

ACT ENGINEERS, INC.
320 S. Shore Road, Suite D
Marmora, NJ 08223

TUBE PERMEAMETER TEST #1 (From Profile Pit #1)
BLOCK 3405, LOTS 5 & 6; MULLICA TOWNSHIP; ATLANTIC CO.

1 Test No. 1 Replicate (letter) A Date Collected 9/5/23
 2 Material Tested Fill Native Soil Test- depth 112"
 3 Type of sample: Undisturbed XX Disturbed
 4 Sample dimensions: Inside radius of sample tube, R (cm) _____
 Length of sample, L (inches) 5.00
 5 Bulk density determination (disturbed samples only):
 Sample weight (grams) 765
 Sample volume (L x 2.54 cm/in. x (3.14r²) 578.866
 Bulk density (Sample weight/Sample volume) 1.321549374
 6 Standpipe Used: _____ Yes X No
 Indicate Internal Radius _____
 7 Height of water above rim of test basin, inche Refer to following table _____
 At the beginning of each test interval,H1 Refer to following table _____
 At the end of each test interval H2 Refer to following table _____

Rate of water level drop

	H1 (in)	H2 (in)	Time, Start of Test Interval, T1 (min)	Time, End of Test Interval, T2 (mi)	Length of Test Interval, T, minutes
Test 1	5.50	5.00	0.00	6.50	6.50
Test 2	5.50	4.75	0.00	11.00	11.00
Test 3	5.50	4.50	0.00	26.00	26.00
Test 4	5.75	5.00	0.00	9.44	9.44
Test 5	5.75	4.75	0.00	12.80	12.80

8 Calculation of Permeability:

$K, (in/hr) = \frac{60 \text{ min/hr} \cdot L(in)}{T(min) \cdot \ln(H1/H2)}$
 K1 (in/hr)= 4.399 K3 Soil Permeability Class
 K2 (in/hr)= 3.998 K3 Soil Permeability Class
 K3 (in/hr)= 2.315 K3 Soil Permeability Class
 K4 (in/hr)= 4.442 K3 Soil Permeability Class
 K4 (in/hr)= 4.478 K3 Soil Permeability Class
SLOWEST 2.315 K3

9 I hereby certify that the information furnished on this form is true and accurate.

Signature of Soil Evaluator

Date 9/5/23

Signature of Professional Engineer

Lic. # _____

