

Datum: WGS 84 Lat: 38.9420537 Long: -94.8223517 2-13-23E SWSESWSE

HNTB

LOG OF BORING

BORING NO.

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PROJECT Gateway

STATION / NORTHING / 237556.59

LOCATION Johnson County, Kansas

OFFSET / EASTING / 2215967.297

DATE STARTED 03/14/2012 DATE COMPLETED 03/14/2012

SURFACE ELEVATION 1003.8 ft

EXPLORATION CONTRACTOR Terracon

DATUM NAVD 88

DRILLER Z. Dizmang

DRILL RIG Mobile B-53

GROUND WATER LEVELS:

HAMMER TYPE Safety

HAMMER EFFICIENCY N/A

▽ AT TIME OF DRILLING NATD

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									1003.8
SSA 6" OD								Topsoil		0.8
								Brown to Orange, Stiff to Very Stiff, Little Sand, LEAN CLAY, Moist (CL)		
	5	SPT S1	15		10-14-16 (30)	2.0				1000
								SHALE, Brown, Laminated, Highly Weathered, Soft	Vilas SH	999.1
	10	SPT S2	18		13-19-32 (51)	3.5		Becoming Brown and Gray		995
CORE BARREL NQ2								Gray, Moderately Hard at 12.7'		13.7
	15	SPT S3	2		50/2"			LIMESTONE, Moderately Weathered		990.1
	15.2							LIMESTONE, Gray, Slightly Weathered, Moderately Hard, with Trace Shale Seams and Fossils	Plattsburg LS	990
		NQ C1		100% (100%)						
	19.5							Dark Gray, Moderately Weathered, Hard, Fossiliferous at 19.5'		985
	20							Gray, Slightly Weathered, Moderately Hard, Trace Vugs, Fossiliferous at 20.8'		
		NQ C2		100% (77%)						
	24.5									980
	25									

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BORING LOG 2 W/O LAB DATA - GATEWAY TEMPLATE.GDT - 4/6/12 10:29 - 0155921GEOLOGICALGEOLOGY BORINGS.GPJ



LOG OF BORING

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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)
	25									
		NQ C3		100% (97%)				LIMESTONE, Gray, Slightly Weathered, Moderately Hard, with Trace Shale Seams and Fossils (<i>continued</i>)		
								2" Gray SHALE Seam at 26.7'		
	29.5 30									975
		NQ C4		100% (98%)						
									33.3	970.5
	34.5 35							SHALE, Gray, Moderately Weathered, Moderately Hard	Bonner Springs SH	970
		NQ C5		98% (88%)						
									39.5	965

Auger Refusal at 15.2 feet.
Bottom of borehole at 39.5 feet.