

Datum: WGS 84 Lat: 38.968291

Long: -94.7764334

NW SE NW NW 32-12-24E

HNTB

LOG OF BORING

BORING NO.

B-16

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PROJECT Gateway

STATION / NORTHING / 247567.915

LOCATION Johnson County, Kansas

OFFSET / EASTING / 2228679.603

DATE STARTED 03/28/2012

DATE COMPLETED 03/28/2012

SURFACE ELEVATION 1021.3 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 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									1021.3
								Topsoil		0.3
								Brown to Red, Stiff, FAT CLAY, Moist (CH)		1020
	5	ST U1	18							
	8.7	SPT S2	0		50/1"					7.0
		NQ S2		100% (0%)				LIMESTONE, Brown to Gray, Medium Bedded, Highly Weathered, Moderately Hard	Stoner LS	1014.3
	10.16	NQ C1								
		NQ C2		100% (28%)						1010
	15.15	NQ C3		100% (60%)				SHALE, Gray to Black, Laminated, Weathered, Moderately Hard to Hard	Eudora SH	15.0
										1006.3
	20.26	NQ C4		100% (87%)				LIMESTONE, Gray, Slightly Weathered, Moderately Hard, Fossiliferous	Captain Creek LS	20.1
										1001.2
	25									1000

(Continued Next Page)

BORING LOG 2 W/O LAB DATA - GATEWAY_TEMPLATE.GDT - 4/6/12 11:36 - O:\55921\GEO\GEOLOG\GEOLOGY 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 C5		100% (62%)				SHALE, Gray, Laminated, Slightly Weathered, Moderately Hard	Vilas SH	995.8
								3" Limey Seam at 27.3'		995
	30									

Boring backfilled with Holeplug upon completions.
Auger Refusal at 8.7 feet.
Bottom of borehole at 30.0 feet.