Birmingham Coal & Coke Co., Inc., Gooden Creek #2 Mine, P-39--, Basin 034 Spillway Control Section

Material: Grass mixture

Trapezoidal Channel

Bottom Width (ft)	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Retardance Classes	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)	Limiting Velocity (fps)
12.00	2.0:1	2.0:1	2.0	D, B	1.00			5.0

	Stability Class D w/o Freeboard	Stability Class D w/ Freeboard	Capacity Class B w/o Freeboard	Capacity Class B w/ Freeboard
Design Discharge:	5.00 cfs		5.00 cfs	
Depth:	0.33 ft	1.33 ft	0.67 ft	1.67 ft
Top Width:	13.30 ft	17.30 ft	14.70 ft	18.70 ft
Velocity:	1.21 fps		0.55 fps	
X-Section Area:	4.12 sq ft		9.01 sq ft	
Hydraulic Radius:	0.306 ft		0.600 ft	
Froude Number:	0.38		0.12	
Roughness Coefficient:	0.0789		0.2697	

Birmingham Coal & Coke Co., Inc., Gooden Creek #2 Mine, P-39--, Basin 034 Spillway Tail Section

Material: Grass mixture

Trapezoidal Channel

Bottom Width (ft)	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Retardance Classes	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)	Limiting Velocity (fps)
12.00	2.0:1	2.0:1	5.0	D, B	1.00			5.0

	Stability Class D w/o Freeboard	Stability Class D w/ Freeboard	Capacity Class B w/o Freeboard	Capacity Class B w/ Freeboard
Design Discharge:	5.00 cfs		5.00 cfs	
Depth:	0.25 ft	1.25 ft	0.51 ft	1.51 ft
Top Width:	12.99 ft	16.99 ft	14.03 ft	18.03 ft
Velocity:	1.62 fps		0.76 fps	
X-Section Area:	3.09 sq ft		6.60 sq ft	
Hydraulic Radius:	0.235 ft		0.462 ft	
Froude Number:	0.59		0.19	
Roughness Coefficient:	0.0783		0.2625	