

**Table 5 CCNPP Unit 3 Aquifer Unit Geotechnical Parameters
(Page 1 of 1)**

Exploratory Boring	Sample Top Elevation ft (m)	Geotechnical Laboratory Test Results			Calculated Values		
		Natural Moisture (%)	Moisture Unit Weight (PCF)	Specific Gravity	Void Ratio	Porosity (%)	Effective Porosity (%)
Surficial Aquifer							
B-320	67.9 (20.7)	29.4%	124	2.63	0.713	41.6%	33.3%
B-722	66.3 (20.2)	26.8%	120	2.76	0.820	45.0%	36.0%
B-732	75.3 (23.0)	23.1%	124	2.75	0.704	41.3%	33.0%
				Mean =	0.745	42.7%	34.1%
Upper Chesapeake							
B-328	12.8 (3.9)	44.2%	121	2.66	0.978	49.4%	39.6%
B-321	-2.8 (-0.85)	28.5%	120.5	2.67	0.777	43.7%	35.0%
B-423	6.6 (2.0)	23.1%	120	2.74	0.754	43.0%	34.4%
B-420	-0.9 (-0.27)	28.3%	117	2.75	0.882	46.9%	37.5%
B-440	5.3 (1.6)	30.0%	116	2.75	0.923	48.0%	38.4%
				Mean =	0.863	46.2%	37.0%
Lower Chesapeake							
B-304	-30.5 (-9.3)	42.1%	113.2	2.65	1.076	51.82%	41.5%
B-401	-26.4 (-8.0)	50.5%	117	2.70	1.167	53.86%	43.1%
B-701	-38.8 (-11.8)	37.3%	116	2.64	0.950	48.71%	39.0%
				Mean =	1.064	51.5%	41.2%

Calculations:

$$\text{Void Ratio} = \{ \text{Specific Gravity (x) Unit Weight of Water (x) [1+ Natural Moisture]} / [\text{Moisture Unit Weight}] - 1 \}$$

$$\text{Unit Weight Water} = 62.4$$

$$\text{Porosity} = \{ (\text{Void Ratio}) / (1 + \text{Void Ratio}) \}$$

$$\text{Effective Porosity} = 80\% \text{ of Total Porosity}$$