

CE3105 Mechanics of Fluids Laboratory

Department of Civil Engineering ,Texas Tech University

Experiment: Manning's n - Data Sheet

Date of Experiment: ,Name:.....

Experimental Data:

Temperature of water, $T = 21$ celsius

Water density, $\rho =$ (lb/ft³) , Gravity, $g = 32.2$ (ft/s²)

Part 1:

Trial	H_1 (ft)	H_2 (ft)	Manual Depth (in)	Digital Depth (cm)
1	1.63	1.55	2.213	16
2	1.65	1.50	2.409	15
3	1.72	1.37	2.990	13.5
4	1.80	1.20	3.330	12.5
5	1.95	0.85	3.730	11.5

Part 2:

Slope = 1 Percent			
Trial	H_1 (ft)	H_2 (ft)	Depth (in)
1	1.82	1.16	1.742
2	1.79	1.18	1.620
3	2.05	0.53	2.590

Slope =3 Percent			
Trial	H_1 (ft)	H_2 (ft)	Depth (in)
1	2.05	0.52	2.510
2	2.19	0.65	2.400
3	1.91	0.95	2.040

Slope =5 Percent			
Trial	H_1 (ft)	H_2 (ft)	Depth (in)
1	1.91	0.95	1.865
2	1.98	0.79	2.408
3	2.02	0.61	2.236