



The Ohio Department of Transportation

Office of Geotechnical Engineering

PROJECT: MER-29-7.80	DISTRICT No.: 7	PID No 98642	Tech: PPP
Point Load Strength Calc $I_s = P / (D_c^2)$		$D_c^2 = 4A/\pi$	A = (WD)
		Strength = $I_s * K$	K= Sample Preservation Method Sealed Jar

Boring #	Sample Depth (ft)	Material Type	Test Type	Moist Cont.	W (in)	W (mm)	D (in)	D (mm) Initial	D (mm) Final	D (mm) Avg	L/D	P: Failure Load (kN)	I_{s50} (MPa)	I_{s50} (psi)	Strength S_c (MPa)	Strength S_c (psi)
B-001-0-16	2.1-3.0	LS	a	ar	1.89	48.0	1.02	26.0	21.0	23.5	0.542	4.854	3.38	490	81	11761
					1.89	48.0	0.73	18.5	14.5	16.5	0.385	2.775	2.75	399	66	9576
					1.89	48.0	0.65	16.5	14.0	15.3	0.344	3.402	3.65	529	88	12703
					1.89	48.0	1.04	26.5	23.5	25.0	0.552	3.893	2.55	369	61	8867
					1.89	48.0	1.34	34.0	28.0	31.0	0.708	6.364	3.36	487	81	11690
					1.89	48.0	1.06	27.0	24.0	25.5	0.563	4.471	2.87	416	69	9984
					1.89	48.0	0.87	22.0	16.0	19.0	0.458	4.265	3.67	533	88	12782
					1.89	48.0	0.81	20.5	16.5	18.5	0.427	4.138	3.66	531	88	12736
					1.89	48.0	0.63	16.0	12.0	14.0	0.333	3.873	4.53	656	109	15752
					1.89	48.0	0.79	20.0	16.0	18.0	0.417	4.195	3.81	553	92	13270
																11813

Comments: Test Type: a: axial, d: diametrical; b: block; i: irregular; ⊥: perpendicular; //: parallel
 Rock Type: SS: Sandstone; SH: Shale; LS: Limestone; CLS: Claystone; BLDR: Boulder Moist. Cont.: s: saturated; ar: as received; ad: air dried; od: oven dried (%)
 Bedrock test was Lockport Dolomite of Silurian Age.