

17. Log of test hole 17 in the SE $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 33, T. 34 S., R. 30 W.,  
 Meade county, drilled by the State and Federal Geological Surveys,  
 1944. Surface altitude, 2,858 feet. (Authority, samples studied  
 by Oscar E. Fent and Thad G. McLaughlin)

|                                                                                                         | Thickness,<br>feet | Depth<br>feet |
|---------------------------------------------------------------------------------------------------------|--------------------|---------------|
| Soil, silty, tan                                                                                        | 4.5                | 4.5           |
| Meade Formation                                                                                         |                    |               |
| Silt, light-gray to light-brown, containing caliche and<br>fine to coarse sand                          | 23.5               | 28            |
| Silt, light-buff, and caliche, buff; sandy                                                              | 5                  | 33            |
| Silt, clayey, light-brown                                                                               | 4                  | 37            |
| Sand, coarse to fine, and gravel, medium to fine                                                        | 3                  | 40            |
| Gravel, coarse, to sand, fine                                                                           | 15                 | 55            |
| Silt, light-gray, containing caliche                                                                    | 3                  | 58            |
| Sand, coarse, to gravel, coarse, containing caliche                                                     | 12                 | 70            |
| Hexroad Formation                                                                                       |                    |               |
| Silt, white and light-buff, containing caliche and fine<br>to coarse sand                               | 25                 | 95            |
| Silt, clayey, light-brown and white                                                                     | 15                 | 110           |
| Silt, clayey, gray-brown to light-brown, containing<br>sand and fine gravel                             | 10                 | 120           |
| Gravel, fine to medium, sand, and silt, light-brown and<br>white; containing caliche                    | 7                  | 127           |
| Silt, clayey, dull-yellow and light blue-gray                                                           | 12                 | 139           |
| Sand, coarse to fine, and gravel, medium to fine; con-<br>taining a little silt, greenish-gray and buff | 61                 | 200           |

|                                                                                                             |    |     |
|-------------------------------------------------------------------------------------------------------------|----|-----|
| Sand, coarse to fine, and gravel, fine                                                                      | 30 | 230 |
| Sand, coarse to fine, and silt, light greenish-gray                                                         | 22 | 252 |
| Laverne formation                                                                                           |    |     |
| Silt, soft, light-gray to light-tan, containing fine to medium sand                                         | 8  | 260 |
| Silt, clayey, light-gray, light-buff, and light blue-gray                                                   | 20 | 280 |
| Clay, thin-bedded, blue-gray, containing fine sand                                                          | 20 | 300 |
| Clay, light blue-gray                                                                                       | 20 | 320 |
| Clay, silty, blocky, dull greenish-gray                                                                     | 6  | 326 |
| Silt and clay, brittle; gray                                                                                | 4  | 330 |
| Silt and clay; gray and blue-gray; containing very fine sand                                                | 25 | 353 |
| Silt, green, containing fine to very fine sand                                                              | 7  | 360 |
| Clay, silty, light green-gray and blue-gray                                                                 | 10 | 370 |
| Clay, soft, light-gray                                                                                      | 80 | 420 |
| Clay, soft, light-gray, containing thin beds of caliche and a little sand                                   | 25 | 445 |
| Sand, coarse to fine, and gravel, fine                                                                      | 47 | 482 |
| Clay, silty, white to pink-buff                                                                             | 5  | 497 |
| Sand, coarse to fine, containing white and buff silt                                                        | 23 | 520 |
| Sand, coarse to fine, and gravel, fine                                                                      | 80 | 600 |
| Sand, coarse to fine, and gravel, fine; in part cemented; containing light-buff and pink silt in lower part | 14 | 614 |
| Permian redbeds                                                                                             |    |     |
| Shale, silty, dull-red                                                                                      | 11 | 625 |

265  
614  
264