

NE 1/4, SE 1/4, SE 1/4, Sec. 6, T20S, R18E Anderson County

KANSAS DEPARTMENT OF TRANSPORTATION



| | | | | |
|-------------|-------------|--------------|--------------------------|----------------------------|
| RTE./CO. | 31-Anderson | SOUNDING NO. | CD-1 | SHEET 1 of 2 |
| BRIDGE STA. | 108+42.6: E | PROJ. NO. | KA-2049-01 | BRIDGE NO. 31-2-67.60(041) |
| SITE NAME | | | K-31 over Kenoma Creek | |
| GEOLOGIST | | | SCALE 1 inch = 10.0 feet | DATE September 15, 2011 |
| DRILLER | | J. Burns | RIG TYPE | CME 55 |
| GW ELEV. | | 982.5 | TOTAL DEPTH | 58.0 |
| | | | M/B ELEV. | 974.75 |

N = 38.33477
E = -95.45275

| Bit Type | GEOLOGIC NAME | STRATIGRAPHIC COLUMN | DEPTH | ELEVATION | CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS | UNCONFINED COMPRESSION (TSF) | ELASTIC MODULUS (PSF) | N60 COUNT (SPT) | ELEVATION | | |
|----------------------|---------------------|----------------------|-------|-----------|---|--|-----------------------|-----------------|-----------|--|--------|
| 8" Hollowstem Augers | Soil Mantle | | | 992.3 | SILTY CLAY, medium brown, dry | | | | | | |
| | | | | 990 | | | | | | | |
| | | | | 985 | | | | | | | |
| | | | | 980 | | | | 0.8 | 121000 | | 980.75 |
| | | | | 975 | | | | 1.1 | 35300 | | 975.75 |
| | | | | 17.5 | 974.8 | SHALE, weathered | | | | | |
| | | | | 18.0 | 974.3 | SHALE | | | | | |
| | | | | 18.8 | 973.5 | CLAYEY SHALE, blueish gray to gray, good | | 7 | 472000 | | 971.75 |
| | | | | 1 | 970 | | | 4.2 | 347000 | | 966.35 |
| | | | | 2 | 965 | | | 6 | 395000 | | 963.05 |
| NQ2 Diamond | Weston Shale Member | | | 960 | | 7.3 | 606000 | | 960.35 | | |
| | | | | 955 | | 12.5 | 1260000 | | 957.55 | | |
| | | | | 950 | | 18 | 2510000 | | 954.45 | | |
| | | | | 945 | | 28.5 | 3490000 | | 951.55 | | |
| | | | | 940 | | 101 | 1.68E+07 | | 945.65 | | |
| | | | | 935 | | 12 | 1150000 | | 941.95 | | |
| | | | | 58.0 | 934.25 | T.D. = 58 | | 28.7 | 4070000 | | 935.65 |

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KANSAS DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-------------|------------------------|--------------|------------|--------------|--------------------------|
| RTE./CO. | 31-Anderson | SOUNDING NO. | CD-1 | SHEET 2 of 2 | |
| BRIDGE STA. | 108+42.6: € | PROJ. NO. | KA-2049-01 | BRIDGE NO. | 31-2-67.60(041) |
| SITE NAME | K-31 over Kenoma Creek | | | HOLE STA. | 108+92.5, 33.3' Rt of CL |

| Bit Type | GEOLOGIC NAME | STRATIGRAPHIC COLUMN | DEPTH | ELEVATION | CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS | UNCONFINED COMPRESSION (TSF) | ELASTIC MODULUS (PSF) | N60 COUNT (SPT) | ELEVATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---------------|----------------------|-------------|-------------|--|------------------------------|-----------------------|-----------------|-----------|-----|-------|-----|---|------|--------|-----|-----|----|-----|---|------|--------|-----|-----|-----|-----|---|------|--------|-----|-----|-----|-----|---|------|--------|-----|-----|-----|-----|---|------|--------|-----|-----|-----|-----|---|------|--------|-----|-----|-----|------|---|------|--------|-----|-----|-----|------|---|------|--------|-----|-----|-----|-----|---|------|--------|-----|-----|-----|-----|--------------|-----------|---------------|-------------|-------------|-----------|------------|--|--|--|--|
| | | | | | <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px auto;"> <thead> <tr> <th>Core</th> <th>Depth</th> <th>Elev.</th> <th>Cut</th> <th>Rec</th> <th>Rec %</th> <th>RQD</th> </tr> </thead> <tbody> <tr><td>1</td><td>18.8</td><td>973.45</td><td>4.5</td><td>4.0</td><td>89</td><td>87□</td></tr> <tr><td>2</td><td>23.3</td><td>968.95</td><td>4.8</td><td>5.2</td><td>108</td><td>94□</td></tr> <tr><td>3</td><td>28.1</td><td>964.15</td><td>4.9</td><td>5.2</td><td>106</td><td>71□</td></tr> <tr><td>4</td><td>33.0</td><td>959.25</td><td>4.8</td><td>4.8</td><td>100</td><td>94□</td></tr> <tr><td>5</td><td>37.8</td><td>954.45</td><td>4.8</td><td>5.1</td><td>106</td><td>63□</td></tr> <tr><td>6</td><td>42.6</td><td>949.65</td><td>0.7</td><td>0.7</td><td>100</td><td>100□</td></tr> <tr><td>7</td><td>43.3</td><td>948.95</td><td>4.8</td><td>4.8</td><td>100</td><td>100□</td></tr> <tr><td>8</td><td>48.1</td><td>944.15</td><td>4.9</td><td>5.1</td><td>104</td><td>82□</td></tr> <tr><td>9</td><td>53.0</td><td>939.25</td><td>5.0</td><td>5.0</td><td>100</td><td>56□</td></tr> <tr> <td>Total</td> <td>58</td> <td>934.25</td> <td>39.2</td> <td>39.9</td> <td>1□</td> <td>81%</td> </tr> </tbody> </table> | Core | Depth | Elev. | Cut | Rec | Rec % | RQD | 1 | 18.8 | 973.45 | 4.5 | 4.0 | 89 | 87□ | 2 | 23.3 | 968.95 | 4.8 | 5.2 | 108 | 94□ | 3 | 28.1 | 964.15 | 4.9 | 5.2 | 106 | 71□ | 4 | 33.0 | 959.25 | 4.8 | 4.8 | 100 | 94□ | 5 | 37.8 | 954.45 | 4.8 | 5.1 | 106 | 63□ | 6 | 42.6 | 949.65 | 0.7 | 0.7 | 100 | 100□ | 7 | 43.3 | 948.95 | 4.8 | 4.8 | 100 | 100□ | 8 | 48.1 | 944.15 | 4.9 | 5.1 | 104 | 82□ | 9 | 53.0 | 939.25 | 5.0 | 5.0 | 100 | 56□ | Total | 58 | 934.25 | 39.2 | 39.9 | 1□ | 81% | | | | |
| Core | Depth | Elev. | Cut | Rec | Rec % | RQD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 18.8 | 973.45 | 4.5 | 4.0 | 89 | 87□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 23.3 | 968.95 | 4.8 | 5.2 | 108 | 94□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 28.1 | 964.15 | 4.9 | 5.2 | 106 | 71□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 33.0 | 959.25 | 4.8 | 4.8 | 100 | 94□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 37.8 | 954.45 | 4.8 | 5.1 | 106 | 63□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 42.6 | 949.65 | 0.7 | 0.7 | 100 | 100□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 43.3 | 948.95 | 4.8 | 4.8 | 100 | 100□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 48.1 | 944.15 | 4.9 | 5.1 | 104 | 82□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 53.0 | 939.25 | 5.0 | 5.0 | 100 | 56□ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 58 | 934.25 | 39.2 | 39.9 | 1□ | 81% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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