

Table 5--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date completed | Depth of well (ft) | Diameter of well (in.) | Water-bearing unit | Altitude of land surface (ft) | Below land surface datum (ft) | Water level | Date of measurement | Method of lift | Use of water | Remarks |
|---------------|---------------------------------|-------------------------------|----------------|--------------------|------------------------|--------------------|-------------------------------|-------------------------------|--|-----------------------------------|-------------------------------------|---|---|
| *SB-61-58-505 | City of Liberty Well 1 | -- Tucker | -- | 651 | 4 | Ev | 30 | 8 31.0 43.1 | Nov., Apr., Feb., 26, 1964 | 1944 9, 1958 26, 1964 | N | N | Reported flowed 40 gpm, Nov. 1944. Observation well. Unused public supply well. Temp. 76°F. ^{3/2} |
| * 506 | John Meacom | -- | -- | 540 | 4 | Ev | + 33 | + | Jan. | 1966 | Flows | D | Supplies water for swimming pool. Estimated flow 5 gpm, Jan. 1966. |
| * 507 | Meacom & Harrison | -- | 1903 | 260 | 4 | Ch | 25 | + | Dec. | 1944 | Flows, T _E , 7-1/2 | S | Formerly used for rice irrigation. Reported flowed 150 gpm in 1903; flowed 50 gpm in Dec. 1944. Temp. 71°F. |
| * 508 | Trinity Valley Cold Storage Co. | -- | 1924 | 350 | 10 | Ev | 30 | -- | -- | -- | N | N | Formerly used for rice irrigation. Reported destroyed in 1965. |
| 509 | C. W. Fisher | C. W. Fisher | 1895 | 232 | 2 | Ch | 28 | 34 | 1908 | N | N | N | Reported flows 17 gpm in 1908. Formerly used for swimming pool. Destroyed. |
| * 510 | Louis Fair | Louis Fair | 1933 | 18 | 2 | Ch | 31 | 8 | Jan. | 1945 | N | N | Driven well. Screen from 14 ft to bottom. Destroyed in 1965. |
| 511 | Meacom & Harrison | Serles Yount | 1909 | 260 | 8 | Ch | 23 | 5.0 6.4 | Dec., Apr., 18, 1951 | 1944 | N | N | Formerly used for livestock. Unable to locate. Destroyed in 1965. ^{3/2} |
| 512 | do | -- | 1903 | 260 | 4 | Ch | 23 | -- | -- | -- | N | N | Formerly used for rice irrigation. Destroyed in 1965. |
| * 514 | Southern Pacific RR. | Layne-Bowler Co. | 1911 | 601 | 10 | Ev | 35 | -- | -- | -- | N | N | Formerly used as industrial well. Screen from 559 to 591 ft. Destroyed in 1965. |
| * 515 | City of Liberty Well 1-A | -- Walling | -- | 680 | 8 | Ev | 23 | 7 | Dec., Apr., 12, | 1944 1954 | N | N | Observation well from 1944 to 1954 dropped. Formerly used for public supply. Old well. Abandoned. ^{3/2} |
| 516 | Layl Sandwich Shop | Pitts Water Well Drilling Co. | 1940 | 119 | 4 | Ch | 30 | 17 | Dec. | 1944 | N | N | Screen from 98 to 108 ft. Formerly used for public supply. Destroyed. ^{3/2} |
| 517 | City of Liberty | -- Tucker | -- | 695 | 8 | Ev | 28 | 18 | 1931 | N | N | Formerly used for public supply. Old well. Abandoned, 1939. | |
| 518 | Mrs. Maggie L. Moorefield | Pitts Water Well Drilling Co. | 1941 | 200 | 2 | Ch | 30 | 18 | Aug. | 1941 | N | N | Formerly used as domestic well. Destroyed. |
| 601 | City of Liberty | do | 1953 | 818 | 4,2 | Ev | 42 | 31 | Mar. | 1953 | N | N | Screen from 793 ft to bottom. Well originally drilled in 1946 but deepened to 818 ft in 1953. Formerly a public supply well. Abandoned in 1965. |
| 602 | do | do | 1952 | 786 | 4 | Ev | 42 | 30 | Aug. | 1952 | N | N | Screen from 747 ft to bottom. Formerly used as public supply. Abandoned in 1965. |
| 603 | do | do | 1953 | 341 | 4 | Ch | 46 | = = | = = | = = | N | N | Formerly used for public supply. Abandoned in 1965. |

See footnotes at end of table.

Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date completed | Depth of well (ft) | Diameter of well (in.) | Water-bearing unit | Altitude of land surface (ft) | Water level | | Method of lift | Use of water | Remarks |
|---------------|------------------------|-------------------------------|----------------|--------------------|------------------------|--------------------|-------------------------------|-------------------------------|--------------------------------|----------------|--------------|---|
| | | | | | | | | Below land surface datum (ft) | Date of measurement | | | |
| *SB-61-58-605 | A. C. Neyland | -- | 1927 | 28 | 4 | Ch | 42 | 12 | Mar. 1945 | N | N | Screen from 24 ft to bottom. Abandoned in 1965. |
| * | 606 Sun Pipeline Co. | Sun Pipeline Co. | 1932 | 40 | 6 | Ch | 31 | 10 | Apr. 1945 | N | N | Screen from 30 ft to bottom. Destroyed in 1966. |
| 607 | Liberty County | Pitre Water Well Drilling Co. | 1943 | 65 | 4 | Ch | 20 | 19 | Oct. 1943 | N | N | Well located at fairgrounds. Screen from 45 to 57 ft. Destroyed by 1966. |
| 608 | do | do | 1943 | 65 | 2 | Ch | 38 | 19 | do | N | N | Formerly used as public supply at fairgrounds. Screen from 47 to 57 ft. Destroyed by 1966. |
| * | 609 Ames Minglewood | Layne-Texas Co. | 1964 | 610 | 4 | Ev | 73 | 94 | May 1964 | T,E,14 | P | Screen from 519 to 550 and 570 to 600 ft. |
| * | 702 Texas Pipeline Co. | J. M. Trager | 1918 | 350 | 6 | Ch | 20 | 8.0 | June 15, 1945 | N | N | Formerly supplied water for pumping station. Destroyed by 1966. ^{3/} |
| 703 | Bullard & Wison well 5 | -- | -- | 670 | -- | -- | 13 | -- | -- | -- | -- | Oil test. Salt water charged with hydrogen sulfide reported below 360 ft. Well abandoned and casing pulled. Old well. |
| 705 | J. C. Baldwin well 4 | Humble Oil & Refining Co. | 1953 | 10,357 | -- | -- | 20 | -- | -- | -- | -- | Oil test. ^{2/} |
| 802 | Florence Fisher | do | 1949 | 6,788 | -- | -- | 18 | -- | -- | -- | -- | Do. |
| 803 | E. F. Simms well 1 | do | 1953 | 7,099 | -- | -- | 21 | -- | -- | -- | -- | Do. |
| 804 | A. Deussen Fee "A" | Gulf Oil Co. | 1955 | 2,265 | -- | -- | 18 | -- | -- | -- | -- | Do. |
| 805 | M. Van Deventer well 1 | Humble Oil & Refining Co. | -- | 6,017 | -- | -- | 20 | -- | -- | -- | -- | Do. |
| 901 | Cliff Tevis well 1 | The Texas Co. | 1955 | 9,500 | -- | -- | 17 | -- | -- | -- | -- | Do. |
| 59-101 | Jack Turner | Katy Drilling Co. | 1954 | 404 | 18,10 | Ev,Ch | 70 | 62.4 | Mar. 25, 1965 | T,G | Irr | Casing: 18-in. to 240 ft, 10-in. from 240 ft to bottom. 234 ft of slotted pipe. |
| 102 | Graves & Partlow | do | 1952 | 600 | 20,12 | Ev,Ch | 72 | 54.5 59.3 | Jan. 14, 1960 Mar. 25, 1965 | T,G | Irr | Cased to bottom. 453 ft of screen. Gravel-walled. |
| 103 | do | Texas Water Wells, Inc. | 1951 | 600 | -- | Ev,Ch | 72 | 54.6 | Jan. 14, 1960 | T,G | Irr | |
| * | 104 | do | do | 1948 | 800 | 20,13, 12,10 | Ev | 72 | 27.7 | do | N | Formerly used for irrigation. Gravel-walled. Reported destroyed. |
| 105 | Felton & Dennison | Katy Drilling Co. | 1951 | 522 | 24,12 | Ev,Ch | 70 | -- | -- | N | N | Cased to bottom. Formerly used for irrigation. 347 ft of screen. Collapsed not used. |

See footnotes at end of table.

Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date com- plet- ed | Depth of well (ft) | Diam- eter of well (in.) | Water- bearing unit | Altitude of land surface (ft) | Water level | | Method of lift | Use of water | Remarks | |
|--------------|---------------------------|-----------------------------------|-------------------------------|--------------------|--------------------------|---------------------|-------------------------------|-------------------------------|--------------------------------|--|--------------|---|---|
| | | | | | | | | Below land surface datum (ft) | Date of measurement | | | | |
| SB-61-59-106 | Graves & Partlow | Katy Drilling Co. | 1963 | 485 | 20,12 | Ev | 72 | -- | -- | T,G | Irr | Casing: 20-in. to 323 ft, 12-in. from 323 to 482 ft. Originally drilled to 620 ft, plugged back to 485 ft. | |
| 107 | F. M. Graves | do | 1951 | 539 | 24,16,10 | Ev,Ch | 72 | 54.2 63.8 | Jan. 14, 1960 Mar. 25, 1965 | N | N | Casing: 24-in. to 220 ft, 16-in. from 220 to 280, 10-in. from 280 to bottom. 416 ft of screen. Abandoned irrigation well. | |
| 108 | John Tarlton | Humble Oil & Refining Co. | 1947 | 10,036 | -- | -- | 69 | -- | -- | -- | -- | Oil test. ^{2/} | |
| 109 | A. S. J. Stevenson well 1 | Hunt Oil Co. | 1948 | 9,344 | -- | -- | 72 | -- | -- | -- | -- | Do. | |
| 110 | Graves & Partlow | Katy Drilling Co. | 1964 | 530 | 20,12 | Ev,Ch | 71 | 85 | Mar. 1964 | T,G | Irr | Cased to bottom. 342 ft of slotted pipe. Reported discharge 2,316 gpm, test by driller. | |
| 112 | Frank S. Spear | Pitre Water Well Drilling Co. | 1963 | 77 | 2 | Ch | 69 | 31 | Sept. 1963 | J,E,1/2 | D | Screen from 66 to 72 ft. | |
| 201 | G. F. and J. O. Dennison | Katy Drilling Co. | 1953 | 570 | 20,12 | Ev,Ch | 71 | 54.9 | Jan. 19, 1960 | N | N | Cased to bottom. Slotted pipe 330 ft. Gravel-walled. Abandoned irrigation well. | |
| * | 202 | do | 1952 | 572 | 20,12 | Ev,Ch | 71 | 55.0 62.4 | Jan. 19, 1960 Mar. 25, 1965 | T,G | Irr | Cased to bottom. Screen 357 ft. Temp. 73°F. | |
| * | 203 | Liberty Ranch Co. | -- | 1917 | 703 | 24,10 | Ev | 70 | 5 | 1917 | N | N | Cased to bottom. Formerly supplied water for rice irrigation. Destroyed. ^{1/} |
| * | 204 | G. F. Dennison | Katy Drilling Co. | 1963 | 525 | -- | Ev,Ch | 70 | -- | -- | T,G | Irr | Reported salt water below 525 ft. Temp. 72°F. |
| * | 205 | do | 1953 | 525 | -- | Ev,Ch | 70 | -- | -- | T,G | Irr | Screen below 240 ft. Temp. 73°F. | |
| * | 206 | W. L. Bingle well 5 | Eumble Oil & Refining Co. | 1952 | 5,800 | -- | -- | 63 | -- | -- | -- | -- | Oil test. ^{2/} |
| * | 301 | Hamill & Smith | Pitre Water Well Drilling Co. | 1938 | 255 | 5 | Ch | 63 | 29.1 46.9 54.5 | Mar. 16, 1949 Apr. 9, 1958 Feb. 26, 1964 | N | N | Observation well. Screen from 228 ft to bottom. Formerly supplied water for oil lease. ^{3/} |
| | 302 | do | do | 1938 | 305 | 4 | Ch | 63 | 20 | 1938 | N | N | Screen from 285 ft to bottom. Formerly supplied water for drilling rig. Abandoned. |
| | 304 | Houston Production Oil Co. well 2 | do | 1941 | 374 | 5 | Ch | 65 | 30 | July 1941 | N | N | Screen from 353 to 373 ft. Formerly supplied water for drilling rig. Destroyed. |
| | 305 | Joe Haines | do | 1938 | 106 | 6 | Ch | 77 | 32 | May 1938 | N | N | Screen from 85 ft to bottom. Reported poor quality of water. Formerly drilled for public supply. Reported casing pulled in 1940. Destroyed. ^{1/} |

See footnotes at end of table.

Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date comple- ted | Depth of well (ft) | Diam- eter of well (in.) | Water- bearing unit | Altitude of land surface (ft) | Water level | | Method of lift | Use of water | Remarks |
|--------------|----------------------------|-------------------------------|---------------------|-----------------------------|--------------------------------------|---------------------------|--|---|--------------------------------|----------------------|--------------------|---|
| | | | | | | | | Below land surface datum (ft) | Date of measurement | | | |
| SB-61-59-306 | John Mecom | Pitre Water Well Drilling Co. | 1937 | 236 | 4 | Ch | 74 | 20 | Nov. 1937 | N | N | Screen from 226 ft to bottom. Water reported to be salty. Abandoned. |
| 307 | The Texas Co. | L. Patterson | 1941 | 383 | 5 | Ch | 65 | 30 | Oct. 1941 | N | N | Screen from 355 to 379 ft. Formerly supplied water for drilling rig. Destroyed by 1966. |
| 308 | Gulf Oil Co. | Pitre Water Well Drilling Co. | 1944 | 321 | 4 | Ch | 65 | 21 | Sept. 1944 | N | N | Screen from 286 to 310 ft. Well is in middle of lake. Formerly supplied water for drilling rig. Not used. |
| 309 | Houston Production Co. | do | 1939 | 255 | 7,5 | Ch | 69 | 30 | 1939 | N | N | Screen from 233 ft to bottom. Formerly supplied water for drilling rig. Destroyed by 1966. |
| 310 | Morris-Phillips well 30 | Gulf Oil Corp. | 1941 | 2,910 | -- | -- | 69 | -- | -- | -- | -- | Oil test. ^{2/} |
| 311 | Morris-Phillips well 29 | do | 1941 | 3,134 | -- | -- | 69 | -- | -- | -- | -- | Do. |
| 312 | Baldwin Fee well 24 | do | 1937 | 5,063 | -- | -- | 64 | -- | -- | -- | -- | Do. |
| 313 | Barngrover well 38 | Cities Service Co. | 1953 | 4,000 | -- | -- | 66 | -- | -- | -- | -- | Do. |
| 314 | Phoenix well 11-A | Sterling Oil & Gas Co. | 1951 | 5,577 | -- | -- | 65 | -- | -- | -- | -- | Do. |
| 315 | Sun Pipeline Co. | do | -- | 97 | 6 | Ch | 68 | 11.0 17.0 | Feb. 20, 1948 Apr. 10, 1953 | N | N | Screen from 77 ft to bottom. Destroyed by 1966. ^{3/} |
| 401 | Graves & Partlow | Katy Drilling Co. | 1953 | 821 | 20,12 | Ev,Ch | 70 | -- | -- | T,E,150 | Irr | Casing: 20-in. to 296 ft, 12-in. from 296 to 525 ft. Slotted pipe 525 ft. Gravel-walled. Temp. 74°F. |
| 402 | Swilley Estate | Layne-Texas Co. | 1947 | 675 | -- | Ev,Ch | 67 | -- | -- | T,G | N | Unused irrigation well. |
| * | Our Mother of Mercy Church | Pitre Water Well Drilling Co. | 1962 | 571 | 2 | Ev | 72 | 90 | Dec. 1962 | T,E,2 | P | Screen from 549 to 564 ft. Supplies water for church and school. ^{1/} |
| * | Partlow & Graves | Lawrence J. Kelley | 1958 | 7,495 | -- | -- | 71 | -- | -- | -- | -- | Oil test. ^{2/} |
| * | 501 C. F. Kellina | Baseman, Dodge & Ericson | 1948 | 1,180 | 20,12,8 | Ev | 66 | 51.8 61.3 | Apr. 4, 1957 Mar. 24, 1965 | T,G | Irr | Cased to bottom. Observation well. 450 ft of slotted pipe opposite sands. Measured discharge 2,550 gpm in 1955. Temp. 74°F. ^{3/} |
| * | 503 A. L. Ericson | Katy Drilling Co. | 1962 | 790 | -- | Ev | 69 | -- | -- | T,- | Irr | Cased to about 200 ft. Temp. 75°F. |
| 504 | Mrs. Ruth Robinett | Pitre Water Well Drilling Co. | 1944 | 161 | 4 | Ch | 64 | 26 | Apr. 1944 | J,E,1/4 | S | Screen from 147 to 157 ft. |
| 505 | Regile Fontenet | do | 1962 | 65 | 2 | Ch | 65 | 18 | July 1962 | J,E,1/2 | D | Screen from 51 ft to bottom. |

See footnotes at end of table.

Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date completed | Depth of well (ft) | Diam-eter of well (in.) | Water-bearing unit | Altitude of land surface (ft) | Below land surface datum (ft) | Water level | Date of measurement | Method of lift | | Use of water | Remarks | |
|---------------|--------------------------|------------------------------------|----------------|--------------------|-------------------------|--------------------|-------------------------------|-------------------------------|-------------|---------------------|----------------|---------|--|--|--|
| | | | | | | | | | | | T, E, 3 | Irr | | | |
| *SB-61-59-506 | W. H. Gilfillian | Pitre Water Well Drilling Co. | 1963 | 371 | 4 | Ch | 66 | 100 | Oct. | 1963 | J, E, 3 | Irr | Screen from 355 ft to bottom. ^{1/} | | |
| 507 | Wallace Fontenot | -- Schneider | 1963 | 98 | 2 | Ch | 69 | 10 | Mar. | 1963 | J, E | Irr | Screen from 92 ft to bottom. | | |
| 508 | Jason Gradyne | Pitre Water Well Drilling Co. | 1962 | 62 | 2 | Ch | 65 | 19 | Oct. | 1962 | J, E, 1/2 | Irr | Screen from 53 to 59 ft. ^{1/} | | |
| 509 | Silva & Welch | do | 1940 | 151 | 4, 2 | Ch | 65 | 26 | Sept. | 1940 | N | N | Screen from 138 to 148 ft. Abandoned by 1966. | | |
| * | 601 N. S. Bean | Katy Drilling Co. | 1953 | 876 | 20, 12 | Ev, Ch | 64 | 30 | Mar. | 1953 | T, G | Irr | Casing: 20-in. to 279 ft, 12-in. from 279 to 597 ft. Slotted pipe 595 ft. Temp. 74°F. | | |
| 604 | do | Pitre Water Well Drilling Co. | 1963 | 197 | 2 | Ch | 64 | 55 | July | 1963 | J, E, 1 | Irr | Screen from 181 to 192 ft. ^{1/} | | |
| 703 | C. C. Thornton | do | 1944 | 287 | 4 | Ch | 55 | 32 | Sept. | 1944 | C, N | S | Screen from 273 to 283 ft. | | |
| 704 | Thornton well 1 | Lawrence J. Kelley Harry Hurt Inc. | 1958 | 8,747 | -- | Ch | 57 | -- | -- | -- | -- | -- | Oil test. ^{2/} | | |
| 705 | Louise A. Swilley well 1 | do | 1959 | 7,794 | -- | Ch | 69 | -- | -- | -- | -- | -- | Do. | | |
| * | 801 A. C. Holbrook | Pitre Water Well Drilling Co. | 1948 | 350 | 14 | Ch | 62 | 56.2 | Feb. | 18, 1960 | T, G | Irr | Temp. 74°F. | | |
| 802 | Pitre Water Supply | do | 1948 | 825 | 4 | Ev | 62 | -- | -- | -- | T, E, 5 | P | Screen from 539 to 561 ft. Originally drilled to 561 ft in 1948; deepened to 825 ft in 1961. | | |
| * | 803 | do | do | 1956 | 845 | 7, 4 | Ev | 62 | 56 | May | 1956 | T, E, 5 | P | Cased to bottom. Screen from 805 ft to bottom. | |
| 804 | A. C. Holbrook | Texas Water Wells, Inc. | 1955 | 580 | 20, 14 | Ev, Ch | 62 | 28.7 | Jan. | 27, 1960 | T, G | Irr | Cased to bottom. Gravel-walled. | | |
| 805 | C. V. Welch | Katy Drilling Co. | 1956 | 500 | 20, 12 | Ev, Ch | 57 | 51.6 | Mar. | 25, 1965 | T, G | Irr | Casing: 20-in. to 250 ft, 12-in. from 250 ft to bottom. Gravel-walled. | | |
| 806 | Elli & Hollis Rich | Pitre Water Well Drilling Co. | 1956 | 469 | 12, 8 | Ch | 57 | 53.3 | Jan. | 15, 1960 | T, G | Irr | Screened from 364 ft to bottom. | | |
| 807 | Howard LaCour | do | 1945 | 145 | 2 | Ch | 66 | 24 | May | 1945 | N | N | Screen from 134 ft to bottom. Abandoned by 1966. | | |
| 810 | J. B. Clark, Sr. | do | 1963 | 145 | 2 | Ch | 63 | 42 | July | 1963 | J, E, 3/4 | D | Screen from 136 to 142 ft. | | |
| 812 | R. D. McDonald | Shell Oil Co. | 1959 | 11,509 | -- | Ch | 62 | -- | -- | -- | -- | -- | Oil test. ^{2/} | | |

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|--------------|------------------------------------|--------------------------------|-------------------------------|--------------------|--------------------------|---------------------|-------------------------------|-------------------------------|---|----------------|--------------|--|
| | | | | | | | | Below land surface datum (ft) | Date of measurement | | | |
| SB-61-59-813 | Keith Flournoy | Katy Drilling Co. | 1961 | 408 | -- | Ch | 64 | -- | -- | T,G | Irr | |
| 901 | Carl A. Johnson | Layne-Texas Co. | 1957 | 900 | 14 | Ev | 57 | 59 | 1957 | T,G | Irr | Reported drawdown 85 ft pumping 3,230 gpm in 1957. Reported water is of poor quality. |
| 908 | F. A. Connell | Pitre Water Well Drilling Co. | 1964 | 95 | 2 | Ch | 60 | 11 | Apr. 1964 | J,E,1/3 | D,S | Plastic screen from 86 ft to 92 ft. ^{1/} |
| 909 | Edgar E. Reavis | R. H. Schneider | 1965 | 88 | 2 | Ch | 60 | 15 | Nov. 1965 | -- | D | Screen from 82 ft to bottom. |
| 60-101 | V. K. Palmer | Pitre Water Well Drilling Co. | 1965 | 147 | 2 | Ch | 64 | 22 | Jan. 1965 | J,E,1/2 | D | Screen from 84 to 90 ft. ^{1/} |
| 301 | Levi Carr | Levi Carr | 1962 | 29 | -- | Ch | 54 | 15 | 1962 | C,H | D | Screen from 25 ft to bottom. Supplies water for hunting camp. |
| 501 | Garland Jones | R. H. Schneider | 1963 | 100 | 12 | Ch | 52 | 16.2 | Aug. 4, 1965 | T,G | Irr | Screen from 100 ft to bottom. ^{1/} |
| 502 | The Texas Co. | Pitre Water Well Drilling Co. | 1944 | 232 | 4 | Ch | 52 | 11 | Aug. 1944 | N | N | Screen from 209 to 231 ft. Formerly supplied water for oil test. Abandoned. |
| 503 | Sabine Tram. Co. | Humble Oil & Refining Co. | 1930 | 5,800 | -- | -- | 57 | -- | -- | -- | -- | Oil test. Abandoned. ^{1/} |
| 504 | C. A. Moore well 1 | The Texas Co. | 1944 | 6,905 | -- | -- | 55 | -- | -- | -- | -- | Oil test. ^{2/} |
| 701 | Devers Independent School District | Pitre Water Well Drilling Co. | 1965 | 229 | 2 | Ch | 56 | 38 | Aug. 1965 | J,E,1 | P | Screen from 210 to 216 ft. Supplies water for school. ^{1/} |
| 706 | A. L. Callihan | Green Bros. Water Well Service | 1963 | 440 | 2 | Ch | 58 | 47 | May 1963 | -- | D | Slotted pipe from 432 ft to bottom. ^{1/} |
| 713 | G. W. Maxwell | Pitre Water Well Drilling Co. | 1963 | 71 | 2 | Ch | 62 | 13 | Dec. 1963 | J,E,1/2 | D | Screen from 57 to 68 ft. |
| 716 | Devers Implement Co. | Green Bros. Water Well Service | 1962 | 390 | 2 | Ch | 58 | 18 | Nov. 1962 | -- | Ind | Screen from 382 ft to bottom. |
| * | 802 | V. D. Myers | Pitre Water Well Drilling Co. | 1943 | 99 | 2,1 | Ch | 56 | 8.8 Jan. 23, 1945 5.6 Apr. 8, 1952 | N | N | Screen from 74 to 79 ft. Observation well from 1945 to 1952. Casing pulled and well destroyed in 1953. ^{1/3/} |
| * | 901 | Sidney Hill, Jr. | Layne-Louisiana | 1948 | 650 | 20,12 | Ev,Ch | 48 | 8.0 Mar. 24, 1965 | T,G | Irr | Cased to 150 ft. |
| * | 902 | Sinclair Pipeline Co. | -- | 1923 | 492 | 8,6 | Ch | 47 | 11.9 June 20, 1945 28.6 Apr. 4, 1956 35.2 Mar. 24, 1965 | N | N | Observation well. Screen from 429 ft to bottom. Formerly supplied water for pump station and 6 houses. Not used. ^{3/} |
| * | 903 | B. H. Willis Estate | -- | -- | 180 | 6 | Ch | 50 | 13.1 Jan. 17, 1945 19.0 Apr. 13, 1954 | N | N | Formerly supplied water for livestock and domestic use. Destroyed. Old well. ^{3/} |
| * | 904 | Sidney Hill | Layne-Louisiana | 1950 | 650 | 20,12 | Ev,Ch | 51 | 22.0 July 14, 1965 | T,G | Irr | Screen from 400 ft to bottom. Not used since 1962. |

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Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date com- pleted | Depth of well (ft) | Diam- eter of well (in.) | Water- bearing unit | Altitude of land surface (ft) | Water level Below land surface datum (ft) | Date of measurement | Method of lift | Use of water | Remarks | | |
|--------------|---------------------------------------|-------------------------------|---------------------|--------------------------|--------------------------------------|---------------------------|--|--|------------------------|----------------------|--------------------|---------|--|--|
| SB-61-60-905 | B. H. Willis Farm & Ranch Co. | Pitre Water Well Drilling Co. | 1962 | 114 | 2 | Ch | 47 | 18 | Oct. | 1962 | J, E, 1/2 | D | Screen from 105 to 111 ft. Used for fall-out-shelter. ^{1/} | |
| 61-101 | -- Stone well 1 | Sun Oil Co. | 1959 | 11,000 | -- | -- | 46 | -- | -- | -- | -- | -- | Oil test. ^{2/} | |
| 401 | M. E. Pickett | Humble Oil & Refining Co. | 1960 | 11,517 | -- | -- | 43 | -- | -- | -- | -- | -- | Do. | |
| 701 | A. L. Banke | Katy Drilling Co. | 1958 | 538 | 12 | Ev, Ch | 42 | 18.9 | Mar. | 24, 1965 | T, G | Irr | Gravel-walled. | |
| 703 | B. H. Willis Farm & Ranch Co. | Pitre Water Well Drilling Co. | 1964 | 134 | 2 | Ch | 46 | 18 | Apr. | 1964 | J, E, 1/2 | D, S | Screen from 126 to 132 ft. ^{1/} | |
| 802 | Ritter Bros. Farm | do | 1963 | 148 | 2 | Ch | 45 | 16 | Jan. | 1963 | -- | S | Screen from 131 to 142 ft. ^{1/} | |
| 64-01-101 | Hall & Hall | Layne-Texas Co. | -- | 407 | 9,8 | Ch | 67 | -- | -- | N | N | N | Screen from 248 to 285, and 314 to 395 ft. Formerly used for rice irrigation. Unable to locate probably destroyed. Old well. ^{1/} | |
| 102 | C. M. Rogers | -- | -- | 650 | 4 | Ev, Ch | 67 | 8.5 | Oct. | 30, 1931 | N | N | Formerly used for livestock well. Abandoned. Old well. | |
| 103 | R. Freeman | -- | -- | 175 | 2 | Ch | 64 | -- | -- | N | N | N | Formerly used for domestic and livestock. Destroyed by 1965. Old well. | |
| 104 | -- Davis well 16 | General Crude Oil Co. | 1936 | 3,719 | -- | -- | 62 | -- | -- | -- | -- | -- | Oil test. ^{2/} | |
| 105 | -- Davis well 13 | do | 1936 | 4,205 | -- | -- | 62 | -- | -- | -- | -- | -- | Do. | |
| 106 | -- Davis well 17 | do | 1936 | 1,901 | -- | -- | 61 | -- | -- | -- | -- | -- | Do. | |
| 107 | -- Davis well 15 | do | 1936 | 3,585 | -- | -- | 59 | -- | -- | -- | -- | -- | Do. | |
| * | 201 | J. M. Hlavaty | Frank Gay | 1940 | 400 | 4 | Ch | 58 | 38 | Aug. | 1944 | N | N | Formerly used for domestic purpose. Abandoned. |
| 202 | Heal-Brown Rice Land & Irrigation Co. | -- | -- | 487 | 8 | Ev | 85 | 10 | | 1903 | N | N | Screened from 447 ft to bottom. Formerly used for rice irrigation. Destroyed. Old well. | |
| 203 | Charles Seaburg | C. A. Brown | 1902 | 415 | 11,8 | Ch | 65 | 17 | | 1908 | N | N | Formerly used for rice irrigation. Reported destroyed. | |
| 204 | W. A. Noble | do | 1904 | 400 | 9 | Ch | 67 | 8 | | 1908 | N | N | Do. | |
| 205 | -- Esperson well B-2 | General Crude Oil Co. | 1939 | 7,352 | -- | -- | 57 | -- | -- | -- | -- | -- | Oil test. ^{2/} | |
| 206 | -- Burgess well 1 | do | 1939 | 7,944 | -- | -- | 56 | -- | -- | -- | -- | -- | Do. | |
| 401 | W. O. Kay well 1 | Massart Oil Co. | 1939 | 2,917 | -- | -- | 57 | -- | -- | -- | -- | -- | Do. | |

See footnotes at end of table.

Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date completed | Depth of well (ft) | Diameter of well (in.) | Water-bearing unit | Altitude of land surface (ft) | Water level | | Method of lift | Use of water | Remarks | |
|--------------|------------------------|-------------------------------|-----------------|--------------------|------------------------|--------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------|--|---|
| | | | | | | | | Below land surface datum (ft) | Date of measurement | | | | |
| SB-64-01-602 | Moore's Bluff well Q-8 | General Crude Oil Co. | 1960 | 11,447 | -- | -- | 45 | -- | -- | -- | -- | Oil test. ^{2/} | |
| 603 | Moore's Bluff well D-1 | do | 1958 | 13,469 | -- | -- | 48 | -- | -- | -- | -- | Do. | |
| 701 | J. M. Frost, Jr. | Katy Drilling Co. | 1951 | 940 | 20,13, 10 | Ev,Ch | 43 | 44.3 41.3 | Mar. 23, 1965 Mar. 1, 1966 | T,G | Irr | Cased to bottom. Slotted pipe 818 ft. | |
| 801 | do | do | 1951 | 920 | 24,13, 10 | Ev,Ch | 40 | -- | -- | N | N | Casing: 24-in. to 240 ft, 13-in. from 240 to 298, 10-in. from 298 to 383 ft. Slotted pipe 705 ft. Abandoned rice irrigation well. | |
| 802 | do | do | 1960 | 919 | 20,12 | Ev,Ch | 43 | 113 | June 1960 | T,G | Irr | Casing: 20-in. to 303 ft, 12-in. from 303 ft to 607 ft. Slotted pipe 398 ft to bottom. Gravel-walled. Reported pumping level 175 ft at 2,896 gpm, June 1960. | |
| 02-101 | Sidney A. Smith well 1 | Gulf Oil Co. | 1948 | 5,050 | -- | -- | 18 | -- | -- | -- | -- | Oil test. ^{2/} | |
| 202 | Loftis Bros. | F. Gay | 1942 | 190 | 4 | Ch | 17 | + | 1942 | N | N | Screen from 170 ft to bottom. Plugged and abandoned. Formerly supplied water for drilling rig. | |
| * | 601 | Devers Canal Co. | Paul Acheson | 1940 | 176 | 3 | Ch | 12 | 3.6 7.5 | Dec. 8, 1944 Apr. 14, 1954 | J,E,1/2 | D | Screen from 160 ft to bottom. Temp. 70°F. ^{3/} |
| * | 603 | Lacy Armour well 1 | John W. Mecom | 1956 | 11,570 | -- | -- | 10 | -- | -- | -- | -- | Oil test. ^{2/} |
| * | 604 | Robert D. Jones | Leyne-Texas Co. | 1963 | 491 | 12 | Ch | 15 | 38 | May 1963 | T,E,25 | P | Slotted pipe from 230 to 260 ft, and 395 to 480 ft. ^{1/} |
| * | 701 | -- League | The Texas Co. | 1926 | 1,428 | -- | -- | 25 | -- | -- | -- | -- | Shallow test well. ^{1/} |
| * | 03-101 | Liberty County | -- Waggoner | 1910 | 825 | 8 | Ev | 14 | -- | -- | N | N | Casing filled with rocks. No flow in 1965. Reported flow in 1944, 50 gpm. Originally drilled to 1,500 ft; plugged back to 825 ft. |
| 103 | Bill Norman | Pitre Water Well Drilling Co. | 1944 | 275 | 4 | Ch | 25 | 10.7 20.0 | June 16, 1945 Apr. 7, 1953 | J,E | S | Screen from 261 to 273 ft. ^{3/} | |
| 201 | H. E. LaCour | Katy Drilling Co. | 1956 | 500 | 20,12 | Ev,Ch | 57 | 48 | 1956 | T,G | Irr | Cased to 250 ft. Gravel-walled. | |
| 202 | Mrs. M. R. Groesbeck | Wilson Broach Co. | 1956 | 8,592 | -- | -- | 48 | -- | -- | -- | -- | Oil test. ^{2/} | |
| 301 | D. I. Moss | Katy Drilling Co. | 1956 | 490 | 20,12 | Ch | 53 | 100 | 1956 | T,G | Irr | Casing: 20-in. to 258 ft, 12-in. from 258 ft to 232 ft. Screen 364 ft. | |
| 302 | Devers Canal Co. | do | 1956 | 487 | 20 | Ch | 51 | -- | -- | T,G | Irr | Supplies water to sulfur company. Originally drilled to 525 ft; plugged back to 487 ft. | |

See footnotes at end of table.

Table 5.-Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date completed | Depth of well (ft) | Diameter of well (in.) | Water-bearing unit | Altitude of land surface (ft) | Below land surface datum (ft) | Water level | Date of measurement | Method of lift | Use of water | Remarks |
|---------------|-------------------------------|------------------------------------|----------------|--------------------|------------------------|--------------------|-------------------------------|-------------------------------|--------------------------|---------------------|----------------|--------------|--|
| *SB-64-03-303 | Howard LaCour | Katy Drilling Co. | 1956 | 496 | 20,12 | Ch | 48 | 38,7 30,9 | Mar. 25, Mar. 1, | 1965 1966 | T, G | Irr | Cased to bottom. Screen 423 ft. Reported discharge 990 gpm, Aug. 1965. Temp. 72°F. |
| * | 401 Shiloh Baptist Church | Pitare Water Well Drilling Co. | 1940 | 333 | 2 | Ch | 32 | 4 | June | 1940 | J, E, 1/2 | D | Screen from 306 to 317 ft. ^{1/2} |
| 402 | Liberty Investment Co. | The Pure Oil Co. | 1929 | 5,766 | -- | 25 | -- | -- | -- | -- | -- | -- | Abandoned oil test. ^{2/} |
| 701 | R. H. Manger | Hinkle Drilling Co. | 1950 | 6,029 | -- | 24 | -- | -- | -- | -- | -- | -- | Oil test. ^{2/} |
| 702 | -- Kyle well 3 | U. S. Oil of Texas-Louisiana | 1959 | 1,046 | -- | 25 | -- | -- | -- | -- | -- | -- | Do. |
| 703 | -- Cowan well 1 | U. M. Harrison | 1958 | 6,018 | -- | 27 | -- | -- | -- | -- | -- | -- | Do. |
| * | 801 Texas Gulf Sulfur Co. | Pitare Water Well Drilling Co., do | 1957 | 68 | 10,4 | Ch | 37 | 21 | Feb. | 1957 | T, E, 15 | Ind | Reported discharge 100 gpm. Screen 21 ft. of 4-in. Temp. 72°F. |
| * | 802 | do | 1957 | 68 | 8 | Ch | 37 | 21 | Mar. | 1959 | T, E, 3 | D | Used as standby well. Screen 22 ft. of 8-in. Temp. 71°F. |
| 803 | R. S. Sterling well 11 | Humble Oil & Refining Co. | 1950 | 6,700 | -- | 33 | -- | -- | -- | -- | -- | -- | Oil test. ^{2/} |
| 804 | Martha Carter | U. M. Harrison | 1958 | 1,022 | -- | 42 | -- | -- | -- | -- | -- | -- | Do. |
| 901 | Robertson-McDonald Lumber Co. | Humble Oil & Refining Co. | 1957 | 17,952 | -- | 33 | -- | -- | -- | -- | -- | -- | Do. |
| * | 04-101 J. D. Sellers | Pitare Water Well Drilling Co. | 1938 | 406 | 4 | Ch | 43 | 20,6 26,2 | Feb. 20, Apr. 7, 1950 | 1948 1950 | J, E, 1/4 | D, S | Screen from 384 to 404 ft. Formerly supplied water for pump station. (Texas Pipeline Co.) ^{1/2} |
| 103 | Autry Kelley well 1 | Lawrence Kelley | 1956 | 7,951 | -- | 44 | -- | -- | -- | -- | -- | -- | Oil test. ^{2/} |
| 503 | J. M. Rich well 1 | Humble Oil & Refining Co. | 1947 | 8,501 | -- | 39 | -- | -- | -- | -- | -- | -- | Do. |
| 702 | Gulf Oil Co. | Gulf Oil Corp. | 1935 | 225 | 7 | Ch | 34 | -- | -- | -- | -- | N | Screen from 182 to 205 ft. Formerly used for drilling rig. Abandoned. |
| 704 | Dan J. Harrison, Jr. | Dan J. Harrison, Jr. | 1955 | 1,452 | -- | 36 | -- | -- | -- | -- | -- | -- | Oil test. ^{2/} |
| 705 | -- Boyt well 27 | Gulf Oil Corp. | 1938 | 2,946 | -- | 33 | -- | -- | -- | -- | -- | -- | Do. |
| 706 | -- Boyt well 28 | do | 1939 | 2,961 | -- | 33 | -- | -- | -- | -- | -- | -- | Do. |
| 707 | -- Stinger well 2 | Hankamer Oil Co. | 1938 | 2,641 | -- | 20 | -- | -- | -- | -- | -- | -- | Do. |
| 708 | B. Hankamer well 1 | Scurlock Oil Co. | 1948 | 3,800 | -- | 34 | -- | -- | -- | -- | -- | -- | Do. |

See footnotes at end of table.

Table 5.--Records of wells and springs in Liberty County--Continued

| Well | Owner | Driller | Date com- plet- ed | Depth of well (ft) | Diam- eter of well (in.) | Water- bearing unit | Altitude of land surface (ft) | Water level | | Method of lift | Use of water | Remarks |
|--------------|-------------------------|------------------------------|--------------------|--------------------|--------------------------|---------------------|-------------------------------|-------------------------------|---------------------|----------------|--------------|-------------------------|
| | | | | | | | | Below land surface datum (ft) | Date of measurement | | | |
| SB-64-04-801 | Crow & Jacobs well 1 | Robert E. Rew | 1939 | 3,400 | -- | -- | 40 | -- | -- | -- | -- | Oil test. ^{2/} |
| 802 | E. B. Pickett well 1 | Humble Oil & Refining Co. | 1951 | 7,262 | -- | -- | 35 | -- | -- | -- | -- | Do. |
| 05-701 | -- Boyt | do | 1944 | 9,183 | -- | -- | 38 | -- | -- | -- | -- | Do. |

* For analyses of water from wells and springs in Liberty County see Table 8.

^{1/} For drillers' logs of wells in Liberty County see Table 6.

^{2/} Electric logs in files of Texas Water Development Board or U.S. Geological Survey, Austin, Texas, files.

^{3/} For water levels in wells in Liberty County see Table 7.

Table 6.--Drillers' logs of wells in Liberty County

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-60-48-104

Owner: Gulf, Colorado & Santa Fe Ry., Co. Driller: --

| | | | | | |
|----------------------|-----|-----|----------------------|-----|-------|
| Surface----- | 44 | 44 | Shale ----- | 33 | 750 |
| Sand----- | 62 | 106 | Sand ----- | 20 | 770 |
| Clay ----- | 13 | 119 | Gumbo ----- | 24 | 794 |
| Sand and gravel ---- | 27 | 146 | Sand ----- | 45 | 839 |
| Rock ----- | 3 | 149 | Shale ----- | 66 | 905 |
| Clay ----- | 66 | 215 | Sand, loose ----- | 13 | 918 |
| Sand, fine ----- | 24 | 239 | Gumbo ----- | 3 | 921 |
| Shale ----- | 34 | 273 | Sand ----- | 9 | 930 |
| Sand and gravel ---- | 55 | 328 | Shale ----- | 15 | 945 |
| Gumbo ----- | 137 | 465 | Rock ----- | 12 | 957 |
| Shale ----- | 35 | 500 | Gumbo ----- | 8 | 965 |
| Rock ----- | 1 | 501 | Shale ----- | 6 | 971 |
| Gumbo ----- | 26 | 527 | Gumbo ----- | 9 | 980 |
| Gumbo and boulders - | 40 | 567 | Shale ----- | 127 | 1,107 |
| Shale, soft ----- | 23 | 590 | Sand, packed, fine - | 21 | 1,128 |
| Boulders ----- | 5 | 595 | Gumbo ----- | 42 | 1,170 |
| Shale ----- | 7 | 602 | Shale, streaks ----- | 10 | 1,180 |
| Boulders ----- | 9 | 611 | Sand ----- | 25 | 1,205 |
| Rock, ledges ----- | 13 | 624 | Boulders ----- | 2 | 1,207 |
| Gumbo ----- | 68 | 692 | Sand and gravel ---- | 32 | 1,239 |
| Sand, fine ----- | 18 | 710 | Gravel ----- | 6 | 1,245 |
| Gumbo ----- | 7 | 717 | Gumbo ----- | 5 | 1,250 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|---------------------------|---------------------|-----------------|---------------------|---------------------|-----------------|
| Well 60-48-104--Continued | | | | | |
| Sand ----- | 30 | 1,280 | Sand ----- | 35 | 1,451 |
| Gumbo ----- | 5 | 1,285 | Shale streaks ----- | 13 | 1,464 |
| Sand ----- | 52 | 1,337 | Sand ----- | 14 | 1,478 |
| Shale and boulders - | 58 | 1,395 | Shale ----- | 34 | 1,512 |
| Sand, tight ----- | 21 | 1,416 | | | |

Well SB-60-48-802

Owner: Black Gold Petroleum Co. Driller: Layne-Texas Co.

| | | | | | |
|---------------------|----|----|----------------------|----|----|
| Sand ----- | 10 | 10 | Sand and gravel ---- | 21 | 88 |
| Clay ----- | 33 | 43 | Clay ----- | 7 | 95 |
| Rock and sand ----- | 24 | 67 | | | |

Well SB-60-56-201

Owner: Jordan Campbell. Driller: Humble Oil & Refining Co.

| | | | | | |
|---------------------|----|-----|----------------------|----|-----|
| Sand, surface ----- | 12 | 12 | Shale ----- | 11 | 248 |
| Clay, sandy ----- | 13 | 25 | Sand and gravel ---- | 13 | 261 |
| Sand ----- | 13 | 38 | Shale, sticky ----- | 22 | 283 |
| Clay ----- | 22 | 60 | Shale ----- | 24 | 307 |
| Sand ----- | 26 | 86 | Gumbo ----- | 5 | 312 |
| Clay ----- | 5 | 91 | Shale, sticky ----- | 17 | 329 |
| Gumbo ----- | 13 | 104 | Sand and gravel ---- | 44 | 373 |
| Shale ----- | 27 | 131 | Rock ----- | 3 | 376 |
| Sand ----- | 42 | 173 | Gumbo ----- | 40 | 416 |
| Gravel ----- | 64 | 237 | | | |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|-------------------------------|---------------------|-----------------|----------------------|---------------------|-----------------|
| Well SB-60-56-201--Continued | | | | | |
| Gumbo, lime and sand ----- | 17 | 433 | Gumbo ----- | 27 | 935 |
| Gumbo and lime ----- | 32 | 465 | Sand ----- | 9 | 944 |
| Sand and boulders -- | 21 | 486 | Gumbo ----- | 43 | 987 |
| Sand, hard ----- | 5 | 491 | Sand ----- | 3 | 990 |
| Gumbo and lime ----- | 20 | 511 | Shale, sandy ----- | 26 | 1,016 |
| Lime, hard ----- | 4 | 515 | Gumbo ----- | 44 | 1,060 |
| Sand and boulders -- | 15 | 530 | Rock ----- | 1 | 1,061 |
| Lime, hard ----- | 4 | 534 | Gumbo ----- | 9 | 1,070 |
| Gumbo and lime ----- | 47 | 581 | Sand ----- | 40 | 1,110 |
| Sand and boulders -- | 19 | 600 | Gumbo ----- | 34 | 1,144 |
| Sand, hard, brown -- | 12 | 612 | Sand and boulders -- | 16 | 1,160 |
| Sand ----- | 8 | 620 | Gumbo ----- | 32 | 1,192 |
| Gumbo and lime ----- | 108 | 728 | Shale, sandy, hard - | 3 | 1,195 |
| Sand ----- | 3 | 731 | Gumbo and boulders - | 9 | 1,204 |
| Sand and boulders -- | 28 | 759 | Gumbo ----- | 9 | 1,213 |
| Gumbo and lime ----- | 41 | 800 | Boulders ----- | 3 | 1,216 |
| Shale and lime ----- | 18 | 818 | Sand ----- | 24 | 1,240 |
| Shale, tough, sticky ----- | 18 | 836 | Shale, sandy, hard - | 5 | 1,245 |
| Rock ----- | 1 | 837 | Gumbo ----- | 121 | 1,366 |
| Shale, sticky ----- | 16 | 853 | Sand ----- | 2 | 1,368 |
| Gumbo ----- | 54 | 907 | Shale, sandy ----- | 17 | 1,385 |
| Rock ----- | 1 | 908 | Gumbo ----- | 15 | 1,400 |
| | | | Sand ----- | 3 | 1,403 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|-------------------------------|---------------------|-----------------|--------------------------------------|---------------------|-----------------|
| Well SB-60-56-201--Continued | | | | | |
| Shale, sandy, soft - | 16 | 1,419 | Shale and lime ----- | 15 | 1,672 |
| Gumbo ----- | 62 | 1,481 | Sand and shale ----- | 4 | 1,676 |
| Sand ----- | 21 | 1,502 | Sand, hard, and shale ----- | 10 | 1,686 |
| Gumbo ----- | 39 | 1,541 | Shale and lime ----- | 18 | 1,704 |
| Shale, sandy ----- | 40 | 1,581 | Gumbo ----- | 4 | 1,708 |
| Rock ----- | 2 | 1,583 | Gumbo and lime ----- | 47 | 1,755 |
| Gumbo ----- | 11 | 1,594 | Gumbo, lime, sand and boulders ----- | 62 | 1,817 |
| Shale, sticky, and lime ----- | 11 | 1,605 | Sand ----- | 52 | 1,869 |
| Sand, packed ----- | 5 | 1,610 | Sand and boulders -- | 16 | 1,885 |
| Sand ----- | 10 | 1,620 | Gumbo ----- | 7 | 1,892 |
| Shale, sticky ----- | 6 | 1,626 | Gumbo, tough ----- | 55 | 1,947 |
| Gumbo and lime ----- | 2 | 1,628 | Gumbo ----- | 2 | 1,949 |
| Shale and lime ----- | 1 | 1,629 | Shale, sandy and lime ----- | 32 | 1,981 |
| Shale, sticky, and lime ----- | 28 | 1,657 | Gumbo ----- | 19 | 2,000 |

Well SB-60-64-601

Owner: E. J. Stoesser well 1. Driller: Layne-Texas Co.

| | | | | | |
|---------------------------|----|-----|--------------------|----|-----|
| Soil, sandy ----- | 3 | 3 | Sand (good) ----- | 31 | 164 |
| Clay ----- | 17 | 20 | Clay ----- | 22 | 186 |
| Clay, sandy ----- | 21 | 41 | Shale, sandy ----- | 16 | 202 |
| Clay and sandy clay ----- | 92 | 133 | Shale ----- | 10 | 212 |
| | | | Shale, sandy ----- | 10 | 222 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|------------------------------|---------------------|-----------------|-------------------------------|---------------------|-----------------|
| Well SB-60-64-601--Continued | | | | | |
| Shale ----- | 22 | 244 | Shale, sandy ----- | 5 | 585 |
| Sand (good) ----- | 19 | 263 | Shale ----- | 13 | 598 |
| Shale, sandy ----- | 13 | 276 | Sand (good) ----- | 12 | 610 |
| Sand (good) ----- | 58 | 334 | Shale, sticky ----- | 14 | 624 |
| Shale ----- | 7 | 341 | Shale, sandy ----- | 6 | 630 |
| Shale and sand layers ----- | 22 | 363 | Shale, sticky ----- | 15 | 645 |
| Sand (good) ----- | 31 | 394 | Shale, sandy ----- | 5 | 650 |
| Shale, sandy, hard - | 20 | 414 | Sand (good) ----- | 37 | 687 |
| Shale ----- | 8 | 422 | Shale ----- | 13 | 700 |
| Sand (good) ----- | 87 | 509 | Sand ----- | 55 | 755 |
| Shale, hard ----- | 6 | 515 | Sand and gravel ---- | 27 | 782 |
| Sand (good) ----- | 17 | 532 | Sand, fine and boulders ----- | 20 | 802 |
| Shale ----- | 3 | 535 | Shale, hard ----- | 6 | 808 |
| Sand (good) ----- | 45 | 580 | | | |

Well SB-61-33-605

Owner: C. M. Lusk. Driller: Noack Drilling Co.

| | | | | | |
|----------------------|----|----|----------------------------------|----|----|
| Topsoil ----- | 2 | 2 | Clay, sand streaks - | 5 | 40 |
| Clay, red ----- | 2 | 4 | Clay, white ----- | 12 | 52 |
| Sand ----- | 14 | 18 | Sand, coarse, gravel, fine ----- | 19 | 71 |
| Sand and gravel ---- | 6 | 24 | Clay ----- | 1 | 72 |
| Clay, white ----- | 11 | 35 | | | |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|------------------------------|---------------------|-----------------|------------------------------------|---------------------|-----------------|
| Well SB-61-33-605--Continued | | | | | |
| Sand, coarse ----- | 7 | 79 | Sand, rock, and lime ----- | 4 | 143 |
| Clay, white ----- | 12 | 91 | Sand, coarse ----- | 12 | 155 |
| Sand, coarse ----- | 29 | 120 | Clay, jointed, red and white ----- | 107 | 262 |
| Clay, white ----- | 10 | 130 | | | |
| Sand, coarse ----- | 9 | 139 | | | |

Well SB-61-33-705

Owner: Mrs. W. P. Johnston. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|---------------------------------------|----|-----|----------------------------------|----|-----|
| Sand, hard, red to pink ----- | 38 | 38 | Sand and lime lenses ----- | 18 | 255 |
| Clay, sandy, red --- | 21 | 59 | Rock, lime ----- | 2 | 257 |
| Sand, brown ----- | 21 | 80 | Sand ----- | 1 | 258 |
| Gravel and clay, sand streaks ----- | 18 | 98 | Rock, lime ----- | 2 | 260 |
| Sand ----- | 19 | 117 | Sand ----- | 8 | 268 |
| Clay, sandy ----- | 7 | 124 | Rock and lime ----- | 6 | 274 |
| Gravel ----- | 2 | 126 | Sand, hard and soft ----- | 32 | 306 |
| Clay, sandy ----- | 3 | 129 | Clay, brown, red and white ----- | 48 | 354 |
| Gravel ----- | 11 | 140 | Sand ----- | 2 | 356 |
| Clay, sandy, white - | 9 | 149 | Clay ----- | 44 | 400 |
| Clay, tough, cream-colored ---- | 24 | 173 | Rock, and sand, brown ----- | 4 | 404 |
| Rock ----- | 1 | 174 | Sand, gray ----- | 26 | 430 |
| Sand and gravel ---- | 16 | 190 | Clay ----- | 4 | 434 |
| Clay, hard, brown, red and white ---- | 47 | 237 | Clay, sandy ----- | 6 | 440 |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-33-706

Owner: Roy Morton. Driller: Layne-Texas Co.

| | | | | | |
|---|----|----|---|----|-----|
| Soil, sandy ----- | 2 | 2 | Clay ----- | 26 | 96 |
| Clay, red ----- | 10 | 12 | Sand, gray (good) -- | 29 | 125 |
| Sand, fine, red and clay streaks ----- | 30 | 42 | Clay ----- | 30 | 155 |
| Sand, white (good) - | 18 | 60 | Sand, fine, broken, brown, and clay -- | 21 | 176 |
| Sand, white, and clay streaks ----- | 10 | 70 | Sand and gravel, fine ----- | 48 | 224 |
| | | | Clay ----- | 2 | 226 |

Well SB-61-33-802

Owner: Lewis Wells, Jr. Driller: A. & L. Pump & Well Service.

| | | | | | |
|----------------------|----|----|----------------------|----|----|
| Surface ----- | 5 | 5 | Clay, white ----- | 8 | 38 |
| Clay, sandy, red --- | 25 | 30 | Sand and gravel ---- | 10 | 48 |

Well SB-61-34-401

Owner: Gulf, Colorado & Santa Fe Ry. Co. Driller: Homer Wright.

| | | | | | |
|----------------------------------|----|-----|----------------------|----|-----|
| Soil, surface ----- | 7 | 7 | Shale ----- | 21 | 169 |
| Clay, sandy, and gravel ----- | 39 | 46 | Sand and boulders -- | 63 | 232 |
| Clay, red ----- | 12 | 58 | Shale ----- | 29 | 261 |
| Sand and clay ----- | 32 | 90 | Sand ----- | 24 | 285 |
| Sand, very fine ---- | 34 | 124 | Gumbo ----- | 17 | 302 |
| Shale ----- | 17 | 141 | Sand ----- | 40 | 342 |
| Sand, hard ----- | 7 | 148 | Shale ----- | 43 | 385 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-34-401--Continued

| | | | | | |
|----------------------|----|-----|-----------------------------|----|-----|
| Sand, very hard ---- | 20 | 405 | Sand, salt and pepper ----- | 64 | 596 |
| Gumbo ----- | 67 | 472 | Sand, rough ----- | 14 | 610 |
| Sand, hard ----- | 12 | 484 | Shale ----- | 35 | 645 |
| Gumbo, hard ----- | 8 | 492 | | | |
| Sand, hard ----- | 40 | 532 | | | |

Well SB-61-34-503

Owner: T. B. Allen & Co. Driller: R. B. Melat.

| | | | | | |
|-----------------------|----|-----|-----------------------|-----|-----|
| Clay ----- | 10 | 10 | Gravel ----- | 19 | 210 |
| Sand ----- | 70 | 80 | Rock and sand ----- | 30 | 240 |
| Clay and gravel ---- | 20 | 100 | Clay and gravel ---- | 160 | 400 |
| Sand ----- | 40 | 140 | Sand ----- | 20 | 420 |
| Clay and gravel ---- | 20 | 160 | Clay and gravel ---- | 50 | 470 |
| Sand ----- | 20 | 180 | Rock, sand layers --- | 12 | 482 |
| Rock ----- | 2 | 182 | Shale ----- | 38 | 520 |
| Clay and gravel ----- | 6 | 188 | Clay and gravel ----- | 30 | 550 |
| Rock ----- | 3 | 191 | Sand, water ----- | 109 | 659 |

Well SB-61-34-801

Owner: Texas Construction Material Co. Driller: -- Jackson.

| | | | | | |
|----------------------|----|----|----------------------|----|-----|
| Clay and sand ----- | 24 | 24 | Sand and gravel ---- | 72 | 130 |
| Sand and gravel ---- | 26 | 50 | Clay and gravel ---- | 16 | 146 |
| Clay ----- | 8 | 58 | Sand and gravel ---- | 26 | 172 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|------------------------------|---------------------|-----------------|--------------------------------|---------------------|-----------------|
| Well SB-61-34-801--Continued | | | | | |
| Clay, hard ----- | 68 | 240 | Sand and gravel ----- | 20 | 416 |
| Sand and gravel ---- | 12 | 252 | Sand ----- | 26 | 442 |
| Clay ----- | 26 | 278 | Sand and gravel ----- | 62 | 504 |
| Sand and gravel ---- | 17 | 295 | Shale ----- | 11 | 515 |
| Gravel ----- | 52 | 347 | Sand, clay, and boulders ----- | 15 | 530 |
| Shale ----- | 3 | 350 | Shale ----- | 102 | 632 |
| Gravel ----- | 29 | 379 | Sand and gravel ----- | 96 | 728 |
| Rock ----- | 1 | 380 | Shale and gumbo ----- | 21 | 749 |
| Sand, clean ----- | 11 | 391 | Sand and gravel ----- | 59 | 808 |
| Clay and gravel ---- | 5 | 396 | | | |

Well SB-61-41-403

Owner: Dovall Ranch. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|--------------------|----|-----|-----------------------|----|-----|
| Clay ----- | 69 | 69 | Sand and gravel ----- | 9 | 140 |
| Sand ----- | 10 | 79 | Clay ----- | 11 | 151 |
| Clay ----- | 5 | 84 | Clay, sandy ----- | 6 | 157 |
| Shale ----- | 13 | 97 | Sand ----- | 3 | 160 |
| Sand ----- | 33 | 130 | Clay ----- | 47 | 207 |
| Clay, sticky ----- | 1 | 131 | Sand ----- | 77 | 284 |

Well SB-61-41-501

Owner: W. C. Leasure. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|------------|---|----|------------------|----|----|
| Sand ----- | 3 | 3 | Sand ----- | 6 | 18 |
| Clay ----- | 9 | 12 | Clay, hard ----- | 49 | 67 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-41-501--Continued

| | | | | | |
|--|----|-----|----------------------|----|-----|
| Sand, red ----- | 29 | 96 | Clay, hard ----- | 72 | 293 |
| Clay, hard ----- | 21 | 117 | Sand and gravel ---- | 12 | 305 |
| Sand, red ----- | 6 | 123 | Clay, hard ----- | 2 | 307 |
| Clay, hard ----- | 40 | 163 | Sand and gravel ---- | 4 | 311 |
| Sand ----- | 23 | 186 | Clay, hard ----- | 10 | 321 |
| Clay, hard ----- | 12 | 198 | Sand and gravel ---- | 15 | 336 |
| Sand ----- | 6 | 204 | Clay, hard ----- | 10 | 346 |
| Clay, hard ----- | 2 | 206 | Gravel, medium ----- | 5 | 351 |
| Sand, coarse, red, and gravel ----- | 15 | 221 | Clay ----- | 17 | 368 |

Well SB-61-42-402

Owner: A. G. Lesterjette. Driller: --

| | | | | | |
|----------------------------------|-----|-----|------------------------------------|-----|-----|
| Soil ----- | 12 | 12 | Sand and shale ---- | 150 | 570 |
| Shale and sand ---- | 173 | 185 | Gumbo ----- | 5 | 575 |
| Gumbo, blue ----- | 100 | 285 | Sand, and oil (blow- out) ----- | 18 | 593 |
| Sand, packed, and shale ----- | 95 | 380 | Gumbo ----- | 47 | 640 |
| Gumbo (showing oil) ----- | 40 | 420 | Sand with salt water ----- | 22 | 662 |

Well SB-61-50-604

Owner: Humble Oil & Refining Co. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|------------|----|----|----------------------|----|----|
| Sand ----- | 2 | 2 | Sand and gravel ---- | 26 | 38 |
| Clay ----- | 10 | 12 | Clay ----- | 4 | 42 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Thickness (feet) | Depth (feet) | Thickness (feet) | Depth (feet) |
|---------------------|-----------------|---------------------|-----------------|
|---------------------|-----------------|---------------------|-----------------|

Well SB-61-50-604--Continued

| | | | | | |
|----------------------------|----|-----|-----------------------|----|-----|
| Clay, sandy ----- | 56 | 98 | Sand ----- | 25 | 176 |
| Sand ----- | 18 | 116 | Clay ----- | 13 | 189 |
| Sand lenses and clay ----- | 35 | 151 | Sand and gravel ----- | 30 | 219 |
| | | | Clay ----- | 11 | 230 |

Well SB-61-50-801

Owner: James R. Nowery. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-----------------------------|----|-----|-------------------------------|----|-----|
| Sand and gravel ---- | 36 | 36 | Gravel ----- | 5 | 207 |
| Clay ----- | 60 | 96 | Clay ----- | 13 | 220 |
| Sand, fine ----- | 22 | 118 | Gravel and clay streaks ----- | 13 | 233 |
| Clay ----- | 43 | 161 | Clay ----- | 8 | 241 |
| Sand, fine ----- | 35 | 196 | Sand, fine ----- | 13 | 254 |
| Clay and sand streaks ----- | 6 | 202 | | | |

Well SB-61-51-107

Owner: Ethel Cleveland. Driller: West Water Well Service.

| | | | | | |
|------------------|----|----|------------------------|----|----|
| Topsoil ----- | 1 | 1 | Sand, fine, blue ----- | 11 | 74 |
| Clay, red ----- | 49 | 50 | Sand and gravel ----- | 16 | 90 |
| Clay, blue ----- | 13 | 63 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Soil group | Thickness (feet) | Depth (feet) | Soil group | Thickness (feet) | Depth (feet) |
|---------------|---------------------|-----------------|---------------|---------------------|-----------------|
|---------------|---------------------|-----------------|---------------|---------------------|-----------------|

Well SB-61-51-709

Owner: W. A. Lacy. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------------------|----|----|-------------------------------|----|----|
| Sand, surface, black ----- | 6 | 6 | Clay, blue ----- | 7 | 65 |
| Clay, hard, red ----- | 9 | 15 | Sand and gravel ----- | 23 | 88 |
| Clay, hard, white -- | 7 | 22 | Clay and sand, brown ----- | 6 | 94 |
| Clay, hard, brown -- | 36 | 58 | | | |

Well SB-61-51-913

Owner: Hull Fresh Water Supply District. Driller: Layne-Texas Co.

| | | | | | |
|--|-----|-----|--|----|-----|
| Soil, sandy ----- | 2 | 2 | Sand ----- | 33 | 521 |
| Clay, white ----- | 40 | 42 | Shale and sand layers ----- | 31 | 552 |
| Clay, sandy, and layers of wood --- | 20 | 62 | Shale ----- | 31 | 583 |
| Shale, blue, sand and gravel ----- | 43 | 105 | Shale, hard ----- | 72 | 655 |
| Shale, hard ----- | 19 | 124 | Shale, hard and shale streaks ---- | 21 | 676 |
| Shale, sandy and shale ----- | 271 | 395 | Sand and shale, broken ----- | 31 | 707 |
| Sand, white ----- | 36 | 431 | Shale ----- | 3 | 710 |
| Shale ----- | 2 | 433 | Sand and shale breaks ----- | 28 | 738 |
| Sand and shale, sandy ----- | 39 | 472 | Shale, sandy and shale streaks ---- | 22 | 760 |
| Shale, sandy ----- | 16 | 488 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Soil or rock type | Thickness (feet) | Depth (feet) | Soil or rock type | Thickness (feet) | Depth (feet) |
|-------------------|---------------------|-----------------|-------------------|---------------------|-----------------|
|-------------------|---------------------|-----------------|-------------------|---------------------|-----------------|

Well SB-61-51-914

Owner: Mrs. J. M. Phillips. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|----------------------|----|----|----------------------|----|----|
| Surface ----- | 4 | 4 | Clay, sandy, brown - | 26 | 48 |
| Clay, hard, white -- | 2 | 6 | Sand, coarse ----- | 19 | 67 |
| Clay, hard, red ---- | 6 | 12 | Clay, hard, blue --- | 7 | 74 |
| Clay, hard, brown -- | 10 | 22 | | | |

Well SB-61-57-201

Owner: D. A. Reidland. Driller: Layne-Texas Co.

| | | | | | |
|---------------------------|----|-----|-------------------|----|-----|
| Sand, soil and clay ----- | 56 | 56 | Sand ----- | 22 | 462 |
| Clay ----- | 64 | 120 | Clay ----- | 10 | 472 |
| Clay, sandy ----- | 20 | 140 | Sand ----- | 68 | 540 |
| Clay ----- | 10 | 150 | Clay ----- | 12 | 552 |
| Sand ----- | 30 | 180 | Sand ----- | 14 | 566 |
| Clay, sandy ----- | 10 | 190 | Clay, sandy ----- | 16 | 582 |
| Clay, sandy ----- | 15 | 205 | Clay ----- | 12 | 594 |
| Sand ----- | 23 | 228 | Sand ----- | 24 | 618 |
| Clay, sandy ----- | 40 | 268 | Clay ----- | 7 | 625 |
| Clay ----- | 36 | 304 | Sand ----- | 85 | 710 |
| Clay, sandy ----- | 14 | 318 | Clay ----- | 15 | 725 |
| Clay ----- | 42 | 360 | Clay, sandy ----- | 5 | 730 |
| Clay, sandy ----- | 10 | 370 | Sand ----- | 42 | 772 |
| Sand ----- | 30 | 400 | Clay ----- | 5 | 777 |
| Clay ----- | 40 | 440 | Sand ----- | 30 | 807 |
| | | | Clay ----- | 5 | 812 |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Geological unit | Thickness (feet) | Depth (feet) | Geological unit | Thickness (feet) | Depth (feet) |
|-----------------|---------------------|-----------------|-----------------|---------------------|-----------------|
|-----------------|---------------------|-----------------|-----------------|---------------------|-----------------|

Well SB-61-57-412

Owner: Sun Oil Co. Driller: --

| | | | | | |
|--------------------------------|-----|-----|-------------------------------|----|-----|
| Clay, surface, yellow ----- | 20 | 20 | Shale ----- | 4 | 601 |
| Shale, blue ----- | 13 | 33 | Sand ----- | 12 | 613 |
| Sand, white ----- | 20 | 53 | Gumbo ----- | 8 | 621 |
| Sand and clay ----- | 105 | 158 | Shale, rock and clay ----- | 39 | 660 |
| Quicksand, white --- | 13 | 171 | Shale ----- | 12 | 672 |
| Shale, blue ----- | 9 | 180 | Rock, hard ----- | 1 | 673 |
| Sand, white ----- | 6 | 186 | Gumbo ----- | 6 | 679 |
| Shale, blue ----- | 7 | 193 | Sand ----- | 26 | 705 |
| Gumbo ----- | 47 | 240 | Shale ----- | 25 | 730 |
| Sand and gravel ---- | 85 | 325 | Gumbo ----- | 65 | 795 |
| Gumbo ----- | 22 | 347 | Rock ----- | 4 | 799 |
| Sand, putty sand --- | 11 | 358 | Gumbo ----- | 7 | 806 |
| Sand and gravel ---- | 79 | 437 | Shale ----- | 12 | 818 |
| Shale ----- | 6 | 443 | Gumbo ----- | 27 | 845 |
| Sand ----- | 22 | 465 | Clay, yellow ----- | 10 | 855 |
| Gumbo ----- | 16 | 481 | Gumbo ----- | 20 | 875 |
| Sand ----- | 15 | 496 | Clay ----- | 9 | 884 |
| Gumbo ----- | 17 | 513 | Gumbo ----- | 6 | 890 |
| Sand, putty sand --- | 14 | 527 | Sand, putty sand --- | 5 | 895 |
| Gumbo ----- | 38 | 565 | Limestone ----- | 1 | 896 |
| Sand, putty sand --- | 32 | 597 | Sand, putty sand --- | 8 | 904 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|------------------------------------|---------------------|-----------------|---|---------------------|-----------------|
| Well SB-61-57-412--Continued | | | | | |
| Sand, coarse ----- | 6 | 910 | Shale ----- | 86 | 1,392 |
| Gumbo ----- | 23 | 933 | Sand, hard ----- | 6 | 1,398 |
| Sand, putty sand --- | 9 | 942 | Shale ----- | 8 | 1,406 |
| Shale ----- | 16 | 958 | Gumbo ----- | 14 | 1,420 |
| Rock ----- | 3 | 961 | Shale ----- | 34 | 1,454 |
| Gumbo and shale ---- | 64 | 1,025 | Gumbo, tough ----- | 71 | 1,525 |
| Shale, rock and shale ----- | 11 | 1,036 | Shale, hard ----- | 27 | 1,552 |
| Rock ----- | 2 | 1,038 | Shale and gumbo ---- | 39 | 1,591 |
| Shale ----- | 22 | 1,060 | Shell, white, and rock ----- | 7 | 1,598 |
| Rock ----- | 5 | 1,065 | Shale, blue ----- | 32 | 1,630 |
| Gumbo and shale ---- | 47 | 1,112 | Rock, soft ----- | 2 | 1,632 |
| Shale and rock ----- | 12 | 1,124 | Gumbo ----- | 8 | 1,640 |
| Limestone ----- | 2 | 1,126 | Sand, hard, blue and brown strata of rock --- | 10 | 1,650 |
| Sand, putty sand --- | 7 | 1,133 | Gumbo, blue ----- | 30 | 1,680 |
| Limestone ----- | 1 | 1,134 | Rock ----- | 3 | 1,683 |
| Shale, blue and brown ----- | 33 | 1,167 | Shale ----- | 8 | 1,691 |
| No record ----- | 78 | 1,245 | Sandstone, hard ----- | 2 | 1,693 |
| Boulders (concretions) and rock -- | 4 | 1,249 | Shale, blue, and sand, blue ----- | 12 | 1,705 |
| Gumbo ----- | 41 | 1,290 | Shale, blue, rock strata ----- | 13 | 1,718 |
| Shale ----- | 5 | 1,295 | Shale, blue ----- | 45 | 1,763 |
| Rock and clay ----- | 4 | 1,299 | | | |
| Gumbo ----- | 7 | 1,306 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|---------------------|-----------------|--|---------------------|-----------------|
|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-57-501

Owner: C. B. Peterson. Driller: --

| | | | | | |
|-----------------------------------|-----|-------|-----------------------------------|-----|-------|
| Shale and clay ----- | 60 | 60 | Sand and boulders -- | 25 | 1,030 |
| Clay ----- | 283 | 343 | Shale and shell ----- | 20 | 1,050 |
| Gumbo, blue ----- | 64 | 407 | Sand and boulders -- | 12 | 1,062 |
| Sand and gravel ----- | 22 | 429 | Gumbo and sand ----- | 119 | 1,181 |
| Shale and sand ----- | 91 | 520 | Gumbo and gypsum --- | 4 | 1,185 |
| Sand, hard and gravel ----- | 35 | 555 | Sand, hard and boulders ----- | 29 | 1,214 |
| Shale and sand ----- | 40 | 595 | Shale and shell ----- | 10 | 1,224 |
| Gumbo and sand ----- | 115 | 710 | Gumbo ----- | 11 | 1,235 |
| Shale and sand ----- | 25 | 735 | Sand and boulders -- | 28 | 1,263 |
| Shale and gumbo ----- | 17 | 752 | Gumbo and gypsum --- | 15 | 1,278 |
| Rock ----- | 4 | 756 | Rock ----- | 2 | 1,280 |
| Sand, hard, and boulders ----- | 24 | 780 | Sand and pyrites --- | 32 | 1,312 |
| Gypsum and gumbo --- | 14 | 794 | Rock ----- | 3 | 1,315 |
| Sand and shale ----- | 46 | 840 | Shale ----- | 5 | 1,320 |
| Sand and rock ----- | 17 | 857 | Gumbo and gypsum --- | 42 | 1,362 |
| Gumbo ----- | 15 | 872 | Rock ----- | 3 | 1,365 |
| Sand, hard, and boulders ----- | 68 | 940 | Gumbo ----- | 23 | 1,388 |
| Rock ----- | 5 | 945 | Rock ----- | 3 | 1,391 |
| Gumbo ----- | 58 | 1,003 | Sand, hard, and boulders ----- | 8 | 1,399 |
| Rock ----- | 2 | 1,005 | Rock ----- | 16 | 1,415 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued.

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|----------------------------------|---------------------|-----------------|-------------------------------------|---------------------|-----------------|
| Well SB-61-57-501--Continued | | | | | |
| Gumbo and shale ---- | 101 | 1,516 | Gypsum, rock, and shale, blue -- | 15 | 2,280 |
| Sand, packed, hard - | 19 | 1,535 | Shale ----- | 50 | 2,330 |
| Shale and gumbo ---- | 75 | 1,610 | Gypsum ----- | 1 | 2,331 |
| Sand and boulders -- | 17 | 1,627 | Gumbo and shale ---- | 311 | 2,642 |
| Gumbo and boulders - | 46 | 1,673 | Shell, hard ----- | 38 | 2,680 |
| Sand, hard ----- | 21 | 1,694 | Gumbo and shale ---- | 70 | 2,750 |
| Rock ----- | 2 | 1,696 | Rock, and lime ----- | 18 | 2,768 |
| Sand and boulders -- | 6 | 1,702 | Gypsum and rock, sand ----- | 23 | 2,791 |
| Gumbo ----- | 16 | 1,718 | Gumbo and sand ----- | 35 | 2,826 |
| Sand, hard and boulders ----- | 14 | 1,732 | Rock, sand, hard --- | 21 | 2,847 |
| Gumbo ----- | 14 | 1,746 | Rock, hard ----- | 5 | 2,852 |
| Rock and lime ----- | 6 | 1,752 | Sand, hard ----- | 9 | 2,861 |
| Gumbo and sand ---- | 195 | 1,947 | Sand, hard, and boulders ----- | 27 | 2,888 |
| Sand and boulders -- | 4 | 1,951 | Rock and gypsum ----- | 3 | 2,891 |
| Gumbo ----- | 34 | 1,985 | Sand, hard ----- | 8 | 2,899 |
| Sand, hard and shale ----- | 39 | 2,024 | Rock, hard ----- | 3 | 2,902 |
| Gumbo and shale ---- | 121 | 2,145 | Rock and sand, hard ----- | 50 | 2,952 |
| Gypsum ----- | 2 | 2,147 | Gumbo ----- | 23 | 2,975 |
| Shale and gumbo ---- | 41 | 2,188 | Shale and sand ----- | 8 | 2,983 |
| Shale, hard, sticky ----- | 24 | 2,212 | Gumbo and shale ---- | 424 | 3,407 |
| Clay, shelly ----- | 53 | 2,265 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-58-504

Owner: City of Liberty well 2. Driller: A. E. Fawcett.

| | | | | | |
|---------------------|-----|-----|-----------------------|----|-----|
| Clay, surface ----- | 12 | 12 | Sand and gravel ----- | 14 | 320 |
| Sand ----- | 48 | 60 | Shale, sticky ----- | 40 | 360 |
| Clay ----- | 20 | 80 | Sand ----- | 16 | 376 |
| Sand ----- | 14 | 94 | Shale, sticky ----- | 69 | 445 |
| Clay ----- | 25 | 119 | Sand ----- | 10 | 455 |
| Sand and clay ----- | 27 | 146 | Sand and shale ----- | 10 | 465 |
| Shale, sticky ----- | 110 | 256 | Shale, sticky ----- | 58 | 523 |
| Sand ----- | 42 | 298 | Sand ----- | 39 | 562 |
| Shale, sticky ----- | 8 | 306 | Shale, sticky ----- | 3 | 565 |

Well SB-61-59-203

Owner: Liberty Ranch Co. Driller: --

| | | | | | |
|----------------------|-----|-----|-------------------|----|-----|
| Clay, yellow ----- | 120 | 120 | Gumbo ----- | 21 | 529 |
| Shale, soft ----- | 10 | 130 | Sand, fine ----- | 35 | 564 |
| Gumbo, light-blue -- | 110 | 240 | Gumbo ----- | 20 | 584 |
| Sand ----- | 20 | 260 | Sand ----- | 13 | 597 |
| Gumbo ----- | 60 | 320 | Gumbo ----- | 46 | 643 |
| Sand ----- | 120 | 440 | Sand, fine ----- | 19 | 662 |
| Gumbo ----- | 32 | 472 | Gumbo ----- | 5 | 667 |
| Sand ----- | 36 | 508 | Sand (good) ----- | 36 | 703 |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Material | Thickness (feet) | Depth (feet) | Material | Thickness (feet) | Depth (feet) |
|----------|---------------------|-----------------|----------|---------------------|-----------------|
|----------|---------------------|-----------------|----------|---------------------|-----------------|

Well SB-61-59-305

Owner: Joe Haines. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------|----|----|----------------------|----|-----|
| Clay, tough ----- | 53 | 53 | Clay, tough ----- | 5 | 84 |
| Sand ----- | 26 | 79 | Sand and gravel ---- | 22 | 106 |

Well SB-61-59-404

Owner: Our Mother of Mercy Church. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|------------------------------------|-----|-----|------------------------------------|-----|-----|
| Clay, hard, brown -- | 83 | 83 | Shale, hard, blue -- | 51 | 357 |
| Clay, sandy, brown - | 27 | 110 | Shale, hard, broken, gray ----- | 125 | 482 |
| Sand, powder, brown ----- | 18 | 128 | Sand, salt and pepper ----- | 14 | 496 |
| Clay, hard, gray --- | 110 | 238 | Shale, hard, blue -- | 9 | 505 |
| Shale, hard, blue -- | 21 | 259 | Shale, hard, broken, blue ----- | 28 | 533 |
| Shale, hard, red and blue ----- | 12 | 271 | Sand, hard, white -- | 31 | 564 |
| Sand, fine, brown -- | 9 | 280 | Shale, hard, blue -- | 7 | 571 |
| Shale, soft, blue -- | 26 | 306 | | | |

Well SB-61-59-506

Owner: W. H. Gilfillian. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|----------------------|----|-----|-------------------------------------|----|-----|
| Sand, surface ----- | 6 | 6 | Clay, hard, brown -- | 52 | 214 |
| Clay, hard, brown -- | 17 | 23 | Clay and sand streaks, brown --- | 55 | 269 |
| Sand, brown ----- | 34 | 57 | Rock, hard, black -- | 1 | 270 |
| Clay, hard, brown -- | 78 | 135 | Shale, sandy, gray - | 37 | 307 |
| Clay, hard, gray --- | 23 | 158 | Sand, salt and pepper ----- | 64 | 371 |
| Sand, powder-white - | 4 | 162 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-59-508

Owner: Jason Gradney. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------------------|----|----|----------------------|---|----|
| Surface, hard, black ----- | 6 | 6 | Clay, hard brown --- | 5 | 56 |
| Clay, hard, brown -- | 36 | 42 | Sand, powder-white - | 5 | 61 |
| Clay, hard, white -- | 9 | 51 | Clay ----- | 1 | 62 |

Well SB-61-59-604

Owner: N. S. Bean. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------------------|----|-----|----------------------|----|-----|
| Surface, hard, black ----- | 9 | 9 | Clay, sandy, brown - | 15 | 115 |
| Clay, hard, brown -- | 52 | 61 | Clay, gray ----- | 53 | 168 |
| Sand, powder-white - | 7 | 68 | Clay, hard, blue --- | 7 | 175 |
| Clay, brown ----- | 32 | 100 | Sand, fine, white -- | 20 | 195 |
| | | | Clay, hard ----- | 2 | 197 |

Well SB-61-59-908

Owner: Fred A. Connell. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------------------|----|----|--------------------------------|----|----|
| Sand, surface, brown ----- | 5 | 5 | Sand, coarse ----- | 16 | 75 |
| Clay, yellow ----- | 23 | 28 | Clay, blue ----- | 3 | 78 |
| Clay, hard, white -- | 6 | 34 | Sand, salt and pepper ----- | 16 | 94 |
| Sand, powder-white - | 25 | 59 | Clay, hard, brown -- | 1 | 95 |

Well SB-61-60-101

Owner: Vernon K. Palmer. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|--------------------------------------|----|----|--------------------------------|----|-----|
| Surface ----- | 3 | 3 | Sand, salt and pepper ----- | 80 | 94 |
| Clay, joint, red and yellow ----- | 11 | 14 | Clay, blue ----- | 53 | 147 |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-60-501

Owner: Garland L. Jones. Driller: R. H. Schneider.

| | | | | | |
|-------------------|----|----|------------|----|-----|
| Clay ----- | 20 | 20 | Sand ----- | 25 | 100 |
| Shale, blue ----- | 55 | 85 | | | |

Well SB-61-60-503

Owner: Sabine Tram. Co. Driller: Humble Oil & Refining Co.

| | | | | | |
|----------------------|-----|-----|-------------------------------|-----|-------|
| Clay, surface ----- | 45 | 45 | Sand ----- | 10 | 840 |
| Sand ----- | 49 | 94 | Gumbo ----- | 16 | 856 |
| Shale and sand ----- | 78 | 172 | Sand ----- | 46 | 902 |
| Sand ----- | 42 | 214 | Sand and boulders -- | 40 | 942 |
| Shale ----- | 53 | 267 | Shale and lime ----- | 30 | 972 |
| Gumbo ----- | 37 | 304 | Sand and boulders -- | 58 | 1,030 |
| Sand ----- | 30 | 334 | Gumbo ----- | 19 | 1,049 |
| Shale ----- | 27 | 361 | Sand and boulders -- | 159 | 1,208 |
| Sand ----- | 29 | 390 | Shale and lime ----- | 15 | 1,223 |
| Gumbo ----- | 160 | 550 | Sand ----- | 26 | 1,249 |
| Sand ----- | 98 | 648 | Shale, lime and sand ----- | 32 | 1,281 |
| Gumbo ----- | 38 | 686 | Shale and lime ----- | 17 | 1,298 |
| Shale ----- | 23 | 709 | Lime ----- | 45 | 1,343 |
| Sand and gravel ---- | 73 | 782 | Sand and boulders -- | 35 | 1,378 |
| Gumbo ----- | 16 | 798 | Gumbo and lime ----- | 40 | 1,418 |
| Sand ----- | 20 | 818 | Sand and lime ----- | 34 | 1,452 |
| Gumbo ----- | 12 | 830 | | | |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-60-503--Continued--partial log

| | | | | | |
|----------------------------|-----|-------|---------------------|----|-------|
| Gumbo ----- | 4 | 1,456 | Sand ----- | 3 | 1,757 |
| Sand ----- | 44 | 1,500 | Lime, sandy ----- | 40 | 1,797 |
| Lime, shale and sand ----- | 2 | 1,502 | Gumbo ----- | 32 | 1,829 |
| Shale, sandy ----- | 12 | 1,514 | Sand ----- | 5 | 1,834 |
| Gumbo and lime ----- | 38 | 1,552 | Shale, sticky ----- | 88 | 1,922 |
| Sand ----- | 2 | 1,554 | Lime, sandy ----- | 10 | 1,932 |
| Sand and shale ----- | 15 | 1,569 | Shale, sticky ----- | 33 | 1,965 |
| Shale, sandy ----- | 16 | 1,585 | Sand ----- | 31 | 1,996 |
| Gumbo ----- | 169 | 1,754 | Shale ----- | 27 | 2,023 |
| | | | Total depth ----- | | 5,800 |

Well SB-61-60-701

Owner: Devers Independent School District. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------------------------|----|-----|-----------------------------|----|-----|
| Clay, gray ----- | 23 | 23 | Sand, fine, dirty -- | 14 | 118 |
| Sand, powdered, white ----- | 46 | 69 | Clay, hard, white -- | 63 | 181 |
| Log, black ----- | 1 | 70 | Sand, salt and pepper ----- | 40 | 221 |
| Sand, coarse, salt and pepper ----- | 34 | 104 | Clay, sandy, brown - | 8 | 229 |

Well SB-61-60-706

Owner: A. L. Callihan. Driller: Green Bros. Water Well Service.

| | | | | | |
|--------------------|----|----|-------------------|----|-----|
| Clay, yellow ----- | 30 | 30 | Clay, green ----- | 60 | 150 |
| Sand, red ----- | 60 | 90 | Sand, water ----- | 40 | 190 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Geological unit | Thickness (feet) | Depth (feet) | Geological unit | Thickness (feet) | Depth (feet) |
|-----------------|---------------------|-----------------|-----------------|---------------------|-----------------|
|-----------------|---------------------|-----------------|-----------------|---------------------|-----------------|

Well SB-61-60-706--Continued

| | | | | | |
|-------------------|-----|-----|-------------------|----|-----|
| Clay, green ----- | 115 | 305 | Sand, water ----- | 70 | 440 |
| Clay, blue ----- | 65 | 370 | | | |

Well SB-61-60-802

Owner: V. D. Meyers. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|------------|----|----|------------------------------|----|----|
| Clay ----- | 74 | 74 | Sand, loose, coarse ----- | 25 | 99 |
|------------|----|----|------------------------------|----|----|

Well SB-61-60-905

Owner: B. H. Willis Farm & Ranch Co. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|----------------------|----|----|--------------------|----|-----|
| Surface, black ----- | 6 | 6 | Clay, brown ----- | 16 | 74 |
| Clay, hard, yellow - | 12 | 18 | Sand, fine ----- | 23 | 97 |
| Clay, hard, white -- | 29 | 47 | Sand, coarse ----- | 17 | 114 |
| Clay, sandy, brown - | 11 | 58 | | | |

Well SB-61-61-703

Owner: B. H. Willis Farm & Ranch Co. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------------|----|----|-------------------------------|----|-----|
| Clay, hard, brown ----- | 15 | 15 | Clay, white and blue ----- | 40 | 122 |
| Sand, fine, white -- | 15 | 30 | Sand, hard, white -- | 11 | 133 |
| Clay, white ----- | 12 | 42 | Clay, hard, brown -- | 1 | 134 |
| Clay, sandy, brown - | 40 | 82 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|---------------------|-----------------|--|---------------------|-----------------|
|---------------------|-----------------|--|---------------------|-----------------|

Well SB-61-61-802

Owner: Ritter Bros. Farm. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|------------------------------|----|----|-------------------------------|----|-----|
| Clay, hard, red ---- | 6 | 6 | Sand, fine, brown -- | 16 | 82 |
| Clay, yellow ----- | 9 | 15 | Clay, brown ----- | 3 | 85 |
| Clay, sandy, yellow ----- | 2 | 17 | Clay, sandy, brown - | 6 | 91 |
| Clay, hard, yellow - | 25 | 42 | Clay, blue and white ----- | 8 | 99 |
| Clay, blue ----- | 5 | 47 | Sand, medium coarse ----- | 47 | 146 |
| Sand, fine, brown -- | 3 | 50 | Clay ----- | 2 | 148 |
| Clay, hard, gray --- | 16 | 66 | | | |

Well SB-64-01-101

Owner: Hail & Heal. Driller: Layne-Texas Co.

| | | | | | |
|----------------------|----|-----|----------------------|----|-----|
| Soil and clay ----- | 26 | 26 | Sand, rock layers -- | 42 | 287 |
| Sand, fine ----- | 5 | 31 | Clay, soft ----- | 16 | 303 |
| Shale and clay ----- | 57 | 88 | Sand ----- | 2 | 305 |
| Sand ----- | 11 | 99 | Clay ----- | 5 | 310 |
| Clay ----- | 71 | 170 | Sand, rock layers -- | 87 | 397 |
| Sand ----- | 5 | 175 | Clay ----- | 6 | 403 |
| Clay ----- | 70 | 245 | Sand ----- | 4 | 407 |

Well SB-64-02-604

Owner: Robert D. Jones. Driller: Layne-Texas Co.

| | | | | | |
|-------------------|----|----|-------------------|----|-----|
| Soil ----- | 3 | 3 | Sand, brown ----- | 10 | 25 |
| Clay, sandy ----- | 12 | 15 | Clay ----- | 75 | 100 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Soil | Thickness (feet) | Depth (feet) | Soil | Thickness (feet) | Depth (feet) |
|------|---------------------|-----------------|------|---------------------|-----------------|
|------|---------------------|-----------------|------|---------------------|-----------------|

Well SB-64-02-604--Continued

| | | | | | |
|--------------------|----|-----|-----------------------------|----|-----|
| Sand, broken ----- | 74 | 174 | Clay, sandy, and clay ----- | 89 | 394 |
| Clay ----- | 38 | 212 | Sand, fine ----- | 66 | 460 |
| Sand, fine ----- | 46 | 259 | Sand, coarse ----- | 16 | 476 |
| Clay ----- | 47 | 305 | Clay ----- | 15 | 491 |

Well SB-64-02-701

Owner: -- League. Driller: The Texas Co.

| | | | | | |
|-------------------------------------|-----|-----|-------------------------------------|----|-------|
| Soil ----- | 1 | 1 | Shale, sand, shell and gravel ----- | 48 | 757 |
| Clay ----- | 21 | 22 | Gumbo, sandy, blue - | 32 | 789 |
| Clay, yellow and gravel ----- | 62 | 84 | Gumbo, blue ----- | 38 | 827 |
| Sand and clay ----- | 37 | 121 | Shale, blue, and shell ----- | 36 | 863 |
| Gumbo, blue ----- | 260 | 381 | Gumbo, sandy, blue - | 94 | 957 |
| Shale, sand, shell and gravel ----- | 56 | 437 | Shale, blue and shell ----- | 61 | 1,018 |
| Sand, gray, and shell ----- | 33 | 470 | Sand, gray, and shell ----- | 16 | 1,034 |
| Gumbo, blue ----- | 34 | 504 | Gumbo and lime, sandy ----- | 65 | 1,099 |
| Gumbo and shell, sandy ----- | 57 | 561 | Shale, blue and shell ----- | 24 | 1,123 |
| Gumbo, blue ----- | 44 | 605 | Gumbo, sandy, blue - | 28 | 1,151 |
| Sand, gray, and shell ----- | 46 | 651 | Shale and boulders - | 68 | 1,219 |
| Gumbo, sandy, blue - | 58 | 709 | Gumbo, blue ----- | 17 | 1,236 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-64-02-701--Continued

| | | | | | |
|----------------------------|----|-------|----------------------------|----|-------|
| Gumbo, blue and lime ----- | 28 | 1,264 | Gumbo, brown ----- | 39 | 1,374 |
| Gumbo ----- | 52 | 1,316 | Shale, blue and lime ----- | 37 | 1,411 |
| Shale and lime ----- | 19 | 1,335 | Gumbo, blue ----- | 17 | 1,428 |

Well SB-64-03-401

Owner: Shiloh Baptist Church. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|-------------------|-----|-----|------------------|----|-----|
| Clay ----- | 17 | 17 | Sand, fine ----- | 34 | 250 |
| Sand, fine ----- | 22 | 39 | Clay ----- | 52 | 302 |
| Clay ----- | 12 | 51 | Sand ----- | 10 | 312 |
| Clay, sandy ----- | 13 | 64 | Sand, fine ----- | 8 | 320 |
| Clay ----- | 152 | 216 | Clay ----- | 13 | 333 |

Well SB-64-03-402, partial log

Owner: Liberty Investment Co. Driller: The Pure Oil Co.

| | | | | | |
|----------------------|-----|-----|----------------------|----|-----|
| Clay ----- | 31 | 31 | Clay ----- | 32 | 562 |
| Sand and clay ----- | 129 | 160 | Sand ----- | 21 | 583 |
| Sand ----- | 46 | 206 | Clay ----- | 25 | 608 |
| Clay ----- | 30 | 236 | Sand ----- | 15 | 623 |
| Sand ----- | 46 | 282 | Clay ----- | 78 | 701 |
| Clay ----- | 47 | 329 | Sand and gravel ---- | 69 | 770 |
| Sand and gravel ---- | 42 | 371 | Clay ----- | 10 | 780 |
| Gumbo ----- | 37 | 408 | Sand and gravel ---- | 16 | 796 |
| Sand and gravel ---- | 122 | 530 | Clay ----- | 26 | 822 |

(Continued on next page)

Table 6.--Drillers' logs of wells in Liberty County--Continued

| | Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|--|---------------------|-----------------|
|--|---------------------|-----------------|--|---------------------|-----------------|

Well SB-64-03-402--Continued--partial log

| | | | | | |
|-----------------------|-----|-------|-----------------------|----|-------|
| Sand and gravel ----- | 103 | 925 | Sand and gravel ----- | 45 | 1,200 |
| Gumbo and lime ----- | 29 | 954 | Gumbo ----- | 32 | 1,232 |
| Sand and gravel ----- | 42 | 996 | Sand and gravel ----- | 15 | 1,247 |
| Gumbo, sandy ----- | 33 | 1,029 | Gumbo ----- | 40 | 1,287 |
| Sand ----- | 22 | 1,051 | Sand ----- | 37 | 1,324 |
| Gumbo ----- | 63 | 1,114 | Gumbo ----- | 79 | 1,403 |
| Sand ----- | 18 | 1,132 | Sand ----- | 90 | 1,493 |
| Gumbo ----- | 4 | 1,136 | Gumbo ----- | 17 | 1,510 |
| Sand and gravel ----- | 9 | 1,145 | Total depth ----- | | 5,766 |
| Gumbo ----- | 10 | 1,155 | | | |

Well SB-64-04-101

Owner: J. D. Sellers. Driller: Pitre Water Well Drilling Co.

| | | | | | |
|------------------------------------|----|-----|------------------------------------|----|-----|
| Clay ----- | 38 | 38 | Sand, fine, and shale lenses ----- | 21 | 297 |
| Shell ----- | 3 | 41 | No record ----- | 36 | 333 |
| Shale, sandy ----- | 59 | 100 | Sand and boulders -- | 5 | 338 |
| Sand, fine, red ---- | 22 | 122 | Rock and lime ----- | 3 | 341 |
| Shale, sandy, and shell beds ----- | 79 | 201 | Sand, very fine, gray ----- | 45 | 386 |
| Sand, fine ----- | 5 | 206 | Sand, fine, gray --- | 20 | 406 |
| Shale, sandy ----- | 49 | 255 | | | |
| Shale, sandy, and shell ----- | 21 | 276 | | | |

Table 6.--Drillers' logs of wells in Liberty County--Continued

| Thickness (feet) | Depth (feet) | | Thickness (feet) | Depth (feet) |
|---------------------|-----------------|--|---------------------|-----------------|
|---------------------|-----------------|--|---------------------|-----------------|

Well SB-64-04-401

Owner: Dan Hart. Driller: --

| | | | | | |
|------------------|----|-----|----------------------|-----|-----|
| Clay ----- | 95 | 95 | Sand, fine ----- | 11 | 296 |
| Sand, fine ----- | 45 | 140 | Shale ----- | 18 | 314 |
| Clay, hard ----- | 10 | 150 | Shale and sand ----- | 141 | 455 |
| Sand, fine ----- | 10 | 160 | Shale ----- | 18 | 473 |
| Shale ----- | 22 | 182 | Sand, fine ----- | 13 | 486 |
| Sand, fine ----- | 48 | 230 | Shale ----- | 2 | 488 |
| Shale ----- | 55 | 285 | | | |

Well SB-64-04-702

Owner: Gulf Oil Corp. Driller: --

| | | | | | |
|---------------------|-----|-----|----------------------|----|-----|
| Clay ----- | 150 | 150 | Gumbo ----- | 50 | 290 |
| Clay and sand ----- | 90 | 240 | Sand and boulders -- | 54 | 344 |

Table 7.--Water levels in wells in Liberty County

[Measurements generally are in feet below land surface; those above land surface are indicated by plus sign (+).]

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-60-40-903

Owner: Roy Morton & Sons.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Mar. 15, 1949 | 36.05 | Apr. 9, 1952 | 37.64 | Apr. 8, 1958 | 40.38 |
| Nov. 3 | 36.62 | Oct. 7 | 38.98 | Jan. 4, 1960 | 41.66 |
| Apr. 5, 1950 | 35.18 | Apr. 9, 1953 | 38.24 | Apr. 4, 1961 | 40.07 |
| Oct. 30 | 36.49 | Oct. 14 | 40.06 | Nov. 2, 1962 | 42.21 |
| Apr. 16, 1951 | 36.33 | Apr. 13, 1954 | 41.30 | Mar. 29, 1963 | 39.80 |
| Oct. 10 | 38.05 | Apr. 3, 1956 | 40.58 | Mar. 26, 1965 | 41.70 |

Well SB-60-48-107

Owner: Corrigan Lumber Co.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Jan. 26, 1945 | 28.40 | Apr. 5, 1950 | 21.90 | Apr. 9, 1952 | 26.33 |
| Oct. 20, 1948 | 26.58 | Oct. 30 | 24.12 | Apr. 9, 1953 | 25.43 |
| Mar. 14, 1949 | 25.55 | Apr. 16, 1951 | 24.59 | Oct. 14 | 26.46 |
| Oct. 31 | 23.22 | Oct. 10 | 25.85 | Apr. 13, 1954 | 25.71 |

Well SB-60-48-501

Owner: C. W. Dove.

| | | | | | |
|---------------|------|---------------|-------|---------------|-------|
| June 8, 1945 | 6.25 | Oct. 30, 1950 | 8.64 | Apr. 9, 1953 | 9.07 |
| Oct. 20, 1948 | 9.50 | Apr. 16, 1951 | 7.61 | Apr. 10, 1957 | 12.68 |
| Mar. 14, 1949 | 7.35 | Oct. 10 | 10.02 | Jan. 6, 1960 | 6.72 |
| Oct. 31 | 6.09 | Apr. 9, 1952 | 8.75 | Apr. 3, 1961 | 3.25 |
| Apr. 5, 1950 | 3.90 | Oct. 7 | 11.26 | Apr. 4, 1962 | 3.31 |

(Continued on next page)

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-60-48-501--Continued

| | | | | | |
|---------------|------|---------------|------|--------------|------|
| Nov. 2, 1962 | 7.89 | Feb. 27, 1964 | 6.19 | Mar. 1, 1966 | 7.06 |
| Mar. 29, 1963 | 5.33 | Oct. 15 | 7.77 | | |
| Oct. 29 | 8.57 | Mar. 26, 1965 | 9.71 | | |

Well SB-60-56-901

Owner: E. J. Stoesser.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Oct. 15, 1956 | 94.35 | Jan. 19, 1960 | 68.30 | Oct. 14, 1964 | 88.24 |
| Apr. 10, 1957 | 66.45 | Apr. 3, 1961 | 63.03 | Mar. 23, 1965 | 75.00 |
| Oct. 28 | 81.36 | Oct. 20 | 79.75 | | |
| Apr. 8, 1958 | 62.33 | Oct. 25, 1963 | 94.31 | | |

Well SB-60-64-301

Owner: E. J. Stoesser.

| | | | | | |
|---------------|-------|---------------|-------|---------------|--------|
| Mar. 17, 1949 | 46.85 | Apr. 2, 1956 | 62.39 | Mar. 28, 1963 | 72.27 |
| Nov. 2 | 63.20 | Oct. 15 | 94.85 | Oct. 25 | 103.57 |
| Apr. 3, 1950 | 46.17 | Apr. 10, 1957 | 66.33 | Feb. 27, 1964 | 77.60 |
| Oct. 31 | 69.57 | Oct. 28 | 82.66 | Oct. 14 | 98.31 |
| Apr. 13, 1951 | 52.00 | Apr. 9, 1958 | 64.54 | Mar. 23, 1965 | 78.31 |
| Oct. 9 | 78.64 | Jan. 19, 1960 | 69.58 | Oct. 21 | 101.80 |
| Apr. 8, 1952 | 54.54 | Apr. 3, 1961 | 63.74 | Mar. 1, 1966 | 77.98 |
| Oct. 6 | 85.09 | Oct. 20 | 81.76 | | |
| Oct. 10, 1955 | 83.00 | Oct. 26, 1962 | 96.47 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-60-64-302

Owner: Roy Seaberg.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Oct. 13, 1953 | 78.32 | Apr. 8, 1958 | 64.44 | Mar. 28, 1963 | 72.06 |
| Apr. 12, 1954 | 63.73 | Jan. 19, 1960 | 69.58 | Oct. 25 | 98.04 |
| Oct. 10, 1955 | 80.71 | Apr. 3, 1961 | 65.20 | Feb. 27, 1964 | 77.25 |
| Apr. 2, 1956 | 62.31 | Oct. 20 | 82.97 | Oct. 14 | 96.01 |
| Apr. 10, 1957 | 65.99 | Apr. 3, 1962 | 65.43 | Mar. 23, 1965 | 77.84 |
| Oct. 28 | 79.01 | Oct. 26 | 89.25 | | |

Well SB-60-64-601

Owner: E. J. Stoesser.

| | | | | | |
|---------------|--------|---------------|--------|---------------|--------|
| Mar. --, 1944 | 57 | Apr. 7, 1953 | 75.75 | Apr. 3, 1961 | 77.55 |
| Feb. 19, 1948 | 55.09 | Oct. 13 | 96.00 | Oct. 20 | 95.38 |
| Mar. 17, 1949 | 60.63 | Oct. 10, 1955 | 98.50 | Apr. 3, 1962 | 79.95 |
| Oct. 31 | 78.97 | Apr. 2, 1956 | 76.77 | Oct. 26 | 101.88 |
| Apr. 3, 1950 | 61.51 | Oct. 15 | 109.33 | Mar. 28, 1963 | 83.79 |
| Oct. 31 | 85.92 | Apr. 10, 1957 | 80.23 | Oct. 25 | 111.59 |
| Apr. 13, 1951 | 68.82 | Oct. 28 | 92.60 | Feb. 27, 1964 | 87.43 |
| Oct. 9 | 95.49 | Apr. 8, 1958 | 88.99 | Oct. 21, 1965 | 113.43 |
| Apr. 8, 1952 | 70.80 | Oct. 27 | 99.91 | Mar. 1, 1966 | 91.69 |
| Oct. 6 | 102.29 | Jan. 7, 1960 | 84.62 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-60-64-602

Owner: Ed Stoesser.

| | | | | | |
|---------------|--------|---------------|--------|---------------|--------|
| Oct. 15, 1956 | 113.21 | Apr. 3, 1961 | 82.43 | Oct. 25, 1963 | 125.71 |
| Apr. 10, 1957 | 80.12 | Oct. 26, 1962 | 108.67 | Oct. 14, 1964 | 118.07 |
| Jan. 19, 1960 | 94.26 | Mar. 28, 1963 | 91.91 | | |

Well SB-60-64-603

Owner: Magnolia Pipeline Co.

| | | | | | |
|---------------|-------|---------------|-------|--------------|-------|
| Apr. --, 1945 | 27.1 | Oct. 31, 1949 | 72.46 | Jan. 7, 1960 | 82.97 |
| Feb. 19, 1948 | 53.00 | Apr. 3, 1950 | 58.30 | Apr. 3, 1961 | 76.0± |
| Oct. 15 | 74.10 | Oct. 19 | 83.02 | | |
| Mar. 14, 1949 | 57.80 | Apr. 17, 1951 | 66.20 | | |

Well SB-61-33-601

Owner: C. Die.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Apr. 4, 1945 | 49.50 | Apr. 9, 1953 | 54.45 | Dec. 31, 1959 | 57.10 |
| Oct. 20, 1948 | 55.64 | Oct. 14 | 59.20 | Apr. 4, 1961 | 52.91 |
| Mar. 15, 1949 | 53.88 | Apr. 13, 1954 | 54.84 | Oct. 23 | 59.14 |
| Nov. 3 | 53.52 | Oct. 12, 1955 | 57.71 | Apr. 4, 1962 | 54.12 |
| Apr. 5, 1950 | 52.04 | Apr. 3, 1956 | 56.30 | Nov. 2 | 56.32 |
| Oct. 30 | 54.94 | Oct. 16 | 59.51 | Mar. 29, 1963 | 59.94 |
| Apr. 16, 1951 | 53.97 | Apr. 4, 1957 | 56.76 | Oct. 29 | 65.27 |
| Oct. 10 | 56.88 | Oct. 29 | 55.59 | Feb. 27, 1964 | 56.51 |
| Apr. 9, 1952 | 54.28 | Apr. 9, 1958 | 53.83 | Mar. 26, 1965 | 60.24 |
| Oct. 7 | 56.33 | Oct. 20 | 56.55 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-33-604

Owner: C. Die.

| | | | | | |
|---------------|-------|--------------|-------|---------------|-------|
| Apr. 4, 1945 | 47.85 | Nov. 3, 1949 | 48.00 | Apr. 16, 1951 | 48.09 |
| Oct. 20, 1948 | 47.51 | Apr. 5, 1950 | 47.29 | | |
| Mar. 15, 1949 | 48.80 | Oct. 30 | 47.27 | | |

Well SB-61-33-701

Owner: Roy Elledge.

| | | | | | |
|---------------|-------|--------------|-------|---------------|-------|
| Aug. 2, 1955 | 179.6 | Apr. 8, 1958 | 36.34 | Mar. 29, 1963 | 40.32 |
| Aug. 2 | 92.25 | Oct. 20 | 44.47 | Oct. 29 | 46.42 |
| Oct. 12 | 42.15 | Jan. 4, 1960 | 39.86 | Feb. 27, 1964 | 39.31 |
| Apr. 3, 1956 | 36.12 | Apr. 4, 1961 | 37.75 | Oct. 15 | 49.75 |
| Oct. 16 | 45.90 | Oct. 23 | 45.72 | Mar. 26, 1965 | 39.72 |
| Apr. 10, 1957 | 36.43 | Apr. 4, 1962 | 37.61 | | |
| Oct. 29 | 43.96 | Nov. 2 | 42.76 | | |

Well SB-61-33-704

Owner: J. W. Whatley.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Apr. 5, 1945 | 33.50 | Oct. 30, 1950 | 28.92 | Apr. 9, 1953 | 32.42 |
| Oct. 20, 1948 | 31.09 | Apr. 16, 1951 | 29.85 | Oct. 14 | 32.76 |
| Mar. 15, 1949 | 30.47 | Oct. 10 | 30.62 | Apr. 13, 1954 | 33.17 |
| Nov. 3 | 30.62 | Apr. 9, 1952 | 31.38 | Oct. 12 | 34.02 |
| Apr. 5, 1950 | 29.21 | Oct. 7 | 32.02 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-33-706

Owner: Roy Morton.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| June 16, 1943 | 32 | Apr. 9, 1953 | 29.67 | Oct. 23, 1961 | 33.22 |
| Oct. 21, 1948 | 37.58 | Oct. 12, 1955 | 31.05 | Apr. 4, 1962 | 29.12 |
| Mar. 15, 1949 | 26.45 | Apr. 3, 1956 | 30.23 | Nov. 2 | 30.43 |
| Nov. 3 | 26.81 | Oct. 16 | 39.20 | Mar. 29, 1963 | 27.31 |
| Apr. 5, 1950 | 27.09 | Apr. 10, 1957 | 31.00 | Oct. 29 | 32.15 |
| Oct. 30 | 27.83 | Oct. 29 | 32.29 | Feb. 27, 1964 | 30.35 |
| Apr. 16, 1951 | 25.38 | Apr. 8, 1958 | 29.06 | Oct. 15 | 32.52 |
| Oct. 10 | 29.17 | Oct. 20 | 32.32 | Mar. 26, 1965 | 30.87 |
| Apr. 9, 1952 | 26.87 | Jan. 4, 1960 | 31.51 | July 6 | 37.40 |
| Oct. 7 | 30.80 | Apr. 4, 1961 | 28.94 | | |

Well SB-61-33-708

Owner: Roy Morton.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Mar. 15, 1949 | 26.03 | Oct. 12, 1955 | 37.57 | Apr. 4, 1962 | 38.19 |
| Nov. 3 | 27.54 | Apr. 3, 1956 | 35.53 | Nov. 2 | 41.89 |
| Apr. 5, 1950 | 25.96 | Oct. 16 | 43.69 | Mar. 29, 1963 | 34.97 |
| Oct. 30 | 31.32 | Apr. 10, 1957 | 34.22 | Oct. 29 | 47.80 |
| Apr. 16, 1951 | 25.93 | Oct. 29 | 42.14 | Feb. 27, 1964 | 39.93 |
| Oct. 10 | 32.57 | Apr. 8, 1958 | 34.88 | Oct. 15 | 50.38 |
| Apr. 9, 1952 | 26.57 | Oct. 20 | 44.98 | Mar. 26, 1965 | 38.96 |
| Oct. 7 | 34.66 | Jan. 4, 1960 | 39.08 | Oct. 20 | 49.08 |
| Apr. 9, 1953 | 27.58 | Apr. 4, 1961 | 36.72 | Mar. 3, 1966 | 41.55 |
| Apr. 13, 1954 | 35.94 | Oct. 23 | 45.20 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-34-103

Owner: John Griffin.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Jan. 11, 1945 | 41.50 | Apr. 16, 1951 | 41.40 | Apr. 13, 1954 | 43.27 |
| Oct. 21, 1948 | 42.50 | Oct. 10 | 42.66 | Oct. 12, 1955 | 43.30 |
| Mar. 15, 1949 | 41.66 | Apr. 9, 1952 | 42.12 | Apr. 3, 1956 | 42.77 |
| Nov. 3 | 41.58 | Oct. 7 | 43.47 | Apr. 4, 1957 | 44.11 |
| Apr. 5, 1950 | 39.56 | Apr. 9, 1953 | 42.63 | Oct. 29 | 44.25 |
| Oct. 30 | 44.5 | Oct. 14 | 43.00 | | |

Well SB-61-41-701

Owner: M. H. Scott.

| | | | | | |
|---------------|--------|--------------|-------|---------------|-------|
| Aug. 2, 1955 | 125.31 | Apr. 8, 1959 | 50.84 | Apr. 4, 1962 | 49.15 |
| Aug. 2 | 75.41 | Oct. 27 | 54.44 | Nov. 2 | 54.81 |
| Oct. 16, 1956 | 60.81 | Jan. 6, 1960 | 52.20 | Mar. 29, 1963 | 50.70 |
| Apr. 10, 1957 | 52.49 | Apr. 3, 1961 | 49.75 | Oct. 15, 1964 | 58.25 |
| Oct. 29 | 55.59 | Oct. 23 | 54.73 | Mar. 26, 1965 | 54.65 |

Well SB-61-49-101

Owner: Harvard Ranch.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Jan. 25, 1945 | 39.45 | Oct. 30, 1950 | 48.13 | Apr. 9, 1953 | 49.60 |
| Oct. 20, 1948 | 46.53 | Apr. 16, 1951 | 46.03 | Oct. 14 | 52.25 |
| Mar. 17, 1949 | 44.50 | Oct. 10 | 51.08 | Apr. 13, 1954 | 49.94 |
| Oct. 31 | 46.22 | Apr. 9, 1952 | 48.44 | Oct. 12, 1955 | 53.84 |
| Apr. 5, 1950 | 43.46 | Oct. 7 | 51.51 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-49-803

Owner: W. A. Conner.

| | | | | | |
|---------------|--------|---------------|-------|---------------|--------|
| Apr. 19, 1945 | 48.33 | Apr. 7, 1953 | 67.21 | Apr. 3, 1961 | 60.27 |
| Feb. 19, 1948 | 58.52 | Oct. 13 | 97.32 | Oct. 20 | 68.44 |
| Oct. 15 | 85.29 | Apr. 12, 1954 | 70.98 | Apr. 3, 1962 | 60.74 |
| Mar. 14, 1949 | 62.69 | Oct. 10, 1955 | 78.20 | Oct. 26 | 85.29 |
| Oct. 31 | 76.10 | Apr. 3, 1956 | 63.98 | Mar. 28, 1963 | 66.61 |
| Apr. 5, 1950 | 61.42 | Oct. 15 | 76.24 | Oct. 25 | 92.49 |
| Oct. 19 | 78.93 | Apr. 10, 1957 | 68.98 | Feb. 27, 1964 | 67.09 |
| Apr. 13, 1951 | 66.68 | Oct. 28 | 78.52 | Oct. 14 | 107.7± |
| Oct. 9 | 84.72 | Apr. 8, 1958 | 64.91 | Mar. 23, 1965 | 64.24 |
| Apr. 10, 1952 | 66.64 | Oct. 27 | 76.22 | July 6 | 90.51 |
| Oct. 6 | 100.61 | Jan. 7, 1960 | 68.38 | Mar. 1, 1966 | 63.92 |

Well SB-61-49-805

Owner: W. A. Conner.

| | | | | | |
|---------------|--------|---------------|-------|---------------|-------|
| Aug. 4, 1955 | 135.39 | Oct. 27, 1958 | 82± | Mar. 28, 1963 | 76.4± |
| Feb. 2, 1956 | 72.34 | Jan. 7, 1960 | 73.68 | Feb. 27, 1964 | 66.80 |
| Apr. 10, 1957 | 70.27 | Apr. 3, 1961 | 67.20 | Mar. 23, 1965 | 63± |
| Oct. 28 | 79.47 | Oct. 20 | 82± | Mar. 1, 1966 | 62.97 |
| Apr. 8, 1958 | 68.37 | Apr. 3, 1962 | 69.55 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-51-707

Owner: S. E. Viles.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| June 7, 1945 | 34.90 | Apr. 5, 1950 | 38.31 | Oct. 7, 1952 | 56.99 |
| Feb. 20, 1948 | 36.81 | Oct. 31 | 45.27 | Apr. 10, 1953 | 44.08 |
| Oct. 21 | 40.52 | Apr. 16, 1951 | 41.06 | Apr. 13, 1954 | 48.07 |
| Mar. 15, 1949 | 39.50 | Oct. 10 | 52.53 | | |
| Nov. 3 | 42.72 | Apr. 9, 1952 | 42.78 | | |

Well SB-61-51-806

Owner: Morgan Tippett.

| | | | | | |
|---------------|--------|---------------|-------|---------------|-------|
| Aug. 5, 1955 | 118.61 | Oct. 20, 1958 | 55.79 | Oct. 29, 1963 | 58.33 |
| Aug. 5 | 80.38 | Jan. 12, 1960 | 42.60 | Oct. 15, 1964 | 66.14 |
| Oct. 16, 1956 | 73.59 | Apr. 4, 1961 | 38.22 | Mar. 24, 1965 | 43.70 |
| Apr. 4, 1957 | 39.18 | Apr. 4, 1962 | 36.20 | Mar. 2, 1966 | 45.29 |
| Oct. 29 | 59.38 | Nov. 2 | 56.40 | | |
| Apr. 9, 1958 | 37.56 | Mar. 29, 1963 | 40.83 | | |

Well SB-61-57-101

Owner: D. A. Reidland.

| | | | | | |
|---------------|-------|---------------|-------|---------------|--------|
| Apr. 19, 1945 | 38.55 | Apr. 7, 1953 | 66.19 | Oct. 26, 1962 | 101.25 |
| Oct. 15, 1948 | 84.09 | Apr. 2, 1956 | 69.49 | Mar. 28, 1963 | 85.3± |
| Mar. 17, 1949 | 55.04 | Apr. 10, 1957 | 75.79 | Feb. 27, 1964 | 86.95 |
| Apr. 3, 1950 | 54.99 | Oct. 28 | 90.94 | Mar. 23, 1965 | 78.8± |
| Oct. 31 | 82.10 | Oct. 27, 1958 | 97.31 | Mar. 1, 1966 | 73.22 |
| Apr. 13, 1951 | 62.58 | Apr. 3, 1961 | 72.16 | | |
| Apr. 8, 1952 | 69.20 | Apr. 3, 1962 | 73.43 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-57-301

Owner: Russ Mitchell.

| | | | | | |
|---------------|--------|---------------|--------|---------------|--------|
| 1936 | 48.20 | Apr. 9, 1953 | 73.71 | Apr. 6, 1961 | 81.33 |
| Feb. 19, 1948 | 48.28 | Oct. 13 | 94.25 | Oct. 20 | 94.78 |
| Oct. 20 | 85.20 | Apr. 12, 1954 | 78.07 | Apr. 3, 1962 | 83.46 |
| Mar. 14, 1949 | 61.68 | Oct. 12, 1955 | 98.22 | Oct. 26 | 101.47 |
| Oct. 31 | 78.85 | Apr. 3, 1956 | 77.55 | Mar. 28, 1963 | 88.74 |
| Apr. 3, 1950 | 61.92 | Oct. 15 | 102.04 | Oct. 25 | 100.41 |
| Oct. 19 | 87.25 | Apr. 10, 1957 | 82.99 | Feb. 27, 1964 | 95.41 |
| Apr. 13, 1951 | 68.78 | Oct. 28 | 99.22 | Oct. 14 | 105.47 |
| Oct. 9 | 93.48 | Apr. 8, 1958 | 83.37 | Mar. 23, 1965 | 95.42 |
| Apr. 8, 1952 | 70.64 | Oct. 27 | 103.07 | Mar. 1, 1966 | 67.35 |
| Oct. 6 | 100.07 | Jan. 7, 1960 | 85.64 | | |

Well SB-61-57-405

Owner: Leo Moreau.

| | | | | | |
|---------------|-------|---------------|-------|---------------|--------|
| Apr. 18, 1945 | 52.82 | Apr. 3, 1950 | 67.66 | Oct. 6 | 107.50 |
| Feb. 19, 1948 | 58.90 | Oct. 19 | 95.40 | Apr. 7, 1953 | 78.49 |
| Oct. 15 | 90.89 | Apr. 13, 1951 | 75.22 | Oct. 10, 1955 | 107.98 |
| Mar. 14, 1949 | 64.35 | Oct. 9 | 97.30 | Apr. 2, 1956 | 89.20 |
| Oct. 31 | 71.30 | Apr. 8, 1952 | 76.53 | Apr. 10, 1957 | 92.45 |

Well SB-61-57-902

Owner: Humble Pipeline Co.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Jan. 27, 1945 | 49.46 | Oct. 15, 1948 | 66.91 | Oct. 31, 1949 | 67.49 |
| Feb. 20, 1948 | 56.96 | Mar. 14, 1949 | 61.03 | Apr. 3, 1950 | 62.61 |

(Continued on next page)

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-57-902--Continued

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Oct. 19, 1950 | 73.98 | Apr. 7, 1953 | 72.65 | Apr. 10, 1957 | 82.80 |
| Apr. 13, 1951 | 69.59 | Oct. 14 | 80.85 | Oct. 28 | 89.07 |
| Apr. 8, 1952 | 70.35 | Apr. 12, 1954 | 76.87 | Apr. 8, 1958 | 80.66 |
| Oct. 6 | 81.61 | Apr. 3, 1956 | 80.14 | Oct. 17 | 81.10 |

Well SB-61-57-903

Owner: Peoples Lumber Co.

| | | | | | |
|---------------|-------|---------------|-------|--------------|-------|
| Jan. 27, 1945 | 59 | Oct. 31, 1949 | 72.33 | Oct. 9, 1951 | 84.73 |
| Oct. 15, 1948 | 73.10 | Apr. 3, 1950 | 63.66 | | |
| Mar. 14, 1949 | 62.40 | Apr. 13, 1951 | 69.40 | | |

Well SB-61-58-502

Owner: City of Liberty well 1.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Mar. 16, 1949 | 13.60 | Oct. 6, 1952 | 37.40 | Feb. 15, 1960 | 32.50 |
| Oct. 19, 1950 | 25.45 | Apr. 7, 1953 | 32.31 | Mar. 28, 1963 | 54.69 |
| Oct. 12, 1951 | 33.50 | Apr. 12, 1954 | 36.30 | | |
| Apr. 9, 1952 | 25.88 | Apr. 9, 1958 | 41.9± | | |

Well SB-61-58-504

Owner: City of Liberty well 2.

| | | | | | |
|---------------|--------|---------------|-------|---------------|-------|
| Nov. 26, 1943 | +0.58 | Nov. 1, 1949 | 32.13 | Oct. 12, 1951 | 39.20 |
| Dec. 8, 1944 | - .15 | Apr. 5, 1950 | 22.37 | Apr. 9, 1952 | 30.06 |
| Oct. 18, 1948 | -30.98 | Oct. 19 | 30.24 | Oct. 6 | 43.62 |
| Mar. 16, 1949 | -17.2 | Apr. 17, 1951 | 32.20 | Apr. 7, 1953 | 36.36 |

(Continued on next page)

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-58-504--Continued

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Oct. 13, 1953 | 51.19 | Apr. 9, 1958 | 51.04 | Mar. 28, 1963 | 64.89 |
| Apr. 12, 1954 | 41.62 | Oct. 27 | 59.67 | Oct. 25 | 76.67 |
| Oct. 10, 1955 | 48.48 | Feb. 15, 1960 | 34.44 | Feb. 26, 1964 | 59.33 |
| Apr. 3, 1956 | 53.80 | Apr. 6, 1961 | 47.02 | Oct. 14 | 75.64 |
| Oct. 16 | 64.86 | Oct. 20 | 64.19 | Mar. 24, 1965 | 46.42 |
| Apr. 10, 1957 | 55.43 | Apr. 3, 1962 | 53.30 | | |
| Oct. 29 | 58.41 | Oct. 26 | 67.15 | | |

Well SB-61-58-505

Owner: City of Liberty.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Nov. 7, 1944 | +8 | Apr. 7, 1953 | 19.95 | Apr. 6, 1961 | 30.91 |
| Oct. 18, 1948 | -8.75 | Oct. 13 | 26.13 | Apr. 3, 1962 | 31.57 |
| Mar. 16, 1949 | -6.17 | Apr. 12, 1954 | 22.59 | Oct. 26 | 41.55 |
| Nov. 1 | 10.59 | Apr. 3, 1956 | 29.39 | Mar. 28, 1963 | 37.26 |
| Apr. 5, 1950 | 9.41 | Oct. 16 | 41.05 | Feb. 26, 1964 | 41.34 |
| Oct. 19 | 14.69 | Apr. 10, 1957 | 32.98 | Oct. 14 | 45.79 |
| Apr. 17, 1951 | 12.26 | Oct. 29 | 35.64 | Oct. 21, 1965 | 49.25 |
| Oct. 12 | 19.84 | Apr. 9, 1958 | 30.98 | Mar. 3, 1966 | 42.34 |
| Apr. 9, 1952 | 15.24 | Oct. 27 | 32.08 | | |
| Oct. 6 | 22.17 | Feb. 19, 1960 | 27.02 | | |

Well SB-61-58-511

Owner: Mecom & Harrison.

| | | | | | |
|---------------|------|--------------|-------|---------------|------|
| Mar. 17, 1949 | 0.86 | Apr. 7, 1950 | 2.07 | Apr. 18, 1951 | 6.36 |
| Nov. 1 | 6.91 | Oct. 19 | 11.67 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-58-515

Owner: City of Liberty.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Dec. 7, 1944 | +7 | Oct. 19, 1950 | 6.18 | Apr. 7, 1953 | 11.33 |
| Oct. 18, 1948 | +0.68 | Apr. 17, 1951 | 3.74 | Oct. 13 | 17.53 |
| Mar. 16, 1949 | +2.12 | Oct. 12 | 11.26 | Apr. 12, 1954 | 14.70 |
| Nov. 1 | -2.12 | Apr. 9, 1952 | 7.26 | Oct. 1 | 1.00 |
| Apr. 5, 1950 | .93 | Oct. 6 | 13.56 | | |

Well SB-61-58-702

| | | | | | |
|---------------|--------------------|---------------|-------|--------------|-------|
| Owner: | Texas Pipeline Co. | 18.00 | 18.00 | 18.00 | 18.00 |
| June 15, 1945 | 7.95 | Mar. 17, 1949 | 18.56 | Apr. 3, 1950 | 20.87 |
| Oct. 18, 1948 | 23.50 | Oct. 31 | 24.18 | | |

Well SB-61-59-301

Owner: Hamill & Smith.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| 1938 | 17 | Apr. 10, 1953 | 37.69 | Apr. 4, 1961 | 43.55 |
| Feb. 20, 1948 | 24.55 | Oct. 14 | 50.91 | Oct. 23 | 60.34 |
| Oct. 19 | 38.00 | Apr. 13, 1954 | 45.39 | Apr. 4, 1962 | 46.99 |
| Mar. 16, 1949 | 29.14 | Oct. 12, 1955 | 59.70 | Nov. 2 | 58.39 |
| Nov. 1 | 39.64 | Apr. 3, 1956 | 40.71 | Mar. 29, 1963 | 50.35 |
| Apr. 6, 1950 | 32.39 | Oct. 16 | 80.70 | Oct. 29 | 60.61 |
| Oct. 20 | 46.03 | Apr. 4, 1957 | 47.69 | Feb. 26, 1964 | 54.52 |
| Apr. 18, 1951 | 34.07 | Oct. 29 | 77.33 | Oct. 15 | 77.30 |
| Oct. 10 | 49.60 | Apr. 9, 1958 | 46.87 | May 5, 1965 | 72.15 |
| Apr. 9, 1952 | 36.44 | Oct. 20 | 74.83 | | |
| Oct. 7 | 54.54 | Jan. 8, 1960 | 49.40 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-59-315

Owner: Sun Pipeline Co.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Feb. 20, 1948 | 11.04 | Apr. 6, 1950 | 11.01 | Apr. 8, 1952 | 15.71 |
| Oct. 19 | 15.94 | Oct. 20 | 15.69 | Apr. 10, 1953 | 17.03 |
| Mar. 16, 1949 | 13.75 | Apr. 18, 1951 | 15.35 | Oct. 14 | 18.11 |
| Nov. 1 | 13.51 | Oct. 10 | 17.39 | | |

Well SB-61-59-501

Owner: C. F. Kellina.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Aug. 3, 1955 | 90.08 | Jan. 12, 1960 | 53.32 | Mar. 24, 1965 | 61.34 |
| Oct. 16, 1956 | 71.5± | Apr. 4, 1961 | 49.60 | July 6 | 95.86 |
| Apr. 4, 1957 | 51.77 | Oct. 23 | 65.78 | Oct. 20 | 76.12 |
| Oct. 29 | 65.76 | Nov. 2, 1962 | 72.77 | Mar. 2, 1966 | 60.32 |
| Apr. 9, 1958 | 52.48 | Oct. 29, 1963 | 79.00 | | |
| Oct. 20, 1958 | 67.27 | Feb. 26, 1964 | 60.99 | | |

Well SB-61-60-802

Owner: V. D. Myers.

| | | | | | |
|---------------|-------|---------------|------|---------------|------|
| Jan. 23, 1945 | 8.80 | Nov. 2, 1949 | 9.07 | Oct. 12, 1951 | 8.66 |
| Feb. 20, 1948 | 8.85 | Apr. 7, 1950 | 6.44 | Apr. 8, 1952 | 5.55 |
| Oct. 19 | 13.14 | Oct. 20 | 8.11 | | |
| Mar. 17, 1949 | 9.16 | Apr. 18, 1951 | 6.14 | | |

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-61-60-902

Owner: Sinclair Pipeline Co.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| June 20, 1945 | 11.92 | Oct. 8, 1952 | 27.34 | Oct. 20, 1958 | 30.83 |
| Feb. 20, 1948 | 13.00 | Apr. 10, 1953 | 24.15 | Jan. 15, 1960 | 30.55 |
| Oct. 19 | 16.95 | Oct. 14 | 28.99 | Apr. 6, 1961 | 29.10 |
| Mar. 17, 1949 | 16.48 | Apr. 13, 1954 | 25.12 | Apr. 4, 1962 | 29.39 |
| Nov. 21 | 19.38 | Oct. 12, 1955 | 31.05 | Mar. 28, 1963 | 32.06 |
| Apr. 7, 1950 | 18.57 | Apr. 4, 1956 | 28.64 | Feb. 26, 1964 | 34.91 |
| Oct. 20 | 22.32 | Oct. 16 | 31.64 | Mar. 24, 1965 | 35.19 |
| Apr. 18, 1951 | 19.96 | Apr. 4, 1957 | 29.87 | Mar. 3, 1966 | 35.05 |
| Oct. 12 | 25.29 | Oct. 29 | 31.18 | | |
| Apr. 9, 1952 | 22.19 | Apr. 9, 1958 | 29.10 | | |

Well SB-61-60-903

Owner: B. H. Willis Estate.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| Jan. 17, 1945 | 13.10 | Apr. 7, 1950 | 13.20 | Oct. 8, 1952 | 17.98 |
| Feb. 20, 1948 | 12.56 | Oct. 20 | 14.99 | Oct. 14, 1953 | 18.39 |
| Oct. 19 | 14.60 | Apr. 18, 1951 | 14.95 | Apr. 13, 1954 | 19.04 |
| Mar. 16, 1949 | 14.14 | Oct. 12 | 15.52 | | |
| Nov. 2 | 14.32 | Apr. 8, 1952 | 15.32 | | |

Well SB-64-02-601

Owner: Devers Canal Co.

| | | | | | |
|---------------|------|---------------|------|--------------|------|
| Dec. 8, 1944 | 3.60 | Mar. 16, 1949 | 4.20 | Apr. 6, 1950 | 5.62 |
| Oct. 19, 1948 | 6.85 | Nov. 1 | 4.28 | Oct. 20 | 6.73 |

(Continued on next page)

Table 7.--Water levels in wells in Liberty County--Continued

| Date | Water level | Date | Water level | Date | Water level |
|------|-------------|------|-------------|------|-------------|
|------|-------------|------|-------------|------|-------------|

Well SB-64-02-601--Continued

| | | | | | |
|---------------|------|--------------|------|---------------|------|
| Apr. 17, 1951 | 7.33 | Oct. 8, 1952 | 8.89 | Apr. 14, 1954 | 7.53 |
| Oct. 9 | 8.23 | Apr. 7, 1953 | 8.12 | | |
| Apr. 11, 1952 | 7.89 | Oct. 13 | 8.80 | | |

Well SB-64-03-103

Owner: Bill Norman.

| | | | | | |
|---------------|-------|---------------|-------|---------------|-------|
| June 16, 1945 | 10.73 | Apr. 6, 1950 | 18.36 | Apr. 11, 1952 | 23.24 |
| Oct. 19, 1948 | 15.52 | Oct. 20 | 21.58 | Oct. 8 | 25.26 |
| Mar. 16, 1949 | 14.34 | Apr. 17, 1951 | 20.96 | Apr. 7, 1953 | 20.00 |
| Nov. 1 | 17.40 | Oct. 9 | 23.06 | | |

Well SB-64-04-101

Owner: J. D. Sellers.

| | | | | | |
|---------------|-------|---------------|-------|--------------|-------|
| 1938 | 14 | Oct. 19, 1948 | 30.43 | Nov. 2, 1949 | 32.61 |
| Feb. 20, 1948 | 19.43 | Mar. 16, 1949 | 24.24 | Apr. 7, 1950 | 26.18 |

Table 8.--Chemical analyses of water from wells and springs in Liberty County

(Analyses given are in parts per million, except specific conductance, pH, percent sodium, sodium-adsorption ratio, and residual sodium carbonate.)

Water-bearing unit: J, Jasper aquifer; Ev, Evangeline aquifer; Ch, Chicot aquifer.

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| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO ₂) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO ₃) g | Sulfate (SO ₄) | Chloride (Cl) | Fluoride (F) | Nitrate (NO ₃) | Phosphate (PO ₄) | Boron (B) | Dissolved solids | Hardness as CaCO ₃ | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH | |
|--------------|--------------------|--------------------|--------------------|----------------------------|-----------|----------------|--------------|----------------|-------------|---------------|--------------------------------------|----------------------------|---------------|--------------|----------------------------|------------------------------|-----------|------------------|-------------------------------|----------------|-------------------------------|---------------------------------|--|-----|-----|
| SB-60-48-101 | 1,337 | Dec. 7, 1955 | J | 19 | 0.06 | -- | 7.8 | 0.6 | 131 | 1.5 | 263 | 15 | 52 | 0.8 | 0.2 | 0.3 | 0.22 | -- | 22 | 92 | 12 | 3.87 | 584 | 8.0 | |
| | 102 | 845 | Aug. 4, 1965 | Ev | -- | -- | -- | -- | -- | -- | 314 | -- | 20 | -- | -- | -- | -- | -- | 104 | -- | -- | 3.07 | 566 | 7.7 | |
| | 103 | 833 | Apr. 11, 1944 | Ev | 17 | .12 | -- | 34 | 7.2 | 90 | 6.7 | 321 | 15 | 27 | .6 | .5 | -- | -- | 377 | 114 | -- | 3.7 | 2.97 | 590 | 7.7 |
| | 104 | 1,512 | June 8, 1945 | J | 19 | .02 | -- | 6.5 | .9 | *140 | -- | 291 | 15 | 47 | .8 | .8 | -- | -- | 378 | 20 | -- | 14 | 4.39 | 717 | 8.0 |
| | 105 | 90 | Jan. 26, 1945 | Ev | -- | -- | -- | 12 | 3.2 | *33 | -- | 29 | 2 | 57 | -- | 10 | -- | -- | 171 | 43 | -- | 2.2 | .00 | -- | -- |
| | 106 | 300 | do | Ev | 26 | .05 | -- | 47 | 3.4 | *11 | -- | 154 | 2 | 18 | .2 | .0 | -- | -- | 190 | 131 | -- | .4 | .00 | 301 | 7.8 |
| | 107 | 200 | do | Ev | -- | -- | -- | 21 | 2.7 | *22 | -- | 52 | 3 | 47 | -- | .5 | -- | -- | 157 | 64 | -- | 1.2 | .00 | -- | -- |
| | 108 | 1,298 | Jan. 8, 1937 | Ev,J | -- | -- | -- | 4 | -- | *133 | -- | 270 | 16 | 47 | -- | .0 | -- | -- | 323 | 16 | -- | 14 | 4.11 | -- | -- |
| | 109 | 386 | do | Ev | -- | -- | -- | -- | -- | -- | 1.5 | 186 | 2 | 14 | -- | .0 | -- | -- | 180 | 171 | -- | -- | -- | -- | -- |
| | 202 | 1,641 | Jan. 10, 1966 | J | 21 | .12 | -- | 30 | .6 | 168 | 1.3 | 352 | 6.4 | 60 | 1.4 | .0 | -- | .39 | 435 | 10 | 97 | 23 | 5.57 | 734 | 8.2 |
| | 301 | 980 | July 28, 1965 | Ev,J | -- | -- | -- | -- | -- | -- | 264 | -- | 31 | -- | -- | -- | -- | -- | 184 | -- | -- | .65 | 518 | 7.0 | |
| | 302 | 452 | July 15, 1965 | Ev | 34 | -- | -- | 53 | .9 | *31 | -- | 178 | 14 | 30 | .1 | .0 | -- | .04 | 251 | 136 | 33 | 1.2 | .20 | 370 | 7.0 |
| | 401 | 327 | Apr. 6, 1945 | Ev | -- | -- | -- | 68 | 3.1 | *12 | -- | 222 | 3 | 16 | -- | 0 | -- | -- | 238 | 182 | -- | .4 | .00 | -- | -- |
| | 402 | 187 | do | Ev | -- | -- | -- | 71 | 14 | *17 | -- | 239 | 3 | 21 | -- | .2 | -- | -- | 265 | 192 | -- | .5 | .07 | -- | -- |
| | 404 | 18 | do | Ev | -- | -- | -- | 40 | 7.5 | *27 | -- | 104 | 10 | 47 | -- | 33 | -- | -- | 268 | 131 | -- | 1.0 | .00 | -- | -- |
| | 405 | 25 | Dec. 13, 1965 | Ev | -- | .37 | -- | -- | -- | -- | 6 | -- | 18 | -- | 2.2 | -- | -- | -- | 17 | -- | -- | -- | 102 | 6.0 | |
| | 702 | 1,394 | Dec. 7, 1966 | J | -- | -- | -- | -- | -- | -- | 258 | 14 | 60 | -- | -- | -- | -- | -- | 10 | -- | -- | 4.03 | 632 | 7.9 | |
| | 801 | 100 | Mar. 30, 1945 | Ev | -- | -- | -- | 31 | 5.7 | *43 | -- | 24 | 7 | 118 | -- | -- | -- | -- | 298 | 101 | -- | 1.9 | .00 | -- | -- |
| | 56-902 | 1,040 | Aug. 5, 1965 | Ev | -- | -- | -- | -- | -- | -- | 162 | -- | 26 | -- | -- | -- | -- | -- | 118 | -- | -- | .30 | 345 | 7.3 | |
| | 64-502 | 980 | July 29, 1965 | Ev | -- | -- | -- | -- | -- | -- | 190 | -- | 40 | -- | -- | -- | -- | -- | 112 | -- | -- | .87 | 443 | 7.2 | |
| | 601 | 808 | June 9, 1945 | Ev,Ch | -- | .26 | -- | 68 | 8.1 | *61 | -- | 205 | 8 | 113 | -- | -- | -- | -- | 388 | 203 | -- | 1.9 | .00 | -- | -- |
| | 601 | 808 | July 23, 1965 | Ev,Ch | -- | -- | -- | -- | -- | -- | 274 | -- | 184 | -- | -- | -- | -- | -- | 292 | -- | -- | -- | 1,040 | 7.5 | |
| | 602 | 1,017 | do | Ev,Ch | 21 | -- | -- | 34 | 2.2 | *118 | -- | 190 | 15 | 127 | .2 | .0 | -- | .07 | 410 | 94 | 73 | 5.3 | 1.23 | 747 | 7.3 |
| | 603 | 540 | Apr. 18, 1945 | Ev,Ch | -- | .89 | -- | 66 | 7.5 | *108 | -- | 182 | 7 | 178 | -- | -- | -- | -- | 502 | 196 | -- | 3.4 | .00 | -- | -- |
| | 604 | 20 | do | Ch | -- | .38 | -- | 129 | 11 | *40 | -- | 371 | 6 | 68 | -- | 6.9 | -- | -- | 523 | 367 | -- | .9 | .00 | -- | -- |
| | 901 | 912 | Aug. 5, 1965 | Ev | -- | -- | -- | -- | -- | -- | 198 | -- | 27 | -- | -- | -- | -- | -- | 61 | -- | -- | 2.02 | 403 | 7.6 | |

See footnotes at end of table.

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO_2) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO_3) g | Sulfate (SO_4) | Chloride (Cl) | Fluoride (F) | Nitrate (NO_3) | Phosphate (PO_4) | Boron (B) | Dissolved solids | Hardness as CaCO_3 | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|---------------------------|-----------|----------------|--------------|----------------|-------------|---------------|----------------------------------|---------------------------|---------------|--------------|---------------------------|-----------------------------|-----------|------------------|-----------------------------|----------------|-------------------------------|---------------------------------|--|-----|
| SB-60-64-902 | 595 | Aug. 9, 1955 | Ev, Ch | 19 | -- | -- | 42 | 4.4 | 50 | 2.0 | 206 | 8.9 | 42 | -- | 0.2 | -- | 0.12 | 274 | 122 | -- | 2.0 | 0.94 | 472 | 8.0 |
| 907 | 276 | Apr. 18, 1945 | Ch | -- | 0.26 | -- | 50 | 5.9 | *40 | -- | 184 | 7 | 43 | -- | .2 | -- | -- | 264 | 149 | -- | 1.4 | .36 | -- | -- |
| 61-33-601 | 140 | Apr. 4, 1945 | Ev | -- | -- | -- | 65 | 4.8 | *13 | -- | 207 | 3 | 26 | -- | .5 | -- | -- | 249 | 182 | -- | .4 | .00 | -- | -- |
| 601 | 140 | Dec. 9, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 214 | -- | 34 | -- | -- | -- | -- | -- | 180 | -- | -- | .00 | 444 | 7.0 |
| 602 | 86 | Apr. 4, 1945 | Ev | -- | -- | -- | 31 | 2.7 | *11 | -- | 94 | 3 | 23 | -- | -- | -- | -- | 157 | 88 | -- | .5 | .00 | -- | -- |
| 603 | 23 | do | Ev | -- | -- | -- | 18 | 16 | *61 | -- | 11 | 17 | 74 | -- | 138 | -- | -- | 419 | 111 | -- | 2.5 | .00 | -- | -- |
| 604 | 56 | do | Ev | -- | -- | -- | 217 | 14 | *94 | -- | 219 | 7 | 425 | -- | 20 | -- | -- | 1,060 | 599 | -- | -- | -- | -- | -- |
| 701 | 835 | Aug. 2, 1955 | Ev | 32 | -- | -- | 34 | 2.5 | 36 | 2.2 | 173 | 4.5 | 24 | -- | .0 | -- | .15 | 224 | 95 | -- | 1.6 | .93 | 359 | 7.7 |
| 701 | 835 | July 28, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 149 | -- | 22 | -- | -- | -- | -- | -- | 113 | -- | -- | .18 | 319 | 6.6 |
| 702 | 110 | Apr. 5, 1945 | Ev | -- | -- | -- | 7.7 | 1.3 | *24 | -- | 64 | 2 | 11 | -- | 7.5 | -- | -- | 97 | 25 | -- | 2.1 | .56 | -- | -- |
| 703 | 1,200 | Jan. 8, 1937 | J | -- | -- | -- | 2 | -- | *208 | -- | 402 | 1 | 98 | -- | .0 | -- | -- | 493 | 16 | -- | -- | -- | -- | -- |
| 704 | 52 | Apr. 5, 1945 | Ev | -- | -- | -- | 81 | 7.3 | *104 | -- | 166 | 13 | 215 | -- | 5.6 | -- | -- | 600 | 232 | -- | 3.0 | .00 | -- | -- |
| 705 | 440 | Apr. 17, 1945 | Ev | -- | .29 | -- | 33 | 6.0 | *31 | -- | 172 | 4 | 20 | -- | .2 | -- | -- | 201 | 107 | -- | 1.3 | .69 | -- | -- |
| 706 | 226 | June 8, 1945 | Ev | -- | .10 | -- | 17 | 1.7 | *18 | -- | 66 | 2 | 22 | -- | .5 | -- | -- | 143 | 49 | -- | 1.1 | .09 | -- | -- |
| 707 | 36 | Mar. 29, 1945 | Ev | -- | -- | -- | 9.2 | 3.3 | *21 | -- | 42 | 2 | 21 | -- | 20 | -- | -- | 119 | 31 | -- | 1.6 | .00 | -- | -- |
| 801 | 85 | Apr. 5, 1945 | Ev | -- | -- | -- | 23 | 1.9 | *22 | -- | 89 | 2 | 27 | -- | .0 | -- | -- | 172 | 65 | -- | 1.2 | .16 | -- | -- |
| 803 | 45 | do | Ev | -- | -- | -- | 27 | 2.2 | *27 | -- | 101 | 8 | 31 | -- | .2 | -- | -- | 179 | 76 | -- | 1.3 | .13 | -- | -- |
| 901 | 135 | Nov. 23, 1944 | Ev | -- | .06 | -- | 55 | 3.8 | *15 | -- | 188 | 2 | 21 | -- | -- | -- | -- | 232 | 153 | -- | .5 | .02 | -- | -- |
| 902 | 100 | do | Ev | -- | .06 | -- | 48 | 4.7 | *5.8 | -- | 150 | 2 | 19 | -- | -- | -- | -- | 247 | 139 | -- | .2 | .00 | -- | -- |
| 903 | 22 | Apr. 4, 1945 | Ev | -- | -- | -- | 3.0 | .9 | *12 | -- | 26 | 4 | 6.0 | -- | 5.5 | -- | -- | 65 | 11 | -- | 1.6 | .20 | -- | -- |
| 904 | 30 | Apr. 6, 1945 | Ev | -- | -- | -- | 23 | 2.4 | *17 | -- | 71 | 11 | 24 | -- | .8 | -- | -- | 147 | 67 | -- | .9 | .00 | -- | -- |
| 905 | 236 | July 26, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 245 | -- | 9.0 | -- | -- | -- | -- | -- | 42 | -- | -- | 3.18 | 423 | 7.2 |
| 908 | 62 | Apr. 6, 1945 | Ev | -- | -- | -- | 28 | 6.4 | *17 | -- | 21 | 7 | 17 | -- | 104 | -- | -- | 229 | 96 | -- | .8 | .00 | -- | -- |
| 909 | Spring | Apr. 4, 1945 | Ev | -- | -- | -- | 17 | 2.1 | *20 | -- | 32 | 3 | 45 | -- | 1.8 | -- | -- | 148 | 51 | -- | 1.2 | .00 | -- | -- |
| 912 | 283 | Dec. 12, 1965 | Ev | -- | .01 | -- | -- | -- | -- | -- | 232 | -- | 23 | -- | .2 | -- | -- | -- | 178 | -- | -- | .24 | 416 | 7.7 |
| 34-106 | 800 | Sept. 1, 1965 | J | -- | -- | -- | -- | -- | -- | -- | 292 | -- | 46 | -- | -- | -- | -- | -- | 26 | -- | -- | 4.27 | 639 | 7.7 |

See footnotes at end of table.

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO ₂) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO ₃) g/l | Sulfate (SO ₄) g/l | Chloride (Cl) g/l | Fluoride (F) g/l | Nitrate (NO ₃) g/l | Phosphate (PO ₄) g/l | Boron (B) mg/l | Dissolved solids mg/l | Hardness as CaCO ₃ mg/l | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|----------------------------|-----------|----------------|--------------|----------------|-------------|---------------|--|-----------------------------------|----------------------|---------------------|-----------------------------------|-------------------------------------|-------------------|--------------------------|---------------------------------------|----------------|-------------------------------|---------------------------------|--|-----|
| SB-61-34-107 | Spring | Sept. 1, 1965 | Ev | -- | -- | -- | -- | -- | -- | 316 | -- | 84 | -- | -- | -- | -- | -- | 302 | -- | -- | 0.00 | 787 | 7.0 | |
| 401 | 645 | Nov. 23, 1944 | Ev | -- | 0.49 | -- | 44 | 7.4 | *32 | -- | 216 | 7 | 18 | -- | -- | -- | -- | 237 | 140 | -- | 1.2 | .74 | -- | |
| 401 | 645 | Dec. 9, 1965 | Ev | -- | .66 | -- | -- | -- | -- | 191 | -- | 19 | -- | -- | -- | -- | -- | 116 | -- | -- | .81 | 363 | 7.5 | |
| 402 | 608 | Jan. 10, 1945 | Ev | 20 | .06 | -- | 36 | 6.6 | *44 | -- | 219 | 7.8 | 18 | -- | -- | -- | -- | 244 | 117 | -- | 1.8 | 1.25 | 397 | 7.4 |
| 403 | 233 | do | Ev | 22 | .04 | -- | 43 | 3.5 | *25 | -- | 170 | 3 | 24 | -- | 0.2 | -- | -- | 207 | 122 | -- | 1.0 | .35 | 332 | 7.2 |
| 404 | 382 | Aug. 31, 1965 | Ev | -- | -- | -- | -- | -- | -- | 218 | -- | 18 | -- | -- | -- | -- | -- | 115 | -- | -- | 1.27 | 409 | 7.3 | |
| 408 | 650 | Apr. 13, 1942 | Ev | -- | -- | -- | 53 | 2.2 | *29 | -- | 214 | 5 | 16 | -- | -- | -- | -- | 210 | 141 | -- | -- | -- | -- | -- |
| 501 | 808 | do | Ev | -- | .15 | -- | 46 | 4.5 | *33 | -- | 220 | 5 | 14 | -- | -- | -- | -- | 211 | 133 | -- | -- | -- | -- | -- |
| 501 | 808 | Nov. 23, 1944 | Ev | -- | .15 | -- | 46 | 8.9 | *23 | -- | 211 | 6 | 15 | -- | -- | -- | -- | 236 | 151 | -- | .8 | .43 | -- | -- |
| 502 | 585 | Apr. 13, 1942 | Ev | -- | -- | -- | 60 | 4.6 | *12 | -- | 207 | 4 | 14 | -- | -- | -- | -- | 197 | 168 | -- | -- | -- | -- | -- |
| 503 | 659 | Jan. 11, 1945 | Ev | -- | .08 | -- | 41 | 7.1 | *31 | -- | 202 | 4 | 16 | -- | -- | -- | -- | 268 | 132 | -- | 1.2 | .81 | -- | -- |
| 506 | 715 | Aug. 30, 1965 | Ev | 24 | -- | -- | 37 | 5.3 | *42 | -- | 214 | 8.4 | 14 | 0.2 | .0 | -- | -- | 236 | 114 | 44 | 1.7 | 1.22 | 387 | 7.4 |
| 509 | 500 | Sept. 1, 1965 | Ev | -- | -- | -- | -- | -- | -- | 210 | -- | 15 | -- | -- | -- | -- | -- | 119 | -- | -- | 1.06 | 384 | 7.3 | |
| 511 | 650 | Aug. 30, 1965 | Ev | 31 | -- | -- | 55 | 2.4 | *13 | -- | 190 | 6.2 | 8.6 | .1 | .2 | -- | -- | 210 | 147 | 16 | .5 | .17 | 334 | 7.2 |
| 601 | 580 | Apr. 13, 1942 | Ev | -- | -- | -- | 6.4 | 5.4 | *75 | -- | 207 | 4 | 18 | -- | -- | -- | -- | 211 | 38 | -- | -- | -- | -- | -- |
| 601 | 580 | Dec. 8, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 204 | -- | 19 | -- | -- | -- | -- | 144 | -- | -- | .46 | 386 | 7.2 | |
| 603 | 165 | Jan. 11, 1945 | Ev | -- | 37 | -- | 20 | 1.5 | *16 | -- | 62 | 14 | 18 | -- | .2 | -- | -- | 121 | 56 | -- | .9 | .00 | -- | -- |
| 605 | 90 | do | Ev | -- | .81 | -- | 6.6 | 1.6 | *15 | -- | 26 | 2 | 22 | -- | .5 | -- | -- | 72 | 23 | -- | 1.4 | .00 | -- | -- |
| 607 | 87 | Jan. 24, 1945 | Ev | 18 | 5.2 | -- | 19 | 2.3 | *15 | -- | 65 | 2 | 24 | .2 | .0 | -- | -- | 123 | 57 | -- | .9 | .00 | 188 | 6.2 |
| 801 | 808 | Apr. 13, 1942 | Ev | -- | -- | -- | 27 | 1.0 | *58 | -- | 207 | 5 | 16 | -- | -- | -- | -- | 209 | 71 | -- | -- | -- | -- | -- |
| 801 | 808 | Jan. 4, 1945 | Ev | -- | -- | -- | -- | -- | -- | -- | 196 | 6 | 17 | -- | -- | -- | -- | 88 | -- | -- | -- | -- | -- | -- |
| 805 | 480 | July 12, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 268 | -- | 46 | -- | -- | -- | -- | 128 | -- | -- | 1.83 | 566 | 7.2 | |
| 807 | 310 | Apr. 13, 1942 | Ev | -- | -- | -- | 51 | 2.2 | *9.2 | -- | 171 | 2 | 10 | -- | -- | -- | -- | 158 | 136 | -- | -- | -- | -- | -- |
| 807 | 310 | Jan. 4, 1945 | Ev | -- | -- | -- | -- | -- | -- | -- | 155 | 3 | 12 | -- | -- | -- | -- | 135 | -- | -- | -- | -- | -- | -- |
| 902 | 104 | Jan. 10, 1945 | Ev | -- | .00 | -- | 30 | 1.8 | *20 | -- | 92 | 2 | 34 | -- | .2 | -- | -- | 168 | 82 | -- | 1.0 | .00 | -- | -- |
| 903 | Spring | Jan. 24, 1945 | Ev | -- | -- | -- | 29 | 3.2 | *24 | -- | 78 | 10 | 45 | -- | .5 | -- | -- | 184 | 86 | -- | 1.1 | .00 | -- | -- |

See footnotes at end of table.

DO NOT USE FOR DRINKING WATER PURPOSES

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Manganese (Mn) | Iron (Fe) | Silica (SiO_2) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO_3^-) g/l | Sulfate (SO_4^{2-}) g/l | Chloride (Cl) | Nitrate (NO_3^-) | Fluoride (F) | Boron (B) | Phosphate (PO_4^{3-}) | Dissolved solids as CaCO_3 | Hardness as CaCO_3 | Percent sodium carbonate (RSC) | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (mfarcomhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|----------------|-----------|---------------------------|--------------|----------------|-------------|---------------|--------------------------------------|------------------------------------|---------------|-----------------------------|--------------|-----------|----------------------------------|-------------------------------------|-----------------------------|--------------------------------|-------------------------------|---------------------------------|---|-----|
| SB-61-41-101 | 502 | Aug. 5, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 1.06 | -- | 1.3 | -- | -- | -- | -- | 80 | -- | -- | 0.14 | 220 | 6.3 | |
| 102 | 45 | Apr. 17, 1945 | Ev | -- | 0.71 | -- | 5.7 | 2.8 | *14 | -- | 34 | 5 | 15 | -- | 3.7 | -- | -- | 92 | 26 | -- | 1.2 | .04 | -- | |
| 301 | 40 | Jan. 9, 1945 | Ev | -- | .10 | -- | 31 | 1.9 | *13 | -- | 117 | 9 | 6.0 | -- | -- | -- | -- | 164 | 85 | -- | .6 | .22 | -- | |
| 401 | 325 | Jan. 25, 1945 | Ev | 30 | .05 | -- | 64 | 4.0 | *15 | -- | 221 | 2 | 18 | -- | .2 | -- | -- | 252 | 176 | -- | .5 | .10 | 395 | |
| 402 | 100 | Jan. 26, 1945 | Ev | -- | .06 | -- | 17 | 2.2 | *26 | -- | 87 | 4 | 23 | -- | .2 | -- | -- | 145 | 52 | -- | 1.6 | .40 | -- | |
| 405 | 35 | Jan. 25, 1945 | Ev | -- | .11 | -- | 62 | 10 | *256 | -- | 88 | 26 | 410 | -- | 94 | -- | -- | 1,040 | 196 | -- | 8.0 | .00 | -- | |
| 406 | 39 | Jan. 26, 1945 | Ev | -- | .09 | -- | 19 | 1.4 | *18 | -- | 61 | 2 | 26 | -- | 4.5 | -- | -- | 120 | 53 | -- | 1.1 | .00 | -- | |
| 501 | 368 | Jan. 25, 1945 | Ev | -- | -- | 49 | 4.1 | *18 | -- | 178 | 3 | 20 | -- | .2 | -- | -- | 212 | 139 | -- | .7 | .14 | -- | | |
| 501 | 368 | Dec. 12, 1965 | Ev | -- | .01 | -- | -- | -- | -- | -- | 172 | -- | 18 | -- | 1.0 | -- | -- | -- | 127 | -- | -- | .28 | .28 | 337 |
| 502 | 247 | Jan. 25, 1945 | Ev | -- | -- | 57 | 4.4 | *17 | -- | 205 | 4 | 18 | -- | -- | -- | -- | -- | 238 | 160 | -- | .6 | .15 | -- | |
| 503 | 95 | Apr. 17, 1945 | Ev | -- | .41 | -- | 5.9 | 1.7 | *27 | -- | 63 | 2 | 18 | -- | 1.2 | -- | -- | 106 | 22 | -- | 2.5 | .60 | -- | |
| 701 | 625 | Aug. 2, 1955 | Ev | 32 | -- | -- | 40 | 3.3 | 16 | -- | 146 | 1.6 | 22 | -- | .0 | -- | -- | 194 | 113 | 23 | .7 | .13 | 307 | |
| 901 | 222 | Jan. 25, 1945 | Ev | -- | -- | 36 | 2.7 | *24 | -- | 139 | 5 | 24 | -- | -- | -- | -- | -- | 188 | 101 | -- | 1.0 | .26 | -- | |
| 902 | 60 | do | Ev | -- | 17 | -- | 6.9 | 2.6 | *28 | -- | 64 | 3 | 18 | -- | 11 | -- | -- | 99 | 28 | -- | 2.3 | .49 | -- | |
| 42-101 | 480 | Jan. 9, 1945 | Ev | -- | .04 | -- | 45 | 3.9 | *22 | -- | 163 | 2 | 29 | -- | -- | -- | -- | 217 | 128 | -- | .8 | .10 | -- | |
| 301 | 1,000 | Sep. 9, 1965 | Ev | 23 | -- | 32 | 6.4 | *46 | -- | 211 | 10 | 16 | 0.2 | .2 | -- | -- | 238 | 106 | 49 | 1.9 | 1.34 | 395 | | |
| 501 | 379 | Aug. 5, 1965 | Ev | -- | -- | -- | -- | -- | -- | 570 | -- | 245 | -- | -- | -- | -- | -- | 59 | 28 | -- | -- | 8.16 | 1,640 | |
| 503 | 600 | do | Ev | -- | -- | -- | -- | -- | -- | 240 | -- | 1,010 | -- | -- | -- | -- | -- | 308 | -- | -- | -- | .00 | 3,560 | |
| 43-701 | 150 | July 23, 1965 | Ev | -- | -- | -- | -- | -- | -- | 246 | -- | 100 | -- | -- | -- | -- | -- | 272 | -- | -- | -- | -- | 725 | |
| 702 | 639 | May 20, 1960 | Ev | 32 | -- | 66 | 3.3 | 14 | 2.7 | 200 | 6.2 | 30 | -- | .0 | -- | 0.05 | 252 | 178 | 14 | .5 | .00 | 419 | | |
| 801 | 100 | July 23, 1965 | Ev | -- | -- | -- | -- | -- | -- | 312 | -- | 176 | -- | -- | -- | -- | -- | 378 | -- | -- | -- | .00 | 1,060 | |
| 49-102 | 103 | Jan. 25, 1945 | Ev | -- | -- | 13 | 1.9 | *38 | -- | 90 | 2 | 32 | -- | 2.5 | -- | -- | 161 | 40 | -- | 2.6 | .67 | -- | | |
| 301 | 24 | June 8, 1945 | Ev | -- | .26 | -- | 5.2 | 2.4 | *16 | -- | 19 | 2 | 19 | -- | 16 | -- | -- | 85 | 23 | -- | 1.5 | .00 | -- | |
| 301 | 24 | Dec. 13, 1965 | Ev | -- | .13 | -- | -- | -- | -- | 44 | -- | 110 | -- | .0 | -- | -- | -- | 58 | -- | -- | -- | -- | 438 | |
| 801 | 750 | June 9, 1945 | Ev | -- | .06 | -- | 53 | 4.9 | *28 | -- | 201 | 4 | 32 | -- | .2 | -- | -- | 254 | 152 | -- | 1.0 | .25 | -- | |
| 802 | 760 | Aug. 4, 1965 | Ev | -- | -- | -- | -- | -- | -- | 220 | -- | 37 | -- | -- | -- | -- | -- | 168 | -- | -- | -- | .25 | 472 | |

See footnotes at end of table.

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO ₂) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO ₃) g/l | Sulfate (SO ₄) | Chloride (Cl) | Fluoride (F) | Nitrate (NO ₃) | Phosphate (PO ₄) | Boron (B) | Dissolved solids | Hardness as CaCO ₃ | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|----------------------------|-----------|----------------|--------------|----------------|-------------|---------------|-------------------------------------|----------------------------|---------------|--------------|----------------------------|------------------------------|-----------|------------------|-------------------------------|----------------|-------------------------------|---------------------------------|--|-----|
| SB-61-49-804 | 760 | July 15, 1965 | Ev | 26 | -- | -- | 55 | 3.1 | *37 | -- | 204 | 8.0 | 38 | 0.3 | 0.0 | -- | 0.02 | 267 | 150 | 35 | 1.3 | 0.34 | 453 | 7.2 |
| 805 | 624 | Aug. 4, 1955 | Ev | 29 | -- | -- | 71 | 5.8 | 38 | 1.6 | 240 | 7.7 | 59 | -- | .0 | -- | .12 | 330 | 200 | 29 | 1.2 | .00 | 599 | 7.7 |
| 805 | 624 | July 15, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 362 | -- | 79 | -- | -- | -- | -- | -- | 296 | -- | -- | .01 | 818 | 7.1 |
| 806 | 885 | Aug. 4, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 184 | -- | 37 | -- | -- | -- | -- | -- | 148 | -- | -- | .06 | 421 | 7.5 |
| 51-102 | 660 | July 13, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 250 | -- | 29 | -- | -- | -- | -- | -- | 192 | -- | -- | .26 | 496 | 7.1 |
| 107 | 90 | Aug. 19, 1965 | Ch | -- | -- | -- | -- | -- | -- | -- | 262 | -- | 17 | -- | -- | -- | -- | -- | 174 | -- | -- | .81 | 454 | 7.3 |
| 201 | 643 | July 12, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 201 | -- | 33 | -- | -- | -- | -- | -- | 179 | -- | -- | -- | 437 | 7.2 |
| 202 | 100 | July 22, 1965 | Ch | -- | -- | -- | -- | -- | -- | -- | 314 | -- | 36 | -- | -- | -- | -- | -- | 206 | -- | -- | 1.03 | 610 | 7.0 |
| 501 | 160 | July 13, 1965 | Ch | -- | -- | -- | -- | -- | -- | -- | 296 | -- | 49 | -- | -- | -- | -- | -- | 218 | -- | -- | .47 | 622 | 7.0 |
| 502 | 106 | Aug. 19, 1965 | Ch | -- | -- | -- | -- | -- | -- | -- | 390 | -- | 38 | -- | -- | -- | -- | -- | 216 | -- | -- | 2.07 | 718 | 7.0 |
| 601 | 550 | July 19, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 220 | -- | 59 | -- | -- | -- | -- | -- | 186 | -- | -- | -- | 563 | 6.9 |
| 701 | 678 | May 20, 1960 | Ev, Ch | 23 | -- | -- | 144 | 10 | 84 | 2.6 | 257 | 22 | 250 | -- | -- | -- | .02 | 669 | 400 | 31 | 1.8 | .00 | 1,240 | 6.9 |
| 701 | 678 | July 13, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 282 | 22 | 173 | -- | -- | -- | -- | -- | 344 | -- | -- | .00 | 1,030 | 7.1 |
| 705 | 150 | do | Ch | 24 | -- | -- | 101 | 7.3 | *70 | -- | 428 | 5.6 | 54 | .4 | .0 | -- | .08 | 472 | 282 | 35 | 1.8 | 1.37 | 809 | 7.5 |
| 801 | 817 | July 20, 1965 | Ev | 28 | -- | -- | 54 | 4.3 | *79 | -- | 270 | 10 | 65 | .3 | .0 | -- | .08 | 374 | 152 | 53 | 2.8 | 1.39 | 646 | 7.3 |
| 804 | 625 | do | Ev | -- | -- | -- | -- | -- | -- | -- | 260 | 8.0 | 37 | -- | -- | -- | -- | -- | 156 | -- | -- | 1.14 | 536 | 7.3 |
| 806 | 624 | Aug. 5, 1955 | Ev, Ch | 26 | -- | -- | 57 | 3.1 | *43 | -- | 233 | 7.6 | 36 | -- | -- | -- | .03 | 288 | 154 | -- | 1.8 | -- | 498 | 7.9 |
| 806 | 624 | July 20, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 253 | -- | 39 | -- | -- | -- | -- | -- | 174 | -- | -- | .67 | 536 | 6.8 |
| 906 | 365 | Apr. 12, 1944 | Ch | 24 | 0.03 | -- | 50 | 3.2 | 46 | 4.0 | 213 | 4.7 | 44 | .8 | .5 | -- | -- | 288 | 138 | -- | 1.7 | .73 | 492 | 7.9 |
| 906 | 365 | Feb. 1, 1966 | Ch | 27 | -- | -- | 46 | 3.7 | 50 | 1.6 | 220 | 5.8 | 40 | .2 | .2 | 0.01 | .05 | 283 | 130 | 45 | 1.9 | 1.01 | 482 | 7.3 |
| 913 | 580 | Jan. 10, 1966 | Ev | 23 | .12 | -- | 50 | 3.7 | 46 | 1.5 | 220 | 5.8 | 40 | .3 | .0 | -- | .05 | 278 | 140 | 41 | 1.7 | .81 | 476 | 7.4 |
| 57-101 | 1,000 | June 9, 1945 | Ev, Ch | -- | .61 | -- | 92 | 8.5 | *104 | -- | 354 | 12 | 133 | -- | .2 | -- | -- | 550 | 264 | -- | 2.8 | .51 | -- | -- |
| 102 | 740 | do | Ev, Ch | -- | .48 | -- | 97 | 8.3 | *46 | -- | 264 | 12 | 104 | -- | .2 | -- | -- | 470 | 276 | -- | 1.2 | .00 | -- | -- |
| 102 | 740 | July 23, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 208 | -- | 51 | -- | -- | -- | -- | -- | 152 | -- | -- | .37 | 514 | 7.2 |
| 105 | 880 | do | Ev | -- | -- | -- | -- | -- | -- | -- | 200 | -- | 26 | -- | -- | -- | -- | -- | 108 | -- | -- | 1.12 | 375 | 7.2 |
| 202 | 816 | do | Ev | -- | -- | -- | -- | -- | -- | -- | 236 | -- | 72 | -- | -- | -- | -- | -- | 214 | -- | -- | -- | 626 | 7.1 |

See footnotes at end of table.

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

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| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO_2) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO_3^-) | Sulfate (SO_4^-) | Chloride (Cl) | Fluoride (F) | Nitrate (NO_3^-) | Phosphate (PO_4^{3-}) | Boron (B) | Dissolved solids | Hardness as CaCO_3 | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|---------------------------|-----------|----------------|--------------|----------------|-------------|---------------|----------------------------------|-----------------------------|---------------|--------------|-----------------------------|----------------------------------|-----------|------------------|-----------------------------|----------------|-------------------------------|---------------------------------|--|-----|
| SB-61-57-204 | 827 | July 23, 1965 | Ev | -- | -- | -- | -- | -- | -- | 204 | -- | 38 | -- | -- | -- | -- | -- | 124 | -- | -- | 0.86 | 437 | 7.1 | |
| 206 | 887 | do | Ev, Ch | 23 | -- | -- | 50 | 3.2 | *306 | -- | 200 | 17 | 440 | 0.3 | 0.8 | -- | 0.08 | 938 | 138 | 83 | 11 | .52 | 1,790 | 7.3 |
| 401 | 545 | do | Ev, Ch | -- | -- | -- | -- | -- | -- | 228 | -- | 288 | -- | -- | -- | -- | -- | 200 | -- | -- | -- | -- | 1,320 | 7.1 |
| 402 | 1,030 | Apr. 19, 1945 | Ev, Ch | -- | 0.54 | -- | 12 | 2.0 | *235 | -- | 250 | 12 | 234 | -- | -- | -- | -- | 638 | 38 | -- | 17 | 3.35 | -- | -- |
| 403 | 1,005 | June 19, 1945 | Ev, Ch | -- | .21 | -- | 18 | 2.1 | *250 | -- | 241 | 18 | 270 | -- | -- | -- | -- | 708 | 54 | -- | 15 | 2.88 | -- | -- |
| 405 | 870 | June 7, 1945 | Ev, Ch | -- | .08 | -- | 4.2 | .8 | *212 | -- | 258 | 19 | 172 | -- | .2 | -- | -- | 542 | 14 | -- | 25 | 3.97 | -- | -- |
| 405 | 870 | July 30, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | 220 | -- | 234 | -- | -- | -- | -- | -- | 44 | -- | -- | 2.73 | 1,190 | 7.2 | |
| 406 | 834 | Apr. 19, 1945 | Ev, Ch | -- | .40 | -- | 26 | 3.3 | *423 | -- | 240 | 12 | 560 | -- | .8 | -- | -- | 1,140 | 78 | -- | 21 | 2.36 | -- | -- |
| 406 | 834 | July 30, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | 254 | -- | 636 | -- | -- | -- | -- | -- | 50 | -- | -- | 3.16 | 2,460 | 7.3 | |
| 409 | 884 | do | Ev | -- | -- | -- | -- | -- | -- | 230 | -- | 240 | -- | -- | -- | -- | -- | 61 | -- | -- | 2.55 | 1,130 | 7.2 | |
| 506 | 940 | July 15, 1965 | Ev | -- | -- | -- | -- | -- | -- | 266 | -- | 225 | -- | -- | -- | -- | -- | 54 | -- | -- | 3.28 | 1,160 | 7.5 | |
| 601 | 490 | Aug. 16, 1965 | Ev | -- | -- | -- | -- | -- | -- | 188 | -- | 240 | -- | -- | -- | -- | -- | 236 | -- | -- | -- | 1,060 | 6.9 | |
| 602 | 376 | do | Ch | -- | -- | -- | -- | -- | -- | 256 | -- | 218 | -- | -- | -- | -- | -- | 140 | -- | -- | 1.40 | 1,080 | 6.9 | |
| 603 | 806 | do | Ev | 18 | -- | 0.04 | 48 | 8.3 | 277 | 2.3 | 198 | 6.8 | 415 | .5 | .8 | 0.02 | .12 | 874 | 154 | 79 | 9.7 | .17 | 1,670 | 7.3 |
| 605 | 399 | Apr. 17, 1944 | Ch | 21 | .11 | -- | 48 | 4.4 | 170 | 4.0 | 239 | 2 | 207 | .8 | .0 | -- | -- | 590 | 118 | -- | 6.8 | 1.56 | 1,080 | 7.7 |
| 701 | 780 | June 15, 1945 | Ev, Ch | -- | .65 | -- | 11 | 1.6 | *132 | -- | 256 | 12 | 69 | -- | -- | -- | -- | 382 | 34 | -- | 9.8 | 3.53 | -- | -- |
| 703 | 837 | Aug. 13, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | 264 | -- | 48 | -- | -- | -- | -- | -- | 24 | -- | -- | 3.85 | 585 | 8.0 | |
| 902 | 400 | Jan. 27, 1945 | Ch | -- | -- | -- | 7.2 | 1.3 | *112 | -- | 229 | 4 | 54 | -- | .2 | -- | -- | 304 | 24 | -- | 9.9 | 3.28 | -- | -- |
| 903 | 685 | do | Ev | 11 | .06 | -- | 29 | 5.6 | *247 | -- | 240 | 2 | 307 | .2 | .5 | -- | -- | 753 | 96 | -- | 11 | 2.55 | 1,370 | 7.8 |
| 58-501 | 960 | June 27, 1960 | Ev | 18 | .80 | .20 | 64 | 14 | 171 | 3.0 | 169 | .0 | 318 | .2 | 1.8 | .05 | -- | 731 | 217 | 63 | 5.0 | .00 | 1,290 | 7.6 |
| 502 | 806 | Jan. 27, 1966 | Ev | 22 | .07 | .11 | 75 | 9.0 | 77 | 2.4 | 178 | 5.4 | 174 | .3 | .2 | .0 | .05 | 453 | 224 | 42 | 2.2 | .00 | 855 | 7.2 |
| 503 | 351 | Nov. 18, 1943 | Ch | 21 | .10 | -- | 53 | 4.7 | 54 | 2.5 | 240 | 9.5 | 46 | .6 | .8 | -- | -- | 312 | 152 | -- | 1.9 | .89 | 544 | 7.5 |
| 504 | 565 | do | Ev | 21 | .08 | -- | 70 | 6.6 | 62 | 3.6 | 190 | 6.8 | 125 | .4 | .2 | -- | -- | 419 | 202 | -- | 1.9 | .00 | 730 | 7.5 |
| 505 | 651 | do | Ev | 16 | .08 | -- | 76 | 11 | 112 | 3.5 | 149 | 3.7 | 251 | .2 | 1.0 | -- | -- | 636 | 234 | -- | 3.2 | .00 | 1,090 | 7.6 |
| 506 | 540 | Jan. 16, 1945 | Ev | -- | 2.4 | -- | 55 | 7.6 | *65 | -- | 206 | 2 | 98 | -- | .8 | -- | -- | 341 | 168 | -- | 2.2 | .01 | -- | -- |
| 507 | 260 | Dec. 9, 1944 | Ch | -- | -- | -- | 67 | 7.0 | *89 | -- | 231 | 5 | 138 | -- | 1.0 | -- | -- | 379 | 196 | -- | 2.8 | .00 | -- | -- |

See footnotes at end of table.

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO_2) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO_3^-) | Sulfate (SO_4^{2-}) | Chloride (Cl) | Fluoride (F) | Nitrate (NO_3^-) | Phosphate (PO_4^{3-}) | Boron (B) | Dissolved solids | Hardness as CaCO_3 | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|---------------------------|-----------|----------------|--------------|----------------|-------------|---------------|----------------------------------|--------------------------------|---------------|--------------|-----------------------------|----------------------------------|-----------|------------------|-----------------------------|----------------|-------------------------------|---------------------------------|--|-----|
| SB-61-58-508 | 350 | Jan. 23, 1945 | Ev | 20 | 0.37 | -- | 60 | 6.8 | *54 | -- | 210 | 4 | 83 | 0.4 | -- | -- | -- | 345 | 178 | -- | 1.8 | 0.00 | 611 | 7.4 |
| 510 | 18 | Jan. 27, 1945 | Ch | -- | -- | -- | 26 | 28 | *11 | -- | 12 | 6 | 30 | -- | 180 | -- | -- | 361 | 180 | -- | .4 | .00 | -- | -- |
| 514 | 601 | Oct. 30, 1931 | Ev | -- | -- | -- | -- | -- | -- | -- | 10 | 130 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 515 | 680 | Nov. 1, 1931 | Ev | -- | -- | -- | -- | -- | -- | -- | 5 | 256 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 605 | 28 | Mar. 31, 1945 | Ch | -- | -- | -- | 62 | 5.2 | *15 | -- | 185 | 4 | 38 | -- | -- | -- | -- | 259 | 176 | -- | .5 | .00 | -- | -- |
| 606 | 40 | Apr. 20, 1945 | Ch | -- | .63 | -- | 38 | 2.4 | *1.7 | -- | 108 | 8 | 8 | -- | .2 | -- | -- | 142 | 105 | -- | .1 | .00 | -- | -- |
| 609 | 610 | Jan. 8, 1966 | Ev | 19 | -- | -- | 50 | 8.5 | 78 | 2.3 | 176 | 5.6 | 132 | .3 | .2 | -- | .06 | 383 | 160 | 51 | 2.7 | .00 | 715 | 7.4 |
| 702 | 350 | June 15, 1945 | Ch | -- | 1.4 | -- | 32 | 3.8 | *166 | -- | 248 | 3 | 177 | -- | -- | -- | -- | 542 | 96 | -- | 7.4 | 2.16 | -- | -- |
| 59-104 | 800 | July 16, 1965 | Ev | -- | -- | -- | -- | -- | -- | -- | 322 | -- | 144 | -- | -- | -- | -- | -- | 310 | -- | -- | -- | 989 | 7.1 |
| 202 | 572 | Aug. 19, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 220 | -- | 348 | -- | -- | -- | -- | -- | 316 | -- | -- | -- | 1,480 | 7.1 |
| 205 | 525 | do | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 200 | -- | 470 | -- | -- | -- | -- | -- | 412 | -- | -- | -- | 1,820 | 6.6 |
| 301 | 255 | June 21, 1945 | Ch | -- | .08 | -- | 42 | 4.6 | *81 | -- | 223 | 9 | 77 | -- | -- | -- | -- | 358 | 124 | -- | 3.2 | 1.18 | -- | -- |
| 404 | 571 | Jan. 10, 1966 | Ev | 16 | -- | -- | 68 | 9.8 | 94 | 2.5 | 180 | 3.2 | 190 | .3 | .0 | -- | .08 | 473 | 210 | 49 | 2.8 | .00 | 898 | 7.3 |
| 501 | 1,180 | Aug. 3, 1955 | Ev | 21 | -- | -- | 75 | 8.5 | 331 | 2.9 | 210 | 2.7 | 558 | -- | 2.0 | -- | .32 | 1,120 | 222 | -- | 9.7 | .00 | 2,100 | 8.3 |
| 503 | 790 | July 14, 1965 | Ev, Ch | -- | -- | -- | -- | -- | -- | -- | 202 | -- | 460 | -- | -- | -- | -- | -- | 198 | -- | -- | -- | 1,830 | 7.2 |
| 506 | 371 | Jan. 8, 1966 | Ch | 25 | -- | -- | 81 | 15 | 410 | 3.0 | 278 | .8 | 660 | .3 | 2.5 | -- | .09 | 1,330 | 262 | 77 | 11 | .00 | 2,490 | 7.3 |
| 601 | 876 | July 14, 1965 | Ev, Ch | 20 | -- | -- | 26 | 3.4 | *289 | -- | 218 | 7.6 | 368 | .6 | .5 | -- | .11 | 822 | 79 | 89 | 14 | 1.99 | 1,570 | 7.3 |
| 801 | 350 | do | Ch | -- | -- | -- | -- | -- | -- | -- | 260 | -- | 520 | -- | -- | -- | -- | -- | 246 | -- | -- | -- | 2,080 | 7.1 |
| 803 | 845 | Jan. 26, 1966 | Ev | 14 | .10 | 0.04 | 11 | 2.6 | 182 | 1.3 | 158 | 4.8 | 216 | .3 | .5 | 0.02 | .10 | 511 | 38 | 91 | 13 | 1.83 | 966 | 7.4 |
| 60-802 | 99 | Jan. 23, 1945 | Ch | -- | 25 | -- | 56 | 6.6 | *29 | -- | 171 | 21 | 49 | -- | -- | -- | -- | 274 | 167 | -- | 1.0 | .00 | -- | -- |
| 902 | 492 | June 20, 1945 | Ch | -- | 1.1 | -- | 21 | 3.9 | *308 | -- | 303 | 2 | 344 | -- | 2.5 | -- | -- | 854 | 68 | -- | 16 | 3.61 | -- | -- |
| 903 | 180 | Jan. 17, 1945 | Ch | -- | -- | -- | 35 | 5.6 | *94 | -- | 269 | 4 | 63 | -- | 1.0 | -- | -- | 338 | 110 | -- | 3.9 | 2.20 | -- | -- |
| 904 | 650 | July 19, 1965 | Ev, Ch | 21 | -- | -- | 55 | 4.6 | *84 | -- | 288 | 20 | 57 | .4 | .0 | -- | .06 | 384 | 156 | 54 | 2.9 | 1.6 | 665 | 7.3 |
| 64-01-103 | 175 | Oct. 30, 1931 | Ch | -- | -- | -- | -- | -- | -- | -- | -- | 224 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 201 | 400 | Jan. 27, 1945 | Ch | 12 | .68 | -- | 5.2 | 1.5 | *149 | -- | 333 | 2 | 45 | 1.4 | .2 | -- | -- | 389 | 19 | -- | 15 | 5.08 | 647 | 7.3 |
| 02-601 | 176 | Dec. 8, 1944 | Ch | -- | .04 | -- | 39 | 7.4 | *244 | -- | 254 | 3 | 294 | -- | -- | -- | -- | 760 | 128 | -- | 9.4 | 2.27 | -- | -- |

See footnotes at end of table.

Table 8.--Chemical analyses of water from wells and springs in Liberty County--Continued

| Well | Depth of well (ft) | Date of collection | Water-bearing unit | Silica (SiO_2) | Iron (Fe) | Manganese (Mn) | Calcium (Ca) | Magnesium (Mg) | Sodium (Na) | Potassium (K) | Bicarbonate (HCO_3) g | Sulfate (SO_4) | Chloride (Cl) | Fluoride (F) | Nitrate (NO_3) | Phosphate (PO_4) | Boron (B) | Dissolved solids | Hardness as CaCO_3 | Percent sodium | Sodium adsorption ratio (SAR) | Residual sodium carbonate (RSC) | Specific conductance (micromhos at 25°C) | pH |
|--------------|--------------------|--------------------|--------------------|---------------------------|-----------|----------------|--------------|----------------|-------------|---------------|----------------------------------|---------------------------|---------------|--------------|---------------------------|-----------------------------|-----------|------------------|-----------------------------|----------------|-------------------------------|---------------------------------|--|-----|
| SB-64-02-601 | 176 | Feb. 1, 1966 | Ch | 15 | -- | -- | 44 | 11 | 237 | 1.7 | 344 | 0.2 | 282 | 0.6 | 0.05 | -- | 0.16 | 761 | 156 | 77 | 8.2 | 2.52 | 1,420 | 7.5 |
| 604 | 491 | Jan. 9, 1966 | Ch | 16 | -- | -- | 35 | 8.9 | 260 | 1.6 | 300 | .0 | 312 | .9 | .5 | -- | .21 | 783 | 124 | 82 | 10 | 2.44 | 1,450 | 7.5 |
| 03-101 | 825 | Dec. 23, 1944 | Ev | -- | 0.06 | -- | 50 | 4.8 | *336 | -- | 186 | 2 | 510 | -- | .2 | -- | -- | 1,080 | 144 | -- | 12 | .17 | -- | -- |
| 303 | 496 | Aug. 17, 1965 | Ch | 27 | .03 | -- | 41 | 4.3 | 146 | 1.2 | 322 | 4.0 | 126 | .7 | .2 | -- | .14 | 509 | 120 | 72 | 5.8 | 2.88 | 1,000 | 7.4 |
| 401 | 333 | Jan. 1, 1945 | Ch | -- | .07 | -- | 26 | 4.1 | *300 | -- | 318 | 2 | 334 | -- | -- | -- | -- | 836 | 82 | -- | 14 | 3.57 | -- | -- |
| 801 | 68 | do | Gh | 23 | .03 | -- | 160 | 21 | 318 | 1.6 | 364 | 58 | 580 | .5 | .8 | -- | .10 | 1,340 | 486 | 59 | 6.3 | .00 | 2,460 | 7.0 |
| 802 | 68 | do | Gh | -- | -- | -- | -- | -- | -- | -- | 400 | -- | 520 | -- | -- | -- | -- | 462 | -- | -- | -- | 2,300 | 7.4 | |
| 04-101 | 406 | do | Ch | 24 | 1.1 | -- | 23 | 3.1 | *213 | -- | 279 | 2 | 212 | 1.0 | .2 | -- | -- | 615 | 70 | -- | 11 | 3.18 | 1,130 | 7.9 |
| 101 | 406 | Feb. 1, 1966 | Ch | 27 | -- | -- | 21 | 3.3 | 211 | 1.2 | 260 | .6 | 228 | .8 | .8 | -- | .14 | 622 | 66 | 87 | -- | -- | 1,130 | 7.5 |

* Sodium and potassium calculated as sodium (Na).

g Includes the equivalent of any carbonate (CO_3) present.