

1023082033

KANSAS DEPARTMENT OF TRANSPORTATION



Department of Transportation

RTE./CO.	K-181 / Osborne	SOUNDING NO.	CH 3	SHEET 1 of 3		
BRIDGE STA.	46+25: ②	PROJ. NO.	KA-3938-01	BRIDGE NO.	8.92 (054)	
SITE NAME				K-181 over Twin Ck		
HOLE STA.		46+58, 31.3' Lt CL				
GEOLOGIST	J. Geist, P.G.	SCALE	1 inch = 5.0 feet		DATE	January 14, 2020
DRILLER	R. Salber	RIG TYPE	CME 75	TOP HOLE ELEV.	1482.2	
GW ELEV.	N/A	TOTAL DEPTH	58.0	M/B ELEV.	1456.3	
GPS COORDINATES 39.4233254, -98.5455412						

T R S
7 11 W 21
D SE SE SE SE

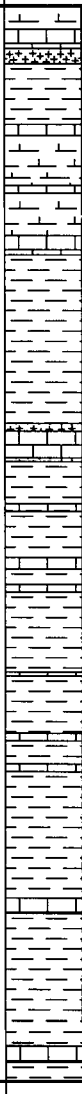
Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	SPT BLOW COUNT	N60	ELEVATION
NQ2 Diamond	Alluvium		5.4	1482.2	SILTY CLAY, dark brown					
			1480							
			25.9	1476.8	SILTY CLAY, dark brown to brown, gravel below 12"					
			1475							
			1470							
			1465							
			1460							
			1455	1456.3	CHALKY SHALE, competent, tan to dark gray, hard					
			1							
			2							
						33.0	7540000			1453.5

BOREHOLE REPORT - KANSAS DOT GDT - 2/23/23 1326 - Q:\GEOLOGY\GINT\181-71 KA-3938-01 TWIN CK.GPJ

8" Hollow Augers

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RTE./CO.	K-181 / Osborne	SOUNDING NO.	CH 3	SHEET 2 of 3	
BRIDGE STA.	46+25: ௫	PROJ. NO.	KA-3938-01	BRIDGE NO.	8.92 (054)
SITE NAME	K-181 over Twin Ck			HOLE STA.	46+58, 31.3' Lt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	SPT BLOW COUNT	N60	ELEVATION
NQ2 Diamond	Fairport Chalk Mbr		30.6	1450	CHALKY SHALE, competent, tan to dark gray, hard					
			31.1		CHALKY LIMESTONE, light gray, hard					
			31.5		BENTONITE, light blue-gray					
			31.5		SHALE, dark gray, fossils, thin limestone bed at 32.2					
			33.1	1449	CHALKY LIMESTONE	41.0	8830000			1449.2
			33.4		CHALKY SHALE, dark gray, medium hard					
			34.7		CHALKY LIMESTONE, light gray					
			34.9		CHALKY SHALE, dark gray to gray-brown					
			36.0	1445	CHALKY LIMESTONE, light gray, hard	32.0	9730000			1445.6
			36.5		CHALKY SHALE, dark gray, fossil beds					
						94.0	1.47E+07			1442.3
			40.9	1440	BENTONITE, blue-gray, sandy					
			41.1		SHALY LIMESTONE, gray, chalky					
			41.8		BENTONITE					
			41.9		SHALE, dark gray, plentiful fossils					
			43.0	1439	SHALY LIMESTONE, gray					
			43.2		CHALKY SHALE, slightly weathered, wavy, dark gray	67.0	2.13E+07			1437.8
			44.4		LIMESTONE, gray, hard					
			44.7		CHALKY SHALE, dark gray					
			45.1	1435	LIMESTONE, wavy, gray					
			45.3		CHALKY SHALE, dark gray, fossils	62.0	1.21E+07			1435.5
			47.4		LIMESTONE, light gray, hard					
			47.5		CHALKY SHALE, slightly weathered, hard					
			49.0	1430	LIMESTONE, planar, gray, hard					
			49.2		CHALKY SHALE, dark gray					
			49.8		LIMESTONE, gray, fine, hard	70.0	7350000			1431.7
			50.0		CHALKY SHALE, dark gray, limestone beds 50.7-50.8 and 53.3-53.5	54.0	2.17E+07			1429.9
				1425						
			53.3		LIMESTONE, light gray-brown, fine, hard					
			53.7		CHALKY SHALE, gray-brown to dark gray, hard, fossils, limestone nodule 55.7-55.8	65.0	1.31E+07			1426.5
			57.1	1425	LIMESTONE, light gray, hard					
			57.5		CHALKY SHALE, dark gray, fossils					
			58.0		I.D. = 58.0					



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SITE NAME	K-181 over Twin Ck			HOLE STA.	46+58, 31.3' Lt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	SPT BLOW COUNT	N60	ELEVATION																																																														
					<table><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>26.4</td><td>1455.8</td><td>1.7</td><td>1.5</td><td>88</td><td>88%</td></tr><tr><td>2</td><td>28.1</td><td>1454.1</td><td>5.0</td><td>5.0</td><td>100</td><td>88%</td></tr><tr><td>3</td><td>33.1</td><td>1449.1</td><td>5.0</td><td>5.0</td><td>100</td><td>100%</td></tr><tr><td>4</td><td>38.1</td><td>1444.1</td><td>4.9</td><td>5.0</td><td>102</td><td>90%</td></tr><tr><td>5</td><td>43.0</td><td>1439.2</td><td>5.0</td><td>5.0</td><td>100</td><td>78%</td></tr><tr><td>6</td><td>48.0</td><td>1434.2</td><td>5.0</td><td>5.0</td><td>100</td><td>74%</td></tr><tr><td>7</td><td>53.0</td><td>1429.2</td><td>5.0</td><td>5.0</td><td>100</td><td>100%</td></tr><tr><td>Total</td><td>58.0</td><td>1424.2</td><td>31.6</td><td>31.5</td><td>100</td><td>88%</td></tr></tbody></table>	Core	Depth	Elev.	Cut	Rec	Rec %	RQD	1	26.4	1455.8	1.7	1.5	88	88%	2	28.1	1454.1	5.0	5.0	100	88%	3	33.1	1449.1	5.0	5.0	100	100%	4	38.1	1444.1	4.9	5.0	102	90%	5	43.0	1439.2	5.0	5.0	100	78%	6	48.0	1434.2	5.0	5.0	100	74%	7	53.0	1429.2	5.0	5.0	100	100%	Total	58.0	1424.2	31.6	31.5	100	88%				
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Box 1 26.4-38.1

Box 2 38.1-49

Box 3 49-58