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-030-0-08 | *Location:* Sta. 194+14.54, 24.17' LT., BL I-70 WB | *Date Drilled:* 7/20/2008 to 7/23/2008

WATER OBSERVATIONS:
Water seepage at: 16.0'
Water level at completion: 13.6' (includes drilling water)

FIELD NOTES:
Advanced boring using 3.25" diameter hollowstem augers.

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
	636.7														10 20 30 40
							Very dense gray GRAVEL WITH SAND (A-1-b), trace to little silty clay; wet.								
103.5	633.2						@ 100.0'-103.5', 25.0 to 27.3 feet sand heave; washed out twice.								
		50/3	3	29			Severely weathered gray SHALE.								50+ ○
105.0 105	631.7														
		Core 60"	Rec 57"	RQD 37%	R1		Shale, dark gray, highly weathered, weak, laminated, slightly calcareous, contains abundant pyritic inclusions, fissile, laminated, fractured to highly fractured, RQD 38%, Loss 4%.								
							@ 107.7'-107.8', encounterd large pyritic inclusion.								
110							@ 108.1'-109.1', moderately weathered, moderately strong.								
111.0	625.7	Core 12"	Rec 12"	RQD 42%	R2		@ 111.0', core steel damaged. Abandoned boring at 111.0'.								
							Bottom of Boring - 111.0'								
115															
120															
125															