DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: ms consultants | *Project:* FRA-70-8.93 | *Job No.* 0221-1004.01

LOG OF: Boring B-040-0-08 | *Location:* Sta. 211+71.37, 62.65' RT., BL I-70 EB | *Date Drilled:* 8/15/2008 to 8/19/2008

WATER OBSERVATIONS:
Water seepage at: 10.5', 23.0', 47.0'
Water level at completion: 29.7' (beginning of shift, 8/18/08)
29.3' (includes drilling water)

FIELD NOTES:
Advanced boring using 4.0" diameter flush joint casing.

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	STANDARD PENETRATION (N60) Natural Moisture Content, % - ● PL — LL Blows per foot - ○ / Non-Plastic - NP (10 20 30 40)
	633.9	Core 60"	Rec 60"	RQD 90%	R3		Interbedded Shale (92%) and Limestone (8%), RQD 86%, Loss 1%; Shale, dark gray, highly weathered, weak, thinly laminated, calcareous, fissile, pyritic, jointed, slightly rough, tight; Limestone, gray, moderately weathered, strong, thinly bedded.								
130															
		Core 60"	Rec 60"	RQD 100%	R4		@ 133.8' - 134.3', qu = 3589 psi								
135.0 135	623.9						Bottom of Boring - 135.0'								
140															
145															
150															