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Birmingham Coal & Coke Company, Inc.

Old Union No. 2, P-3962

Diversion Ditch DC-1

Station 0+00 - 15+84

SCS 6 HOUR

100 yr, 6 hr

5.9 inches

J. David McGehee, PE/LS

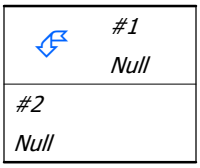
General Information

Storm Information:

Storm Type:	SCS 6HOUR
Design Storm:	100 yr - 6 hr
Rainfall Depth:	5.900 inches

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Null	#1	==>	#2	0.000	0.000	Diversion Ditch DC-1 Sta. 0+00 - 5+73
Null	#2	==>	End	0.000	0.000	Diversion Ditch DC-1 Sta. 5+73 - 15+84



Structure Summary:

	Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)
#1	1.880	1.880	7.63	0.59
#2	8.680	10.560	42.84	3.34

Structure Detail:

Structure #1 (Null)

Diversion Ditch DC-1 Sta. 0+00 - 5+73

Structure #2 (Null)

Diversion Ditch DC-1 Sta. 5+73 - 15+84

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#1	1	1.880	0.055	0.000	0.000	81.000	F	7.63	0.594
	Σ	**1.880**						**7.63**	**0.594**
#2	1	8.680	0.066	0.000	0.000	81.000	F	35.21	2.743
	Σ	**10.560**						**42.84**	**3.338**

Subwatershed Time of Concentration Details:

Stru #	SWS #	Land Flow Condition	Slope (%)	Vert. Dist. (ft)	Horiz. Dist. (ft)	Velocity (fps)	Time (hrs)
#1	1	5. Nearly bare and untilled, and alluvial valley fans	2.50	5.00	200.00	1.580	0.035
		8. Large gullies, diversions, and low flowing streams	6.98	40.00	573.00	7.920	0.020
#1	**1**	**Time of Concentration:**					**0.055**
#2	1	5. Nearly bare and untilled, and alluvial valley fans	3.33	5.00	150.00	1.820	0.022
		8. Large gullies, diversions, and low flowing streams	8.80	125.00	1,421.00	8.890	0.044
#2	**1**	**Time of Concentration:**					**0.066**