 9 miles southeast        | Georgie Thomas           | Lra Thomas       | 1920           | 20                  | 35                      | 3.0  |
| 65   | 7½ miles south           | Mrs. D. A. Olds          | --               | 1926           | 23                  | 36                      | 3.5  |
| 66   | 5½ miles southwest       | Ivy McLemore             | --               | 1912           | 13                  | 21                      | 3.5  |
| 67   | 5½ miles southeast       | Van D. Marshall          | C. E. Brown      | 1940           | 331                 | 8                       | 0  |
| 68   | 3½ miles south           | C. E. Johnson            | C. E. Johnson    | 1947           | 30                  | 30                      | 3.0  |
| 69   | 5 miles southeast        | Stewart Kateliff         | --               | Old            | 16                  | 36                      | 3.0  |
| 70   | 7 miles southeast        | Alfred Southwell         | --               | 1938           | 27                  | 30                      | 3.5  |
| 71   | 9½ miles southeast       | Page Hoirs               | --               | 1924           | 42                  | 36                      | 2.5  |
| Well | Distance from Kirbyville | Owner                    | Driller          | Date completed | Depth of well (ft.) | Diame-ter of well (in.) | Height of measuring point above ground (ft.) |
| 72   | 10 miles north           | T. C. Morgan             | --               | 1932           | 71                  | 27                      | 3.5  |

| Well | Water level<br>Below measuring point (ft.) a/ | Date of measurement | Method of lift b/ | Use of water c/ | Remarks  |
|------|---|---------------------|-------------------|-----------------|--|
| 49   | d/ 65   | ---                 | A,E,<br>1         | D,S,P           | Supplies cotton gin, school and several families.  |
| 50   | ---   | ---                 | A,G,-             | D,S             |  |
| 51   | d/ 50   | 1942                | A,G,-             | D,S             | See log.   |
| 52   | d/ 19   | 1928                | C,G,<br>2         | D,S             |  |
| 53   | +   | Apr. 10, 1942       | Flows             | D,S             | Estimated flow 5 gallons a minute. Temperature 68 <sup>10</sup> / <sub>2</sub> F.              |
| 54   | +   | May 6, 1942         | Flows             | D,S             | Casing has sunk below surface.   |
| 55   | +   | Apr. 10, 1941       | Flows             | D,S             | Reported flow 110 gallons a minute when drilled. Equipped with hydraulic ram.                  |
| 56   | d/ 17   | 1940                | A,E,<br>3         | D               | Screen from 371 to 411 feet. Temperature 71 <sup>10</sup> / <sub>2</sub> F.                    |
| 57   | + 16  | Sept. 17, 1940      | Flows<br>T,E,3    | Sw              | Casing: 311 feet of 6-inch. Screen from 311 to 340 feet. Measured flow 6 $\frac{1}{2}$ gallons |
| 58   | ---   | ---                 | C,E               | D,S             | Driven a minute when drilled. See log. well.   |
| 59   | d/ 55   | 1929                | A,G,<br>3         | D,S             | Screen from 217 to 237 feet.   |
| 60   | d/ 4  | 1938                | A,G,<br>3         | D,S             | Screen from 105 to 125 feet. Supplies dairy.   |
| 61   | 19.25   | May 8, 1942         | B,H               | D,S             | Dug well.  |
| 62   | *   | do.                 | Flows             | N               | Estimated flow 40 gallons a minute.  |
| 63   | 24.98   | do.                 | B,H               | D,S             | Dug well.  |
| 64   | 13.74   | do.                 | B,H               | D,S             | Do.  |
| 65   | 21.52   | do.                 | B,H               | D,S             | Do.  |
| 66   | 9.05  | do.                 | B,H               | D,S             | Do.  |
| 67   | d/ 135  | 1942                | C,E,<br>5         | D,S             | Screen from 371 to 381 feet. Water reported in coarse-grained sand.                            |
| 68   | 57.80   | May 9, 1942         | B,H               | D,S             | Dug well.  |
| 69   | 13.62   | May 18, 1942        | B,H               | D,S             | Do.  |
| 70   | 26.03   | May 9, 1942         | B,H               | D,S             | Do.  |
| 71   | 54.60   | May 12, 1942        | B,H               | D,S             | Do.  |
| Well | Water level<br>Below measuring point (ft.) a/ | Date of measurement | Method of lift b/ | Use of water c/ | Remarks  |
| 72   | 50.91   | May 12, 1942        | B,H               | D,S             | Dug well   |

## Records of wells in Jasper County--Continued

| Well | Distance from Kirbyville | Owner                              | Driller       | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|--------------------------|------------------------------------|---------------|----------------|---------------------|------------------------|--|
| 73   | 7½ miles north           | Unknown                            | ---           | Old            | 39                  | 36                     | 3.0  |
| 74   | 8 miles northwest        | Noah Davis                         | ---           | 1940           | 32                  | 36                     | 3.0  |
| 75   | 10 miles northwest       | Mrs. Walter Aarent                 | ---           | 1941           | 39                  | 36                     | 1.5  |
| 76   | 10½ miles northwest      | Monroe Arnold                      | ---           | 1924           | 48                  | 36                     | 3.0  |
| 77   | 13 miles southwest       | A. K. Bentley                      | ---           | 1940           | 17                  | 24                     | 3.0  |
| 78   | 10½ miles northwest      | Bryant Good                        | ---           | 1902           | 23                  | 36                     | 2.5  |
| 79   | 10½ miles northwest      | Liza Smith                         | ---           | 1940           | 24                  | 36                     | 3.0  |
| 80   | 9 miles northwest        | J. O. Ecker                        | ---           | 1912           | 41                  | 48                     | 3.0  |
| 81   | 7 miles northwest        | A. J. Musselwhite                  | ---           | Old            | 20                  | 24                     | 5.0  |
| 82   | do.                      | Robert Turner                      | ---           | Old            | 17                  | 48                     | 2.5  |
| 83   | 9½ miles northwest       | Vernon Clark                       | ---           | 1930           | 30                  | 36                     | 2.0  |
| 84   | 6½ miles northwest       | W. E. Smith                        | ---           | 1928           | 63                  | 30                     | 0  |
| 85   | 6 miles northwest        | J. M. Turner                       | ---           | 1927           | 50½                 | 36                     | ---  |
| 86   | do.                      | E. Harlett                         | ---           | 1939           | 47                  | 36                     | 5.0  |
| 87   | 4 miles northwest        | G. R. Warren                       | ---           | Old            | 33                  | 36                     | 5.0  |
| 88   | 4½ miles northwest       | Virgil Fulliam                     | ---           | 1937           | 29                  | 30                     | 5.0  |
| 89   | 5 miles west             | M. V. Summers                      | ---           | 1902           | 18                  | 30                     | 0  |
| 90   | 2½ miles northwest       | Clifford Mullin                    | ---           | 1926           | 35                  | 24                     | 2.5  |
| 91   | In Kirbyville            | Gulf, Colorado & Santa Fe R.R. Co. | H. C. Devent  | 1918           | 1,427               | 8                      | 30.0   |
| 92   | do.                      | City of Kirbyville                 | J. W. Jackson | 1927           | 1,490               | 6                      | 0  |
| 93   | do.                      | Trout Creek Lumber Co.             | Frank Balcar  | 1924           | 248                 | 6                      | 0  |
| 94   | ½ mile northwest         | Magnolia Pipe Line Co.             | do.           | 1926           | 325                 | 6                      | 5.0  |
| 95   | do.                      | do.                                | do.           | 1926           | 1,564               | 4                      | 0  |
| 96   | 3 miles northwest        | W. P. Van Felt                     | John Adams    | 1938           | 150                 | 2                      | 0  |
| 97   | 5½ miles northwest       | L. F. Ogden                        | ---           | Old            | 18                  | 36                     | 3.0  |

| Well | Water level                    |                     | Method of lift | Use of water | Remarks   |
|------|--------------------------------|---------------------|----------------|--------------|---|
|      | Below measuring point (ft.) a/ | Date of measurement |                |              |   |
| 73   | 50.91                          | May 12, 1942        | B,H            | D,S          | Dug well.   |
| 74   | 28.35                          | May 11, 1942        | B,H            | D,S          | Do.   |
| 75   | 37.78                          | May 9, 1942         | B,H            | D,S          | Do.   |
| 76   | 24.19                          | do.                 | B,H            | D,S          | Do.   |
| 77   | 5.50                           | do.                 | B,H            | D,S          | Do.   |
| 78   | 16.93                          | do.                 | B,H            | D,S          | Do.   |
| 79   | 17.94                          | May 11, 1942        | B,H            | D,S          | Do.   |
| 80   | 28.04                          | May 9, 1942         | B,H            | D,S          | Do.   |
| 81   | 13.69                          | May 11, 1942        | B,H            | D,S          | Do.   |
| 82   | 9.15                           | do.                 | C,E,<br>1/6    | D,S          | Do.   |
| 83   | 6.42                           | May 9, 1942         | B,H            | F            | Do.   |
| 84   | d/ 58                          | 1942                | C,H            | D,S          |   |
| 85   | ---                            | ---                 | C,E,<br>1/4    | D,S          | Dug to 40 feet. Shallow water sealed off. Supplies dairy.   |
| 86   | 8.63                           | May 11, 1942        | B,H            | D,S          | Dug well.   |
| 87   | 25.73                          | do.                 | B,H            | D,S          | Do.   |
| 88   | 15.17                          | May 12, 1942        | B,H            | D,S          | Do.   |
| 89   | d/ 15                          | 1942                | Cf,G,-         | D,S          | Do.   |
| 90   | 12.62                          | May 16, 1942        | B,H            | D,S          | Do.   |
| 91   | +                              | Apr. 10, 1942       | Flows          | RR           | Casing: 1,246 feet of 8-inch; 181 feet of 3-inch. Screens from 1,186 to 1,226, 1,243 to 1,266 and 1,306 to 1,323 feet. Reported flow 100 gallons a minute into tank 30 feet |
| 92   | +                              | do.                 | Flows          | P            | Reported flow 175 gallons a minute above ground. See log.   |
| 93   | d/ 20                          | Apr. 15, 1942       | A              | Ind          | Screen from 428 to 448 feet. Supplies sawmill. Estimated yield 40 gallons a minute. Original depth 710 feet, plugged  |
| 94   | 30.82                          | May 16, 1942        | A              | Ind          | Sand reported from 300 to back to 448 feet. 340 feet. Cased to 325 feet.  |
| 95   | +                              | Apr. 15, 1942       | Flows          | D,S,<br>Ind  | Reported flow 30 gallons a minute into tank 30 feet above ground.   |
| 96   | d/ 35                          | 1939                | C,W            | D,S          | Screen from 138 to 150 feet.  |
| 97   | 10.73                          | May 16, 1942        | B,H            | D,S          | Dug well. Water sand reported at 60 feet in nearby seismograph test.  |

Records of wells in Jasper County--Continued

| Well | Distance from Kirbyville | Owner                     | Driller                     | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|--------------------------|---------------------------|-----------------------------|----------------|---------------------|------------------------|--|
| 98   | 7 miles west             | Frank Cooper              | --                          | Old            | 27                  | 48                     | 2.0  |
| 99   | 7 1/2 miles west         | Texas Forest Service      | Civilian Conservation Corps | 1938           | 12                  | 6                      | 1.8  |
| 100  | 8 1/2 miles southwest    | W. J. Wright              | --                          | Old            | 54                  | 24                     | 3.0  |
| 101  | 5 miles southwest        | do.                       | John Adams                  | 1939           | 156                 | 2                      | 0  |
| 102  | 3 miles southwest        | Jess Gilcrease            | --                          | 1934           | 17                  | 36                     | 2.7  |
| 103  | 2 1/2 miles southwest    | T. B. Stanford            | --                          | 1939           | 14                  | 30                     | 3.0  |
| 104  | 3 1/2 miles south        | Call School               | John Adams                  | 1939           | 260                 | 2                      | --   |
| 105  | 5 1/2 miles south        | J. S. Linscomb            | Frank Balcar                | 1940           | 150                 | 3                      | --   |
| 106  | 4 miles southwest        | R. L. Miller              | --                          | 1937           | 20                  | 42                     | 2.0  |
| 107  | 7 miles southwest        | Gibson Irby               | --                          | 1938           | 29                  | 36                     | 5.2  |
| 108  | 8 1/2 miles southwest    | Texas State Highway Dept. | Frank Balcar                | 1934           | 388                 | 4                      | 0  |
| 109  | 7 miles southwest        | T. A. Horn                | --                          | 1927           | 22                  | 30                     | 1.5  |
| 110  | 9 miles southwest        | M. G. Gregory             | --                          | 1939           | 15                  | 48                     | 3.0  |
| 111  | do.                      | W. F. Withers             | --                          | 1902           | 28                  | 36                     | 3.0  |

| Well | Distance from Buna    | Owner              | Driller      | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|-----------------------|--------------------|--------------|----------------|---------------------|------------------------|--|
| 112  | 8 1/2 miles northwest | S. H. Toujan       | Frank Balcar | 1927           | 1,470               | 4,2                    | 20   |
| 113  | 3 miles northwest     | J. V. Withers      | --           | 1920           | 39                  | 36                     | 6.0  |
| 114  | 6 miles northwest     | A. P. Walters      | --           | 1910           | 250                 | 2                      | --   |
| 115  | 3 1/2 miles northwest | Hardy Richardson   | Paul Acheson | 1940           | 95                  | 2                      | --   |
| 116  | 5 1/2 miles northeast | W. S. Richard      | --           | 1922           | 30                  | 24                     | 4.5  |
| 117  | 3 miles north         | W. R. Black        | --           | 1934           | 24                  | 30                     | 3.0  |
| 118  | 2 miles north         | Kirby Lumber Corp. | Frank Balcar | 1936           | 280                 | 9                      | 0  |
| 119  | 2 miles north         | do.                | O. C. Adams  | Old            | 761                 | 5                      | 0  |

| Well | Water level                           |                     | Method of lift         | Use of water | Remarks                                   |
|------|---------------------------------------|---------------------|------------------------|--------------|---|
|      | Below measuring point (ft.) <u>a/</u> | Date of measurement |                        |              |   |
| 98   | 17.36                                 | May 16, 1942        | B,H                    | D,S          | Dug well.                                 |
| 99   | 39.71                                 | do.                 | B,H                    | D            | Bored well.                               |
| 100  | 41.79                                 | do.                 | B,H                    | D,S          | Dug well.                                 |
| 101  | <u>d/12</u>                           | 1939                | C,H                    | S            |   |
| 102  | 7.26                                  | May 16, 1942        | B,H                    | D,S          | Dug well.                                 |
| 103  | 10.03                                 | May 18, 1942        | C,E,<br>$\frac{1}{4}$  | D,S          | Do.                                       |
| 104  | --                                    | --                  | C,E,<br>2              | P            |   |
| 105  | --                                    | --                  | C,G,<br>$1\frac{1}{2}$ | D,S          |   |
| 106  | 10.71                                 | May 18, 1942        | Cf,G,<br>3             | D,S          | Dug well.                                 |
| 107  | 28.39                                 | do.                 | B,H                    | D,S          | Do.                                       |
| 108  | <u>d/11</u>                           | 1934                | C,W                    | N            | Formerly used in construction of highway. |
| 109  | 10.46                                 | May 16, 1942        | B,H                    | D,S          | Dug well.                                 |
| 110  | 8.43                                  | do.                 | B,H                    | D,S          | Do.                                       |
| 111  | 8.80                                  | do.                 | B,H                    | D,S          | Do.                                       |

| Well | Water level                           |                     | Method of lift         | Use of water | Remarks  |
|------|---------------------------------------|---------------------|------------------------|--------------|--|
|      | Below measuring point (ft.) <u>a/</u> | Date of measurement |                        |              |  |
| 112  | +                                     | Apr. 10, 1942       | Flows                  | D,S          | Casing: 1,100 feet of 4-inch; 350 feet of $2\frac{1}{2}$ -inch. Screen from 1,450 to 1,470 feet. Estimated flow 35 gallons a minute into   |
| 113  | 37.00                                 | May 16, 1942        | B,H                    | D,S          | Dug well. <span style="border: 1px solid black; padding: 2px;">tank 20 feet above ground.</span>   |
| 114  | --                                    | --                  | C,G,<br>$1\frac{1}{2}$ | D,S          | Screen from 226 to 230 feet.   |
| 115  | --                                    | --                  | C,E,<br>$1\frac{1}{4}$ | D,S          |  |
| 116  | 24.67                                 | May 18, 1942        | B,H                    | D,S          | Dug well.  |
| 117  | 15.78                                 | May 19, 1942        | B,H                    | D,S          | Do.  |
| 118  | <u>d/20</u>                           | 1936                | A                      | Ind,<br>P    | Casing: 260 feet of 9-inch. Screen from 260 to 280 feet. This well and wells 119 and 120 supply 500,000 gallons a day for  |
| 119  | <u>d/45</u>                           | 1932                | A                      | Ind,<br>P    | Deep- <span style="border: 1px solid black; padding: 2px;">sawmill and town of Bessmay.</span> See log. <span style="border: 1px solid black; padding: 2px;">ened from 400± to 761 feet in 1932.</span> Screen from 704 to 749 feet. |

Records of wells in Jasper County--Continued

| Well | Distance from Buna    | Owner                            | Driller      | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|-----------------------|----------------------------------|--------------|----------------|---------------------|------------------------|--|
| 120  | 2 miles north         | Kirby Lumber Corp.               | --           | 1902           | 1,100               | 3                      | --   |
| 121  | 1 1/2 miles northwest | John A. Lewis                    | --           | 1928           | 30                  | 2 1/2                  | --   |
| 122  | 3/4 miles northwest   | James E. Wallace                 | --           | 1939           | 25                  | 1                      | --   |
| 123  | 1/2 miles west        | T. McGalin                       | --           | 1919           | 34                  | 1                      | 2.0  |
| 124  | 5 miles west          | L. V. Withers                    | --           | 1912           | 27                  | 2 1/2                  | 1.0  |
| 125  | 1/2 miles southwest   | J. Reese                         | --           | 1942           | 32                  | 1 1/2                  | --   |
| 126  | 3/4 miles southwest   | Bill Lowe                        | --           | Old            | --                  | 1 1/2                  | --   |
| 127  | 2 1/2 miles southwest | R. M. Franklin                   | --           | 1900           | 21                  | 3 1/2                  | 3.0  |
| 128  | 1 1/2 miles southwest | Mike Rogers                      | --           | 1929           | 17                  | 1 1/2                  | 0.5  |
| 129  | In town               | Buna Independent School District | Paul Cheson  | 1939           | 232                 | 3, 2                   | --   |
| 130  | 1/2 miles east        | B. A. Richardson                 | --           | 1915           | 17                  | 3 1/2                  | 0  |
| 131  | 1/2 miles southeast   | The Texas Pipe Line Co.          | --           | 1912           | 400                 | 3                      | --   |
| 132  | 3 1/2 miles southeast | J. R. Spencer                    | --           | 1940           | 18                  | 1 1/2                  | --   |
| 133  | 1/2 miles southeast   | M. E. Fann                       | --           | Old            | 22                  | 3 1/2                  | 3.0  |
| 134  | 3/4 miles southeast   | Oliver Pevito                    | J. B. Jordan | 1941           | 185                 | 2                      | 0  |
| 135  | 3/4 miles southeast   | Earl Baker                       | --           | 1938           | 33                  | 3                      | 0  |

| Well | Distance from Beaufort | Owner              | Driller      | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|------------------------|--------------------|--------------|----------------|---------------------|------------------------|--|
| 136  | 2 1/2 miles northeast  | L. E. Gailey       | --           | 1928           | 25                  | 1 1/2                  | --   |
| 137  | 1 1/2 miles northeast  | Houston Oil Co.    | Frank Balcar | 1933           | 226                 | 3                      | 0  |
| 138  | In Swadale             | Kirby Lumber Corp. | --           | 1924           | 600                 | 4                      | 0  |
| 139  | 1 1/2 miles southeast  | Archie Moss        | --           | 1939           | 17                  | 3 1/2                  | 2.2  |
| 140  | 1/2 miles southeast    | J. M. Richardson   | --           | 1941           | 18                  | 1 1/2                  | --   |
| 141  | 2 1/2 miles south      | W. H. Newbold      | --           | 1934           | 27                  | 3 1/2                  | 3.0  |
| 142  | 1/2 miles southwest    | City of Beaumont   | Frank Balcar | 1932           | 33                  | 3                      | 0  |



| Well | Water level                 |     | Date of measurement | Method of lift      | Use of water | Remarks   |
|------|-----------------------------|-----|---------------------|---------------------|--------------|---|
|      | Below measuring point (ft.) | a/  |                     |                     |              |   |
| 120  | ---                         | --- |                     | A                   | Ind, P       |   |
| 121  | ---                         | --- |                     | C, E, $\frac{1}{4}$ | D, S         | Dug well.   |
| 122  | ---                         | --- |                     | C, H                | D, S         | Driven well.  |
| 123  | 18.12                       |     | May 19, 1942        | C, F                | D, S         | Driven well. Screen from 50 to 84 feet.                                     |
| 124  | 18.89                       |     | do.                 | B, H                | D, S         | Dug well.   |
| 125  | ---                         | --- |                     | C, H                | D, S         | Driven well.  |
| 126  | ---                         | --- |                     | C, H                | D, S         | Bored well.   |
| 127  | 14.27                       |     | May 19, 1942        | B, H                | D, S         | Dug well.   |
| 128  | 15.56                       |     | May 15, 1942        | C, F                | D, S         | Do.   |
| 129  | ---                         | --- |                     | C, E, 1             | P            | Casing: 160 feet of 3-inch; 51 feet of 2-inch. Screen from 254 to 262 feet. |
| 130  | 10.75                       |     | May 19, 1942        | B, H                | D, S         | Dug well.   |
| 131  | ---                         | --- |                     | None                | P            | Formerly supplied pump station and camp.                                    |
| 132  | ---                         | --- |                     | C, H                | D, S         | Driven well.  |
| 133  | 10.75                       |     | May 15, 1942        | C, E, $\frac{1}{4}$ | D, S         | Dug well.   |
| 134  | d/ 14                       |     | 1941                | C, H                | D, S         | Sand reported from 178 to 135 feet.   |
| 135  | d/ 6                        |     | 1942                | C, F                | D, S         | Screen from 49 to 83 feet.  |

| Well | Water level                 |     | Date of measurement | Method of lift      | Use of water | Remarks  |
|------|-----------------------------|-----|---------------------|---------------------|--------------|--|
|      | Below measuring point (ft.) | a/  |                     |                     |              |  |
| 136  | ---                         | --- |                     | C, H                | D, S         | Bored well.  |
| 137  | d/ 17                       |     | Nov. 1941           | T, G, 5             | PS           | Reported yield. 250 gallons a minute. Supplies about 50 families. See log. |
| 138  | c/                          |     | 1924                | ---                 | ---          | Reported flow 30 gallons a minute in 1924. Filled and abandoned in 1937.   |
| 139  | 5.96                        |     | May 15, 1942        | B, H                | D, S         | Dug well.  |
| 140  | ---                         | --- |                     | C, H                | D, S         | Driven well.   |
| 141  | 6.42                        |     | May 4, 1942         | B, H                | D, S         | Dug well.  |
| 142  | c/ 7                        |     | 1932                | C, E, $\frac{1}{2}$ | D, S         | See log.   |

Records of wells in Jasper County--Continued

| Well | Distance from Evadale  | Owner                   | Driller            | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|------------------------|-------------------------|--------------------|----------------|---------------------|------------------------|--|
| 145  | 4 1/4 miles south      | A. G. Harvor            | L. B. Jenson       | 1905           | 1,211               | 8                      | 3.0  |
| 146  | 5 miles south          | Miller-Vidor Lumber Co. | Gloss and Fletcher | 1904           | 1,070               | 8                      | 0  |
| 147  | 4 1/2 miles southeast  | T. H. Mabiy             | do.                | 1903           | 1,084               | 8                      | 0  |
| 148  | 3 1/2 miles southeast  | A. E. Arrington         | Fred Hetzel        | 1939           | 751                 | 1                      | --   |
| 149  | 5 1/2 miles east       | Magnolia Pipe Line Co.  | --                 | --             | 90                  | 6                      | 1.6  |
| 150  | do.                    | do.                     | --                 | 1928           | 880                 | 5                      | 0.4  |
| 151  | 8 1/2 miles southeast  | Mixon heirs             | --                 | 1942           | 71                  | 1                      | --   |
| 152  | 9 1/2 miles southeast  | O. K. Rateliff          | --                 | 1939           | 65                  | 3                      | --   |
| 153  | 11 1/2 miles southeast | D. Ward                 | --                 | 1940           | 72                  | 2                      | 0  |
| 154  | 12 miles southeast     | Kirby Lumber Corp.      | --                 | 1911           | 388                 | 8                      | 0  |

| Well | Distance from Jasper   | Owner                | Driller                   | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|------------------------|----------------------|---------------------------|----------------|---------------------|------------------------|--|
| 155  | 9 miles south          | C. F. Smith          | Layne-Bowler Co.          | 1907           | 523                 | 9-5/8                  | --   |
| 156  | 4 miles east           | C. T. Flournoy No. 1 | Helmerich and Payne, Inc. | 1930           | 5,360               | --                     | --   |
| 157  | 3 miles south          | -- Seale             | Seale et al.              | 1900           | 1,471               | --                     | --   |
| 158  | 6 miles southwest      | D. M. Thomas No. 1   | Commodore Oil Co. Old     |                | 3,802               | --                     | --   |
| 159  | 12 miles southwest     | State of Texas No. 1 | -- Adams                  | Old            | 2,330               | --                     | --   |
| 160  | 1 1/2 miles northwest  | McShane Lst. No. 1   | C. E. V. Lenz             | 1925           | 3,504               | --                     | --   |
| 161  | 2 1/2 miles northwest  | Kountze Bros. No. 3  | East Texas Oil Co.        | --             | 1,249               | --                     | --   |
| 162  | 25 1/2 miles northwest | Bob Boykin No. 1     | Great Lakes Oil Syndicate | 1928           | 1,298               | --                     | --   |
| 163  | 12 1/2 miles northwest | H. Ralph No. 1       | Guffey Oil Co.            | 1905           | 2,277               | 10                     | --   |

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

b/ Pump or lift; I, turbine, A, air lift; C, cylinder; CF, centrifugal; D, rope and bucket.

Power: E, electric; G, gasoline engine; W, windmill; H, hand. Number indicates horsepower.

| Well | Water level                           |                     | Method of lift | Use of water | Remarks   |
|------|---------------------------------------|---------------------|----------------|--------------|---|
|      | Below measuring point (ft.) <u>a/</u> | Date of measurement |                |              |   |
| 143  | +                                     | Apr. 10, 1942       | Flows          | D,S          | Estimated flow 50 gallons a minute. Deussen No. 622 e/. Temperature 80° F. See log.   |
| 144  | +                                     | do.                 | Flows          | S            | Estimated flow 40 gallons a minute. Deussen No. 623 e/. Temperature 81° F.  |
| 145  | +                                     | do.                 | Flows          | D,S          | Estimated flow 30 gallons a minute. Equipped with hydraulic ram. Deussen No. 624 e/. Temperature 78° F. See log.  |
| 146  | --                                    | --                  | A,G,<br>1½     | D,S          | Supplies dairy.   |
| 147  | 5.06                                  | May 15, 1942        | None           | N            | Casing: 88 feet of 6-inch.  |
| 148  | 12.16                                 | do.                 | A              | D,<br>Ind    | Casing: 675 feet of 5-inch.   |
| 149  | --                                    | --                  | C,H            | D,S          | Bored well. Screen from 63 to 71 feet. Electrical log of seismograph test nearby shows sands from 275 to 375 feet and sands interbedded with shales or clays from 470 |
| 150  | --                                    | --                  | C,H            | D,S          | Bored well. Screen from 60 to 620 feet. to 65 feet.   |
| 151  | <u>d/</u> 14                          | 1942                | C,H            | D,S          | Screen from 67 to 72 feet.  |
| 152  | <u>d/</u> 6                           | 1912                | None           | N            | Formerly supplied sawmill and lumber camp. Casing obstructed near surface.  |

| Well | Water level                           |                     | Method of lift | Use of water | Remarks   |
|------|---------------------------------------|---------------------|----------------|--------------|---|
|      | Below measuring point (ft.) <u>a/</u> | Date of measurement |                |              |   |
| 153  | --                                    | --                  | --             | --           | Screens from 405 to 446 and 513 to 521 feet. See log.                                 |
| 154  | --                                    | --                  | --             | --           | Oil test. Approximate location on map, well not visited. See log.                     |
| 155  | --                                    | --                  | --             | --           | Oil test. Approximate location on map, well not visited. Deussen No. 629 e/. See      |
| 156  | --                                    | --                  | --             | --           | Oil test. Approximate location on map, well not visited. See log. log.                |
| 157  | --                                    | --                  | --             | --           | Do.   |
| 158  | --                                    | --                  | --             | --           | Do.   |
| 159  | --                                    | --                  | --             | --           | Oil test. Approximate location on map, well not visited. Deussen No. 635 e/. See      |
| 160  | --                                    | --                  | --             | --           | Oil test. Approximate location on map, well not visited. See log. log.                |
| 161  | --                                    | --                  | --             | --           | Oil test. Approximate location on map, well not visited. Deussen No. 637 e/. See log. |

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

d/ Water level reported by owner or driller.

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

Table of drillers' logs of wells in Jasper County, Texas.

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 4</u>                                     |                     |                 |
| B. F. Boykin No. 2, 22 miles northwest of Jasper. |                     |                 |
| Surface soil and white sand                       | 16                  | 16              |
| Shale   | 96                  | 112             |
| Gray sand   | 40                  | 152             |
| Rock  | 3                   | 155             |
| Blue shale  | 69                  | 224             |
| Fine-grained gray sand                            | 45                  | 269             |
| Shale and sand                                    | 68                  | 337             |
| Shale   | 24                  | 361             |
| Shale and sandy shale                             | 76                  | 437             |
| Blue shale  | 74                  | 511             |
| Sandy shale                                       | 17                  | 528             |
| Gray shale  | 83                  | 611             |
| Sand and shale                                    | 85                  | 696             |
| Rock  | 1                   | 697             |
| Shale   | 41                  | 738             |
| Sand, shale, layers of sand and shells            | 127                 | 865             |
| Rock  | 1                   | 866             |
| Hard shale  | 53                  | 899             |
| Sand, shale and shells                            | 62                  | 961             |
| Shale, shells and rock                            | 211                 | 1172            |
| Rock  | 3                   | 1175            |
| Sand, shell and rocks                             | 5                   | 1180            |
| Shale and rock                                    | 72                  | 1252            |
| Sand  | 7                   | 1259            |
| Sand, shale and shells                            | 329                 | 1528            |
| Hard shale  | 11                  | 1599            |
| Sand and shale                                    | 100                 | 1699            |
| Sand, shale and lignite                           | 13                  | 1712            |
| Shale and sandy shale                             | 14                  | 1726            |
| Rock and shale                                    | 3                   | 1729            |
| Sand and shale                                    | 70                  | 1799            |
| Rock  | 1                   | 1800            |
| Shale   | 42                  | 1842            |
| Sand and shale                                    | 32                  | 1874            |
| Rock  | 1                   | 1875            |
| Sandy shale                                       | 56                  | 1911            |
| Sandy shale and lignite                           | 75                  | 1986            |
| Sand  | 10                  | 1996            |

Well 9  
(Doussan No. 331 1/2)

|   |    |    |
|---|----|----|
| I. S. Egan, 12 miles northwest of Jasper. |    |    |
| Catahoula sandstone:                      |    |    |
| Red clay                                  | 15 | 15 |
| Fine white sand (waterbearing; fresh)     | 5  | 20 |
| Soft white limestone (gypsum or chalk)    | 42 | 62 |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 9--Continued</u>  |                     |                 |
| Green shale   | 5                   | 65              |
| Mixed streaks of sandstone and limestone  | 21                  | 86              |
| Shale   | 2                   | 88              |
| Sand sandstone  | 4                   | 92              |
| Soft sandstone  | 12                  | 104             |
| Greenish shale  | 24                  | 128             |
| White sand  | 3                   | 131             |
| Limestone   | 9                   | 140             |
| Green shale   | 4                   | 144             |
| Green shale with limestone interbedded  | 32                  | 176             |
| Tough blue clay   | 6                   | 182             |
| Limestone, at top (cased and baled, but could not lower water over 10 feet; water rose to 15 feet of surface; baled before casing was set). | 10                  | 192             |
| Fine-grained rock (quartzitic sandstone; of great grinding power; could not penetrate with rotary)  | 3                   | 195             |
| Green shale   | 24                  | 219             |
| White sand (artesian flow and some gas; water brackish)   | 1                   | 220             |
| Green and blue shale with streaks of limestone  | 36                  | 306             |
| Fine gray sand  | 6                   | 312             |
| Blue clay   | 9                   | 321             |
| Blue shale  | 5                   | 326             |
| Shale and sand in streaks   | 9                   | 335             |
| Gray sand (bad odor)  | 10                  | 345             |
| Blue shale  | 3                   | 348             |
| Fine gray sand  | 12                  | 360             |
| Sand and shale  | 5                   | 365             |
| Limestone, soft   | 15                  | 380             |
| Blue clay and shale   | 9                   | 389             |
| White sand, fine-grained  | 26                  | 415             |
| Blue clay and shale   | 10                  | 425             |
| Limestone   | 10                  | 435             |
| Blue shale  | 15                  | 450             |
| Limestone   | 12                  | 462             |
| Fine white sand with good artesian flow, water brackish   | 11                  | 473             |

(Continued on next page)

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

|   | Thickness<br>(feet) | Depth<br>(feet)  |
|---|---------------------|------------------|
| Well 9--Continued   |                     |                  |
| Blue shale  | 10                  | 238              |
| Limestone, with sheets<br>of sand   | 26                  | 309              |
| Fine white sand   | 15                  | 524              |
| Soft sandstone  | 5                   | 519              |
| Jackson sandstone and<br>Jackson formation:   |                     |                  |
| Sand and soft shales,<br>strong artesian flow<br>about 360 feet,<br>water rose 30 feet<br>above surface as<br>casing was pulled | 482                 | 991              |
| Soft rock   | 1                   | 992              |
| Soil  | 1                   | 993 <sup>a</sup> |
| Jackson and Yogan<br>formations:  |                     |                  |
| Soft bluish shale,<br>covered considerably  | 407                 | 1400             |
| "Soft bluish casing at 535 feet;<br>shows two fair artesian flow of<br>brackish water." J. S. Bean.                             |                     |                  |
| a/ Number under which log is listed in<br>U. S. Geol. Survey Water-Supply Paper<br>335, Alexander Dousson, 1914.                |                     |                  |

Well 28  
(Dousson No. 625 a/)

Gilmer Lumber Co., 15 1/2 miles northeast of  
Jasper.

|                            |     |      |
|----------------------------|-----|------|
| Soil                       | 4   | 4    |
| Clay                       | 14  | 18   |
| Sand                       | 2   | 20   |
| Blue shale and shale       | 362 | 392  |
| Rock                       | 2   | 394  |
| Blue shale and shale       | 76  | 470  |
| Rock                       | 1   | 461  |
| Blue shale and shale       | 50  | 511  |
| Rock                       | 2   | 513  |
| Blue shale and shale       | 52  | 565  |
| Sand                       | 8   | 573  |
| Blue shale and shale       | 30  | 603  |
| Rock                       | 1   | 604  |
| Blue shale and shale       | 6   | 610  |
| Rock                       | 3   | 613  |
| Blue shale and shale       | 212 | 825  |
| Close blue sand            | 40  | 925  |
| Blue shale and shale       | 112 | 1037 |
| Blue water sand (strainer) | 30  | 1077 |
| Gumbo and shale            | 10  | 1087 |
| Rock                       | 2   | 1089 |
| Brown shale and gumbo      | 24  | 1123 |
| Rock                       | 2   | 1125 |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| Well 26--Continued  |                     |                 |
| Brown shale and gumbo   | 7                   | 1182            |
| Rock  | 1                   | 1183            |
| Coal (lignite)  | 4                   | 1187            |
| Brown shale and gumbo   | 6                   | 1193            |
| Blue water sand   | 21                  | 1223            |
| Brown shale and gumbo   | 10                  | 1271            |
| Blue water sand   | 21                  | 1262            |
| Coal (lignite)  | 5                   | 1267            |
| Rock  | 5                   | 1268            |
| Blue water sand   | 17                  | 1285            |
| Brown shale and gumbo   | 5                   | 1290            |
| Blue water sand (strainer)  | 30                  | 1320            |
| Casing used, 1,077 feet of length and 233<br>feet of thickness strainer at 1,077 to<br>1,077 and 1,290 to 1,320 feet. |                     |                 |

a/ Number under which log is listed in  
U. S. Geol. Survey Water-Supply Paper 335,  
Alexander Dousson, 1914.

Well 41

D. G. Lindsey, 4 miles east of Jasper.

|                       |    |     |
|-----------------------|----|-----|
| Soil                  | 3  | 3   |
| Clay                  | 9  | 12  |
| Sand                  | 3  | 50  |
| Clay                  | 14 | 114 |
| Sand                  | 23 | 137 |
| Clay and sandy clay   | 20 | 253 |
| Sand and small gravel | 24 | 290 |
| Sand and clay         | 10 | 350 |
| Sand and gravel       | 25 | 375 |
| Clay                  | 5  | 390 |

Well 44

City of Jasper, in Jasper.

|                                  |       |       |
|----------------------------------|-------|-------|
| Sandy soil                       | 2     | 2     |
| Sandy red clay                   | 13    | 18    |
| Sandy clay and gravel            | 11    | 20    |
| Sand                             | 7     | 30    |
| Clay                             | 7     | 45    |
| Sand                             | 37.5  | 70.5  |
| Sand, gravel and clay<br>streaks | 37.5  | 159   |
| Sandy clay                       | 4     | 134   |
| Sand                             | 21    | 205   |
| Clay                             | 1     | 220   |
| Sand                             | 51    | 251   |
| Sand with clay                   | 119.5 | 364.5 |
| Clay                             | 2.5   | 375   |
| Sand and gravel                  | 13    | 391   |

(Continued on next page)

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

|                           | Thickness<br>(feet) | Depth<br>(feet) |
|---------------------------|---------------------|-----------------|
| <u>Well 41--Continued</u> |                     |                 |
| Sand and lignite          | 12                  | 405             |
| Sand                      | 49                  | 452             |
| Gumbo                     | 8                   | 460             |
| Sand                      | 14                  | 474             |
| Hard shale                | 42                  | 516             |
| Sand                      | 65                  | 581             |
| Rock                      | 0.5                 | 581.5           |

Well 51

|   |     |     |
|---|-----|-----|
| J. J. Darbell, $4\frac{1}{2}$ miles west of Jasper. |     |     |
| Unreported  | 208 | 208 |
| Clay  | 16  | 224 |
| Shale   | 32  | 256 |
| Red and yellow clay                                 | 16  | 272 |
| Sandy shale   | 43  | 315 |
| Blue shale  | 49  | 364 |
| Clay  | 32  | 396 |
| Hard shale  | 10  | 406 |
| White sand  | 19  | 425 |

Well 57

|   |    |     |
|---|----|-----|
| Martin Dies, $7\frac{1}{2}$ miles west of Jasper. |    |     |
| Sandy clay  | 5  | 5   |
| Sand and gravel                                   | 50 | 55  |
| Clay  | 31 | 86  |
| Sandy clay  | 44 | 130 |
| Clay  | 22 | 152 |
| Sandy clay  | 20 | 172 |
| Gray sand   | 52 | 224 |
| Clay  | 88 | 312 |
| Gray sand   | 49 | 361 |
| Clay  | 3  | 364 |

Well 91

|  |     |     |
|--|-----|-----|
| Gulf, Colorado Santa Fe R.R. Co., In<br>Kirby Lumber Co. |     |     |
| Red clay   | 4   | 4   |
| White sand   | 24  | 28  |
| Shale and sand   | 18  | 46  |
| Yellow clay  | 30  | 76  |
| Gray sand  | 131 | 215 |
| Shale  | 33  | 248 |
| Sand   | 36  | 284 |
| Shale  | 12  | 296 |
| Shale and sand   | 28  | 324 |
| Clay   | 13  | 337 |
| Soft rock  | 22  | 359 |
| Gumbo  | 21  | 380 |
| Shale and boulders                                       | 62  | 442 |
| Gumbo and shale  | 43  | 485 |

|                           | Thickness<br>(feet) | Depth<br>(feet) |
|---------------------------|---------------------|-----------------|
| <u>Well 91--Continued</u> |                     |                 |
| Sand                      | 20                  | 505             |
| Shale                     | 20                  | 525             |
| Gumbo                     | 20                  | 555             |
| Shale                     | 16                  | 571             |
| Course red sand           | 37                  | 608             |
| Gumbo and shale           | 52                  | 670             |
| Gumbo                     | 111                 | 781             |
| Gumbo and shale           | 94                  | 875             |
| Rock                      | 15                  | 890             |
| Shale and boulders        | 65                  | 945             |
| Gumbo                     | 62                  | 1007            |
| Rock                      | 3                   | 1009            |
| Gumbo                     | 53                  | 1065            |
| Rock                      | 7                   | 1072            |
| Gumbo                     | 110                 | 1182            |
| Sand and boulders         | 32                  | 1214            |
| Gumbo                     | 25                  | 1240            |
| Sand                      | 8                   | 1248            |
| Gumbo and shale           | 50                  | 1298            |
| Sand                      | 19                  | 1317            |
| Gumbo and shale           | 103                 | 1420            |
| Gumbo                     | 7                   | 1427            |

Well 116

|  |    |     |
|--|----|-----|
| Kirby Lumber Corp., 2 miles north of Tuna. |    |     |
| Red clay                                   | 13 | 13  |
| Yellow sand                                | 5  | 21  |
| Red and gray clay                          | 77 | 98  |
| Shale                                      | 52 | 150 |
| Sandy shale                                | 20 | 170 |
| Clay                                       | 24 | 194 |
| Brown sand                                 | 57 | 251 |
| Rock                                       | 1  | 252 |
| Gravel                                     | 3  | 260 |
| Sand                                       | 20 | 280 |

Well 157

|  |    |     |
|--|----|-----|
| Houston Oil Co., $1\frac{1}{2}$ miles northeast of<br>Evadale. |    |     |
| Yellow clay  | 30 | 30  |
| Sand   | 5  | 35  |
| Yellow sandy shale   | 10 | 52  |
| Clay   | 50 | 90  |
| Quicksand  | 2  | 94  |
| Blue gumbo   | 21 | 115 |
| Sandy shale  | 37 | 150 |
| Blue shale   | 35 | 205 |
| Dark-colored clay  | 5  | 210 |
| Sand and gravel  | 10 | 226 |

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

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <u>Well 142</u>                                  |                     |                 |
| City of Beaumont, 6½ miles southwest of Evadale. |                     |                 |
| Unreported                                       | 70                  | 70              |
| Clay   | 14                  | 84              |
| Sandy shale                                      | 48                  | 132             |
| Clay   | 31                  | 163             |
| Blue sandy shale                                 | 69                  | 232             |
| Packsand   | 28                  | 260             |
| Shale  | 50                  | 310             |
| Blue sand  | 17                  | 327             |
| Sandy shale                                      | 78                  | 405             |
| Shale and gumbo                                  | 75                  | 480             |
| Sand and shale                                   | 30                  | 510             |
| Gumbo  | 30                  | 540             |
| Sand   | 16                  | 556             |
| Shale  | 14                  | 570             |
| Gumbo  | 50                  | 620             |
| Shale  | 20                  | 640             |
| Blue gumbo                                       | 5                   | 645             |
| Sand   | 37                  | 682             |
| Shale  | 53                  | 735             |
| Yellow gumbo                                     | 57                  | 792             |
| Sand   | 22                  | 814             |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 143</u><br>(Deussen No. 622 a/)   |                     |                 |
| A. G. Tarver, 4¼ miles south of Evadale.  |                     |                 |
| Fine sandy loam                           | 2                   | 2               |
| Red clay                                  | 23                  | 25              |
| Lissie gravel and marine<br>miocene beds: |                     |                 |
| White sand                                | 50                  | 75              |
| Yellow clay                               | 21                  | 96              |
| Fine blue sand                            | 33                  | 129             |
| Yellow clay                               | 27                  | 156             |
| White sand                                | 17                  | 173             |
| Yellow clay                               | 52                  | 225             |
| Fine blue sand                            | 27                  | 252             |
| Hard yellow clay                          | 134                 | 386             |
| White sand                                | 90                  | 476             |
| Blue clay                                 | 81                  | 557             |
| Blue sand                                 | 22                  | 579             |
| Hard blue clay                            | 10                  | 589             |
| Coarse white sand                         | 49                  | 638             |
| Blue clay                                 | 18                  | 656             |
| Fine blue clay                            | 30                  | 686             |
| Hard blue clay                            | 19                  | 705             |
| Coarse white sand                         | 55                  | 760             |
| Hard blue clay                            | 9                   | 769             |
| Soft blue clay                            | 25                  | 794             |
| White sand                                | 10                  | 804             |
| Hard blue clay                            | 20                  | 824             |
| Fragmentary sandstone                     | 4                   | 828             |
| Hard blue clay                            | 82                  | 910             |
| Rotten sandstone                          | 6                   | 916             |
| Blue clay                                 | 7                   | 923             |
| White sand                                | 22                  | 945             |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 143--Continued</u>  |                     |                 |
| Hard blue clay  | 67                  | 1012            |
| Coarse white sand   | 19                  | 1031            |
| Fine gravel   | 17                  | 1048            |
| Coarse gravel (water<br>bearing)  | 14                  | 1062            |
| White sand  | 34                  | 1096            |
| Blue clay   | 18                  | 1114            |
| White sand (water bearing)  | 97                  | 1211            |
| a/ Number under which logs is listed in<br>U.S.Geol. Survey Water-Supply Paper<br>335, Alexander Deussen, 1914. |                     |                 |

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <u>Well 145</u><br>(Deussen No. 624 a/)  |                     |                 |
| T. H. Mabry, 4¼ miles southeast of Evadale.  |                     |                 |
| Fine sandy loam  | 2                   | 2               |
| Yellow clay  | 4                   | 6               |
| Yellow sand  | 12                  | 18              |
| Gray clay  | 9                   | 27              |
| Lissie gravel and marine<br>Miocene beds:  |                     |                 |
| White sand   | 23                  | 50              |
| Yellow clay  | 33                  | 83              |
| Fine blue sand   | 34                  | 117             |
| Blue clay  | 35                  | 152             |
| White sand   | 21                  | 173             |
| Blue clay  | 61                  | 234             |
| Fine blue sand   | 30                  | 264             |
| Blue clay  | 31                  | 295             |
| Fine blue sand   | 61                  | 356             |
| Gray clay  | 70                  | 426             |
| White sand   | 94                  | 520             |
| Blue clay  | 63                  | 583             |
| Fine blue sand   | 37                  | 620             |
| Blue hard clay   | 11                  | 631             |
| Coarse white sand  | 53                  | 684             |
| Blue clay  | 13                  | 697             |
| Fine blue sand   | 21                  | 718             |
| Soft stone   | 38                  | 756             |
| Hard blue clay   | 12                  | 768             |
| Coarse white sand, loses<br>water rapidly  | 31                  | 799             |
| Hard blue clay   | 54                  | 853             |
| Unable to tell the strata,<br>drills like oil strata   | 15                  | 868             |
| Hard blue clay   | 68                  | 936             |
| Fine blue clay   | 13                  | 949             |
| Hard blue clay   | 41                  | 990             |
| White sand, water bearing  | 22                  | 1012            |
| Blue and green clay  | 27                  | 1039            |
| Hard blue clay   |                     | 1039            |
| a/ Number under which log is listed in<br>U. S. Geol. Survey Water-Supply Paper<br>335, Alexander Deussen, 1914. |                     |                 |

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

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 153</u>                                     |                     |                 |
| C. F. Smith, 9 $\frac{1}{2}$ miles south of Jasper. |                     |                 |
| Soil  | 9                   | 9               |
| Clay  | 51                  | 60              |
| Sand  | 55                  | 115             |
| Clay  | 34                  | 149             |
| Gumbo   | 12                  | 161             |
| Clay and boulders                                   | 32                  | 193             |
| Clay  | 42                  | 235             |
| Gumbo   | 15                  | 250             |
| Gravel  | 27                  | 277             |
| Blue clay   | 3                   | 280             |
| White sand  | 52                  | 333             |
| Gumbo   | 51                  | 384             |
| Clay  | 21                  | 405             |
| Fine-grained sand                                   | 21                  | 426             |
| Coarse-grained sand                                 | 20                  | 446             |
| Rock  | 8                   | 454             |
| Gumbo   | 11                  | 465             |
| Fine-grained sand                                   | 29                  | 494             |
| Coarse-grained sand                                 | 13                  | 507             |
| Gravel  | 3                   | 510             |
| Sand  | 3                   | 513             |
| Gumbo   | 10                  | 523             |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 154, partial log</u>                                |                     |                 |
| C. T. Flourney No. 1, 4 $\frac{3}{4}$ miles east of Jasper. |                     |                 |
| Surface   | 60                  | 60              |
| Clay  | 90                  | 150             |
| Sand and gravel, water                                      | 70                  | 220             |
| Reddish-brown and yellow clay                               | 69                  | 289             |
| Green shale   | 55                  | 344             |
| Sand, water   | 75                  | 419             |
| Blue and green shale  | 31                  | 450             |
| Sand, water   | 10                  | 460             |
| Green, yellow and blue shale                                | 260                 | 720             |
| Sand  | 13                  | 733             |
| Gummy shale   | 47                  | 780             |
| Sandy shale   | 25                  | 805             |
| Shale   | 80                  | 885             |
| Sand  | 75                  | 950             |
| Gummy shale   | 3                   | 953             |
| Green shale   | 75                  | 1028            |
| Sand and shale streaks                                      | 52                  | 1080            |
| Sticky shale  | 5                   | 1085            |
| Gumbo   | 25                  | 1110            |
| Shale and streaks of sand                                   | 100                 | 1210            |
| Sand  | 30                  | 1240            |
| Shale   | 5                   | 1245            |
| Sand rock   | 7                   | 1252            |

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <u>Well 154, partial log--Continued</u>                                |                     |                 |
| Green shale and blue gumbo   | 196                 | 1448            |
| Sand, water  | 11                  | 1459            |
| Green and blue sandy shale   | 121                 | 1580            |
| Greenish-gray sand, water  | 6                   | 1586            |
| Shale, gumbo and sandy shale   | 84                  | 1670            |
| Fine-grained gray sand   | 21                  | 1691            |
| Hard sandy shale   | 34                  | 1725            |
| Gray sand, water   | 10                  | 1735            |
| Gray gumbo   | 13                  | 1748            |
| Packsand   | 26                  | 1774            |
| Coarse-grained white sand  | 127                 | 1801            |
| Streaks of shale, sand and gumbo                                       | 97                  | 1898            |
| Sand   | 14                  | 1912            |
| Hard shale   | 13                  | 1925            |
| Sand   | 10                  | 1935            |
| Shale, streaks of sand and gumbo                                       | 29                  | 1964            |
| Soft white sand  | 10                  | 1974            |
| Salt and pepper sand   | 26                  | 2000            |
| Coarse-grained sand  | 24                  | 2024            |
| Sticky shale   | 9                   | 2033            |
| Shale with streaks of sand and lignite                                 | 18                  | 2051            |
| Fine-grained sand and sulphur  | 12                  | 2063            |
| Shale and sand, water  | 6                   | 2069            |
| Fine-grained gray sand   | 18                  | 2087            |
| Blue shale and streaks of sand   | 19                  | 2106            |
| Gumbo, hard shale, shells, lignite and streaks of sand with salt water | 132                 | 2238            |
| <b>TOTAL DEPTH</b>   |                     | <b>3360</b>     |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 155</u><br>(Deussen No. 629 a/)   |                     |                 |
| -- Seale No. 1, 3 miles south of Jasper.  |                     |                 |
| Sand  | 40                  | 40              |
| Water sand  | 20                  | 60              |
| Sand and sand rock  | 90                  | 150             |
| Blue clay and sand; at 275 feet, artesian water and gas; at 250 feet, oil showing | 260                 | 410             |
| Lime rock   | 10                  | 420             |
| Blue clay   | 100                 | 520             |
| (Continued on next page)  |                     |                 |



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

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| Well 155--Continued   |                     |                 |
| Lime rock   | 5                   | 525             |
| Gumbo and sand  | 150                 | 375             |
| Lime rock   | 6                   | 381             |
| Gumbo   | 23                  | 701             |
| Sand, oil showing   | 25                  | 727             |
| Lime rock   | 3                   | 730             |
| Gumbo and shale   | 29                  | 758             |
| Dolomitic rock, pyrites,<br>quartz, sand, oil showing   | 9                   | 767             |
| Dolomitic rock, pyrites,<br>quartz, sand, yellow clay,<br>oil showing   | 19                  | 786             |
| Quicksand, dolomitic rock,<br>gumbo   | 22                  | 808             |
| Gumbo, shale, gravel,<br>dolomitic rock,<br>quicksand, iron pyrites,<br>oil showing   | 21                  | 829             |
| Dolomitic rock, quick-<br>sand, yellow clay,<br>lignite (?), slight oil<br>showing  | 21                  | 850             |
| Hard gray clay, calcareous<br>concretions, lime rock,<br>pyrites  | 77                  | 927             |
| Fine quicksand,<br>concretions, much fine<br>pyrites, splendid oil<br>showing   | 11                  | 938             |
| Shale, fine quartz sand,<br>dolomitic rock, iron<br>oxide, calcite  | 79                  | 1017            |
| Fine blue sand, pyrites,<br>shale, large amount of<br>lime  | 40                  | 1057            |
| Fine white sand, pyrites,<br>sack, some lime rock   | 10                  | 1067            |
| Shale, variegated pebbles,<br>chips of flint rock,<br>little wood and plenty of<br>pyrites  | 3                   | 1070            |
| Extremely fine gray sand,<br>shell fragments, very<br>fine white quartz, black<br>carbonaceous matter,<br>some clay and limestone,<br>oil showing very good | 23                  | 1093            |
| Fine gray sand, lime rock<br>concretions, some white<br>quartz, black<br>carbonaceous particles,<br>considerable iron oxide                                 | 21                  | 1114            |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| Well 155--Continued   |                     |                 |
| Fine gray sand, lime<br>concretions, white<br>quartz, black<br>carbonaceous matter,<br>magnetic iron oxide<br>in abundance, oil<br>showing good | 11                  | 1125            |
| Sand rock, white quartz   | 20                  | 1145            |
| Sand rock, gas and oil<br>showing   | 20                  | 1165            |
| Fine gray sand,<br>carbonaceous particles,<br>magnetic iron oxide   | 20                  | 1185            |
| Bluish-gray clay, very<br>fine sand, black<br>particles, magnetic iron,<br>quartz   | 50                  | 1235            |
| Very hard blue shale  | 151                 | 1386            |

(Number under which log is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1912.)

Well 156, partial log

|  |     |      |
|--|-----|------|
| D. H. Thomas, 3 miles southwest of Jasper. |     |      |
| Surface                                    | 43  | 43   |
| Sand, artesian water at<br>35'             | 396 | 439  |
| Lime                                       | 10  | 449  |
| Sand                                       | 59  | 508  |
| Gumbo                                      | 12  | 520  |
| Sand                                       | 133 | 653  |
| Lime and gumbo                             | 105 | 758  |
| Sand                                       | 10  | 768  |
| Lime                                       | 10  | 778  |
| Peck sand                                  | 0   | 788  |
| Gumbo                                      | 10  | 798  |
| Sand                                       | 15  | 813  |
| Peck sand                                  | 25  | 838  |
| Lime and gumbo                             | 113 | 951  |
| Hard lime and sand                         | 37  | 988  |
| Gumbo                                      | 25  | 1013 |
| Sand                                       | 25  | 1038 |
| Lime and gumbo                             | 25  | 1063 |
| Lime, artesian water                       | 22  | 1085 |
| Sand                                       | 12  | 1097 |
| Gumbo and shale                            | 30  | 1127 |
| Lime and sand                              | 45  | 1172 |
| Sand                                       | 10  | 1182 |
| Sand and shale                             | 15  | 1197 |
| Gumbo                                      | 25  | 1222 |

(Continued on next page)

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

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 156, partial log--Continued</u> |                     |                 |
| Gumbo                                   | 15                  | 1545            |
| Sand, salt water                        | 25                  | 1570            |
| TOTAL DEPTH                             |                     | 38.5            |

| <u>Well 157, partial log</u>                        |     |      |
|---|-----|------|
| State of Texas No. 1, 12 miles southwest of Jasper. |     |      |
| Surface sand  | 5   | 5    |
| Clay  | 7   | 12   |
| Gray sand, water                                    | 38  | 50   |
| Yellow sand and gravel                              | 10  | 60   |
| Blue sand, water                                    | 60  | 120  |
| Shale   | 15  | 135  |
| Sand  | 190 | 325  |
| Gumbo   | 35  | 360  |
| Sand, water   | 50  | 410  |
| Gumbo   | 60  | 470  |
| Sand  | 30  | 500  |
| Packed shale  | 35  | 535  |
| Gumbo   | 30  | 615  |
| Gumbo   | 65  | 678  |
| Shale and boulders                                  | 22  | 700  |
| Gumbo   | 40  | 740  |
| Shale   | 60  | 800  |
| Gumbo   | 50  | 850  |
| Packed shale  | 23  | 873  |
| Gumbo   | 27  | 900  |
| Shale and boulders                                  | 40  | 940  |
| Gumbo   | 30  | 970  |
| Broken rock   | 3   | 973  |
| Packed shale  | 27  | 1000 |
| Hard limestone                                      | 4   | 1004 |
| Shale and gumbo                                     | 166 | 1170 |
| Rock  | 5   | 1175 |
| Gumbo   | 65  | 1240 |
| Gray water sand                                     | 60  | 1300 |
| Gumbo and gypsum                                    | 198 | 1498 |
| Waco sand   | 20  | 1518 |
| Thin gumbo  | 32  | 1550 |
| Packed  | 50  | 1600 |
| Sand, shale (flowed hot)                            | 25  | 1625 |
| TOTAL DEPTH   |     | 2330 |

| <u>Well 158, partial log</u>                     |     |     |
|--|-----|-----|
| McShane No. 1, 14 1/2 miles northwest of Jasper. |     |     |
| Surface sand and clay                            | 60  | 60  |
| Soft gumbo                                       | 130 | 190 |
| Sand, water                                      | 10  | 200 |
| Rock   | 2   | 202 |
| Sand   | 36  | 240 |
| Sand shale                                       | 100 | 340 |
| Sand rock, water                                 | 45  | 385 |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 158, partial log--Continued</u> |                     |                 |
| Gumbo                                   | 15                  | 400             |
| Pack sand                               | 50                  | 450             |
| Shale and lime                          | 101                 | 551             |
| Sand                                    | 13                  | 569             |
| Sandy shale                             | 31                  | 590             |
| Gumbo, lime and shale                   | 520                 | 1110            |
| Sand, water                             | 12                  | 1122            |
| Gumbo, sandy shale and rock             | 118                 | 1240            |
| Sand                                    | 3                   | 1246            |
| Sandy shale, gumbo and lime shells      | 451                 | 1697            |
| Sand, shale, gumbo, broken              | 88                  | 1785            |
| Streaks of sand, rock, shale and gumbo  | 100                 | 1885            |
| Gumbo, rock and lime                    | 130                 | 2015            |
| TOTAL DEPTH                             |                     | 3004            |

Well 159  
(Deussen No. 505 a/)

|  |     |      |
|--|-----|------|
| Kountze Bros. No. 6, 24 1/2 miles northwest of Jasper. |     |      |
| Red clay and sand                                      | 65  | 65   |
| Gray sand, artesian flow                               | 20  | 85   |
| Gray sand rock   | 20  | 105  |
| Blue gumbo and shale                                   | 70  | 175  |
| Blue gumbo   | 36  | 263  |
| Green shale  | 12  | 275  |
| Blue gumbo   | 35  | 300  |
| Green shale  | 190 | 490  |
| Green marl and boulders                                | 47  | 535  |
| Green marl   | 60  | 615  |
| Dark blue sand   | 15  | 630  |
| Dark gray sand   | 25  | 655  |
| Dark gray shale  | 17  | 672  |
| Green shale  | 20  | 692  |
| Green shale and shell                                  | 73  | 765  |
| Dark gray sand   | 10  | 734  |
| Green marl   | 10  | 800  |
| Green shale and hard streaks                           | 55  | 835  |
| Green marl with shell                                  | 43  | 880  |
| Green marl and rock                                    | 133 | 1118 |
| Sand rock  | 2   | 1120 |
| Green marl   | 80  | 1200 |
| Dark brown shale                                       | 8   | 1208 |
| Green marl   | 31  | 1229 |
| Gray sand, artesian flow of salt water                 | 12  | 1241 |
| Green shale  | 3   | 1249 |

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

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

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <u>Well 130</u>  |                     |                 |
| Bob Lewis No. 1, 25 $\frac{1}{2}$ miles northwest of Jasper. |                     |                 |
| Clay   | 30                  | 30              |
| Sand, salt water   | 19                  | 49              |
| Sandy shale  | 501                 | 400             |
| Sand   | 5                   | 405             |
| Blue gumbo   | 25                  | 430             |
| Shale and boulders   | 17                  | 447             |
| Gumbo  | 77                  | 524             |
| Sand, salt water   | 32                  | 556             |
| Green shale  | 156                 | 712             |
| Blue sand, salt water  | 37                  | 749             |
| Gumbo  | 312                 | 1061            |
| Sand shale   | 20                  | 1081            |
| Gumbo  | 61                  | 1142            |
| Shale and boulders   | 12                  | 1154            |
| Blue gumbo   | 136                 | 1290            |
| Sand   | 8                   | 1298            |

|                                | Thickness<br>(feet) | Depth<br>(feet) |
|--------------------------------|---------------------|-----------------|
| <u>Well 131--Continued</u>     |                     |                 |
| Sand                           | 10                  | 220             |
| Gumbo                          | 20                  | 240             |
| Sand                           | 150                 | 390             |
| Gumbo and gravel               | 50                  | 440             |
| Shale                          | 30                  | 470             |
| Sand and gravel                | 20                  | 490             |
| Gumbo                          | 30                  | 520             |
| Shale                          | 110                 | 630             |
| Sand, gravel and flowing water | 150                 | 780             |
| Soapstone                      | 50                  | 830             |
| Sand                           | 30                  | 860             |
| Gumbo                          | 100                 | 960             |
| Loose shale                    | 150                 | 1110            |
| Gumbo                          | 100                 | 1210            |
| Sand and gravel                | 30                  | 1240            |
| Gumbo, gravel and boulders     | 175                 | 1415            |
| Rock                           | 5                   | 1420            |
| Gumbo                          | 50                  | 1470            |
| Rock                           | 10                  | 1480            |
| Gumbo                          | 200                 | 1680            |
| Sand                           | 40                  | 1720            |
| Coarse gravel and shale        | 30                  | 1750            |
| Soft rock and gravel           | 100                 | 1850            |
| Hard gravel, sand and water    | 27                  | 1877            |

Well 161  
(Deussen No. 337 2/)

|   |    |     |
|---|----|-----|
| H. ... No. 1, 12 $\frac{1}{2}$ miles northwest of Jasper. |    |     |
| Clay  | 20 | 20  |
| Sand  | 25 | 45  |
| Gravel  | 15 | 60  |
| Sand, flowing water                                       | 20 | 80  |
| Soapstone   | 60 | 140 |
| Sand  | 30 | 170 |
| Rock  | 30 | 200 |
| Gumbo   | 20 | 220 |

Number under which log is listed in U. S. Geol. Survey Water-Supply Paper 345, Alexander Deussen, 1914.

Partial analyses of water from wells in Jasper 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. P. D. 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 | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) <sup>3</sup> |
|---------|----------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|--|
| 1       | Mrs. -- Smith        | 17                  | May 5, 1942        | 36                     | 2.0          | 4.4            | 2.5                                   | 6                               | 2                          | 5.0           | -            | 15                         | 23   |
| b/ 2    | U.S. Government      | 986                 | do.                | 459                    | 1.6          | 3.2            | 100                                   | 451                             | 2                          | 39            | 0.7          | 0                          | 17   |
| b/ 3    | B. F. Rowkin No. 1   | 155                 | do.                | 375                    | 1.6          | 1.7            | 158                                   | 134                             | 2                          | 156           | -            | 0                          | 11   |
| 5       | D. P. Pace           | 22                  | do.                | 225                    | 1.2          | 4.4            | 58                                    | 73                              | 23                         | 32            | -            | 55                         | 43   |
| 6       | R. E. Primrose       | 17                  | do.                | 145                    | 6.8          | 6.6            | 32                                    | 12                              | 3                          | 47            | 0.2          | 43                         | 44   |
| 7       | J. M. Byerly         | 22                  | do.                | 94                     | 4.0          | 5.6            | 20                                    | 13                              | 2                          | 25            | -            | 27                         | 33   |
| 8       | Sol Pace             | 17                  | May 7, 1942        | 40                     | 8.4          | 2.7            | 5.9                                   | 18                              | 3                          | 5.0           | -            | 11                         | 32   |
| 9       |                      |                     |                    |                        |              |                |                                       |                                 |                            |               |              |                            |  |
| (621c/) | I. S. Bean           | 1,400               | Apr. 11, 1908      | 5,454                  | 140          | 24             | 2,057                                 | 531                             | 12                         | 3,063         | -            | -                          | -  |
| 10      | F. Moody             | 17                  | May 7, 1942        | 211                    | 0.8          | 11             | 52                                    | 6                               | 7                          | 93            | -            | 33                         | 62   |
| b/ 12   | L. Mays              | 360+                | do.                | 158                    | 0.4          | 1.2            | 64                                    | 140                             | 4                          | 18            | 0.1          | 1.0                        | 5  |
| 13      | Archie Hamilton      | 19                  | do.                | 77                     | 2.0          | 10             | 7.1                                   | 5                               | 3                          | 19            | -            | 33                         | 46   |
| 14      | W. H. Hancock        | 21                  | do.                | 191                    | 4.8          | 12             | 41                                    | 18                              | 2                          | 62            | -            | 60                         | 63   |
| 15      | C. C. Woods          | 40                  | do.                | 51                     | 2.8          | 5.1            | 8.1                                   | 37                              | 2                          | 3.0           | -            | 12                         | 28   |
| 16      | Shade Griffin        | 43                  | do.                | 28                     | 4.0          | 1.2            | 5.9                                   | 12                              | 2                          | 4.5           | -            | 6.0                        | 15   |
| 17      | A. A. DuBose         | 34                  | do.                | 72                     | 5.4          | 2.7            | 16                                    | 49                              | 2                          | 5.0           | -            | 15                         | 27   |
| b/ 18   | Morgan and Lindsey   | 1,366               | do.                | 30                     | 4.4          | 2.7            | 3.0                                   | 18                              | 7                          | 3.5           | 0.4          | 0                          | 22   |
| 20      | Bill Limbrick        | 19                  | May 14, 1942       | 39                     | 0.4          | 2.7            | 9.4                                   | 6                               | 4                          | 13            | -            | 5.0                        | 12   |
| 21      | Funis McClelland     | 22                  | do.                | 24                     | 4.0          | 1.5            | 2.1                                   | 12                              | 2                          | 4.0           | -            | 4.0                        | 16   |
| b/ 22   | Texas Forest Service | 84                  | do.                | 133                    | 3.4          | 3.9            | 14                                    | 159                             | 3                          | 0.5           | -            | 0                          | 102  |
| 23      | J. L. Cooper         | 32                  | do.                | 20                     | 1.5          | 0.2            | 6.0                                   | 12                              | 2                          | 3.5           | -            | 1.0                        | 5  |
| 24      | Kirby Lumber Corp.   | 24                  | do.                | 121                    | 14           | 7.5            | 16                                    | 37                              | 2                          | 29            | -            | 34                         | 65   |
| 25      | J. P. Short          | 24                  | do.                | 88                     | 3.5          | 0.2            | 28                                    | 12                              | 6                          | 30            | -            | 14                         | 10   |
| 26      | Gilmer Lumber Co.    | 1,320               | --                 | 1,332                  | 3.4          | 2.4            | 416                                   | 183                             | 504                        | 41            | -            | -                          | -  |

a/ Less than 3 parts per million.

b/ Analyses of water from selected wells are given in milligram equivalents per liter on page 31.

c/ Lumber under which analyses is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.

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

Results are in parts per million

| Well  | Owner                 | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|-------|-----------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 28    | J. Z. Ziegler         | 17                  | Nov 14, 1942       | 171                    | 20           | 5.             | 20                                    | 0                               | 11                         | 5             | -            | 39                         | 73  |
| 29    | Mrs. S. P. Carlington | 30                  | do.                | 242                    | 27           | 12             | 30                                    | 12                              | 8                          | 73            | -            | 75                         | 118   |
| b/ 30 | Roy Davis             | 41                  | do.                | 25                     | 0.4          | 3.9            | 3.0                                   | 5                               | 2                          | 10            | -            | 3.0                        | 17  |
| 32    | J. E. Parker          | 25                  | do.                | 198                    | 14           | 7.3            | 43                                    | 5                               | 2                          | 91            | -            | 48                         | 55  |
| 33    | Corrie Reese          | 10                  | do.                | 75                     | 0.5          | 3.2            | 17                                    | 18                              | 4                          | 14            | -            | 24                         | 22  |
| 35    | Beaver Bishop         | 22                  | May 13, 1942       | 85                     | 14           | 1.2            | 17                                    | 55                              | 2                          | 13            | -            | 5.0                        | 40  |
| 36    | F. R. Simmons         | 10                  | do.                | 144                    | 4.1          | 2.7            | 44                                    | 18                              | 2                          | 58            | -            | 24                         | 22  |
| 37    | Dave Adams            | 25                  | do.                | 22                     | a/           | 1.5            | 6.2                                   | 12                              | 3                          | 3.5           | -            | 2.0                        | 6   |
| b/ 38 | Ellis Sidney          | 46                  | do.                | 31                     | 2.0          | 1.5            | 3.3                                   | 24                              | 2                          | 4.5           | -            | 0.5                        | 11  |
| 39    | Price Powell          | 25                  | do.                | 513                    | 51           | 10             | 54                                    | 55                              | 5                          | 125           | -            | 200                        | 271   |
| 40    | W. H. Fortney         | 12                  | do.                | 53                     | 0            | 1.5            | 18                                    | 13                              | 7                          | 14            | -            | 3.0                        | 6   |
| 42    | Cliff Bishop          | 27                  | do.                | 59                     | 4.4          | 2.7            | 16                                    | 61                              | 2                          | 3.4           | 0.2          | 0                          | 22  |
| b/ 43 | C. E. Perkins         | 196                 | do.                | 51                     | 5.6          | 0.2            | 15                                    | 49                              | 2                          | 4.0           | -            | 0                          | 15  |
| 44    | City of Jasper        | 531                 | Apr. 10, 1941      | 126                    | 9.3          | 1.0            | 10                                    | 35                              | 14                         | 4.1           | .2           | .0                         | 27  |
| 45    | J. E. Dodd            | 43                  | May 9, 1942        | 19                     | 2.4          | 1.2            | 2.1                                   | 0                               | 5                          | 5.5           | -            | 3.0                        | 11  |
| 46    | Mrs. Luine Yates      | 17                  | do.                | 192                    | 24           | 2.7            | 39                                    | 12                              | 3                          | 7.9           | -            | 35                         | 72  |
| 47    | J. C. Yates           | 25                  | May 8, 1942        | 290                    | 21           | 12             | 58                                    | 37                              | 3                          | 88            | -            | 90                         | 103   |
| 48    | A. B. Jolly           | 22                  | May 6, 1942        | 39                     | 4.0          | 5.6            | 1.2                                   | 24                              | 3                          | 2.5           | -            | 11                         | 33  |
| 49    | Adam Byerly           | 137                 | do.                | 15                     | 1.2          | 1.9            | 1.3                                   | 6                               | 3                          | 4.5           | 0.2          | 0                          | 11  |
| 50    | C. M. Bridges         | 230                 | do.                | 21                     | 3.2          | 1.9            | 1.3                                   | 17                              | 3                          | 5.0           | -            | 0                          | 16  |
| b/ 51 | J. W. Campbell        | 425                 | May 5, 1942        | 25                     | 1.5          | 3.2            | 3.0                                   | 12                              | 7                          | 3.5           | 0.4          | 0                          | 17  |
| 52    | A. L. Mays            | 200                 | May 6, 1942        | 22                     | 1.6          | 3.2            | 2.1                                   | 12                              | 3                          | 5.0           | -            | 0                          | 17  |
| 53    | State Fish Hatchery   | 500                 | May 5, 1942        | 121                    | 1.2          | 1.9            | 46                                    | 110                             | 11                         | 5.5           | 0.2          | 1.0                        | 11  |
| 54    | Robert Shelby         | 100+                | May 6, 1942        | 61                     | 5.6          | 1.7            | 16                                    | 49                              | 10                         | 4.0           | -            | 0                          | 21  |
| 55    | Ed Lynn               | 333                 | Apr. 10, 1941      | 157                    | 4.5          | .5             | 42                                    | 100                             | 13                         | 6.2           | 0            | .0                         | 14  |
| 57    | Martin Dies           | 34                  | Apr. 15, 1942      | 85                     | 4.3          | 1.0            | 28                                    | 73                              | 10                         | 4.0           | 0.2          | 0                          | 15  |
| 58    | Hardy Durdin          | 17                  | May 7, 1942        | 31                     | 0.8          | 2.4            | .4                                    | 12                              | 2                          | 5.0           | 0.1          | 3.0                        | 12  |
| 59    | P. K. Perkins         | 237                 | May 6, 1942        | 26                     | 4.4          | 2.7            | 1.4                                   | 12                              | 4                          | 7.0           | 0.3          | 0                          | 22  |

a/ Less than 3 parts per million.

b/ Analyses of water from selected wells are given in milligram equivalents per liter on page 31.

c/ Number under which analyses is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deusser, 1914.

Partial analyses of water from wells in Jasper County--Continued  
Results are in parts per million

| Well  | Owner                    | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|-------|--------------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 60    | Smith Dairy              | 125                 | May 5, 1942        | 28                     | 1.6          | 0.2            | 9.0                                   | 13                              | 4                          | 4.0           | -            | 0                          | 5   |
| 61    | Jasper County Lumber Co. | 22                  | May 8, 1942        | 36                     | a/           | 1.5            | 8.3                                   | 0                               | 3                          | 4.0           | -            | 19                         | 6   |
| 62    | M. R. Smith              | 65±                 | do.                | 155                    | 28           | 3.9            | 29                                    | 155                             | 7                          | 6.0           | -            | 0                          | 87  |
| 63    | S. D. Jones              | 33                  | do.                | 175                    | 23           | 3.6            | 33                                    | 79                              | 3                          | 28            | -            | 46                         | 72  |
| 64    | Georgie Thomas           | 20                  | do.                | 168                    | 3.6          | 6.1            | 43                                    | 6                               | 3                          | 54            | -            | 55                         | 34  |
| 65    | Mrs. D. A. Wds           | 23                  | do.                | 32                     | 6.0          | 1.5            | 3.0                                   | 6                               | 2                          | 12            | -            | 4.5                        | 21  |
| 66    | Ivy McLemore             | 13                  | do.                | 503                    | 115          | 29             | 0.9                                   | 49                              | 3                          | 156           | -            | 1.5                        | 48  |
| b/ 67 | Van D. Marshall          | 331                 | Apr. 15, 1942      | 82                     | 20           | 1.7            | 9.9                                   | 73                              | 7                          | 6.5           | 0.4          | 0                          | 56  |
| 68    | J. F. Johnson            | 38                  | May 9, 1942        | 84                     | 6.4          | 2.7            | 18                                    | 6                               | 2                          | 29            | 0.4          | 22                         | 27  |
| 69    | Stewart Ratcliff         | 16                  | May 13, 1942       | 102                    | 12           | 2.7            | 16                                    | 12                              | 11                         | 13            | 0.2          | 35                         | 42  |
| 70    | Alfred Southwell         | 27                  | May 9, 1942        | 418                    | 43           | 2.7            | 93                                    | 67                              | 55                         | 143           | 0.1          | 38                         | 132   |
| 71    | Page Heirs               | 42                  | May 12, 1942       | 131                    | 10           | 1.5            | 36                                    | 73                              | 3                          | 17            | -            | 27                         | 31  |
| 72    | T. C. Morgan             | 71                  | do.                | 48                     | 2.4          | 3.9            | 7.5                                   | 6                               | 2                          | 15            | -            | 16                         | 22  |
| 73    | Unknown                  | 39                  | do.                | 114                    | 24           | 2.7            | 14                                    | 85                              | 3                          | 12            | -            | 16                         | 72  |
| 74    | Noah Davis               | 32                  | May 11, 1942       | 89                     | 3.3          | 3.6            | 19                                    | 61                              | 2                          | 9.5           | -            | 16                         | 37  |
| 75    | Mrs. Walter Aarant       | 59                  | May 9, 1942        | 43                     | 3.4          | 2.7            | 3.7                                   | 31                              | 2                          | 5.5           | -            | 3.0                        | 32  |
| b/ 76 | Monroe Arnold            | 48                  | do.                | 34                     | 2.4          | 1.2            | 7.4                                   | 6                               | 2                          | 9.5           | -            | 3.0                        | 11  |
| 77    | A. K. Bentley            | 17                  | do.                | 82                     | 20           | 1.5            | 7.4                                   | 55                              | 3                          | 9.0           | -            | 14                         | 55  |
| 78    | Bryant Good              | 23                  | do.                | 79                     | 5.5          | 7.5            | 9.4                                   | 13                              | 3                          | 20            | -            | 24                         | 45  |
| 79    | Liza Smith               | 24                  | May 11, 1942       | 30                     | 0.4          | 3.9            | 3.5                                   | 6                               | 2                          | 5.5           | -            | 12                         | 17  |
| 80    | J. O. Booker             | 41                  | May 9, 1942        | 68                     | 4.4          | 3.9            | 12                                    | 6                               | 2                          | 18            | 0.2          | 24                         | 27  |
| 81    | A. J. Fusselwhite        | 20                  | May 11, 1942       | 226                    | 11           | 3.6            | 56                                    | 43                              | 5                          | 31            | -            | 33                         | 42  |
| 82    | Robert Turner            | 17                  | do.                | 31                     | a/           | 2.4            | 3.3                                   | 12                              | 2                          | 10            | -            | 2.5                        | 10  |
| 83    | Vernon Clark             | 30                  | May 9, 1942        | 97                     | 3.2          | 4.9            | 21                                    | 24                              | 2                          | 14            | -            | 40                         | 28  |
| 84    | V. F. Smith              | 63                  | May 11, 1942       | 24                     | 5.2          | 1.9            | 1.2                                   | 13                              | 2                          | 4.0           | -            | 1.0                        | 21  |
| b/ 85 | J. M. Turner             | 90+                 | do.                | 23                     | a/           | 0.2            | 7.8                                   | 6                               | 2                          | 5.0           | 0.2          | 4.5                        | 1   |
| 86    | F. Hamlett               | 47                  | do.                | 245                    | 5.2          | 6.3            | 73                                    | 18                              | 2                          | 100           | -            | 50                         | 39  |
| 87    | G. P. Warren             | 36                  | do.                | 115                    | 4.3          | 5.1            | 29                                    | 12                              | 5                          | 46            | -            | 20                         | 33  |
| 88    | Virgil Pulliam           | 29                  | May 12, 1942       | 107                    | 4.4          | 3.9            | 23                                    | 6                               | 2                          | 22            | -            | 49                         | 27  |
| 89    | M. V. Summers            | 13                  | do.                | 49                     | 0.4          | 2.7            | 13                                    | 6                               | 4                          | 17            | -            | 9.0                        | 12  |
| 90    | Clifford Mullin          | 35                  | May 15, 1942       | 49                     | 4.4          | 2.7            | 11                                    | 37                              | 2                          | 3.0           | -            | 3.0                        | 22  |

a/ Less than 3 parts per million.

b/ Analyses of water from selected wells are given in milligram equivalents per liter on page 31.

c/ Number under which analyses is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deusser, 1914.

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

Results are in parts per million

| Well  | Owner                                | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|-------|--------------------------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| b/ 91 | Gulf, Colorado and Santa Fe S.R. Co. | 1,427               | Apr. 10, 1942      | 141                    | 19           | 1.0            | 38                                    | 146                             | 7                          | 5.5           | 0.1          | 0                          | 51  |
| 93    | Trout Creek Lumber Co.               | 448                 | Apr. 15, 1942      | 42                     | 4.8          | 1.0            | 11                                    | 37                              | 2                          | 5.0           | -            | 0                          | 16  |
| b/ 94 | Magnolia Pipe Line Co.               | 325                 | do.                | 69                     | 6.4          | 6.8            | 12                                    | 67                              | 2                          | 7.5           | 1.4          | 0                          | 44  |
| 95    | do.                                  | 1,554               | do.                | 171                    | 4.3          | 2.2            | 23                                    | 183                             | 7                          | 6.0           | 0.2          | 0                          | 116   |
| b/ 96 | W.P. Van Pelt                        | 150                 | May 15, 1942       | 52                     | 1.1          | 0.2            | 20                                    | 43                              | 2                          | 7.0           | 0.1          | 0                          | 5   |
| 97    | L. F. Ogden                          | 18                  | do.                | 148                    | 3.4          | 3.9            | 37                                    | 12                              | 4                          | 51            | -            | 38                         | 37  |
| 98    | Frank Cooper                         | 27                  | do.                | 24                     | 4.0          | 1.5            | 2.8                                   | 12                              | 3                          | 6.0           | -            | 0.5                        | 16  |
| 99    | Texas Forest Service                 | 42                  | do.                | 28                     | 4.8          | 2.2            | 2.5                                   | 18                              | 3                          | 5.5           | -            | 0.5                        | 21  |
| 100   | W. J. Wright                         | 54                  | do.                | 263                    | 18           | 13             | 51                                    | 31                              | 2                          | 32            | -            | 32                         | 98  |
| 101   | do.                                  | 156                 | do.                | 75                     | 2.4          | 1.2            | 26                                    | 55                              | 3                          | 14            | -            | 1.5                        | 11  |
| 102   | Jess Gilcrease                       | 17                  | do.                | 71                     | 0.4          | 2.7            | 21                                    | 13                              | 2                          | 19            | -            | 17                         | 12  |
| 103   | T.P. Stanford                        | 14                  | May 13, 1942       | 137                    | 16           | 2.7            | 30                                    | 79                              | 2                          | 20            | -            | 27                         | 52  |
| 104   | Call School                          | 260                 | May 19, 1942       | 77                     | a/           | 1.5            | 30                                    | 73                              | 3                          | 1.0           | 0.1          | 0                          | 6   |
| b/105 | J.S. Linscomb                        | 150                 | do.                | 22                     | 4.0          | 1.5            | 2.1                                   | 12                              | 2                          | 6.0           | 0            | 0                          | 16  |
| 106   | R. L. Miller                         | 20                  | May 18, 1942       | 54                     | 4.4          | 2.7            | 11                                    | 12                              | 2                          | 17            | 0            | 11                         | 22  |
| 107   | Gibson Irby                          | 29                  | do.                | 130                    | 15           | 3.0            | 23                                    | 31                              | 5                          | 30            | -            | 33                         | 52  |
| 109   | W. A. Horn                           | 22                  | May 16, 1942       | 97                     | 10           | 3.9            | 21                                    | 31                              | 5                          | 17            | -            | 10                         | 42  |
| 110   | H. G. Gregory                        | 15                  | do.                | 88                     | 4.6          | 3.9            | 19                                    | 12                              | 3                          | 22            | -            | 30                         | 27  |
| 111   | W. F. Withers                        | 28                  | do.                | 453                    | 26           | 10             | 120                                   | 49                              | 3                          | 174           | 0.2          | 96                         | 106   |
| 112   | S. J. Toujan                         | 1,470               | Apr. 10, 1942      | 283                    | 2.3          | 1.0            | 117                                   | 305                             | 7                          | 4.0           | 1.0          | 0                          | 11  |
| 113   | J. V. Withers                        | 39                  | May 16, 1942       | 436                    | 25           | 15             | 112                                   | 49                              | 15                         | 121           | -            | 174                        | 124   |
| b/114 | A. P. Walters                        | 230                 | do.                | 69                     | 8.4          | 2.7            | 15                                    | 55                              | 2                          | 11            | 0.2          | 3.0                        | 32  |
| 115   | Hardy Richardson                     | 92                  | do.                | 34                     | 2.4          | 2.7            | 6.9                                   | 13                              | 2                          | 10            | -            | 1.0                        | 17  |
| 116   | W. S. Richard                        | 30                  | May 18, 1942       | 156                    | 14           | 2.7            | 41                                    | 55                              | 7                          | 40            | -            | 34                         | 47  |
| 117   | E. R. Black                          | 24                  | May 19, 1942       | 89                     | 12           | 2.7            | 13                                    | 12                              | 4                          | 26            | -            | 25                         | 42  |
| b/118 | Kirby Lumber Corp.                   | 280                 | Apr. 14, 1942      | 92                     | 5.3          | 2.2            | 27                                    | 61                              | 3                          | 23            | -            | 0                          | 26  |
| b/119 | do.                                  | 751                 | do.                | 140                    | 20           | 1.7            | 36                                    | 146                             | 4                          | 6.0           | 0.3          | 0                          | 56  |

a/ Less than 3 parts per million.

b/ Analyses of water from selected wells are given in milligram equivalents per liter on page 31.

Partial analysis of water from wells in Jasper County—Continued

Results are in parts per million

| Well  | Owner                         | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Carbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|-------|-------------------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|-------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 120   | Kirby Lumber Corp.            | 1,100±              | Apr. 11, 1942      | 142                    | 17           | 2.2            | 39                                    | 145                           | 4                          | 7.5           | 0.1          | 0                          | 51  |
| 121   | John A. Lewis                 | 30                  | May 19, 1942       | 127                    | 4.0          | 2.7            | 33                                    | 12                            | 10                         | 26            | -            | 45                         | 21  |
| 122   | James E. Wallace              | 25±                 | do.                | 40                     | 2.3          | 2.4            | 7.4                                   | 18                            | 2                          | 5.0           | -            | 11                         | 17  |
| 123   | T. McGalin                    | 34                  | do.                | 281                    | 20           | 17             | 42                                    | 12                            | 5                          | 71            | -            | 120                        | 121   |
| 124   | L. V. Withers                 | 27                  | do.                | 2,213                  | 173          | 105            | 412                                   | 171                           | 17                         | 775           | 1.0          | 545                        | 865   |
| 125   | J. Reese                      | 32                  | do.                | 65                     | 4.3          | 5.1            | 12                                    | 43                            | 5                          | 10            | -            | 7.0                        | 33  |
| 126   | Bill Lowe                     | -                   | May 15, 1942       | 191                    | 1.3          | 0.2            | 73                                    | 49                            | 13                         | 74            | -            | 0                          | 5   |
| 127   | P.M. Franklin                 | 21                  | do.                | 95                     | 9.6          | 7.5            | 14                                    | 37                            | 3                          | 29            | -            | 14                         | 55  |
| 128   | Mike Rogers                   | 17                  | do.                | 36                     | 4.0          | 1.5            | 7.4                                   | 6                             | 4                          | 15            | 0.3          | 1.0                        | 16  |
| b/129 | Suna Independent School Dist. | 202                 | Apr. 10, 1942      | 50                     | 7.2          | 1.9            | 9.9                                   | 37                            | 2                          | 11            | 0            | 0                          | 16  |
| 130   | B.A. Richardson               | 17                  | May 19, 1942       | 193                    | 4.3          | 5.1            | 56                                    | 12                            | 4                          | 76            | 0            | 41                         | 33  |
| 132   | J. E. Spencer                 | 13                  | do.                | 21                     | 4.0          | 1.5            | 1.2                                   | 6                             | 2                          | 7.0           | -            | 7.0                        | 16  |
| 133   | M. E. Fann                    | 22                  | May 15, 1942       | 65                     | a/           | 0.2            | 25                                    | 24                            | 3                          | 20            | -            | 4.5                        | 1   |
| b/134 | Oliver Pevito                 | 135                 | do.                | 48                     | 5.4          | 3.9            | 6.7                                   | 21                            | 2                          | 13            | 0.1          | 0.5                        | 32  |
| 135   | Earl Baker                    | 63                  | do.                | 124                    | 0.4          | 3.9            | 43                                    | 31                            | 2                          | 60            | -            | 0                          | 17  |
| 136   | T. F. Gailey                  | 25                  | do.                | 102                    | 7.3          | 7.5            | 23                                    | 35                            | 2                          | 20            | -            | 0                          | 50  |
| b/137 | Houston Oil Co.               | 226                 | Apr. 10, 1942      | 151                    | 23           | 1.0            | 34                                    | 122                           | 2                          | 23            | -            | 0                          | 51  |
| 139   | Archie Moss                   | 17                  | May 15, 1942       | 93                     | 2.0          | 1.5            | 34                                    | 12                            | 3                          | 50            | -            | 1.5                        | 11  |
| 140   | J.H. Richardson               | 12                  | do.                | 22                     | 2.4          | 1.2            | 3.9                                   | 6                             | 2                          | 9.0           | -            | 0                          | 11  |
| 141   | H. H. Newbold                 | 27                  | May 4, 1942        | 93                     | 0.0          | 4.4            | 26                                    | 6                             | 20                         | 33            | -            | 0                          | 23  |
| 142   | City of Beaumont              | 814                 | Mar. 5, 1941       | 362                    | -            | -              | 153                                   | 352                           | 2                          | 41            | -            | -                          | 4.5   |
| 143   | A. G. Tarver                  | 1,211               | Apr. 10, 1942      | 253                    | 0.3          | 1.0            | 106                                   | 252                           | 4                          | 12            | 0.3          | 0                          | 6   |
| 144   | Miller-Vidor Lumber Co.       | 1,072               | do.                | 280                    | 2.8          | 1.0            | 115                                   | 281                           | 5                          | 13            | 0.6          | 0                          | 11  |
| 145   | T. W. Mabry                   | 1,034               | do.                | 270                    | 3.4          | 3.2            | 1.7                                   | 231                           | 4                          | 14            | 0.3          | 0                          | 22  |
| b/146 | A.E. Arrington                | 75±                 | May 15, 1942       | 66                     | 3.6          | 1.7            | 21                                    | 49                            | 2                          | 14            | 0            | 0                          | 16  |
| b/148 | Magnolia Pipe Line Co.        | 330                 | do.                | 248                    | 3.6          | 0.2            | 102                                   | 262                           | 2                          | 10            | 0.4          | 0                          | 10  |

a/ Less than 3 parts per million.

b/ Analyses of water from selected wells are given in milligram equivalents per liter on page 31.

c/ Number under which analyses is listed in J. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.



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

Results are in parts per million

| Well           | Owner                  | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|----------------|------------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 149            | Mixon Heirs            | 71                  | May 15, 1942       | 129                    | 19           | 12             | 14                                    | 85                              | 2                          | 40            | -            | 0                          | 98  |
| 150            | O. K. Ratcliff         | 65                  | do.                | 755                    | 28           | 22             | 234                                   | 61                              | 52                         | 399           | 0.2          | 0                          | 159   |
| b/151          | D. Ward                | 72                  | do.                | 561                    | 26           | 15             | 170                                   | 67                              | 26                         | 291           | -            | 0                          | 124   |
| 159<br>(635c/) | Kountze Bros.<br>No. 6 | 1,249               | Sept. 12, 1907     | 15,146                 | 675          | 66             | 4,876                                 | 217                             | 9.8                        | 8,700         | -            | .0                         | -   |

a/ Less than 3 parts per million.

b/ Analyses of water from selected wells are given in milligram equivalents per liter on page 31.

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

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

| Well | Owner                                   | Depth<br>of<br>well<br>(ft.) | Date<br>of<br>collection | Cal-<br>cium<br>(Ca) | Magne-<br>sium<br>(Mg) | Sodium and<br>Potassium<br>(Na + K)<br>(calc.) | Bicar-<br>bonate<br>(HCO <sub>3</sub> ) | Sul-<br>fate<br>(SO <sub>4</sub> ) | Chlo-<br>ride<br>(Cl) | Fluor-<br>ide<br>(F) | Ni-<br>trate<br>(NO <sub>3</sub> ) | Total<br>hardness<br>as CaCO <sub>3</sub><br>(calc.) |
|------|---|------------------------------|--------------------------|----------------------|------------------------|--|---|------------------------------------|-----------------------|----------------------|------------------------------------|--|
| 2    | U.S. Government                         | 986                          | May 5, 1942              | 0.08                 | 0.26                   | 8.24   | 7.10                                    | 0.04                               | 1.10                  | 0.04                 | 0                                  | 0.34   |
| 3    | B. F. Boykin                            | 155                          | do.                      | 0.09                 | 0.14                   | 6.42   | 2.20                                    | 0.04                               | 1.40                  | -                    | 0                                  | 0.22   |
| 12   | L. Mays                                 | 350+                         | May 7, 1942              | 0.02                 | 0.10                   | 2.80   | 2.20                                    | 0.08                               | 0.51                  | 0.01                 | 0.02                               | 0.12   |
| 18   | Morgan and Lindsey                      | 1,366                        | do.                      | 0.22                 | 0.22                   | 0.13   | 0.30                                    | 0.15                               | 0.10                  | 0.02                 | 0                                  | 0.44   |
| 22   | Texas Forest<br>Service                 | 84                           | May 14, 1942             | 1.72                 | 0.32                   | 0.63   | 2.60                                    | 0.06                               | 0.01                  | -                    | 0                                  | 2.01   |
| 30   | Ray Davis                               | 41                           | do.                      | 0.02                 | 0.32                   | 0.13   | 0.10                                    | 0.04                               | 0.28                  | -                    | 0.05                               | 0.34   |
| 39   | Ellis Sidney                            | 46                           | May 13, 1942             | 0.10                 | 0.12                   | 0.36   | 0.40                                    | 0.04                               | 0.13                  | -                    | 0.01                               | 0.22   |
| 43   | J. W. Perkins                           | 196                          | do.                      | 0.23                 | 0.02                   | 0.66   | 0.80                                    | 0.04                               | 0.11                  | 0.01                 | 0                                  | 0.30   |
| 51   | J. W. Campbell                          | 425                          | May 5, 1942              | 0.08                 | 0.26                   | 0.13   | 0.20                                    | 0.15                               | 0.10                  | 0.02                 | 0                                  | 0.34   |
| 67   | Van D. Marshall                         | 381                          | Apr. 15, 1942            | 0.93                 | 0.14                   | 0.43   | 1.20                                    | 0.15                               | 0.18                  | 0.02                 | 0                                  | 1.12   |
| 76   | Monroe Arnold                           | 48                           | May 9, 1942              | 0.12                 | 0.10                   | 0.32   | 0.10                                    | 0.04                               | 0.27                  | -                    | 0.13                               | 0.22   |
| 85   | J. M. Turner                            | 90+                          | May 11, 1942             | 0.00                 | 0.02                   | 0.34   | 0.10                                    | 0.04                               | 0.14                  | 0.01                 | 0.07                               | 0.02   |
| 91   | Gulf, Colorado and<br>Santa Fe R.R. Co. | 1,427                        | Apr. 10, 1942            | 0.94                 | 0.08                   | 1.64   | 2.40                                    | 0.15                               | 0.10                  | 0.01                 | 0                                  | 1.02   |
| 94   | Magnolia Pipe<br>Line Co.               | 325                          | Apr. 15, 1942            | 0.32                 | 0.56                   | 0.54   | 1.10                                    | 0.04                               | 0.21                  | 0.07                 | 0                                  | 0.88   |
| 96   | W. P. VanPelt                           | 15                           | May 16, 1942             | 0.08                 | 0.02                   | 0.85   | 0.70                                    | 0.04                               | 0.20                  | 0.01                 | 0                                  | 0.10   |
| 105  | J. S. Linscomb                          | 150                          | May 19, 1942             | 0.20                 | 0.12                   | 0.09   | 0.20                                    | 0.04                               | 0.17                  | 0                    | 0                                  | 0.32   |
| 114  | A. P. Walters                           | 230                          | May 16, 1942             | 0.42                 | 0.22                   | 0.67   | 0.90                                    | 0.04                               | 0.31                  | 0.01                 | 0.05                               | 0.64   |
| 118  | Kirby Lumber Corp.                      | 280                          | Apr. 14, 1942            | 0.34                 | 0.13                   | 1.19   | 1.20                                    | 0.06                               | 0.65                  | -                    | 0                                  | 0.52   |
| 119  | do.                                     | 761                          | do.                      | 0.98                 | 0.14                   | 1.55   | 2.40                                    | 0.08                               | 0.17                  | 0.02                 | 0                                  | 1.12   |
| 129  | Buna Independent<br>School District     | 262                          | Apr. 10, 1942            | 0.36                 | 0.16                   | 6.43   | 0.60                                    | 0.04                               | 0.31                  | 0                    | 0                                  | 0.52   |
| 134  | Oliver Pevito                           | 185                          | May 19, 1942             | 0.32                 | 0.32                   | 0.29   | 0.50                                    | 0.04                               | 0.37                  | 0.01                 | 0.01                               | 0.64   |
| 137  | Houston Oil Co.                         | 226                          | Apr. 10, 1942            | 1.14                 | 0.08                   | 1.47   | 2.00                                    | 0.04                               | 0.65                  | -                    | 0                                  | 1.22   |
| 146  | A. F. Errington                         | 75+                          | May 15, 1942             | 0.18                 | 0.14                   | 0.91   | 0.80                                    | 0.04                               | 0.39                  | 0                    | 0                                  | 0.32   |
| 148  | Magnolia Pipe<br>Line Co.               | 630                          | do.                      | 0.13                 | 0.02                   | 4.44   | 4.30                                    | 0.04                               | 0.28                  | 0.02                 | 0                                  | 0.20   |
| 151  | D. Ward                                 | 72                           | do.                      | 1.23                 | 1.20                   | 7.37   | 1.10                                    | 0.54                               | 3.21                  | -                    | 0                                  | 2.48   |

NEWTON COUNTY, TEXAS

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

Records of wells in Newton County, Texas  
All wells are dug unless otherwise stated in Remarks

| Well | Distance from Arkoville          | Owner                     | Driller             | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|----------------------------------|---------------------------|---------------------|----------------|---------------------|------------------------|--|
| 1    | 15 miles northwest               | Unknown                   | --                  | Old            | 19                  | 36                     | 4.0  |
| 2    | 13 $\frac{1}{2}$ miles northwest | Bennie Harrison           | Bennie Harrison     | 1939           | 22                  | 48                     | 2.5  |
| 3    | 12 $\frac{1}{2}$ miles northwest | H. A. Marshall            | --                  | 1932           | 12                  | 36                     | 3.0  |
| 4    | 10 $\frac{1}{2}$ miles northwest | Onnie E. Weaver           | --                  | Old            | 27                  | 36                     | 2.0  |
| 5    | 12 miles northwest               | Wier Long Leaf Lumber Co. | --                  | 1921           | 54                  | 6                      | 0  |
| 6    | 11 $\frac{1}{2}$ miles northwest | Walter Clark              | --                  | 1941           | 23                  | 36                     | 2.5  |
| 7    | 10 miles northwest               | Wilkins and Hart          | --                  | Old            | 26                  | 36                     | 2.0  |
| 8    | 8 $\frac{1}{2}$ miles northwest  | Maack Norton              | --                  | 1928           | 12                  | 36                     | 2.0  |
| 9    | 7 $\frac{1}{2}$ miles northwest  | B. C. Perry               | --                  | 1927           | 23                  | 42                     | 2.5  |
| 10   | 12 miles northeast               | Newton County             | --                  | 1941           | 48                  | 3                      | 0  |
| 11   | 12 $\frac{1}{2}$ miles northeast | Mandy Odem                | --                  | 1930           | 50                  | 36                     | 5.0  |
| 12   | 14 $\frac{1}{2}$ miles northeast | Joe E. Ferguson           | --                  | Old            | 15                  | 30                     | 2.0  |
| 13   | 8 $\frac{1}{2}$ miles northeast  | Henry Gunter              | --                  | 1922           | 22                  | 42                     | 2.5  |
| 14   | 9 miles northeast                | Texas Highway Dept.       | Texas Highway Dept. | 1939           | 27                  | 6                      | 0.5  |
| 15   | 6 miles northeast                | C. Newberry               | --                  | 1936           | 24                  | 36                     | 5.0  |
| 16   | do.                              | Cary Ray                  | --                  | Old            | 52                  | 36                     | 3.0  |
| 17   | 3 miles north                    | Carol Miller              | --                  | Old            | 57                  | 36                     | 2.0  |
| 18   | 4 $\frac{1}{2}$ miles northwest  | Kimball Love              | --                  | 1941           | 62                  | 36                     | 3.0  |
| 19   | 12 miles west                    | A. L. Hilliard            | A. L. Hilliard      | 1940           | 20                  | 12                     | 0  |
| 20   | 10 $\frac{1}{2}$ miles west      | Elmer Simmons             | --                  | 1932           | 45                  | 24                     | 0  |
| 21   | 8 $\frac{1}{2}$ miles west       | A. D. Holmes              | --                  | 1939           | 50                  | 6                      | 3.0  |
| 22   | 7 miles west                     | Hunter Fowler             | Hunter Fowler       | 1936           | 33                  | 36                     | 3.0  |
| 23   | 5 $\frac{1}{2}$ miles northwest  | Stark and Brown           | --                  | Old            | 22                  | 36                     | 3.5  |
| 24   | 5 miles northwest                | Wier Long Leaf Lumber Co. | --                  | 1918           | 153                 | 4                      | --   |

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

b/ Pump or lift: T, turbine; A, air lift; C, cylinder; B, rope and bucket.

Power: G, gasoline; E, electric; W, windmill; H, hand. Number indicates horsepower.

Chemical analyses of water from most of these wells are shown in a table of analyses on pages 46 to 50.

| Well | Water level<br>Below<br>measuring<br>point<br>(ft.) a/ | Date of<br>measure-<br>ment | Method<br>of<br>lift<br>b/ | Use<br>of<br>water<br>c/ | Remarks   |
|------|--|-----------------------------|----------------------------|--------------------------|---|
| 1    | 14.06  | May 21,<br>1942             | B,H                        | D,S                      |   |
| 2    | 19.74  | do.                         | B,H                        | D,S                      |   |
| 3    | 8.89   | do.                         | B,H                        | D,S                      |   |
| 4    | 24.64  | do.                         | B,H                        | D,S                      |   |
| 5    | d/ 47  | 1921                        | ---                        | ---                      | Bored well. Caved and abandoned in 1934.  |
| 6    | 19.50  | May 22,<br>1942             | B,H                        | D,S                      |   |
| 7    | 20.86  | May 21,<br>1942             | B,H                        | D,S                      |   |
| 8    | 3.73   | do.                         | B,H                        | D,S                      |   |
| 9    | 13.64  | May 22,<br>1942             | B,H                        | D,S                      |   |
| 10   | +  | May 20,<br>1942             | Flows                      | N                        | Seismograph test. Estimated flow 5 gallons a minute.  |
| 11   | 27.31  | do.                         | B,H                        | D,S                      |   |
| 12   | 11.12  | do.                         | B,H                        | D,S                      |   |
| 13   | 19.51  | do.                         | B,H                        | D,S                      |   |
| 14   | +  | do.                         | Flows                      | N                        | Drilled well. Estimated flow 10 gallons a minute.   |
| 15   | 13.89  | do.                         | B,H                        | D,S                      |   |
| 16   | 43.29  | do.                         | B,H                        | S                        |   |
| 17   | 50.66  | May 21,<br>1942             | B,H                        | D,S                      |   |
| 18   | 63.12  | do.                         | B,H                        | D,S                      |   |
| 19   | d/ 2   | May 22,<br>1942             | C,H                        | S                        | Bored well.   |
| 20   | 41.55  | May 21,<br>1942             | C,H,<br>Irr                | D,S                      |   |
| 21   | 44.24  | do.                         | B,H                        | D,S                      | Bored well. Flow reported from sand at 90 feet in nearby seismograph test.                    |
| 22   | 33.06  | do.                         | B,H                        | D,S                      |   |
| 23   | 16.50  | do.                         | B,H                        | D,S                      |   |
| 24   | ---  | ---                         | ---                        | ---                      | Drilled well. Formerly supplied water for sawmill and Town of Niergate. Capped and abandoned. |

a/ ?, public supply; D, domestic; S, stock; Ind, industrial; Irr, irrigation; ---, not used.

d/ Water level reported by driller or owner.

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

- 3 -  
Records of wells in Newton County--Continued.

| Well | Distance from Burkeville | Owner                     | Driller                | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|--------------------------|---------------------------|------------------------|----------------|---------------------|------------------------|--|
| 25   | 2 miles northwest        | Wier Long Leaf Lumber Co. | Frank Calcar           | 1926           | 346                 | 4                      | 0  |
| 26   | do.                      | do.                       | McLassters and Pomeroy | 1937           | 232                 | 6                      | 0-   |
| 27   | 1/4 mile northeast       | Burkeville High School    | do.                    | 1938           | 120                 | 4                      | ---  |
| 28   | 1 1/2 miles south        | Mrs. S. C. Erwin          | do.                    | Old            | 30                  | 36                     | 5.0  |
| 29   | 1 1/2 miles southeast    | Mary Dickerson            | ---                    | 1912           | 25                  | 36                     | 2.0  |
| 30   | 3 1/2 miles southeast    | Jack Ozment               | ---                    | Old            | 26                  | 36                     | 5.0  |
| 31   | 4 miles southeast        | Curry McMahon             | ---                    | 1939           | 18                  | 42                     | 3.0  |
| 32   | 7 miles southeast        | F. O. Knighton            | ---                    | 1929           | 13                  | 36                     | 2.5  |
| 33   | 5 miles southeast        | John Summers Est.         | ---                    | 1930           | 19                  | 42                     | 2.0  |
| 34   | 7 miles southeast        | Louis Smith               | ---                    | 1938           | 53                  | 6                      | 5.2  |
| 35   | 7 1/2 miles south        | G. H. Young               | G. H. Young            | 1924           | 25                  | 36                     | 2.7  |
| 36   | 3 1/2 miles southwest    | A. M. Sharver             | ---                    | 1934           | 16                  | 33                     | ---  |

| Well | Distance from Newton  | Owner                         | Driller          | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|-----------------------|-------------------------------|------------------|----------------|---------------------|------------------------|--|
| 37   | 5 1/2 miles northeast | C. W. Simmons                 | ---              | 1930           | 22                  | 36                     | 2.5  |
| 38   | 7 1/2 miles north     | H. B. Westbrook               | C. O. Lynch      | 1919           | 33                  | 30                     | 5.0  |
| 39   | 7 miles northwest     | Hanak Kyles                   | ---              | Old            | 15                  | 36                     | 3.0  |
| 40   | 9 miles northwest     | Newton County School District | ---              | Old            | 34                  | 24                     | 3.0  |
| 41   | 7 1/2 miles northwest | Charles W. Adams              | Charles W. Adams | 1940           | 45                  | 6                      | 2.0  |
| 42   | 4 1/2 miles northwest | Jess M. Woods                 | Jess M. Woods    | 1932           | 16                  | 1 1/2                  | ---  |
| 43   | 5 miles northwest     | Can Buitt                     | Can Buitt        | 1933           | 16                  | 24                     | 2.5  |
| 44   | 4 1/2 miles northeast | F. A. Lindsey                 | ---              | 1925           | 56                  | 36                     | 5.2  |
| 45   | 4 miles northeast     | Fowler Smith                  | ---              | Old            | 22                  | 48                     | 5.5  |
| 46   | 3 1/2 miles northeast | M. C. Womack                  | ---              | 1940           | 68                  | 24                     | 0  |
| 47   | 2 1/2 miles northeast | O. C. Tucker                  | Shell Oil Co.    | 1941           | 139                 | 5                      | 0.5  |

| Well | Water level<br>Below<br>measuring<br>point<br>(ft.) a/ | Date of<br>measure-<br>ment | Method<br>of<br>lift<br>b/ | Use<br>of<br>water<br>c/ | Remarks  |
|------|--|-----------------------------|----------------------------|--------------------------|--|
| 25   | a/ 0   | 1926                        | ---                        | ---                      | Drilled well. Screen from 334 to 340 feet. Formerly supplied sawmill and Town of Wiergate.   |
| 26   | a/ 30  | 1942                        | A                          | D,P,<br>Ind              | Drilled well. Sanded up. Replaced by well 26. Casing: 180 feet of 6-inch and 52 feet of 4-inch; screen from 190 to 222 feet. Estimated |
| 27   | ---  | ---                         | C,H,<br>$\frac{2}{4}$      | P                        | Drilled yield 500 gallons a minute. See log. well. Supplies high school.   |
| 28   | 26.72  | May 22,<br>1942             | B,H                        | D,S                      |  |
| 29   | 8.30   | do.                         | B,H                        | D,S                      |  |
| 30   | 27.22  | do.                         | B,H                        | D,S                      |  |
| 31   | 15.18  | do.                         | B,H                        | D,S                      |  |
| 32   | 9.38   | do.                         | B,H                        | D,S                      |  |
| 33   | 15.04  | do.                         | B,H                        | D,S                      |  |
| 34   | 43.69  | do.                         | B,H                        | D,S                      | Bored well.  |
| 35   | 25.05  | do.                         | B,H                        | D,S                      |  |
| 36   | ---  | ---                         | B,H                        | D,S                      |  |
| Well | Water level<br>Below<br>measuring<br>point<br>(ft.) a/ | Date of<br>measure-<br>ment | Method<br>of<br>lift<br>b/ | Use<br>of<br>water<br>c/ | Remarks  |
| 37   | 21.54  | May 22,<br>1942             | C,H,<br>$\frac{1}{4}$      | D,S                      |  |
| 38   | 30.57  | do.                         | B,H                        | D,S                      |  |
| 39   | 7.19   | do.                         | B,H                        | D,S                      |  |
| 40   | 29.47  | do.                         | B,H                        | D                        | Formerly supplied school.  |
| 41   | 40.87  | do.                         | B,H                        | D,S                      | Bored well.  |
| 42   | ---  | ---                         | B,H                        | D,S                      | Do.  |
| 43   | 10.74  | May 24,<br>1942             | B,H                        | D,S                      |  |
| 44   | 43.40  | May 25,<br>1942             | B,H                        | D,S                      |  |
| 45   | 7.74   | do.                         | B,H                        | D,S                      |  |
| 46   | a/ 60  | May<br>1942                 | C,W                        | D,S                      |  |
| 47   | a/+  | 1941                        | ---                        | ---                      | Seismograph test. Casing pulled and hole abandoned.  |

Records of wells in Newton County--Continued.

| Well | Distance from Newton  | Owner                          | Driller               | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|-----------------------|--------------------------------|-----------------------|----------------|---------------------|------------------------|--|
| 48   | 1 1/2 miles north     | Kirby Lumber Corp.             | ---                   | Old            | 300 1/2             | ---                    | ---  |
| 49   | In Newton             | Newton County                  | John Adams            | 1929           | 350 1/2             | 6                      | 0  |
| 50   | do.                   | City of Newton                 | McMasters and Fomeroy | 1940           | 200                 | 6                      | 0  |
| 51   | 4 miles west          | Newton County School District  | ---                   | 1941           | 25 1/2              | 3                      | ---  |
| 52   | 6 miles west          | Lottie Young                   | ---                   | 1922           | 22                  | 4 1/2                  | 2.0  |
| 53   | 1 1/2 miles west      | J. I. Howell                   | ---                   | 1938           | 75                  | 7                      | 1.5  |
| 54   | 4 1/2 miles southwest | Hoy Fuller                     | ---                   | Old            | 31                  | 5 1/2                  | 3.0  |
| 55   | 3 1/2 miles southwest | Civilian Conservation Corp. s. | ---                   | ---            | 260                 | 3                      | ---  |
| 56   | 2 miles southwest     | F. A. Willett                  | ---                   | 1905           | 26                  | 3 1/2                  | 2.5  |
| 57   | 2 1/2 miles south     | Lewis Ferguson                 | ---                   | 1928           | 24                  | 12                     | 3.0  |
| 58   | 2 1/2 miles southeast | E. R. Joyce                    | ---                   | 1936           | 21                  | 13                     | 2.5  |
| 59   | 4 1/2 miles east      | Dr. W. W. Shepherd             | ---                   | Old            | 31                  | 5 1/2                  | 3.0  |
| 60   | 6 1/2 miles southeast | R. B. Simmons                  | ---                   | 1902           | 40                  | 5 1/2                  | 4.5  |
| 61   | 7 miles southeast     | Houston Oil Co.                | ---                   | 1912?          | 360                 | 3                      | 0  |
| 62   | 8 miles southeast     | I. J. Lowe                     | ---                   | 1927           | 13                  | 3 1/2                  | 3.0  |
| 63   | 3 miles southeast     | Kiles Miller                   | ---                   | Old            | 23                  | 24                     | 3.5  |
| 64   | 3 miles southeast     | Warren Hunter                  | ---                   | Old            | 37                  | 24                     | 3.0  |
| 65   | 4 1/2 miles southeast | Henry Moore                    | ---                   | Old            | 29                  | 4 1/2                  | 3.5  |
| 66   | 4 1/2 miles southwest | S. A. Lenze                    | Shell Oil Corp.       | 1936           | 97                  | 3                      | 1.5  |
| 67   | 5 miles southwest     | Louroe Kenebrew                | ---                   | 1934           | 39                  | 3 1/2                  | 4.5  |
| 68   | 7 miles southwest     | A. Wilkinson                   | ---                   | Old            | 34                  | 4                      | 3.0  |
| 69   | 6 1/2 miles southwest | J. B. Stark                    | ---                   | 1930           | 18                  | 3 1/2                  | 3.0  |

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

b/ Pump or lift: T, turbine; A, air lift; C, cylinder; B, rope and bucket.

Power: G, gas line; E, electric; W, windmill; H, hand. Number indicates horsepower.



| Well | Water level<br>Below<br>measuring<br>point<br>(ft.) a/ | Date of<br>measure-<br>ment | Method<br>of<br>lift<br>b/ | Use<br>of<br>water<br>c/ | Remarks  |
|------|--|-----------------------------|----------------------------|--------------------------|--|
| 48   | d/+  | ---                         | ---                        | ---                      | Drilled well. Flowed when drilled. Casing pulled and hole abandoned.   |
| 49   | d/ 2   | 1936                        | ---                        | ---                      | Formerly supplied City of Newton. Reported yield 200 gallons per minute with drawdown of 8 feet during continuous pumping. Abandoned |
| 50   | d/ 11  | 1941                        | T, E,<br>I                 | P                        | Drilled well. Screen: 5-inch from 152 to 189 feet. Supplies City of Newton. See log.   |
| 51   | ---  | ---                         | C, E                       | P                        |  |
| 52   | 3.57   | May 23,<br>1942             | B, H                       | D, S                     |  |
| 53   | 55.33  | May 24,<br>1942             | None                       | I                        | Seismograph test.  |
| 54   | 27.34  | do.                         | B, H                       | D, S                     |  |
| 55   | ---  | ---                         | T, G,<br>7 1/2"            | P                        | Drilled well. Supplies 15 thousand gallons a day for camp.   |
| 56   | 19.98  | May 25,<br>1942             | B, H                       | D, S                     |  |
| 57   | 22.26  | do.                         | B, H                       | D, S                     |  |
| 58   | 10.39  | do.                         | B, H                       | D, S                     |  |
| 59   | 51.92  | do.                         | B, H                       | D, S                     |  |
| 60   | 56.06  | do.                         | B, H                       | D, S                     | Sand reported from 14 to 40 feet.  |
| 61   | d/+  | 1912                        | ---                        | ---                      | Drilled well. Screen from 300 to 330 feet. Formerly supplied sawmill and camp. Casing pulled and hole abandoned in 1930.             |
| 62   | 14.21  | May 25,<br>1942             | B, H                       | D, S                     |  |
| 63   | 25.04  | do.                         | B, H                       | D, S                     |  |
| 64   | 29.90  | do.                         | B, H                       | D, S                     |  |
| 65   | 15.96  | do.                         | B, H                       | D, S                     |  |
| 66   | 3.07   | May 24,<br>1942             | None                       | I                        | Seismograph test. Logging: 64 feet of 2-inch. Sand from 51 to 67 feet.   |
| 67   | 20.29  | do.                         | B, H                       | D, S                     |  |
| 68   | 17.07  | do.                         | B, H                       | D, S                     |  |
| 69   | 9.07   | do.                         | B, H                       | D, S                     | Flow reported in 1930 at 64 feet in nearby seismograph test.   |

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

d/ Water level reported by driller or owner.

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

Records of wells in Newton County--Continued.

| Well | Distance from Call    | Owner                                       | Driller        | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|-----------------------|---|----------------|----------------|---------------------|------------------------|--|
| 70   | 3 miles north         | Jim Weaver Est.                             | ---            | ---            | 21                  | 30                     | 3.0  |
| 71   | 5 miles north         | Mrs. Robert Calhoun                         | ---            | 1929           | 30                  | 36                     | 2.5  |
| 72   | 7 miles northeast     | J. E. Herrin                                | ---            | 1935           | 22                  | 12                     | 0  |
| 73   | 9 miles northeast     | Sarah Lewis                                 | ---            | 1933           | 18                  | 12                     | ---  |
| 74   | 11 miles northeast    | Jim L. Stark                                | ---            | 1907           | 20                  | 36                     | 3.0  |
| 75   | 11 miles northeast    | S. M. Herrin Est.                           | ---            | 1918           | 14                  | 30                     | 3.0  |
| Well | Distance from Call    | Owner                                       | Driller        | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
| 76   | 3 miles west          | Edward L. Davis                             | ---            | 1902           | 26                  | 30                     | 3.0  |
| 77   | 2 miles northwest     | S. F. Hughes                                | ---            | 1941           | 20                  | 12                     | ---  |
| 78   | 1 mile west           | L. M. Davis                                 | ---            | 1942           | 20                  | 12                     | ---  |
| 79   | 1 mile east           | T. J. Brown                                 | T. J. Brown    | 1939           | 22                  | 12                     | 0  |
| 80   | 1 1/2 miles southeast | J. H. Inman                                 | T. L. Brisbane | 1951           | 1,506               | 8                      | 0  |
| 81   | 1/2 miles southwest   | Jackson Est.                                | ---            | 1936           | 22                  | 12                     | ---  |
| Well | Distance from Call    | Owner                                       | Driller        | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
| 82   | 3 miles northeast     | Tom Wilson Est.                             | ---            | Old            | 33                  | 36                     | 3.5  |
| 83   | 5 miles northeast     | Tom Singletary                              | ---            | Old            | 29                  | 36                     | 2.5  |
| 84   | 4 1/2 miles north     | Tom Gilchrist                               | ---            | Old            | 25                  | 36                     | 2.5  |
| 85   | 4 miles north         | Southwestern Settlement and Development Co. | J. L. Barnett  | 1907           | 1,495               | 4                      | 0  |
| 86   | 5 miles north         | Pozas A. & D. No. 1                         | H. O. Cooburn  | 1941           | 9,574               | 9 7/8                  | ---  |
| 87   | 6 miles north         | Bydon Willis                                | ---            | 1940           | 30                  | 36                     | 3.0  |

| Well | Water level<br>below<br>measuring<br>point<br>(ft.) <u>a/</u> | Date of<br>measure-<br>ment | Method<br>of<br>lift<br><u>b/</u> | Use<br>of<br>water<br><u>c/</u> | Remarks                                |
|------|---|-----------------------------|-----------------------------------|---------------------------------|--|
| 70   | 8.32  | May 24,<br>1942             | B,H                               | D,S                             |  |
| 71   | 14.27   | do.                         | B,H                               | D,S                             |  |
| 72   | <u>d/</u> 13  | 1935                        | C,H                               | D,S                             | Bored well. Screen from 19 to 22 feet. |
| 73   | ---   | ---                         | C,H                               | D,S                             | Driven well.                           |
| 74   | 17.66   | May 25,<br>1942             | B,H                               | D,S                             |  |
| 75   | 11.68   | do.                         | B,H                               | D,S                             |  |

| Well | Water level<br>below<br>measuring<br>point<br>(ft.) <u>a/</u> | Date of<br>measure-<br>ment               | Method<br>of<br>lift<br><u>b/</u> | Use<br>of<br>water<br><u>c/</u> | Remarks  |
|------|---|---|-----------------------------------|---------------------------------|--|
| 76   | 19.33   | May <del>23</del> <sup>24</sup> ,<br>1942 | B,H                               | D,S                             |  |
| 77   | ---   | ---                                       | C,H                               | D,S                             | Driven well.   |
| 78   | ---   | ---                                       | C,H                               | D,S                             | Do.  |
| 79   | <u>d/</u> 8   | 1942                                      | C,H                               | D,S                             | Do.  |
| 80   | +   | Apr. 15,<br>1942                          | Flows                             | ---                             | Oil test. Casing: 395 feet of 6-inch. Flow reported from sand between 1,270 and 1,405 feet. Known as T. J. Windham No. 1. See log. |
| 81   | ---   | ---                                       | C,H                               | D,S                             | Driven well.   |

| Well | Water level<br>below<br>measuring<br>point<br>(ft.) <u>a/</u> | Date of<br>measure-<br>ment | Method<br>of<br>lift<br><u>b/</u> | Use<br>of<br>water<br><u>c/</u> | Remarks   |
|------|---|-----------------------------|-----------------------------------|---------------------------------|---|
| 82   | 28.64   | May 26<br>1942              | B,H                               | D,S                             |   |
| 83   | 23.5  | do.                         | B,H                               | D,S                             |   |
| 84   | 15.7  | May 26,<br>1942             | B,H                               | D,S                             |   |
| 85   | ---   | ---                         | ---                               | ---                             | Oil test. Casing: 395 feet had a flow of 500 gallons per minute. Cased and capped. Known as T. J. Windham No. 627 c/. See log. Description of well at 1,220 feet in files of Texas State Board of Water Engineers shows zones consisting predominantly of sand at 1,220 to 1,350, 1,440 to 1,500, 1,640 to 1,840 and 1,900 to 1,950 feet. |
| 86   | 7.02  | May 26,<br>1942             | B,H                               | D,S                             |   |

Records of wells in Newton County--Continued.

| Well | Distance from Call    | Owner                      | Driller                 | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|-----------------------|----------------------------|-------------------------|----------------|---------------------|------------------------|--|
| 88   | 3 miles northeast     | Texas Forest Service       | Frank Balcar            | 1933           | 150                 | 4                      | 1.0  |
| 89   | 5 1/2 miles north     | do.                        | do.                     | 1925           | 550                 | 4                      | ---  |
| 90   | 4 1/2 miles northeast | E. D. Marshall             | E. D. Marshall          | 1941           | 25                  | 1 1/2                  | 0  |
| 91   | 6 1/2 miles northeast | Biloxi School              | ---                     | 1937           | 14                  | 2 1/2                  | ---  |
| 92   | 9 miles northeast     | James Randolph             | James Randolph          | 1937           | 16                  | 1 1/2                  | ---  |
| 93   | 9 1/2 miles east      | A. B. Kellum               | A. B. Kellum            | 1940           | 18                  | 1 1/2                  | ---  |
| 94   | 7 1/2 miles east      | Col. --- Thompson          | ---                     | 1934           | 20                  | 1 1/2                  | ---  |
| 95   | 5 1/2 miles east      | Lddie Levias               | ---                     | 1937           | 17                  | 1 1/2                  | ---  |
| 96   | 5 1/2 miles east      | J. D. Bean                 | ---                     | Old            | 46                  | 36                     | 3.0  |
| 97   | 1 1/2 miles east      | A. M. Bennett              | A. M. Bennett           | 1914           | 24                  | 30                     | 3.0  |
| 98   | 1 1/2 Call            | Kirby Lumber Corp.         | John Adams              | 1935           | 529                 | 7                      | 0  |
| 99   | do.                   | do.                        | ---                     | Old            | 797                 | 3                      | 0  |
| 100  | do.                   | do.                        | Gust Kinecke            | 1906           | 852                 | 8                      | 0  |
| 101  | 2 1/2 miles southeast | W. O. Roy                  | ---                     | 1936           | 24                  | 24                     | 1.0  |
| 102  | 4 1/2 miles southeast | Mrs. F. G. Holmes          | ---                     | 1924           | 48                  | 36                     | 3.0  |
| 103  | 4 miles southerst     | Landrum Est.               | ---                     | 1939           | 40                  | 36                     | 2.5  |
| 104  | 6 miles southeast     | J. J. Bean                 | ---                     | 1938           | 20                  | 1 1/2                  | ---  |
| 105  | 3 1/2 miles southeast | Bluett Holmes              | Bluett Holmes           | 1940           | 20                  | 1 1/2                  | ---  |
| 106  | 2 1/2 miles northwest | Earl Honkamer et al. No. 1 | Republic Production Co. | 1938           | 7,052               | ---                    | ---  |

| Well | Distance from Doneyville | Owner         | Driller       | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|--------------------------|---------------|---------------|----------------|---------------------|------------------------|--|
| 107  | 12 1/2 miles northwest   | E. D. Cain    | John Cain     | 1937           | 33                  | 36                     | 3.0  |
| 108  | 10 miles northwest       | J. M. Bingham | J. M. Bingham | 1937           | 22                  | 1 1/2                  | 0  |

| Well | Water level                    |                     | Method of lift  | Use of water | Remarks  |
|------|--------------------------------|---------------------|-----------------|--------------|--|
|      | Below measuring point (ft.) a/ | Date of measurement |                 |              |  |
| 88   | 35.56                          | May 26, 1942        | C,G,<br>5       | D,S          | Drilled well. Formerly supplied C.C.C. Camp.   |
| 89   | ---                            | ---                 | C,V,G,<br>1 1/2 | D,S          | Drilled well. Supplies camp houses.  |
| 90   | d/ 25                          | May 26, 1942        | C,H             | D,S          | Seismograph test.  |
| 91   | ---                            | ---                 | C,H             | P,S          | Supplies school.   |
| 92   | ---                            | ---                 | C,H             | D,S          | Driven well.   |
| 93   | ---                            | ---                 | C,H             | D,S          | Do.  |
| 94   | ---                            | ---                 | C,H             | D,S          | Do.  |
| 95   | ---                            | ---                 | C,H             | D,S          | Do.  |
| 96   | 41.70                          | May 26, 1942        | B,H             | D,S          |  |
| 97   | 9.19                           | do.                 | B,F             | D,S          |  |
| 98   | d/ 40                          | 1935                | A               | D,<br>Ind    | Drilled well. Screen from 482 to 53 feet. Estimated yield 325 gallons a minute. Supplies   |
| 99   | d/+                            | 1908                | ---             | ---          | Drilled well. Re-sawmill and Town of Call. Reported flow 5 gallons a minute in 1908. Formerly supplied sawmill and Town of Call. A-  |
| 100  | d/+                            | 1906                | ---             | ---          | Drilled well. Abandoned. Deussen No. 830 a/ Formerly supplied sawmill and Town of Call. Reported flow 8 gallons a minute in 1906.  |
| 101  | 15.18                          | May 26, 1942        | C,W             | D,S          | Deussen No. 851 a/   |
| 102  | 27.23                          | do.                 | C,W             | D,S          |  |
| 103  | 37.36                          | do.                 | C,H             | D,S          |  |
| 104  | ---                            | ---                 | C,H             | D,S          | Driven well.   |
| 105  | ---                            | ---                 | C,H             | D,S          | Do.  |
| 106  | ---                            | ---                 | ---             | ---          | Oil test. Electrical log below 429 feet in files of Texas State Board of Water Engineers shows a sand from 429 to 500 feet and numerous sands alternating with clay or shale from 600 to 1,400 feet. |

| Well | Water level                    |                     | Method of lift | Use of water | Remarks      |
|------|--------------------------------|---------------------|----------------|--------------|--------------|
|      | Below measuring point (ft.) a/ | Date of measurement |                |              |              |
| 107  | 20.31                          | May 27, 1942        | B,H            | D,S          |              |
| 108  | d/ 10                          | 1937                | C,H            | D,S          | Driven well. |

Records of wells in Newton County--Continued.

| Well | Distance from Dooleyville | Owner                            | Driller                    | Date completed | Depth of well (ft.) | Diameter of well (in.) | Height of measuring point above ground (ft.) |
|------|---------------------------|----------------------------------|----------------------------|----------------|---------------------|------------------------|--|
| 109  | 10 miles north            | Sam Woods                        | Sam Woods                  | 1939           | 18                  | 1                      | ---  |
| 110  | 9 miles northwest         | W. A. Smith<br>No. 1             | W. M. Oil Co.              | 1941           | 8,005               | 10,<br>9-7/8           | 7  |
| 111  | 7 miles northwest         | W. A. Bean                       | ---                        | 1932           | 40                  | 1                      | ---  |
| 112  | 6 miles northwest         | Gregg and Young                  | Lynch-Texas Co.            | 1939           | 324                 | 20,<br>10              | 1.5  |
| 113  | 5 1/2 miles west          | O. E. Stephenson                 | L. C. Brown                | 1930           | 70                  | 1                      | ---  |
| 114  | 1 mile southeast          | A. D. Lewis                      | ---                        | 1922           | 24                  | 1                      | 0  |
| 115  | 1 mile southwest          | Peavy-Moore<br>Lumber Co., Inc.  | George Glidden             | 1927           | 105                 | 3                      | 0  |
| 116  | 2 1/2 miles southwest     | W. E. Stephenson                 | do.                        | 1941           | 293                 | 3                      | 0  |
| 117  | 3 miles southwest         | J. C. Storms                     | Virgil Phelps              | 1942           | 78                  | 3                      | ---  |
| 118  | 2 1/2 miles southwest     | Pete Lavine                      | S. S. Jordan               | 1940           | 314                 | 1 1/2                  | 0  |
| 119  | 7 1/2 miles southwest     | Peavy-Moore<br>Lumber Co., Inc.  | Sun Oil Co.                | 1932           | 7,297               | ---                    | ---  |
| 120  | 1 mile west               | Earl Hankamer<br>et al.          | Amble Oil and Refining Co. | 1926           | 4,200               | ---                    | ---  |
| 121  | 7 1/2 miles north         | Southwestern<br>Lumber Co. No. 1 | Line Water Oil<br>Co.      | 1934           | 5,848               | ---                    | ---  |

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

g/ Pump or lift: T, turbine; A, air lift; C, cylinder; R, rope and bucket.

Power: G, gasoline; E, electric; M, windmill; H, hand. Number indicates horse-power.

| Well | Water level                           |                              | Method of lift | Use of water | Remarks   |
|------|---------------------------------------|------------------------------|----------------|--------------|---|
|      | below measuring point (ft.) <u>a/</u> | Date of measurement          |                |              |   |
| 109  | ---                                   | ---                          | C,H            | D,S          | Driven well.  |
| 110  | ---                                   | ---                          | ---            | ---          | Oil test. Electrical log in files of Texas State Board of Water Engineers shows a sand from 175 to 425 feet and numerous sands alternating with clays or shales from 500 to 1,400 and 2,050 and 2,250 feet. |
| 111  | ---                                   | ---                          | C,H            | D,S          | Bored well.   |
| 112  | 8.07<br><u>3.67</u>                   | Apr. 3, 1941<br>May 27, 1942 | T,G,-          | Irr          | Drilled well. Casing: 100 feet of 20-inch and 426 feet of 10-inch; screens from 65 to 77, 176 to 218, 335 to 377, 396 to 417, and 459 to 517 feet. See log.   |
| 113  | ---                                   | ---                          | C,H            | D,S          | Drilled well. Screen from 64 to 70 feet.  |
| 114  | <u>d/</u> 12                          | 1922                         | C,H            | D,S          | Driven well.  |
| 115  | <u>d/</u> 12                          | 1942                         | T,E,<br>30     | D,PS         | Drilled well. Screen from 75 to 105 feet. Reported yield 350 gallons a minute. Supplies   |
| 116  | <u>d/</u> 8                           | Oct. 1, 1941                 | C,G,<br>4      | D,S          | Drilled well. Screen from City of Deweyville. 281 to 293 feet. See log.   |
| 117  | ---                                   | ---                          | C,H            | D,S          | Drilled well. Screen from 69 to 78 feet. Supplies sawmill and camp.   |
| 118  | <u>d/</u> 16                          | 1940                         | C,H            | D,S          | Drilled well. Screen from 210 to 214 feet.  |
| 119  | ---                                   | ---                          | ---            | ---          | Oil test. Electrical logs of seismograph tests in this vicinity show thin irregularly bedded sands from surface to 350 feet; thick per-   |
| 120  | ---                                   | ---                          | ---            | ---          | Oil test. Electrical logs of seismograph tests in this vicinity show irregular bedded sands from surface to 300 feet, thick persistent  |
| 121  | ---                                   | ---                          | ---            | ---          | Oil test. See sands between 350 and 600 feet log.   |

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

d/ Water level reported by driller or owner.

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

- 42 -  
Table of drillers' logs of wells in Newton County, Texas.

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 26</u>  |                     |                 |
| Wier Long Leaf Lumber Co., 2 miles northwest of Burkeville. |                     |                 |
| Cinders   | 3                   | 3               |
| Surface sand  | 12                  | 15              |
| Gravel  | 15                  | 30              |
| Sand  | 21                  | 51              |
| Clay  | 15                  | 66              |
| Sand  | 23                  | 89              |
| Clay  | 11                  | 100             |
| Sand  | 18                  | 118             |
| Clay  | 64                  | 182             |
| Sand and gravel   | 39                  | 221             |
| Clay  | 11                  | 232             |

|                            | Thickness<br>(feet) | Depth<br>(feet) |
|----------------------------|---------------------|-----------------|
| <u>Well 50</u>             |                     |                 |
| City of Newton, in Newton. |                     |                 |
| Sand                       | 3                   | 3               |
| Clay                       | 4                   | 7               |
| Sand                       | 21                  | 28              |
| Clay                       | 4                   | 32              |
| Sand                       | 26                  | 58              |
| Shale                      | 6                   | 64              |
| Sand and shale             | 30                  | 94              |
| Clay                       | 21                  | 115             |
| Shale                      | 37                  | 152             |
| Sand and gravel            | 37                  | 189             |
| Shale                      | 11                  | 200             |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 80</u>                                  |                     |                 |
| J. I. Emson, 1 1/2 miles southeast of Bon Wier. |                     |                 |
| Clay  | 17                  | 17              |
| Gray sand                                       | 359                 | 376             |
| Shale and gumbo                                 | 465                 | 841             |
| Sand  | 122                 | 963             |
| Shale and lime                                  | 307                 | 1270            |
| Sand  | 135                 | 1403            |
| Shale and sand                                  | 30                  | 1433            |
| Stick shale                                     | 14                  | 1447            |
| Sandy shale                                     | 59                  | 1506            |

Well 85  
(Deussen No. 627 a/)

|   |     |     |
|---|-----|-----|
| Southwestern Settlement & Development Co., 4 miles north of Jall. |     |     |
| Red and white joint clay  | 47  | 47  |
| Blue sand   | 152 | 199 |
| Sulphur and shale   | 48  | 247 |
| Soapstone, rock   | 1   | 248 |
| Gray sand   | 24  | 272 |

|   | Thickness<br>(feet) | Depth<br>(feet) |
|---|---------------------|-----------------|
| <u>Well 85--Continued</u>   |                     |                 |
| Sand and shale, oil seepage   |                     |                 |
|   | 22                  | 299             |
| Soapstone, rock   | 1                   | 300             |
| Water sand  | 52                  | 352             |
| Gumbo   | 5                   | 357             |
| Blue hard rock  | 1                   | 358             |
| Blue and brown shale  | 107                 | 465             |
| Blue sand   | 10                  | 475             |
| Soapstone, rock   | 2                   | 477             |
| Hard blue shale   | 78                  | 555             |
| Blue marl   | 3                   | 558             |
| Water sand, artesian flow   | 140                 | 678             |
| Gumbo   | 18                  | 696             |
| Hard blue rock (sandstone)  | 1                   | 697             |
| Blue and brown shale, oil signs   | 73                  | 770             |
| Blue marl, set 6-inch casing at 736 feet  | 10                  | 786             |
| Blue marl   | 2                   | 788             |
| Hard blue rock (sandstone)  | 2                   | 790             |
| Sand, oil seepage   | 9                   | 799             |
| Blue soapstone, rock  | 3                   | 802             |
| Blue and yellow shale   | 407                 | 1209            |
| Gumbo, set 4-inch casing at 1,303   | 54                  | 1305            |
| Gumbo   | 9                   | 1312            |
| Mineral water sand, artesian flow   | 54                  | 1346            |
| Gumbo   | 3                   | 1349            |
| Blue shale  | 11                  | 1360            |
| Blue gumbo  | 19                  | 1379            |
| Blue and purple shale   | 117                 | 1495            |
| a/ Gumbo under which log is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914. |                     |                 |

Well 112

|   |    |     |
|---|----|-----|
| Gregg and Young, 8 miles northwest of Deweyville. |    |     |
| Clay  | 25 | 25  |
| Good white sand                                   | 57 | 82  |
| Clay  | 30 | 112 |
| Sand  | 50 | 222 |
| Soft clay   | 40 | 262 |
| Sand and layers of sandy clay                     | 60 | 322 |
| Clay  | 10 | 332 |
| Sand and layers of shale                          | 55 | 387 |
| Good sand   | 31 | 418 |

(Continued on next page)



Table of drillers' logs of wells in Newton County--Continued.

|                            | Thickness<br>(feet) | Depth<br>(feet) |
|----------------------------|---------------------|-----------------|
| <u>Well 112--Continued</u> |                     |                 |
| Soft sandy shale and sand  | 35                  | 455             |
| Sand                       | 71                  | 524             |

| <u>Well 116</u>  |     |     |
|--|-----|-----|
| W. E. Stephenson, 2 $\frac{1}{2}$ miles southwest of Devoyville. |     |     |
| White dirt   | 2   | 2   |
| Clay   | 14  | 16  |
| Sand - clay  | 8   | 24  |
| Yellow clay  | 19  | 43  |
| Fine-grained sand  | 8   | 51  |
| Blue gumbo   | 19  | 150 |
| Coarse water sand  | 19  | 169 |
| Blue gumbo   | 116 | 185 |
| Fine-grained hard sand   | 8   | 193 |
| Blue gumbo   | 64  | 257 |
| Hard packed water sand   | 16  | 273 |
| No record  | 20  | 293 |

|  | Thickness<br>(feet) | Depth<br>(feet) |
|--|---------------------|-----------------|
| <u>Well 131, partial log</u>   |                     |                 |
| Southwestern Lumber Co., No. 1, 7 $\frac{1}{2}$ miles north of Call. |                     |                 |
| Surface sand   | 360                 | 360             |
| Hard sand  | 115                 | 475             |
| Sand with streaks of shale   | 27                  | 500             |
| Sand   | 15                  | 515             |
| Sand and gravel  | 19                  | 534             |
| Sand and clay  | 106                 | 640             |
| Sand   | 15                  | 655             |
| Sand and shale   | 47                  | 700             |
| Sticky shale   | 50                  | 750             |
| Sand   | 13                  | 760             |
| Shale  | 130                 | 890             |
| Sand and gravel  | 16                  | 1006            |
| Clay and shells  | 34                  | 1040            |
| Sand and gravel  | 45                  | 1085            |
| Sandy shale and shells of lime rock                                  | 727                 | 1812            |
| Sand and gravel  | 180                 | 2000            |
| Shale and lime   | 548                 | 2550            |
| TOTAL DEPTH  |                     | 5848            |

Partial analyses of water from wells in Newton 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. E. 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 No. | Owner                     | Depth of well (ft.) | Date of collection | Total dissolved solids | Cal- cium (Ca) | Magne- sium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicar- bonate (HCO <sub>3</sub> ) | Sul- fate (SO <sub>4</sub> ) | Chlo- ride (Cl) | Fluor- ide (F) | Ni- trate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|----------|---------------------------|---------------------|--------------------|------------------------|----------------|------------------|---------------------------------------|-----------------------------------|------------------------------|-----------------|----------------|------------------------------|---|
| 1        | Unknown                   | 19                  | May 21, 1942       | 103                    | 16             | 10               | 1.2                                   | 6                                 | 2                            | 32              | -              | 39                           | 81  |
| a/ 2     | Bennie Harrison           | 22                  | do.                | 37                     | 4.4            | 2.7              | 2.3                                   | 6                                 | 3                            | 2.5             | -              | 19                           | 22  |
| 3        | H. A. Marshall            | 12                  | do.                | 208                    | 21             | 6.3              | 36                                    | 37                                | 8                            | 39              | -              | 80                           | 79  |
| 4        | Onnie H. Weaver           | 27                  | do.                | 429                    | 27             | 14               | 94                                    | 43                                | 3                            | 120             | -              | 150                          | 123   |
| 6        | Walter Clark              | 23                  | May 22, 1942       | 40                     | 10             | 1.5              | 3.2                                   | 37                                | 3                            | 3.0             | -              | 1.5                          | 51  |
| 7        | Wilkins and Hart          | 26                  | May 21, 1942       | 47                     | 0.4            | 3.9              | 8.7                                   | 12                                | 3                            | 5.0             | -              | 20                           | 17  |
| 8        | Mack Norton               | 12                  | do.                | 348                    | 19             | 12               | 83                                    | 6                                 | 3                            | 144             | -              | 84                           | 98  |
| a/ 9     | B. C. Perry               | 23                  | May 22, 1942       | 205                    | 10             | 2.7              | 44                                    | 6                                 | 23                           | 9.0             | 0.2            | 113                          | 37  |
| a/10     | Newton County             | 48                  | May 20, 1942       | 74                     | 4.8            | 5.1              | 18                                    | 67                                | 8                            | 5.0             | 0.3            | 0                            | 33  |
| 11       | Mandy Odem                | 30                  | do.                | 363                    | 10             | 27               | 68                                    | 12                                | 3                            | 117             | -              | 132                          | 137   |
| 12       | Joe R. Ferguson           | 15                  | do.                | 37                     | 3.6            | 0.2              | 9.2                                   | 18                                | 10                           | 1.0             | -              | 4.0                          | 10  |
| 13       | Henry Gunter              | 22                  | do.                | 141                    | 8.0            | 10               | 24                                    | 61                                | 3                            | 11              | 0.1            | 55                           | 61  |
| a/14     | Texas Highway Dept.       | 27                  | do.                | 246                    | 24             | 1.5              | 77                                    | 262                               | 7                            | 6.0             | 0.6            | 0                            | 66  |
| 15       | C. Newberry               | 24                  | do.                | 91                     | 3.6            | 3.2              | 24                                    | 31                                | 2                            | 19              | -              | 24                           | 22  |
| 16       | Cary Ray                  | 52                  | do.                | 91                     | 10             | 10               | 9.0                                   | 67                                | 2                            | 11              | -              | 16                           | 66  |
| a/17     | Carol Miller              | 57                  | May 21, 1942       | 191                    | 25             | 5.1              | 46                                    | 165                               | 2                            | 32              | -              | 0                            | 83  |
| 18       | Kimball Love              | 62                  | do.                | 223                    | 37             | 5.1              | 44                                    | 183                               | 2                            | 32              | 0.5            | 12                           | 113   |
| 19       | A. L. Hilliard            | 20                  | May 22, 1942       | 221                    | 9.2            | 3.4              | 73                                    | 116                               | 22                           | 54              | 0.1            | 2.5                          | 37  |
| 20       | Elmer Simmons             | 45                  | May 21, 1942       | 66                     | 10             | 1.2              | 14                                    | 61                                | 2                            | 3.0             | -              | 6.0                          | 31  |
| a/21     | A. D. Holmes              | 50                  | do.                | 92                     | 10             | 2.7              | 17                                    | 12                                | 17                           | 24              | -              | 15                           | 37  |
| 22       | Hunter Fowler             | 33                  | do.                | 29                     | 4.4            | 1.5              | 3.7                                   | 12                                | 3                            | 6.0             | -              | 4.5                          | 17  |
| 23       | Stark and Brown           | 22                  | do.                | 97                     | 6.4            | 3.9              | 23                                    | 18                                | 4                            | 37              | -              | 14                           | 32  |
| a/26     | Wier Long Leaf Lumber Co. | 232                 | do.                | 24                     | 4.0            | 1.5              | 3.0                                   | 12                                | 3                            | 6.0             | 0.3            | 0                            | 16  |
| a/27     | Burkeville High School    | 120                 | May 20, 1942       | 54                     | 8.4            | 1.2              | 4.4                                   | 31                                | 3                            | 5.0             | 0.2            | 0                            | 26  |
| 28       | Mrs. S. C. Erwin          | 30                  | May 22, 1942       | 305                    | 21             | 2.4              | 83                                    | 43                                | 6                            | 102             | -              | 70                           | 62  |
| 29       | Mary Dickerson            | 25                  | do.                | 100                    | 4.8            | 3.6              | 26                                    | 24                                | 8                            | 30              | -              | 16                           | 27  |
| 30       | Jack Ozment               | 26                  | do.                | 143                    | 6.4            | 2.7              | 42                                    | 12                                | 3                            | 63              | -              | 20                           | 27  |

a/ Analyses of water from selected wells are given in milligram equivalents per liter on page 50.

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

c/ Analyses by Curtis Laboratories.

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

Results are in parts per million

| Well No. | Owner                         | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|----------|-------------------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 31       | Curry McMahon                 | 18                  | May 22, 1942       | 40                     | 4.4          | 1.2            | 8.1                                   | 12                              | 3                          | 11            | -            | 6.0                        | 16  |
| 32       | F. C. Knighton                | 12                  | do.                | 95                     | 4.4          | 3.9            | 22                                    | 24                              | 26                         | 11            | -            | 16                         | 27  |
| 33       | John Summers Estate           | 19                  | do.                | 16                     | 2.0          | 1.5            | 2.1                                   | 12                              | 2                          | 2.5           | -            | 0                          | 11  |
| a/34     | Louis Smith                   | 53                  | do.                | 12                     | 1.6          | 0.2            | 2.3                                   | 6                               | 3                          | 1.5           | -            | 0                          | 5   |
| 35       | C. H. Young                   | 23                  | do.                | 34                     | 6.4          | 3.9            | 0.2                                   | 6                               | 2                          | 18            | -            | 0                          | 32  |
| 36       | A. M. Sharver                 | 16                  | do.                | 681                    | 191          | 14             | 51                                    | 366                             | 4                          | 240           | -            | 1.0                        | 533   |
| 37       | C. W. Simmons                 | 22                  | do.                | 34                     | 4.4          | 3.9            | 2.1                                   | 18                              | 3                          | 6.0           | -            | 6.0                        | 27  |
| 38       | H. H. Westbrook               | 33                  | do.                | 75                     | 8.4          | 3.9            | 9.2                                   | 18                              | 4                          | 10            | 0            | 30                         | 37  |
| 39       | Hanah Kyles                   | 15                  | do.                | 46                     | 6.0          | 1.5            | 8.7                                   | 18                              | 4                          | 12            | -            | 5.0                        | 21  |
| a/40     | Newton County School District | 34                  | do.                | 31                     | 9.6          | 0.2            | 0.9                                   | 18                              | 3                          | 4.0           | -            | 4.5                        | 25  |
| 41       | Chas. W. Adams                | 45                  | do.                | 59                     | 14           | 1.5            | 6.9                                   | 43                              | 4                          | 12            | -            | 0                          | 41  |
| 42       | Jess M. Woods                 | 18                  | do.                | 94                     | 2.4          | 2.7            | 23                                    | 12                              | 2                          | 12            | -            | 46                         | 17  |
| 43       | Can Buitt                     | 16                  | May 21, 1942       | 204                    | 46           | 3.9            | 26                                    | 122                             | 9                          | 52            | 0.6          | 6.0                        | 132   |
| 44       | E. A. Lindsey                 | 56                  | May 23, 1942       | 22                     | 2.0          | 1.5            | 3.9                                   | 12                              | 3                          | 2.5           | 0.1          | 3.0                        | 11  |
| 45       | Fowler Smith                  | 22                  | do.                | 47                     | 8.4          | 2.7            | 1.8                                   | 12                              | 3                          | 5.0           | -            | 20                         | 32  |
| a/46     | M. C. Womack                  | 68                  | do.                | 56                     | 5.6          | 0.2            | 17                                    | 55                              | 2                          | 3.5           | -            | 1.0                        | 15  |
| 50       | City of Newton                | 200                 | Apr. 10, 1941      | 62                     | 5.9          | 1.2            | 6.3                                   | 26                              | 2.1                        | 7.0           | 0            | 0                          | 20  |
| a/51     | Newton County School District | 25+                 | May 23, 1942       | 69                     | 18           | 2.7            | 5.3                                   | 73                              | 3                          | 3.0           | 0.1          | 1.0                        | 57  |
| 52       | Lottie Young                  | 22                  | do.                | 45                     | 2.0          | 1.5            | 12                                    | 12                              | 9                          | 11            | -            | 3.0                        | 11  |
| 54       | Hoy Fuller                    | 31                  | May 24, 1942       | 151                    | 12           | 3.9            | 26                                    | 12                              | 3                          | 18            | -            | 82                         | 47  |
| 55       | Civilian Conservation Corps   | 260                 | Apr. 10, 1941      | 35                     | 1.2          | .8             | 7.5                                   | 18                              | 2.6                        | 3.5           | 0            | .28                        | 6.3   |
| 56       | H. A. Willett                 | 26                  | May 25, 1942       | 143                    | 8.4          | 3.9            | 34                                    | 18                              | 13                         | 36            | -            | 39                         | 37  |
| 57       | Lewis Ferguson                | 24                  | do.                | 33                     | 4.0          | 1.5            | 3.5                                   | 0                               | 4                          | 5.5           | -            | 14                         | 16  |
| 58       | G. R. Joyce                   | 21                  | do.                | 21                     | 2.0          | 1.5            | 3.2                                   | 6                               | 2                          | 6.0           | -            | 3.0                        | 11  |
| 59       | Dr. W. H. Shepherd            | 31                  | do.                | 40                     | 5.0          | 1.5            | 5.5                                   | 12                              | 2                          | 9.5           | -            | 9.0                        | 21  |
| a/60     | R. B. Simmons                 | 40                  | do.                | 347                    | 13           | 23             | 67                                    | 12                              | 2                          | 120           | 0.3          | 116                        | 129   |
| 62       | T. C. Lowe                    | 16                  | do.                | 170                    | 11           | 6.3            | 33                                    | 18                              | 15                         | 31            | -            | 65                         | 54  |
| 63       | Miles Miller                  | 23                  | do.                | 518                    | 25           | 6.3            | 161                                   | 37                              | 65                         | 240           | 0.4          | 0                          | 89  |

a/ Analyses of water from selected wells are given in milligram equivalents per liter on page 50.

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

c/ Analyses by Curtis Laboratories.

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

Results are in parts per million

| Well No. | Owner                           | Depth of well (ft.)       | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|----------|---------------------------------|---------------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 64       | Warren Gunter                   | 37                        | May 25, 1942       | 286                    | 26           | 17             | 49                                    | 18                              | 2                          | 130           | -            | 53                         | 136   |
| 65       | Henry Ebare                     | 29                        | do.                | 137                    | 8.4          | 2.7            | 35                                    | 12                              | 12                         | 43            | -            | 30                         | 32  |
| 67       | Monroe Kenebrew                 | 39                        | May 24, 1942       | 272                    | 15           | 12             | 49                                    | 12                              | 3                          | 52            | -            | 135                        | 83  |
| 68       | A. Wilkinson                    | 34                        | do.                | 220                    | 9.2          | 6.3            | 50                                    | 18                              | 12                         | 37            | -            | 96                         | 49  |
| 69       | J. B. Stark                     | 16                        | do.                | 210                    | 8.4          | 3.9            | 55                                    | 12                              | 3                          | 59            | -            | 75                         | 37  |
| 70       | Jim Weaver Estate               | 21                        | do.                | 220                    | 5.6          | 7.5            | 60                                    | 49                              | 4                          | 59            | -            | 60                         | 45  |
| a/71     | Mrs. Robert Calhoun             | 30                        | do.                | 151                    | 5.2          | 6.3            | 33                                    | 0                               | 7                          | 36            | 0.1          | 63                         | 39  |
| 73       | Sarah Lewis                     | 18                        | May 25, 1942       | 47                     | 10           | 2.7            | 1.8                                   | 12                              | 3                          | 16            | -            | 7.0                        | 37  |
| 74       | Jim L. Stark                    | 20                        | do.                | 207                    | 8.8          | 5.1            | 56                                    | 12                              | 11                         | 73            | 0            | 42                         | 43  |
| 75       | S. M. Herrin Estate             | 14                        | do.                | 48                     | 4.4          | 2.7            | 7.6                                   | 6                               | 3                          | 15            | -            | 12                         | 22  |
| 76       | Edward L. Davis                 | 26                        | do.                | 98                     | 5.6          | 7.5            | 13                                    | 12                              | 2                          | 16            | -            | 48                         | 45  |
| 77       | S. F. Hughes                    | 20                        | do.                | 36                     | 6.4          | 3.9            | 0.2                                   | 18                              | 2                          | 7.0           | -            | 7.0                        | 32  |
| 78       | L. H. Davis                     | 29                        | do.                | 33                     | 4.4          | 2.7            | 4.6                                   | 24                              | 2                          | 7.0           | -            | 0                          | 22  |
| 79       | T. J. Brown                     | 22                        | do.                | 31                     | 2.0          | 1.5            | 6.0                                   | 12                              | 2                          | 2.0           | -            | 11                         | 11  |
| a/80     | J. M. Inman                     | 1,500                     | Apr. 15, 1942      | 94                     | 24           | 4.6            | 6.9                                   | 92                              | 3                          | 10            | 0.4          | 0                          | 78  |
| 81       | Jackson Estate                  | 20                        | May 25, 1942       | 20                     | 2.0          | 1.5            | 3.5                                   | 15                              | 2                          | 3.0           | -            | 0                          | 11  |
| a/82     | Tom Wilson Estate               | 38                        | May 26, 1942       | 220                    | 16           | 10             | 44                                    | 43                              | 2                          | 61            | -            | 66                         | 81  |
| 83       | Tom Singletery                  | 29                        | do.                | 229                    | 28           | 3.9            | 58                                    | 183                             | 3                          | 39            | -            | 7.0                        | 87  |
| 84       | Tom Gilchrist                   | 25                        | May 24, 1942       | 195                    | 15           | 14             | 24                                    | 6                               | 2                          | 47            | -            | 90                         | 93  |
| 85       | Southwestern Settlement (627b/) | and Development Co. 1,495 | --                 | 266                    | 85           | 5              | 22                                    | 292                             | 12                         | 24            | -            | -                          | -   |
| 87       | Hayden Hollis                   | 30                        | May 26, 1942       | 27                     | 2.0          | 1.5            | 5.3                                   | 6                               | 3                          | 8.0           | -            | 4.0                        | 11  |
| a/88     | Texas Forest Service            | 150                       | do.                | 37                     | 4.0          | 1.5            | 8.5                                   | 18                              | 2                          | 12            | 0.2          | 0                          | 16  |
| a/89     | do.                             | 350                       | do.                | 160                    | 11           | 2.4            | 53                                    | 171                             | 3                          | 7.0           | 0            | 0                          | 37  |
| 90       | E. D. Marshall                  | 25                        | do.                | 21                     | 4.0          | 1.5            | 1.4                                   | 12                              | 2                          | 4.0           | -            | 2.0                        | 15  |
| 91       | Biloxi School                   | 14                        | do.                | 65                     | 14           | 1.5            | 9.9                                   | 67                              | 3                          | 3.0           | 0.2          | 0                          | 41  |
| 92       | James Randolph                  | 16                        | do.                | 46                     | 8.4          | 3.9            | 4.1                                   | 49                              | 3                          | 1.0           | -            | 2.0                        | 37  |

a/ Analyses of water from selected wells are given in milligram equivalents per liter on page 50.

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

c/ Analyses by Curtis Laboratories.

Partial analyses of water from wells in Newton County--Continued  
Results are in parts per million

| Well No. | Owner                        | Depth of well (ft.) | Date of collection | Total dissolved solids | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|----------|------------------------------|---------------------|--------------------|------------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 93       | A. B. Kellum                 | 18                  | May 26, 1942       | 13                     | 2.0          | 1.5            | 0.7                                   | 6                               | 2                          | 4.0           | -            | 0                          | 11  |
| 95       | Eddie Levias                 | 17                  | do.                | 18                     | 2.4          | 2.7            | 0.7                                   | 12                              | 2                          | 4.5           | -            | 0                          | 17  |
| a/ 96    | J. D. Bean                   | 46                  | do.                | 33                     | 4.4          | 3.9            | 1.8                                   | 18                              | 3                          | 7.0           | -            | 4.0                        | 27  |
| 97       | A. M. Bennett                | 24                  | do.                | 209                    | 9.6          | 7.5            | 52                                    | 12                              | 3                          | 81            | -            | 50                         | 55  |
| a/ 98    | Kirby Lumber Corp.           | 529                 | Apr. 15, 1942      | 68                     | 17           | 1.0            | 8.5                                   | 61                              | 4                          | 7.0           | 0.1          | 0                          | 46  |
| 101      | W. O. Roy                    | 24                  | May 26, 1942       | 57                     | 3.0          | 1.5            | 14                                    | 43                              | 2                          | 6.0           | -            | 6.0                        | 21  |
| a/102    | Mrs. T. G. Holmes            | 48                  | do.                | 310                    | 12           | 17             | 70                                    | 43                              | 2                          | 107           | -            | 81                         | 101   |
| 103      | Landrum Estate               | 40                  | do.                | 241                    | 39           | 12             | 22                                    | 61                              | 3                          | 55            | -            | 80                         | 148   |
| 104      | J. J. Bean                   | 20                  | do.                | 32                     | 4.4          | 2.7            | 4.1                                   | 18                              | 2                          | 10            | -            | 0                          | 22  |
| 105      | Bluett Holmes                | 20                  | do.                | 166                    | 15           | 6.3            | 27                                    | 6                               | 2                          | 41            | -            | 72                         | 64  |
| a/107    | E. D. Cain                   | 33                  | May 27, 1942       | 198                    | 11           | 5.1            | 52                                    | 37                              | 2                          | 66            | -            | 44                         | 48  |
| 108      | J. H. Bingham                | 22                  | do.                | 38                     | 10           | 1.5            | 1.6                                   | 24                              | 2                          | 60            | -            | 5.0                        | 31  |
| 111      | W. E. Bean                   | 40                  | do.                | 50                     | 8.8          | 5.1            | 3.5                                   | 43                              | 3                          | 9.0           | -            | 0                          | 43  |
| c/112    | Grigg and Young              | 524                 | --                 | 151                    | 10.4         | 3.4            | 49.5                                  | 79.3                            | .8                         | 58.0          | -            | -                          | 40.0  |
| a/113    | O.H. Stephenson              | 70                  | May 26, 1942       | 193                    | 12           | 2.7            | 60                                    | 55                              | 3                          | 88            | 0            | 0                          | 42  |
| a/115    | Peavy-Moore Lumber Co., Inc. | 105                 | Apr. 15, 1942      | 162                    | 20           | 4.6            | 40                                    | 146                             | 3                          | 22            | 0.3          | 0                          | 68  |
| a/116    | W.E. Stephenson              | 293                 | May 27, 1942       | 149                    | 6.4          | 2.7            | 52                                    | 122                             | 3                          | 25            | 0.1          | 0                          | 27  |
| a/117    | J. C. Storms                 | 78                  | do.                | 222                    | 4.4          | 2.7            | 80                                    | 85                              | 12                         | 81            | -            | 0                          | 22  |
| a/118    | Pete Lavine                  | 214                 | do.                | 135                    | 22           | 1.5            | 30                                    | 104                             | 4                          | 26            | 0.3          | 0                          | 61  |

a/ Analyses of water from selected wells are given in milligram equivalents per liter on page 50.

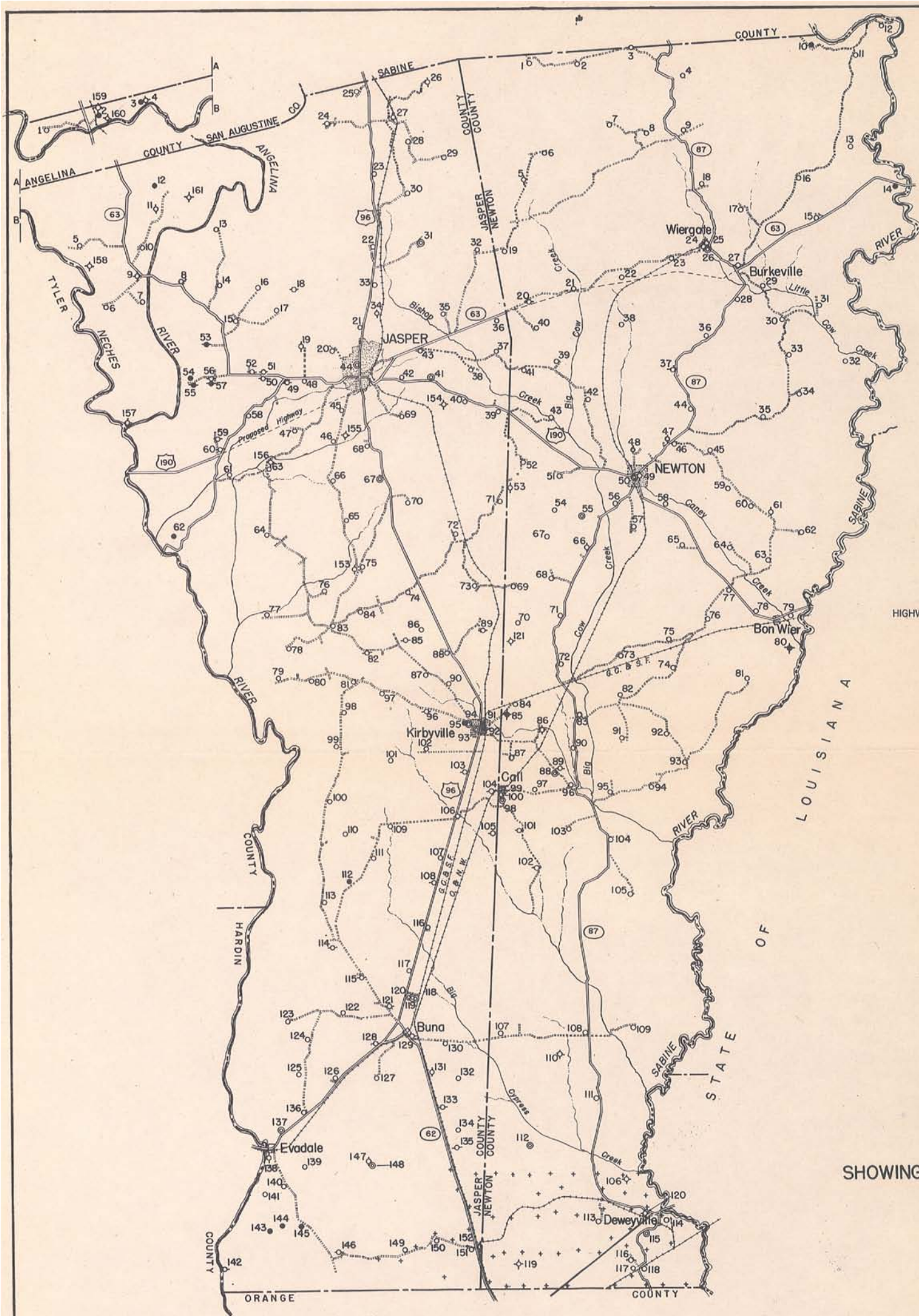
b/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.

c/ Analyses by Curtis Laboratories.

Chemical analyses—Continued

Results are in milligram equivalents per liter

| Well No. | Owner                         | Depth of well (ft.) | Date of collection | Calcium (Ca) | Magnesium (Mg) | Sodium and Potassium (Na + K) (calc.) | Bicarbonate (HCO <sub>3</sub> ) | Sulfate (SO <sub>4</sub> ) | Chloride (Cl) | Fluoride (F) | Nitrate (NO <sub>3</sub> ) | Total hardness as CaCO <sub>3</sub> (calc.) |
|----------|-------------------------------|---------------------|--------------------|--------------|----------------|---------------------------------------|---------------------------------|----------------------------|---------------|--------------|----------------------------|---|
| 2        | Bennie Harrison               | 22                  | May 21, 1942       | 0.22         | 0.22           | 0.10                                  | 0.10                            | 0.06                       | 0.07          | —            | 0.31                       | 0.44  |
| 9        | B. J. Perry                   | 23                  | May 22, 1942       | 0.52         | 0.22           | 1.92                                  | 0.10                            | 0.48                       | 0.25          | 0.01         | 1.32                       | 0.74  |
| 10       | Newton County                 | 48                  | May 20, 1942       | 0.24         | 0.42           | 0.77                                  | 1.10                            | 0.17                       | 0.14          | 0.02         | 0                          | 0.66  |
| 14       | Texas Highway Dept.           | 27                  | do.                | 1.20         | 0.12           | 3.33                                  | 4.30                            | 0.15                       | 0.17          | 0.03         | 0                          | 1.32  |
| 17       | Carol Miller                  | 57                  | May 21, 1942       | 1.24         | 0.42           | 1.92                                  | 2.70                            | 0.04                       | 0.90          | —            | 0                          | 1.66  |
| 21       | A. D. Holmes                  | 50                  | do.                | 0.52         | 0.22           | 0.73                                  | 0.20                            | 0.35                       | 0.68          | —            | 0.24                       | 0.74  |
| 26       | Weir Long Leaf Lumber Co.     | 232                 | do.                | 0.20         | 0.12           | 0.13                                  | 0.20                            | 0.06                       | 0.17          | 0.02         | 0                          | 0.32  |
| 27       | Burkeville High School        | 120                 | May 20, 1942       | 0.42         | 0.10           | 0.19                                  | 0.50                            | 0.06                       | 0.14          | 0.01         | 0                          | 0.52  |
| 34       | Louis Smith                   | 53                  | May 22, 1942       | 0.08         | 0.02           | 0.10                                  | 0.10                            | 0.06                       | 0.04          | —            | 0                          | 0.10  |
| 40       | Newton County School District | 34                  | do.                | 0.48         | 0.02           | 0.04                                  | 0.30                            | 0.06                       | 0.11          | —            | 0.07                       | 0.50  |
| 46       | M. C. Womack                  | 68                  | May 23, 1942       | 0.28         | 0.02           | 0.76                                  | 0.90                            | 0.04                       | 0.10          | —            | 0.02                       | 0.30  |
| 51       | Newton County School District | 25 <sup>±</sup>     | do.                | 0.92         | 0.22           | 0.23                                  | 1.20                            | 0.06                       | 0.08          | 0.01         | 0.02                       | 1.14  |
| 60       | R. B. Simmons                 | 40                  | May 25, 1942       | 0.66         | 1.92           | 2.93                                  | 0.20                            | 0.04                       | 3.38          | 0.02         | 1.87                       | 2.53  |
| 71       | Mrs. Robert Calhoun           | 30                  | May 24, 1942       | 0.26         | 0.52           | 1.42                                  | 0                               | 0.15                       | 1.02          | 0.01         | 1.02                       | 0.78  |
| 80       | J. M. Inman                   | 1,800               | Apr. 15, 1942      | 1.18         | 0.38           | 0.30                                  | 1.50                            | 0.06                       | 0.28          | 0.02         | 0                          | 1.56  |
| 82       | Tom Wilson Estate             | 38                  | May 26, 1942       | 0.80         | 0.82           | 1.90                                  | 0.70                            | 0.04                       | 1.72          | —            | 1.06                       | 1.62  |
| 88       | Texas Forest Service          | 150                 | do.                | 0.20         | 0.12           | 0.37                                  | 0.30                            | 0.04                       | 0.34          | 0.01         | 0                          | 0.32  |
| 89       | do.                           | 350                 | do.                | 0.54         | 0.20           | 2.32                                  | 2.80                            | 0.06                       | 0.20          | 0            | 0                          | 0.74  |
| 96       | J. D. Bean                    | 46                  | do.                | 0.22         | 0.32           | 0.08                                  | 0.30                            | 0.06                       | 0.20          | —            | 0.06                       | 0.54  |
| 98       | Kirby Lumber Co.              | 529                 | Apr. 15, 1942      | 0.84         | 0.08           | 0.37                                  | 1.00                            | 0.08                       | 0.20          | 0.01         | 0                          | 0.92  |
| 102      | Mrs. T. G. Holmes             | 48                  | May 26, 1942       | 0.60         | 1.42           | 3.05                                  | 0.70                            | 0.04                       | 3.02          | —            | 1.31                       | 2.02  |
| 107      | E. D. Cain                    | 33                  | May 27, 1942       | 0.54         | 0.42           | 2.25                                  | 0.60                            | 0.04                       | 1.36          | —            | 0.71                       | 0.96  |
| 113      | O. H. Stephenson              | 70                  | May 26, 1942       | 0.62         | 0.22           | 2.60                                  | 0.90                            | 0.06                       | 2.48          | 0            | 0                          | 0.84  |
| 115      | Peavy-Moore Lumber Co., Inc.  | 105                 | Apr. 15, 1942      | 0.98         | 0.38           | 1.74                                  | 2.40                            | 0.06                       | 0.62          | 0.02         | 0                          | 1.36  |
| 116      | W. F. Stephenson              | 295                 | May 27, 1942       | 0.32         | 0.22           | 2.24                                  | 2.00                            | 0.06                       | 0.71          | 0.01         | 0                          | 0.54  |
| 117      | J. C. Storms                  | 78                  | do.                | 0.22         | 0.22           | 3.49                                  | 1.40                            | 0.25                       | 2.28          | —            | 0                          | 0.44  |
| 118      | Pete Lavine                   | 214                 | do.                | 1.10         | 0.12           | 1.31                                  | 1.70                            | 0.08                       | 0.73          | 0.02         | 0                          | 1.22  |



— EXPLANATION —

- WELL WITH HAND PUMP, BUCKET OR BAILER
- ◊ WELL WITH WINDMILL OR SMALL POWER PUMP
- FLOWING WELL
- ⊙ WELL WITH PUMPING PLANT — 5 HORSE POWER OR LARGER
- ◇ UNUSED WELL
- ⋄ WELL DRILLED TO TEST FOR OIL OR GAS
- + SEISMOGRAPH TEST HOLE
- 96 U.S. HIGHWAY
- 87 STATE HIGHWAY

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  
JASPER COUNTY  
NEWTON COUNTY  
TEXAS

SHOWING LOCATIONS OF WATER WELLS

