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JOB TR-20                FULLPRINT      SUMMARY
TITLE 123 EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150
TITLE 000 100 YEAR STORMS HUFF 2ND QUARTILE FOR EVANSVILLE
5 RAINFL 8              .05
8      0.000      0.040      0.063      0.120      0.173
8      0.260      0.333      0.430      0.530      0.610
8      0.696      0.740      0.786      0.820      0.856
8      0.880      0.917      0.950      0.965      0.980
8      1.00      1.000      1.000      1.000      1.000
9 ENDTBL
6 RUNOFF 1 001      5 1.51      75.2      0.90      1 0 0 0 1
6 RUNOFF 1 001      6 0.59      78.5      0.60      1 0 0 0 1
6 ADDHYD 4 001      5 6 7      1 0 0 0 1
ENDATA
7 INCREM 6              .1
7 COMPUT 7 001      001 0.      1.67      0.25      8 2 01 01
ENDCMP 1
7 COMPUT 7 001      001 0.      2.37      0.5      8 2 02 02
ENDCMP 1
7 COMPUT 7 001      001 0.      3.10      1.      8 2 03 03
ENDCMP 1
7 COMPUT 7 001      001 0.      3.48      2.      8 2 04 04
ENDCMP 1
ENDJOB 2
0*****END OF 80-80 LIST*****
1

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TR20 XEQ 03-25-98 12:23 EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150 JOB 1 PASS 1
 REV PC 09/83(.2) 100 YEAR STORMS HUFF 2ND QUARTILE FOR EVANSVILLE PAGE 1

EXECUTIVE CONTROL OPERATION INCREM RECORD ID
 + MAIN TIME INCREMENT = .10 HOURS

EXECUTIVE CONTROL OPERATION COMPUT RECORD ID
 + FROM XSECTION 1 TO XSECTION 1
 + STARTING TIME = .00 RAIN DEPTH = 1.67 RAIN DURATION= .25 RAIN TABLE NO.= 8 ANT. MOIST. COND= 2
 ALTERNATE NO.= 1 STORM NO.= 1 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 1
 OUTPUT HYDROGRAPH= 5
 AREA= 1.51 SQ MI INPUT RUNOFF CURVE= 75. TIME OF CONCENTRATION= .90 HOURS
 INTERNAL HYDROGRAPH TIME INCREMENT= .0125 HOURS

 PEAK TIME(HRS) PEAK DISCHARGE(CFS) PEAK ELEVATION(Feet)
 .76 285.37 (RUNOFF)

 RUNOFF VOLUME ABOVE BASEFLOW = .24 WATERSHED INCHES, 230.90 CFS-HRS, 19.08 ACRE-Feet; BASEFLOW = .00 CFS

OPERATION RUNOFF CROSS SECTION 1
 OUTPUT HYDROGRAPH= 6
 AREA= .59 SQ MI INPUT RUNOFF CURVE= 74. TIME OF CONCENTRATION= .60 HOURS
 INTERNAL HYDROGRAPH TIME INCREMENT= .0125 HOURS

 PEAK TIME(HRS) PEAK DISCHARGE(CFS) PEAK ELEVATION(Feet)
 .55 225.53 (RUNOFF)

 RUNOFF VOLUME ABOVE BASEFLOW = .33 WATERSHED INCHES, 124.14 CFS-HRS, 10.26 ACRE-Feet; BASEFLOW = .00 CFS

OPERATION ADDHYD CROSS SECTION 1
 INPUT HYDROGRAPHS= 5,6 OUTPUT HYDROGRAPH= 7

 PEAK TIME(HRS) PEAK DISCHARGE(CFS) PEAK ELEVATION(Feet)
 .65 475.30 (NULL)

 RUNOFF VOLUME ABOVE BASEFLOW = .26 WATERSHED INCHES, 355.05 CFS-HRS, 29.34 ACRE-Feet; BASEFLOW = .00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP RECORD ID
 + COMPUTATIONS COMPLETED FOR PASS 1

TR20 XEQ 03-25-98 12:23 EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150 JOB 1 PASS 2
 REV PC 09/83(.2) 100 YEAR STORMS HUFF 2ND QUARTILE FOR EVANSVILLE PAGE 2

TR 20 EXAMPLE PROBLEM

Figure 29-10J

EXECUTIVE CONTROL OPERATION COMPUT

RECORD ID

+ FROM XSECTION 1 TO XSECTION 1
 + STARTING TIME = .00 RAIN DEPTH = 2.37 RAIN DURATION = .50 RAIN TABLE NO. = 8 ANT. MOIST. COND = 2
 ALTERNATE NO. = 2 STORM NO. = 2 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 1

OUTPUT HYDROGRAPH = 5
 AREA = 1.51 SQ MI INPUT RUNOFF CURVE = 75. TIME OF CONCENTRATION = .90 HOURS
 INTERNAL HYDROGRAPH TIME INCREMENT = .0250 HOURS

PEAK TIME (HRS) .90 PEAK DISCHARGE (CFS) 679.29 PEAK ELEVATION (FEET) (RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = .58 WATERSHED INCHES, 569.28 CFS-HRS, 47.05 ACRE-FEET; BASEFLOW = .00 CFS

OPERATION RUNOFF CROSS SECTION 1

OUTPUT HYDROGRAPH = 6
 AREA = .59 SQ MI INPUT RUNOFF CURVE = 79. TIME OF CONCENTRATION = .60 HOURS
 INTERNAL HYDROGRAPH TIME INCREMENT = .0250 HOURS

PEAK TIME (HRS) .70 PEAK DISCHARGE (CFS) 464.96 PEAK ELEVATION (FEET) (RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = .73 WATERSHED INCHES, 277.23 CFS-HRS, 22.91 ACRE-FEET; BASEFLOW = .00 CFS

OPERATION ADDHYD CROSS SECTION 1

INPUT HYDROGRAPHS = 5,6 OUTPUT HYDROGRAPH = 7

PEAK TIME (HRS) .80 PEAK DISCHARGE (CFS) 1061.99 PEAK ELEVATION (FEET) (NULL)

RUNOFF VOLUME ABOVE BASEFLOW = .62 WATERSHED INCHES, 846.52 CFS-HRS, 69.96 ACRE-FEET; BASEFLOW = .00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP

RECORD ID

COMPUTATIONS COMPLETED FOR PASS 2

TR20 XEQ 03-25-98 12:23 EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150
 REV PC 09/83(.2) 100 YEAR STORMS HUFF 2ND QUARTILE FOR EVANSVILLE

JOB 1 PASS 3
 PAGE 3

EXECUTIVE CONTROL OPERATION COMPUT

RECORD ID

+ FROM XSECTION 1 TO XSECTION 1
 + STARTING TIME = .00 RAIN DEPTH = 3.10 RAIN DURATION = 1.00 RAIN TABLE NO. = 8 ANT. MOIST. COND = 2
 ALTERNATE NO. = 3 STORM NO. = 3 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 1

OUTPUT HYDROGRAPH = 5
 AREA = 1.51 SQ MI INPUT RUNOFF CURVE = 75. TIME OF CONCENTRATION = .90 HOURS
 INTERNAL HYDROGRAPH TIME INCREMENT = .0500 HOURS

PEAK TIME (HRS) 1.18 PEAK DISCHARGE (CFS) 1037.90 PEAK ELEVATION (FEET) (RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.04 WATERSHED INCHES, 1011.27 CFS-HRS, 83.57 ACRE-FEET; BASEFLOW = .00 CFS

OPERATION RUNOFF CROSS SECTION 1

OUTPUT HYDROGRAPH = 6
 AREA = .59 SQ MI INPUT RUNOFF CURVE = 79. TIME OF CONCENTRATION = .60 HOURS
 INTERNAL HYDROGRAPH TIME INCREMENT = .0500 HOURS

PEAK TIME (HRS) .93 PEAK DISCHARGE (CFS) 591.65 PEAK ELEVATION (FEET) (RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.23 WATERSHED INCHES, 468.61 CFS-HRS, 38.73 ACRE-FEET; BASEFLOW = .00 CFS

OPERATION ADDHYD CROSS SECTION 1

INPUT HYDROGRAPHS = 5,6 OUTPUT HYDROGRAPH = 7

PEAK TIME (HRS) 1.09 PEAK DISCHARGE (CFS) 1541.21 PEAK ELEVATION (FEET) (NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.09 WATERSHED INCHES, 1479.88 CFS-HRS, 122.30 ACRE-FEET; BASEFLOW = .00 CFS

TR 20 EXAMPLE PROBLEM

(continued)

Figure 29-10J

1

TR20 XEQ 03-25-98 12:23
REV PC 09/83(.2)EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150
100 YEAR STORMS HUFF 2ND QUANTILE FOR EVANSVILLEJOB 1 PASS 4
PAGE 4

EXECUTIVE CONTROL OPERATION COMPUT

RECORD ID

+

FROM XSECTION 1

TO XSECTION 1

STARTING TIME = .00 RAIN DEPTH = 3.48 RAIN DURATION = 2.00 RAIN TABLE NO. = 8 ANT. MOIST. COND = 2
ALTERNATE NO. = 4 STORM NO. = 4 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 1

OUTPUT HYDROGRAPH = 5
AREA = 1.51 SQ MI INPUT RUNOFF CURVE = 75. TIME OF CONCENTRATION = .90 HOURS
INTERNAL HYDROGRAPH TIME INCREMENT = .1000 HOURSPEAK TIME(HRS) 1.58 PEAK DISCHARGE(CFS) 899.88 PEAK ELEVATION(Feet)
(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.30 WATERSHED INCHES, 1265.85 CFS-HRS, 104.61 ACRE-Feet; BASEFLOW = .00 CFS

OPERATION RUNOFF CROSS SECTION 1

OUTPUT HYDROGRAPH = 6
AREA = .59 SQ MI INPUT RUNOFF CURVE = 79. TIME OF CONCENTRATION = .60 HOURS
INTERNAL HYDROGRAPH TIME INCREMENT = .0800 HOURSPEAK TIME(HRS) 1.29 PEAK DISCHARGE(CFS) 484.48 PEAK ELEVATION(Feet)
(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.51 WATERSHED INCHES, 576.72 CFS-HRS, 47.66 ACRE-Feet; BASEFLOW = .00 CFS

OPERATION ADDHYD CROSS SECTION 1

INPUT HYDROGRAPHS = 5,6 OUTPUT HYDROGRAPH = 7

PEAK TIME(HRS) 1.48 PEAK DISCHARGE(CFS) 1326.73 PEAK ELEVATION(Feet)
(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 1842.57 CFS-HRS, 152.27 ACRE-Feet; BASEFLOW = .00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP

RECORD ID

+

COMPUTATIONS COMPLETED FOR PASS 4

EXECUTIVE CONTROL OPERATION ENDJOB

RECORD ID

1

TR20 XEQ 03-25-98 12:23
REV PC 09/83(.2)EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150
100 YEAR STORMS HUFF 2ND QUANTILE FOR EVANSVILLEJOB 1 SUMMARY
PAGE 5SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION			RUNOFF AMOUNT (IN)	PEAK DISCHARGE				
						BEGIN (HR)	AMOUNT (IN)	DURATION (HR)		ELEVATION (FT)	TIME (HR)	RATE (CFS)	RATE (CSM)	
ALTERNATE 1 STORM 1														
+														
XSECTION	1	RUNOFF	1.51	8	2	.10	.0	1.67	.25	.24	---	.70	285.37	189.0
XSECTION	1	RUNOFF	.59	8	2	.10	.0	1.67	.25	.33	---	.55	225.53	382.3
XSECTION	1	ADDHYD	2.10	8	2	.10	.0	1.67	.25	.26	---	.65	475.30	226.3
ALTERNATE 2 STORM 2														
+														
XSECTION	1	RUNOFF	1.51	8	2	.10	.0	2.37	.50	.58	---	.90	679.29	449.9
XSECTION	1	RUNOFF	.59	8	2	.10	.0	2.37	.50	.73	---	.70	464.96	788.1
XSECTION	1	ADDHYD	2.10	8	2	.10	.0	2.37	.50	.62	---	.80	1061.99	505.7
ALTERNATE 3 STORM 3														
+														

TR 20 EXAMPLE PROBLEM

(continued)

Figure 29-10J

XSECTION	1	RUNOFF	1.51	8	2	.10	.0	3.10	1.00	1.04	---	1.18	1037.90	687.3
XSECTION	1	RUNOFF	.59	8	2	.10	.0	3.10	1.00	1.23	---	.94	591.65	1002.8
XSECTION	1	ADDHYD	2.10	8	2	.10	.0	3.10	1.00	1.09	---	1.09	1541.21	733.9

ALTERNATE 4 STORM 4

+	XSECTION	1	RUNOFF	1.51	8	2	.10	.0	3.48	2.00	1.30	---	1.58	899.88	595.9
	XSECTION	1	RUNOFF	.59	8	2	.10	.0	3.48	2.00	1.51	---	1.29	484.48	821.2
	XSECTION	1	ADDHYD	2.10	8	2	.10	.0	3.48	2.00	1.36	---	1.48	1326.73	8

TR20 XEQ 03-25-98 12:23
REV PC 09/83(.2)

EXAMPLE PROBLEM LICK CREEK AND LITTLE LICK CREEK AT US 150
100 YEAR STORMS HUFF 2ND QUARTILE FOR EVANSVILLE

JOB 1 SUMMARY
PAGE 6

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS.....			
		1	2	3	4
0 XSECTION 1	2.10				
+					
ALTERNATE 1		475.30	.00	.00	.00
ALTERNATE 2		.00	1061.99	.00	.00
ALTERNATE 3		.00	.00	1541.21	.00
ALTERNATE 4		.00	.00	.00	1326.73

1END OF 1 JOBS IN THIS RUN

TR 20 EXAMPLE PROBLEM
(continued)
Figure 29-10J