

Datum: WGS 84 Lat: 38.9418114
 Long: -94.7744142

8-135-24E NWNWNE NW

HNTB

LOG OF BORING

BORING NO.

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PROJECT Gateway

STATION / NORTHING / 237950.348

LOCATION Johnson County, Kansas

OFFSET / EASTING / 2229596.799

DATE STARTED 03/26/2012 DATE COMPLETED 03/26/2012

SURFACE ELEVATION 966.2 ft

EXPLORATION CONTRACTOR Terracon

DATUM NAVD 88

DRILLER K. Kempton

DRILL RIG CME-55 ATV

GROUND WATER LEVELS:

HAMMER TYPE Auto

HAMMER EFFICIENCY 79%

▽ AT TIME OF DRILLING 9 ft

LOGGED BY L. Wagner

REVIEWED BY J. Martens

▽ AFTER N/A

DRILLING METHOD	DEPTH (ft)	SAMPLE TYPE NUMBER	SAMPLE RECOVERY (in)	CORE REC % (RQD %)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	GRAPHIC LOG	MATERIAL DESCRIPTION Unified (Visual) Classification System	GEOLOGIC NAME	ELEVATION (ft)
	0									966.2
HSA 3.25" ID								Topsoil Brown, Soft, FAT CLAY, Moist (CH)		
										965
										3.0
								Gray, Very Stiff, LEAN CLAY, Slightly Moist (CL) (Residuum)		
	5	SPT S1	15		3-5-12 (17)	4.0				
								12" Gravel Seam (Limestone Floaters?) at 6'		960
	10	SPT S2	7		3-3-3 (6)	2.0		Firm to Stiff, Very Moist		955
	15	SPT S3	15		4-4-9 (13)	1.5		Same as above		950
	20	ST U4	20			1.5		Same as above		945
								6" Gravel/Limestone Seam at 21.5'		
	23.6	SPT S5 NQ	0	82% (76%)	50/1"			LIMESTONE, Gray, Medium Bedded, Weathered, Moderately Hard, Fossiliferous, with Occasional Shale Lenses	Farley LS	942.6
	25									

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DRILLING METHOD	DEPTH (ft)	SAMPLE TYPE NUMBER	SAMPLE RECOVERY (in)	CORE REC % (RQD %)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	GRAPHIC LOG	MATERIAL DESCRIPTION Unified (Visual) Classification System	GEOLOGIC NAME	ELEVATION (ft)
CORE BARREL NQ	25	C1						LIMESTONE, Gray, Medium Bedded, Weathered, Moderately Hard, Fossiliferous, with Occasional Shale Lenses (continued)		940
	25	NQ C2		100% (77%)				Note: 100% Drill Water Loss		
	30	NQ C3		100% (87%)						935
	35	NQ C4		100% (92%)						930
	37.2							SHALE, Gray, Laminated, Slightly Weathered, Moderately Hard	Island Creek SH	
	39.2									

Boring terminated due to water loss. Boring backfilled with Holeplug upon completion.

Auger Refusal at 23.6 feet.
Bottom of borehole at 39.2 feet.