

Case Concrete Ditch
Worksheet for Trapezoidal Channel

Project Description	
Project File	f:\hydro\projects\ecco industrial park 2nd\ditch.fm2
Worksheet	Case
Flow Element	Trapezoidal Channel
Method	Manning's Formula
Solve For	Discharge

Input Data	
Mannings Coefficient	0.013
Channel Slope	0.000700 ft/ft
Depth	7.00 ft
Left Side Slope	2.000000 H : V
Right Side Slope	2.000000 H : V
Bottom Width	6.00 ft

Results		
Discharge	1,022.44	cfs
Flow Area	140.00	ft ²
Wetted Perimeter	37.30	ft
Top Width	34.00	ft
Critical Depth	5.64	ft
Critical Slope	0.001842	ft/ft
Velocity	7.30	ft/s
Velocity Head	0.83	ft
Specific Energy	7.83	ft
Froude Number	0.63	
Flow is subcritical.		
