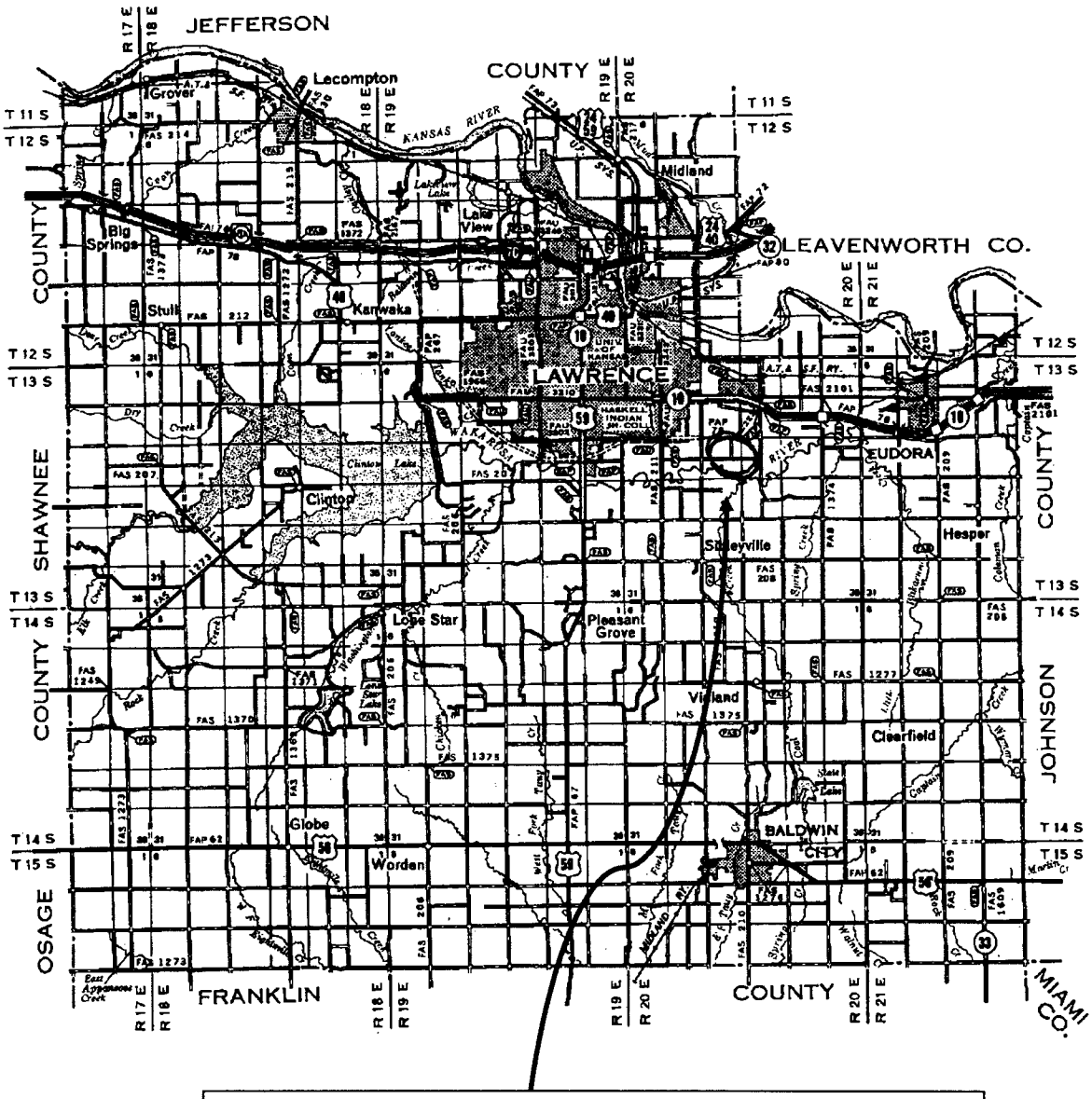


**10-23 K-8392-04 K-10 over Relocated East 31st Street**

**Br. No. 10-2312.93 (179)(R)**
**Br. No. 10-2312.94 (180)(S)**

**Douglas Co.**

**CD 01**

**N:38.926444 E:-95241208 (Approx.)**

**NW ¼, NW ¼, NW ¼, S18, T13S, R20E**

# KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

| | | | | | |
|---|---|---|---|---|---|
| RTE./CO. | 10-Douglas | SOUNDING NO. | CH-1 | SHEET 1 of 3 | |
| BRIDGE STA. | 878+97.03 | PROJ. NO. | K-8392-04 | BRIDGE NO. | 10-23-12.93 (179) |
| SITE NAME | Bridge R & S, South Lawrence Trafficway | | | HOLE STA. | 881+65, 11.0' Lt Cl |
| GEOLOGIST | K. Halverson, G.A. | SCALE 1 inch = 10.0 feet | | DATE | August 22, 2011 |
| DRILLER | J. Burns | RIG TYPE | CME 55 | TOP HOLE ELEV. | 828.7 |
| GW ELEV. | N/A | TOTAL DEPTH | 78.5 | M/B ELEV. | 783.7 |

| 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" Hollow Augers | Soil Mantle | | 0.6 | 828.7 | Silty Clay, dark brown, moist, soft, trace gravel | | | | |
| | | | | 828.1 | Silty Clay, brown, slightly mosit, firm to hard | | | | |
| | | | 7.0 | 821.7 | Sandy Clay, gray to brown, moist, hard, mottled, well compacted @ 20-21.6 Shelby tube had 600 lbs of down pressure | 3.545 | 351000 | | 816.9 |
| | | | | | | 3.495 | 199000 | | 807.1 |
| | | | 27.0 | 801.7 | Sandy Clay, brown, moist, hard to firm, well compacted | 3.925 | 587000 | | 797.0 |
| | | | 43.5 | 785.2 | Sand with some gravel, grayish brown, dense, moist to wet | | | | |
| | | | 45.0 | 783.7 | Coal, black, hard | | | | |
| NQ2 Diamond | Stranger Formation | 1 | 46.5 | 782.2 | Shale gray, poor bedding structure, sandy, weathered, very closely fractured, hard, clayey | | | | |
| | | 2 | 49.0 | 779.7 | Shale, gray, with abundant Sandstone Stingers, non-weathered, very closely fracture, hard | 219 | 8.54E+07 | | 778.3 |
| | | 3 | 49.8 | 778.9 | Sandstone, gray, non-weathered, very closely fractured, hard, abundant Shale seams (less than 1" thick), well cemented | | | | |
| | | 4 | | | | | | | |

BOREHOLE REPORT - KANSAS DOT.GDT - 11/22/11 11:36 - C:\USERS\KYLEH\DESKTOP\PROJECTS\K-8392-04 SOUTH LAWRENCE TRAFFICWAY\BRIDGES R-S\BRIDGE R-S.GPJ

# KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

| | | | | | |
|---|---|---|---|---|---|
| RTE./CO. | 10-Douglas | SOUNDING NO. | CH-1 | SHEET 2 of 3 | |
| BRIDGE STA. | 878+97.03 | PROJ. NO. | K-8392-04 | BRIDGE NO. | 10-23-12.93 (179) |
| SITE NAME | Bridge R & S, South Lawrence Trafficway | | | HOLE STA. | 881+65, 11.0' Lt 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 |
|---|---|---|---|---|---|---|---|---|---|
| NQ2 Diamond | Stranger Formation | 4 | | 765 | Sandstone, gray, non-weathered, very closely fractured, hard, abundant Shale seams (less than 1" thick), well cemented | 116 | 5.33E+07 | | 765.2 |
| | | | 63.0 | | 765.7 Sandstone, fine grained, light gray, well cemented, very closely fractured, non-weathered, very hard | 67 | 4.72E+07 | | 763.0 |
| | | 5 | 65.7 | | 763.0 Shale, gray, very sandy, abundant Sandstone stingers, poor bedding structure, non-weathered, very closely fractured, hard, @66.7-66.8 thin Limestone stinger 2" thick | 3.64 | 236000 | | 760.5 |
| | | | | 760 | | 4.18 | 205000 | | 758.6 |
| | | 6 | 70.2 | | 758.5 Sandstone, gray, well cemented, fine grained, non-weathered, closely to widely fractured, very hard | 189 | 8.9E+07 | | 755.3 |
| | | | | 755 | | | | | |
| | | 7 | | | | | | | |
| | | | 78.5 | | 750.2 T.D. = 78.5 | | | | |