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SURFACE WATER DRAINAGE ANALYSIS
FOR PROPOSED HRI, INC.
CHURCHROCK IN-SITU URANIUM LEACH PROJECT
MCKINLEY COUNTY, NEW MEXICO

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1.0 INTRODUCTION

On July 27, 1993, Espey, Huston & Associates, Inc. (EH&A) was engaged by HRI, Inc., a subsidiary of Uranium Resources, Inc., to perform a surface water drainage analysis for the proposed Churchrock in situ uranium leach project in McKinley County, New Mexico. This analysis addresses both the surface water flooding and erosion potentials of the proposed site.

2.0 SITE CHARACTERISTICS

2.1 SITE LOCATION

HRI has indicated the proposed site is located in Sections 8 and 17, Township 16 North, Range 16 West, of McKinley County, New Mexico. Refer to Figure 1, Project Vicinity Map (HRI, 1993), for the project location. This site is located approximately ten (10) miles northeast of Gallup, New Mexico, along County Highway 566.

2.2 CLIMATE

The climate at the site has been reported as semiarid continental (Bailey, 1987). Mean annual precipitation is about eleven (11) inches, with most of the rain occurring in late summer (HRI, 1993). Gross lake evaporation is estimated to be an average of 56 inches per year (HRI, 1993). Additional meteorological data and information for the project site and vicinity can be found in HRI, Inc.'s Revised Environmental Report, dated March 1993.

2.3 SURFACE SOILS

The project site and vicinity surface soils have been previously documented in the "Soils Survey of Hydro Resources, Inc. Churchrock Properties, McKinley County, New Mexico," by Oran F. Bailey, Soils Scientist, dated October 1987. Information presented in that soils survey was used in this analysis. As indicated in that soils survey, the project site's surface materials are predominantly El Rancho sandy loam, 1 to 3 percent slopes and Miscellaneous (i.e., soils have been disturbed and, therefore, were not classified) (Bailey, 1987).

Bailey reported the El Rancho series consists of a sandy to fine sandy loam and sandy clay loam, with more than 50 percent sand. They are formed on valley bottoms and terraces (Bailey, 1987). Soil moisture is considered to be dry 50 to 75 percent of the time.

Other surface soils mapped by Bailey in the immediate project vicinity include El Rancho sandy loam, 5 to 8 percent slopes, Vessilla-Rock outcrop complex, Rock outcrop-Vessilla-Mion complex, Mion-Rock outcrop complex and Mikim clay loam, 3 to 5 percent slopes, gullied. These soil series are found "upstream" of the project site and generally comprise the tops and side slopes of the areal ridges and mesas. These soils are also considered to be dry most of the year.

2.4 SITE DRAINAGE

Based on examination of a site aerial photo, topography maps, other site photographs, site visit, and Bailey's report, except for that portion of the site that was mapped as "Miscellaneous" (disturbed soil's) by Bailey in 1987, the site and immediate area are well drained. The surface generally slopes at about 1 to 3 percent to an existing arroyo through the site (see figures 3 and 4). This unnamed tributary of the Puerco River bisects the project's proposed wellfield area and follows a southwesterly course to and along the west side of the project site. It varies in depth from about 3 feet (ft) near the southwest corner of the site to as much as 17 ft through the project site interior.

3.0 PROPOSED ACTIVITIES

According to HRI, the project's activities will include construction of a plant site, waste and/or process water surface impoundments and wellfield equipment, exposed above existing ground. The plant site, as described in HRI's Revised Environmental Report, is to be located at or near the southeast corner of Section 8 (see Figure 1 for location). Three (3) surface impoundments, approximately 300 ft by 300 ft in size, are proposed on the north side of the plant. Wellfield equipment, i.e., piping and numerous wellheads, at or near the surface, are to be located throughout the project site. This surface water drainage analysis addresses the flooding and erosion potential of the site with respect to these proposed features. Where/if needed, design recommendations are provided to ensure that these features are accessible and/or not subject to flooding.

HRI estimates the project life to be ten (10) years, including restoration activities. If additional reserves are discovered, the life of the project could be extended ten more years (HRI, 1993).

4.0 SCOPE OF ANALYSIS

Based on discussions with New Mexico Environmental Department (NMED) personnel, the 25- and 100-year frequency storms are to be utilized as the criteria to evaluate the site's flooding potential for the purposes of New Mexico Water Quality Control Commission Regulations, Section 3-106. The 1-, 6-, and 24-hour duration storms are to be considered. However, based on the analysis to be provided later in this report, the 2-hour storm, and not the 1-hour duration, was determined appropriate and was analyzed.

This surface water drainage analysis consists of a determination of the peak 25- and 100-year runoff flow rates through the site, and then using that information to approximate the respective floodplain limits. The widely accepted U.S. Army Corps of Engineers HEC-1 and HEC-2 computer models were run to accomplish these tasks.

4.1 SURFACE WATER HYDROLOGY

Based on an inspection of topography maps of the site and surrounding area, the total drainage basin to the southwest corner of the project site comprises approximately 3.88 square miles of land. This area, subdivided into six (6) sub-basins for analysis, is depicted in Figure 2. The time of concentration for the total watershed to the site's southwest corner is estimated to be approximately 1.78 hours. Because this time is greater than the 1-hour duration discussed with NMED staff (referenced previously), it was deemed appropriate to use a storm duration in the hydrologic analysis that more closely accounts for the watershed's estimated time of concentration. Therefore, a 2-hour duration storm was selected.

The U.S. Weather Bureau's *Technical Paper No. 40, Rainfall Frequency Atlas of the United States*, was used to document the precipitation amounts for each storm frequency and duration analyzed. These data are summarized in the following Table No. 1.

TABLE 1
25- and 100-YEAR FREQUENCY PRECIPITATION DATA

Storm Frequency	Precipitation (inches)		
	2-Hour Duration	6-Hour Duration	24-Hour Duration
100-Year	2.30	3.00	4.00
25-Year	1.80	2.50	3.00

The Soil Conservation Service (SCS) hydrologic analysis methodology was utilized in conservatively determining the peak runoff flow rates from the above precipitation data (SCS, 1972). In this technique, a runoff curve number (CN) parameter is selected. This parameter is a function of land use, soil type and antecedent moisture conditions. Table 2 indicates runoff curve numbers for arid and semiarid rangelands (HEC-1 Short Course, 1991a). With information on the hydrologic soil group (designated as A to D) presented in the soils survey by Bailey (Bailey, 1987), and assuming a poor hydrologic condition, i.e., less than 30 percent ground cover, runoff curve number values were conservatively estimated to be in the range of 85 to 89. It should be noted that these CN values represent an antecedent moisture condition (AMC) Type II, and not a predominantly dry soil condition as documented in Bailey's soil survey (Bailey, 1987). Thus, the hydrologic analysis overstates the expected runoff for the 25- and 100-year storm events, and is conservative.

Based on the HEC-1 models, included in Appendix A, the following table summarizes the estimated peak flow rates to the southwest corner of the project site.

TABLE 3
25- AND 100-YEAR PEAK RUNOFF FLOW RATES

Storm Frequency	Peak Runoff Flow Rates (cfs)		
	2-Hour Duration	6-Hour Duration	24-Hour Duration
100-Year	1959	2389	2767
25-Year	1557	1740	1953

TABLE 2
 RUNOFF CURVE NUMBERS FOR ARID AND SEMIARID RANGELANDS¹

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition ²	A ³	B	C	D
Herbaceous--mixture of grass, weeds, and low-growing brush, with brush the minor element.	Poor	80	87	93	
	Fair	71	81	89	
	Good	62	74	85	
Oak-aspen--mountain brush mixture of oak brush, aspen, mountain mahogany, bitter brush, maple, and other brush.	Poor	66	74	79	
	Fair	48	57	63	
	Good	30	41	48	
Pinyon-juniper--pinyon, juniper, or both; grass understory.	Poor	75	85	89	
	Fair	58	73	80	
	Good	41	61	71	
Sagebrush with grass understory.	Poor	67	80	85	
	Fair	51	63	70	
	Good	35	47	55	
Desert shrub -- major plants include saltbush, greasewood, creosotebush, blackbrush, bursage, palo verde, mesquite, and cactus.	Poor	63	77	85	88
	Fair	55	72	81	86
	Good	49	68	79	84

Source: HEC-1 Short Course, University of Texas at Austin, March 1991.

¹Average runoff condition, and $I_a = 0.2S$. For range in humid regions, use Table 2-2c.

² *Poor*: < 30% ground cover (litter, grass, and brush overstory).
Fair: 30 to 70% ground cover.
Good: > 70% ground cover.

³Curve numbers for group A have been developed only for desert shrub.

As can be seen, the maximum peak flow rates for the 25- and 100-year frequency storms occurred with the 24-hour duration. Therefore, these peak flow rates were used in the HEC-2 modeling for estimating the floodplain limits for the respective storm events.

4.2 FLOODPLAIN DELINEATION

The HEC-2 computer model was utilized to estimate the limits of the 100-year floodplain for the existing arroyo conditions. (Note: Because the 25-year floodplain is contained within the 100-year floodplain, the 25-year floodplain limits were not mapped.) Existing channels (arroyo) sections, starting at the project site's southwest corner, were initially taken at 100-150 ft intervals. Channel section intervals were increased to 200, 300 and 500 ft as one proceeds upstream in a northerly direction (see figures 3 and 4 for section locations). Sections were based on a 1" = 100' scale, two (2) foot topographic contour interval map for Section 17 (Figure 3). Within Section 8, sections were based on a 1" = 200' scale, five (5) foot topographic contour interval map (Figure 4).

The approximate limits of the 100-year floodplain through the project site, also depicted in figures 3 and 4, were determined from the HEC-2 model output (see Appendix B). As indicated, the 100-year floodplain is predominantly contained within the existing arroyo limits, except near the southwest corner of the project site. Some inundation of the site, along and just outside of the existing arroyo limits, is also possible in Section 8 of the site.

4.3 EROSIONAL CONSIDERATIONS

Based on a review of the HEC-2 output (in Appendix B), which uses our conservative peak runoff flow rates for the 25- or 100-year frequency storm events, stormwater velocities within the existing arroyo could be sufficient to cause some erosion of the arroyo (Chow, 1959). Using a method developed by the U.S. Army Corps of Engineers (1970), and considering the conservative calculated peak runoff flow rates determined from the HEC-1 modeling, approximately only one (1) foot of bottom scouring would be expected. For the same overstated peak runoff flow rates, some sloughing of the existing arroyo sideslopes might also occur because of the potentially erosive velocities.

5.0 IMPACTS TO PROPOSED OPERATIONS

With the plant site and surface water impoundments proposed to be located at or near the southeast corner of Section 8, at an approximate horizontal separation (to the nearest bank of the arroyo) of about 300 ft, no adverse impact to these features is anticipated. These features should not be subject to inundation or erosion from the 25- or 100-year frequency storms.

HRI has indicated it will need a vehicular access crossing of the arroyo to install equipment, monitor and inspect the wellfield area. HRI, Inc. proposes to provide vehicular access by constructing a clear span bridge over the arroyo. This bridge structure, to be designed by HRI engineering staff, is tentatively planned near Channel Section 37+00 (see Figure 4 for section location). To ensure no backwater effect due to this proposed bridge structure, and because modeling performed to date does not reflect this improvement, it is recommended that the bottom elevation of this access bridge be established at no less than one (1) ft above the estimated 100-year water surface elevation at that location (elevation approximately 6822.00).

A wellfield pipeline (see HRI's Revised Environmental Report) is also proposed to cross the existing arroyo. HRI, Inc. proposes to attach this pipeline to the proposed clear span bridge at/near Section 37+00. If this pipeline is installed with its invert above the 100-year water surface elevation of 6822.00, at/near Section 37+00, this improvement should also not result in an obstruction to stormwater flow in the arroyo.

A storm sewer culvert (size undetermined) has been installed near Section 35+00. This existing culvert structure was not reflected in this analysis. However, because this culvert might obstruct flow in the arroyo, if the 25- or 100-year storm event were to occur, it is recommended that this existing feature be removed. Some minor channel excavation in this area is anticipated so to transition to the existing arroyo configuration on either side of this culvert.

Finally, if located within the existing arroyo limits, wellheads exposed above existing ground could be subject to flooding. However, HRI proposes to locate all needed wellfield equipment and appurtenances outside of the existing arroyo limits. Thus, no inundation or soil erosion adjacent to the wellfield equipment should occur as a result of the 25- or 100-year storm events.

HRI proposes to inspect the existing arroyo through the project site on a weekly to bi-weekly basis and after each rainfall event producing runoff. These inspections and prompt performance of any needed maintenance activities would ensure that the arroyo remains free of obstruction to flow, the existing conveyance capability of this feature is maintained, and that any observed scouring of the arroyo bottom, if it occurs, is rectified so that positive drainage is maintained and sideslopes remain stable.

6.0 SUMMARY AND CONCLUSIONS

To assist HRI in responding to New Mexico Water Quality Commission Regulations, Section 3-106, the flooding and erosion potential of the proposed Churchrock site was analyzed. This analysis indicates:

- (1) The proposed plant site and surface impoundments, to be located near the southeast corner of Section 8, should not be subject to flooding from the 25- or 100-year storm events.
- (2) No modifications to the existing arroyo are needed (except for the proposed clear span bridge for vehicular access and the removal of the existing storm sewer culvert, noted previously). Also, HRI should avoid locating or siting piping and wellheads within the existing arroyo limits.
- (3) Calculated stormwater runoff velocities within the existing arroyo are potentially erosive. Thus, some scouring of the arroyo bottom might result.
- (4) With respect to the site's flooding potential, no adverse impacts to the surface and ground waters are anticipated from the proposed project operations.

7.0 REFERENCES

- Bailey, Oran F., Soils Scientist. 1987. "Soil Survey of Hydro Resources, Inc. Churchrock Properties, McKinley County, New Mexico. October 1987.
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- Soil Conservation Service, 1972. *SCS National Engineering Handbook, Section 4, Hydrology*. August 1972.
- U.S. Army Corps of Engineers. 1970. *Hydraulic Design of Flood Control Channels*, EM 1110-2-1601. July 1970.
- _____. 1991a. Short Course on Flood Plain Hydrology Using HEC-1. University of Texas at Austin. March 1991.
- _____. 1991b. Short Course on River and Flood Plain Hydraulics Using HEC-2. University of Texas at Austin. April 1991.
- U.S. Weather Bureau. 1961. *Technical Paper No. 40. Rainfall Frequency Atlas of the United States*. May 1961.

APPENDIX A


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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1) *
  SEPTEMBER 1990 *
  VERSION 4.0 *
RUN DATE 08/27/1993 TIME 09:09:49 *
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*****
U.S. ARMY CORPS OF ENGINEERS *
HYDROLOGIC ENGINEERING CENTER *
  609 SECOND STREET *
  DAVIS, CALIFORNIA 95616 *
  (916) 756-1104 *
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X   X  XXXXXXX  XXXXX      X
X   X  X      X   X      XX
X   X  X      X           X
XXXXXXXX XXXX  X           XXXXX X
X   X  X      X           X
X   X  X      X   X      X
X   X  XXXXXXX  XXXXX      XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
 THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	CHURCH ROCK, NEW MEXICO									15608-01
2	ID	100-YEAR, 24-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC=11									
3	ID	FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE									
4	IT	5	300								
5	IO	0									
6	KK	AREA 1									
7	KM	BASIN NO. 1 RUNOFF									
8	PH	1	0	1.15	1.48	2	2.3	2.5	3	3.5	4
9	BA	1.447									
10	LS	0	89								
11	UD	0.552									
12	KK	ROUTE1									
13	KM	ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET									
14	RM	2	0.19	0.4							
15	KK	AREA 2									
16	KM	BASIN NO. 2 RUNOFF									
17	BA	0.604									
18	LS	0	89								
19	UD	0.3									
20	KK	OUTLT2									
21	JM	COMBINE ROUTE 1 AND BASIN TO OUTLET 2									
22	HC	2									
23	KK	ROUTE2									
24	KM	ROUTE OUTLET 2 TO BASIN 3 OUTLET									
25	RM	1	0.064	0.4							
26	KK	AREA 3									
27	KM	BASIN NO. 3 RUNOFF									
28	BA	0.238									
29	LS	0	89								
30	UD	0.313									
31	KK	OUTLT3									
32	KM	COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3									
33	HC	2									
34	KK	ROUTE3									
35	KM	ROUTE OUTLET 3 TO BASIN 4 OUTLET									
36	RM	1	0.125	0.3							
37	KK	AREA 4									
38	KM	BASIN NO. 4 RUNOFF									
39	BA	0.6									
40	LS	0	89								
41	UD	0.297									

FLOOD HYDROGRAPH PACKAGE (HEC-1)
SEPTEMBER 1990
VERSION 4.0

RUN DATE 08/27/1993 TIME 09:09:49

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HYDROLOGIC ENGINEERING CENTER
609 SECOND STREET
DAVIS, CALIFORNIA 95616
(916) 756-1104

CHURCH ROCK, PUEBLO MEXICO 15608-01
100-YEAR, 24-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC=II
FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE

5 IO OUTPUT CONTROL VARIABLES
IPRNT 0 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA
NMIN 5 MINUTES IN COMPUTATION INTERVAL
IDATE 1 0 STARTING DATE
ITIME 0000 STARTING TIME
NQ 300 NUMBER OF HYDROGRAPH ORDINATES
NDDATE 2 0 ENDING DATE
NDTIME 0055 ENDING TIME
ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS
DRAINAGE AREA SQUARE MILES
PRECIPITATION DEPTH INCHES
LENGTH, ELEVATION FEET
FLOW CUBIC FEET PER SECOND
STORAGE VOLUME ACRE-Feet
SURFACE AREA ACRES
TEMPERATURE DEGREES FAHRENHEIT

6 KK

* AREA 1 *

BASIN NO. 1 RUNOFF

SUBBASIN RUNOFF DATA

9 BA

SUBBASIN CHARACTERISTICS
TAREA 1.45 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
..... HYDRD-35 TP-40 TP-49
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
1.15 1.48 2.00 2.30 2.50 3.00 3.50 4.00 .00 .00 .00 .00

STORM AREA = 1.45

10 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNBR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

UNIT HYDROGRAPH
35 END-OF-PERIOD ORDINATES

69.	203.	405.	691.	968.	1125.	1175.	1149.	1043.	914.
738.	560.	442.	350.	284.	227.	178.	143.	114.	90.
72.	57.	45.	36.	29.	23.	18.	15.	12.	10.
8.	6.	4.	3.	1.					

HYDROGRAPH AT STATION AREA 1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.04	.00	.03	1643.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.03	.00	.03	1723.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.03	.00	.03	1707.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.03	.00	.02	1597.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.02	1446.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.02	.00	.02	1244.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.02	.00	.02	1035.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	879.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.02	752.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.02	652.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	566.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	490.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	431.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.02	380.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.02	338.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.02	304.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	277.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	255.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	238.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	224.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	212.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	202.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	193.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	185.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	178.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	171.
1		0210	27	.00	.00	.00	0.	*	1		1440	177	.01	.00	.01	165.
1		0215	28	.00	.00	.00	0.	*	1		1445	178	.01	.00	.01	159.
1		0220	29	.00	.00	.00	0.	*	1		1450	179	.01	.00	.01	153.
1		0225	30	.00	.00	.00	0.	*	1		1455	180	.01	.00	.01	147.
1		0230	31	.00	.00	.00	0.	*	1		1500	181	.01	.00	.01	142.
1		0235	32	.00	.00	.00	0.	*	1		1505	182	.01	.00	.01	138.
1		0240	33	.00	.00	.00	0.	*	1		1510	183	.01	.00	.01	134.
1		0245	34	.00	.00	.00	0.	*	1		1515	184	.01	.00	.01	130.
1		0250	35	.00	.00	.00	0.	*	1		1520	185	.01	.00	.01	126.
1		0255	36	.00	.00	.00	0.	*	1		1525	186	.01	.00	.01	122.
1		0300	37	.00	.00	.00	0.	*	1		1530	187	.01	.00	.01	117.
1		0305	38	.00	.00	.00	0.	*	1		1535	188	.01	.00	.01	113.
1		0310	39	.00	.00	.00	0.	*	1		1540	189	.01	.00	.01	109.
1		0315	40	.00	.00	.00	0.	*	1		1545	190	.01	.00	.01	105.
1		0320	41	.00	.00	.00	0.	*	1		1550	191	.01	.00	.01	101.
1		0325	42	.00	.00	.00	0.	*	1		1555	192	.01	.00	.01	98.
1		0330	43	.00	.00	.00	0.	*	1		1600	193	.01	.00	.01	95.
1		0335	44	.00	.00	.00	0.	*	1		1605	194	.01	.00	.01	93.
1		0340	45	.00	.00	.00	0.	*	1		1610	195	.01	.00	.01	90.
1		0345	46	.00	.00	.00	0.	*	1		1615	196	.01	.00	.01	88.
1		0350	47	.00	.00	.00	0.	*	1		1620	197	.01	.00	.01	86.
1		0355	48	.00	.00	.00	0.	*	1		1625	198	.01	.00	.01	84.
1		0400	49	.00	.00	.00	0.	*	1		1630	199	.01	.00	.01	83.
1		0405	50	.00	.00	.00	0.	*	1		1635	200	.01	.00	.01	81.
1		0410	51	.00	.00	.00	0.	*	1		1640	201	.01	.00	.01	80.
1		0415	52	.00	.00	.00	0.	*	1		1645	202	.01	.00	.01	78.
1		0420	53	.00	.00	.00	0.	*	1		1650	203	.01	.00	.01	77.
1		0425	54	.00	.00	.00	0.	*	1		1655	204	.01	.00	.01	76.
1		0430	55	.00	.00	.00	0.	*	1		1700	205	.01	.00	.01	74.

1	0435	56	.00	.00	.00	0.	*	1	1705	206	.01	.00	.01	73.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.01	.00	.01	72.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.01	.00	.01	71.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.01	.00	.01	70.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.01	.00	.01	69.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.01	.00	.01	68.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.01	.00	.01	67.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.01	.00	.01	66.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.01	.00	.01	65.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.01	.00	.01	65.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.01	.00	.01	64.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.01	.00	.01	63.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	62.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	61.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	60.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	59.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	58.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	56.
1	0605	74	.01	.01	.00	0.	*	1	1835	224	.00	.00	.00	55.
1	0610	75	.01	.01	.00	0.	*	1	1840	225	.00	.00	.00	54.
1	0615	76	.01	.01	.00	0.	*	1	1845	226	.00	.00	.00	52.
1	0620	77	.01	.01	.00	0.	*	1	1850	227	.00	.00	.00	51.
1	0625	78	.01	.01	.00	0.	*	1	1855	228	.00	.00	.00	50.
1	0630	79	.01	.01	.00	0.	*	1	1900	229	.00	.00	.00	49.
1	0635	80	.01	.01	.00	1.	*	1	1905	230	.00	.00	.00	48.
1	0640	81	.01	.01	.00	1.	*	1	1910	231	.00	.00	.00	48.
1	0645	82	.01	.01	.00	1.	*	1	1915	232	.00	.00	.00	47.
1	0650	83	.01	.01	.00	2.	*	1	1920	233	.00	.00	.00	46.
1	0655	84	.01	.01	.00	2.	*	1	1925	234	.00	.00	.00	46.
1	0700	85	.01	.01	.00	3.	*	1	1930	235	.00	.00	.00	45.
1	0705	86	.01	.01	.00	3.	*	1	1935	236	.00	.00	.00	45.
1	0710	87	.01	.01	.00	4.	*	1	1940	237	.00	.00	.00	44.
1	0715	88	.01	.01	.00	4.	*	1	1945	238	.00	.00	.00	44.
1	0720	89	.01	.01	.00	5.	*	1	1950	239	.00	.00	.00	43.
1	0725	90	.01	.01	.00	5.	*	1	1955	240	.00	.00	.00	43.
1	0730	91	.01	.01	.00	6.	*	1	2000	241	.00	.00	.00	42.
1	0735	92	.01	.01	.00	7.	*	1	2005	242	.00	.00	.00	42.
1	0740	93	.01	.01	.00	7.	*	1	2010	243	.00	.00	.00	42.
1	0745	94	.01	.01	.00	8.	*	1	2015	244	.00	.00	.00	41.
1	0750	95	.01	.01	.00	9.	*	1	2020	245	.00	.00	.00	41.
1	0755	96	.01	.01	.00	9.	*	1	2025	246	.00	.00	.00	40.
1	0800	97	.01	.01	.00	10.	*	1	2030	247	.00	.00	.00	40.
1	0805	98	.01	.01	.00	11.	*	1	2035	248	.00	.00	.00	40.
1	0810	99	.01	.01	.00	12.	*	1	2040	249	.00	.00	.00	39.
1	0815	100	.01	.01	.00	13.	*	1	2045	250	.00	.00	.00	39.
1	0820	101	.01	.01	.00	13.	*	1	2050	251	.00	.00	.00	39.
1	0825	102	.01	.01	.00	14.	*	1	2055	252	.00	.00	.00	38.
1	0830	103	.01	.01	.00	15.	*	1	2100	253	.00	.00	.00	38.
1	0835	104	.01	.01	.00	16.	*	1	2105	254	.00	.00	.00	38.
1	0840	105	.01	.01	.00	17.	*	1	2110	255	.00	.00	.00	37.
1	0845	106	.01	.01	.00	18.	*	1	2115	256	.00	.00	.00	37.
1	0850	107	.01	.01	.00	19.	*	1	2120	257	.00	.00	.00	37.
1	0855	108	.01	.01	.00	20.	*	1	2125	258	.00	.00	.00	37.
1	0900	109	.01	.01	.00	21.	*	1	2130	259	.00	.00	.00	36.
1	0905	110	.01	.01	.00	22.	*	1	2135	260	.00	.00	.00	36.
1	0910	111	.01	.01	.00	24.	*	1	2140	261	.00	.00	.00	36.
1	0915	112	.01	.01	.00	25.	*	1	2145	262	.00	.00	.00	36.
1	0920	113	.01	.01	.00	27.	*	1	2150	263	.00	.00	.00	35.
1	0925	114	.01	.01	.00	29.	*	1	2155	264	.00	.00	.00	35.
1	0930	115	.01	.01	.00	31.	*	1	2200	265	.00	.00	.00	35.
1	0935	116	.01	.01	.00	33.	*	1	2205	266	.00	.00	.00	35.
1	0940	117	.01	.01	.01	35.	*	1	2210	267	.00	.00	.00	34.
1	0945	118	.01	.01	.01	38.	*	1	2215	268	.00	.00	.00	34.
1	0950	119	.01	.01	.01	40.	*	1	2220	269	.00	.00	.00	34.
1	0955	120	.01	.01	.01	43.	*	1	2225	270	.00	.00	.00	34.
1	1000	121	.01	.01	.01	46.	*	1	2230	271	.00	.00	.00	33.
1	1005	122	.01	.01	.01	48.	*	1	2235	272	.00	.00	.00	33.
1	1010	123	.02	.01	.01	51.	*	1	2240	273	.00	.00	.00	33.
1	1015	124	.02	.01	.01	54.	*	1	2245	274	.00	.00	.00	33.
1	1020	125	.02	.01	.01	57.	*	1	2250	275	.00	.00	.00	32.
1	1025	126	.02	.01	.01	60.	*	1	2255	276	.00	.00	.00	32.
1	1030	127	.02	.01	.01	63.	*	1	2300	277	.00	.00	.00	32.
1	1035	128	.01	.01	.01	67.	*	1	2305	278	.00	.00	.00	32.
1	1040	129	.02	.01	.01	70.	*	1	2310	279	.00	.00	.00	32.
1	1045	130	.02	.01	.01	73.	*	1	2315	280	.00	.00	.00	31.

1	1050	131	.02	.01	.01	76.	*	1	2320	281	.00	.00	.00	31.
1	1055	132	.02	.01	.01	79.	*	1	2325	282	.00	.00	.00	31.
1	1100	133	.02	.01	.01	82.	*	1	2330	283	.00	.00	.00	31.
1	1105	134	.02	.01	.01	84.	*	1	2335	284	.00	.00	.00	31.
1	1110	135	.02	.01	.01	88.	*	1	2340	285	.00	.00	.00	30.
1	1115	136	.02	.01	.01	91.	*	1	2345	286	.00	.00	.00	30.
1	1120	137	.03	.01	.01	96.	*	1	2350	287	.00	.00	.00	30.
1	1125	138	.03	.01	.02	102.	*	1	2355	288	.00	.00	.00	30.
1	1130	139	.03	.01	.02	108.	*	2	0000	289	.00	.00	.00	30.
1	1135	140	.04	.01	.02	117.	*	2	0005	290	.00	.00	.00	29.
1	1140	141	.04	.02	.03	127.	*	2	0010	291	.00	.00	.00	29.
1	1145	142	.05	.02	.03	140.	*	2	0015	292	.00	.00	.00	28.
1	1150	143	.07	.02	.05	157.	*	2	0020	293	.00	.00	.00	26.
1	1155	144	.10	.03	.07	180.	*	2	0025	294	.00	.00	.00	23.
1	1200	145	.19	.05	.14	217.	*	2	0030	295	.00	.00	.00	20.
1	1205	146	1.14	.19	.94	329.	*	2	0035	296	.00	.00	.00	17.
1	1210	147	.13	.02	.12	517.	*	2	0040	297	.00	.00	.00	14.
1	1215	148	.08	.01	.07	780.	*	2	0045	298	.00	.00	.00	11.
1	1220	149	.06	.01	.05	1120.	*	2	0050	299	.00	.00	.00	9.
1	1225	150	.05	.00	.04	1443.	*	2	0055	300	.00	.00	.00	7.

TOTAL RAINFALL = 3.99, TOTAL LOSS = 1.18, TOTAL EXCESS = 2.82

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
1723.	12.58	363.	363.	109.	105.	105.
		(INCHES)	2.335	2.813	2.813	2.813
		(AC-FT)	180.	217.	217.	217.

CUMULATIVE AREA = 1.45 SQ MI

12 KK

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*****
* ROUTE1 *
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ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET

HYDROGRAPH ROUTING DATA

14 RM

MUSKINGUM ROUTING
 NSTPS 2 NUMBER OF SUBREACHES
 AMSKK .19 MUSKINGUM K
 X .40 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE1

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1031.	*	1		1845	226	55.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1345.	*	1		1850	227	54.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1570.	*	1		1855	228	53.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1683.	*	1		1900	229	51.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1696.	*	1		1905	230	50.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1616.	*	1		1910	231	49.	*
1		0030	7	0.	*	1		0645	82	1.	*	1		1300	157	1480.	*	1		1915	232	49.	*
1		0035	8	0.	*	1		0650	83	1.	*	1		1305	158	1295.	*	1		1920	233	48.	*
1		0040	9	0.	*	1		0655	84	1.	*	1		1310	159	1096.	*	1		1925	234	47.	*
1		0045	10	0.	*	1		0700	85	2.	*	1		1315	160	929.	*	1		1930	235	46.	*
1		0050	11	0.	*	1		0705	86	2.	*	1		1320	161	792.	*	1		1935	236	46.	*
1		0055	12	0.	*	1		0710	87	2.	*	1		1325	162	684.	*	1		1940	237	45.	*

1	0100	13	0.	*	1	0715	88	3.	*	1	1330	163	592.	*	1	1945	238	45.
1	0105	14	0.	*	1	0720	89	3.	*	1	1335	164	513.	*	1	1950	239	44.
1	0110	15	0.	*	1	0725	90	4.	*	1	1340	165	449.	*	1	1955	240	44.
1	0115	16	0.	*	1	0730	91	5.	*	1	1345	166	396.	*	1	2000	241	43.
1	0120	17	0.	*	1	0735	92	5.	*	1	1350	167	351.	*	1	2005	242	43.
1	0125	18	0.	*	1	0740	93	6.	*	1	1355	168	315.	*	1	2010	243	42.
1	0130	19	0.	*	1	0745	94	6.	*	1	1400	169	285.	*	1	2015	244	42.
1	0135	20	0.	*	1	0750	95	7.	*	1	1405	170	262.	*	1	2020	245	42.
1	0140	21	0.	*	1	0755	96	8.	*	1	1410	171	243.	*	1	2025	246	41.
1	0145	22	0.	*	1	0800	97	8.	*	1	1415	172	228.	*	1	2030	247	41.
1	0150	23	0.	*	1	0805	98	9.	*	1	1420	173	215.	*	1	2035	248	41.
1	0155	24	0.	*	1	0810	99	10.	*	1	1425	174	205.	*	1	2040	249	40.
1	0200	25	0.	*	1	0815	100	11.	*	1	1430	175	196.	*	1	2045	250	40.
1	0205	26	0.	*	1	0820	101	11.	*	1	1435	176	188.	*	1	2050	251	39.
1	0210	27	0.	*	1	0825	102	12.	*	1	1440	177	180.	*	1	2055	252	39.
1	0215	28	0.	*	1	0830	103	13.	*	1	1445	178	173.	*	1	2100	253	39.
1	0220	29	0.	*	1	0835	104	14.	*	1	1450	179	167.	*	1	2105	254	39.
1	0225	30	0.	*	1	0840	105	15.	*	1	1455	180	160.	*	1	2110	255	38.
1	0230	31	0.	*	1	0845	106	16.	*	1	1500	181	154.	*	1	2115	256	38.
1	0235	32	0.	*	1	0850	107	17.	*	1	1505	182	148.	*	1	2120	257	38.
1	0240	33	0.	*	1	0855	108	18.	*	1	1510	183	143.	*	1	2125	258	37.
1	0245	34	0.	*	1	0900	109	19.	*	1	1515	184	139.	*	1	2130	259	37.
1	0250	35	0.	*	1	0905	110	20.	*	1	1520	185	135.	*	1	2135	260	37.
1	0255	36	0.	*	1	0910	111	21.	*	1	1525	186	131.	*	1	2140	261	36.
1	0300	37	0.	*	1	0915	112	22.	*	1	1530	187	127.	*	1	2145	262	36.
1	0305	38	0.	*	1	0920	113	23.	*	1	1535	188	123.	*	1	2150	263	36.
1	0310	39	0.	*	1	0925	114	25.	*	1	1540	189	118.	*	1	2155	264	36.
1	0315	40	0.	*	1	0930	115	26.	*	1	1545	190	114.	*	1	2200	265	35.
1	0320	41	0.	*	1	0935	116	28.	*	1	1550	191	110.	*	1	2205	266	35.
1	0325	42	0.	*	1	0940	117	30.	*	1	1555	192	106.	*	1	2210	267	35.
1	0330	43	0.	*	1	0945	118	33.	*	1	1600	193	102.	*	1	2215	268	35.
1	0335	44	0.	*	1	0950	119	35.	*	1	1605	194	99.	*	1	2220	269	34.
1	0340	45	0.	*	1	0955	120	37.	*	1	1610	195	96.	*	1	2225	270	34.
1	0345	46	0.	*	1	1000	121	40.	*	1	1615	196	93.	*	1	2230	271	34.
1	0350	47	0.	*	1	1005	122	42.	*	1	1620	197	91.	*	1	2235	272	34.
1	0355	48	0.	*	1	1010	123	45.	*	1	1625	198	89.	*	1	2240	273	33.
1	0400	49	0.	*	1	1015	124	47.	*	1	1630	199	87.	*	1	2245	274	33.
1	0405	50	0.	*	1	1020	125	50.	*	1	1635	200	85.	*	1	2250	275	33.
1	0410	51	0.	*	1	1025	126	53.	*	1	1640	201	83.	*	1	2255	276	33.
1	0415	52	0.	*	1	1030	127	56.	*	1	1645	202	82.	*	1	2300	277	33.
1	0420	53	0.	*	1	1035	128	59.	*	1	1650	203	80.	*	1	2305	278	32.
1	0425	54	0.	*	1	1040	129	62.	*	1	1655	204	79.	*	1	2310	279	32.
1	0430	55	0.	*	1	1045	130	66.	*	1	1700	205	77.	*	1	2315	280	32.
1	0435	56	0.	*	1	1050	131	69.	*	1	1705	206	76.	*	1	2320	281	32.
1	0440	57	0.	*	1	1055	132	73.	*	1	1710	207	75.	*	1	2325	282	31.
1	0445	58	0.	*	1	1100	133	76.	*	1	1715	208	74.	*	1	2330	283	31.
1	0450	59	0.	*	1	1105	134	78.	*	1	1720	209	72.	*	1	2335	284	31.
1	0455	60	0.	*	1	1110	135	81.	*	1	1725	210	71.	*	1	2340	285	31.
1	0500	61	0.	*	1	1115	136	84.	*	1	1730	211	70.	*	1	2345	286	31.
1	0505	62	0.	*	1	1120	137	87.	*	1	1735	212	69.	*	1	2350	287	31.
1	0510	63	0.	*	1	1125	138	90.	*	1	1740	213	68.	*	1	2355	288	30.
1	0515	64	0.	*	1	1130	139	95.	*	1	1745	214	67.	*	2	0000	289	30.
1	0520	65	0.	*	1	1135	140	100.	*	1	1750	215	67.	*	2	0005	290	30.
1	0525	66	0.	*	1	1140	141	107.	*	1	1755	216	66.	*	2	0010	291	30.
1	0530	67	0.	*	1	1145	142	115.	*	1	1800	217	65.	*	2	0015	292	29.
1	0535	68	0.	*	1	1150	143	124.	*	1	1805	218	64.	*	2	0020	293	29.
1	0540	69	0.	*	1	1155	144	137.	*	1	1810	219	63.	*	2	0025	294	28.
1	0545	70	0.	*	1	1200	145	153.	*	1	1815	220	62.	*	2	0030	295	26.
1	0550	71	0.	*	1	1205	146	175.	*	1	1820	221	62.	*	2	0035	296	24.
1	0555	72	0.	*	1	1210	147	213.	*	1	1825	222	61.	*	2	0040	297	21.
1	0600	73	0.	*	1	1215	148	308.	*	1	1830	223	59.	*	2	0045	298	18.
1	0605	74	0.	*	1	1220	149	476.	*	1	1835	224	58.	*	2	0050	299	15.
1	0610	75	0.	*	1	1225	150	718.	*	1	1840	225	57.	*	2	0055	300	12.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW
1696.	12.83	6-HR 363.
		24-HR 109.
		72-HR 105.
		24.92-HR 105.
		(INCHES) 2.335
		2.811
		2.811
		2.811
		(AC-FT) 180.
		217.
		217.
		217.

CUMULATIVE AREA = 1.45 SQ MI

 * *
 * AREA 2 *
 * *

15 KK

BASIN NO. 2 RUNOFF

SUBBASIN RUNOFF DATA

17 BA

SUBBASIN CHARACTERISTICS

TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	2.50	3.00	3.50	4.00	.00	.00	.00	.00

STORM AREA = .60

18 LS

SCS LOSS RATE

STRTL .25 INITIAL ABSTRACTION
 CRVNBR 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

19 UD

SCS DIMENSIONLESS UNITGRAPH

TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

119.	386.	732.	854.	784.	613.	389.	261.	179.	119.
81.	54.	36.	24.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.04	.00	.03	886.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.03	.00	.03	651.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.03	.00	.03	495.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.03	.00	.02	384.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.02	300.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.02	.00	.02	241.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.02	.00	.02	196.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	163.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.02	139.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.02	121.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	108.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	97.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	89.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.02	82.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.02	76.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.02	74.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	73.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	73.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	72.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	71.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	69.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	67.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	65.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	64.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	62.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	60.

1	0210	27	.00	.00	.00	0.	*	1	1440	177	.01	.00	.01	59.
1	0215	28	.00	.00	.00	0.	*	1	1445	178	.01	.00	.01	57.
1	0220	29	.00	.00	.00	0.	*	1	1450	179	.01	.00	.01	56.
1	0225	30	.00	.00	.00	0.	*	1	1455	180	.01	.00	.01	54.
1	0230	31	.00	.00	.00	0.	*	1	1500	181	.01	.00	.01	53.
1	0235	32	.00	.00	.00	0.	*	1	1505	182	.01	.00	.01	52.
1	0240	33	.00	.00	.00	0.	*	1	1510	183	.01	.00	.01	50.
1	0245	34	.00	.00	.00	0.	*	1	1515	184	.01	.00	.01	48.
1	0250	35	.00	.00	.00	0.	*	1	1520	185	.01	.00	.01	45.
1	0255	36	.00	.00	.00	0.	*	1	1525	186	.01	.00	.01	43.
1	0300	37	.00	.00	.00	0.	*	1	1530	187	.01	.00	.01	41.
1	0305	38	.00	.00	.00	0.	*	1	1535	188	.01	.00	.01	40.
1	0310	39	.00	.00	.00	0.	*	1	1540	189	.01	.00	.01	39.
1	0315	40	.00	.00	.00	0.	*	1	1545	190	.01	.00	.01	38.
1	0320	41	.00	.00	.00	0.	*	1	1550	191	.01	.00	.01	37.
1	0325	42	.00	.00	.00	0.	*	1	1555	192	.01	.00	.01	36.
1	0330	43	.00	.00	.00	0.	*	1	1600	193	.01	.00	.01	35.
1	0335	44	.00	.00	.00	0.	*	1	1605	194	.01	.00	.01	35.
1	0340	45	.00	.00	.00	0.	*	1	1610	195	.01	.00	.01	34.
1	0345	46	.00	.00	.00	0.	*	1	1615	196	.01	.00	.01	33.
1	0350	47	.00	.00	.00	0.	*	1	1620	197	.01	.00	.01	33.
1	0355	48	.00	.00	.00	0.	*	1	1625	198	.01	.00	.01	32.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.01	.00	.01	32.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.01	.00	.01	31.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.01	.00	.01	31.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.01	.00	.01	30.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.01	.00	.01	30.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.01	.00	.01	29.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.01	.00	.01	29.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.01	.00	.01	29.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.01	.00	.01	28.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.01	.00	.01	28.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.01	.00	.01	28.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.01	.00	.01	27.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.01	.00	.01	27.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.01	.00	.01	27.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.01	.00	.01	26.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.01	.00	.01	26.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.01	.00	.01	26.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.01	.00	.01	25.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.01	.00	.01	25.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	25.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	24.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	23.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	22.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	22.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	21.
1	0605	74	.01	.01	.00	0.	*	1	1835	224	.00	.00	.00	21.
1	0610	75	.01	.01	.00	0.	*	1	1840	225	.00	.00	.00	20.
1	0615	76	.01	.01	.00	0.	*	1	1845	226	.00	.00	.00	20.
1	0620	77	.01	.01	.00	0.	*	1	1850	227	.00	.00	.00	20.
1	0625	78	.01	.01	.00	0.	*	1	1855	228	.00	.00	.00	19.
1	0630	79	.01	.01	.00	0.	*	1	1900	229	.00	.00	.00	19.
1	0635	80	.01	.01	.00	1.	*	1	1905	230	.00	.00	.00	19.
1	0640	81	.01	.01	.00	1.	*	1	1910	231	.00	.00	.00	19.
1	0645	82	.01	.01	.00	1.	*	1	1915	232	.00	.00	.00	18.
1	0650	83	.01	.01	.00	1.	*	1	1920	233	.00	.00	.00	18.
1	0655	84	.01	.01	.00	2.	*	1	1925	234	.00	.00	.00	18.
1	0700	85	.01	.01	.00	2.	*	1	1930	235	.00	.00	.00	18.
1	0705	86	.01	.01	.00	2.	*	1	1935	236	.00	.00	.00	18.
1	0710	87	.01	.01	.00	2.	*	1	1940	237	.00	.00	.00	18.
1	0715	88	.01	.01	.00	3.	*	1	1945	238	.00	.00	.00	17.
1	0720	89	.01	.01	.00	3.	*	1	1950	239	.00	.00	.00	17.
1	0725	90	.01	.01	.00	3.	*	1	1955	240	.00	.00	.00	17.
1	0730	91	.01	.01	.00	3.	*	1	2000	241	.00	.00	.00	17.
1	0735	92	.01	.01	.00	4.	*	1	2005	242	.00	.00	.00	17.
1	0740	93	.01	.01	.00	4.	*	1	2010	243	.00	.00	.00	17.
1	0745	94	.01	.01	.00	4.	*	1	2015	244	.00	.00	.00	17.
1	0750	95	.01	.01	.00	5.	*	1	2020	245	.00	.00	.00	16.
1	0755	96	.01	.01	.00	5.	*	1	2025	246	.00	.00	.00	16.
1	0800	97	.01	.01	.00	5.	*	1	2030	247	.00	.00	.00	16.
1	0805	98	.01	.01	.00	6.	*	1	2035	248	.00	.00	.00	16.
1	0810	99	.01	.01	.00	6.	*	1	2040	249	.00	.00	.00	16.
1	0815	100	.01	.01	.00	7.	*	1	2045	250	.00	.00	.00	16.
1	0820	101	.01	.01	.00	7.	*	1	2050	251	.00	.00	.00	16.

1	0825	102	.01	.01	.00	7.	*	1	2055	252	.00	.00	.00	15.
1	0830	103	.01	.01	.00	8.	*	1	2100	253	.00	.00	.00	15.
1	0835	104	.01	.01	.00	8.	*	1	2105	254	.00	.00	.00	15.
1	0840	105	.01	.01	.00	9.	*	1	2110	255	.00	.00	.00	15.
1	0845	106	.01	.01	.00	9.	*	1	2115	256	.00	.00	.00	15.
1	0850	107	.01	.01	.00	10.	*	1	2120	257	.00	.00	.00	15.
1	0855	108	.01	.01	.00	10.	*	1	2125	258	.00	.00	.00	15.
1	0900	109	.01	.01	.00	11.	*	1	2130	259	.00	.00	.00	15.
1	0905	110	.01	.01	.00	11.	*	1	2135	260	.00	.00	.00	15.
1	0910	111	.01	.01	.00	12.	*	1	2140	261	.00	.00	.00	14.
1	0915	112	.01	.01	.00	13.	*	1	2145	262	.00	.00	.00	14.
1	0920	113	.01	.01	.00	14.	*	1	2150	263	.00	.00	.00	14.
1	0925	114	.01	.01	.00	15.	*	1	2155	264	.00	.00	.00	14.
1	0930	115	.01	.01	.00	16.	*	1	2200	265	.00	.00	.00	14.
1	0935	116	.01	.01	.00	18.	*	1	2205	266	.00	.00	.00	14.
1	0940	117	.01	.01	.00	19.	*	1	2210	267	.00	.00	.00	14.
1	0945	118	.01	.01	.01	20.	*	1	2215	268	.00	.00	.00	14.
1	0950	119	.01	.01	.01	21.	*	1	2220	269	.00	.00	.00	14.
1	0955	120	.01	.01	.01	22.	*	1	2225	270	.00	.00	.00	14.
1	1000	121	.01	.01	.01	23.	*	1	2230	271	.00	.00	.00	14.
1	1005	122	.01	.01	.01	24.	*	1	2235	272	.00	.00	.00	13.
1	1010	123	.02	.01	.01	26.	*	1	2240	273	.00	.00	.00	13.
1	1015	124	.02	.01	.01	27.	*	1	2245	274	.00	.00	.00	13.
1	1020	125	.02	.01	.01	29.	*	1	2250	275	.00	.00	.00	13.
1	1025	126	.02	.01	.01	30.	*	1	2255	276	.00	.00	.00	13.
1	1030	127	.02	.01	.01	32.	*	1	2300	277	.00	.00	.00	13.
1	1035	128	.01	.01	.01	34.	*	1	2305	278	.00	.00	.00	13.
1	1040	129	.02	.01	.01	35.	*	1	2310	279	.00	.00	.00	13.
1	1045	130	.02	.01	.01	36.	*	1	2315	280	.00	.00	.00	13.
1	1050	131	.02	.01	.01	36.	*	1	2320	281	.00	.00	.00	13.
1	1055	132	.02	.01	.01	37.	*	1	2325	282	.00	.00	.00	13.
1	1100	133	.02	.01	.01	38.	*	1	2330	283	.00	.00	.00	13.
1	1105	134	.02	.01	.01	40.	*	1	2335	284	.00	.00	.00	12.
1	1110	135	.02	.01	.01	42.	*	1	2340	285	.00	.00	.00	12.
1	1115	136	.02	.01	.01	45.	*	1	2345	286	.00	.00	.00	12.
1	1120	137	.02	.01	.01	48.	*	1	2350	287	.00	.00	.00	12.
1	1125	138	.03	.01	.02	52.	*	1	2355	288	.00	.00	.00	12.
1	1130	139	.03	.01	.02	57.	*	2	0000	289	.00	.00	.00	12.
1	1135	140	.04	.01	.02	63.	*	2	0005	290	.00	.00	.00	12.
1	1140	141	.04	.02	.03	71.	*	2	0010	291	.00	.00	.00	11.
1	1145	142	.05	.02	.03	81.	*	2	0015	292	.00	.00	.00	9.
1	1150	143	.07	.02	.05	95.	*	2	0020	293	.00	.00	.00	7.
1	1155	144	.10	.03	.07	117.	*	2	0025	294	.00	.00	.00	5.
1	1200	145	.19	.05	.14	158.	*	2	0030	295	.00	.00	.00	3.
1	1205	146	1.15	.20	.95	321.	*	2	0035	296	.00	.00	.00	2.
1	1210	147	.13	.02	.12	624.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.08	.01	.07	983.	*	2	0045	298	.00	.00	.00	1.
1	1220	149	.06	.01	.05	1124.	*	2	0050	299	.00	.00	.00	1.
1	1225	150	.05	.00	.04	1065.	*	2	0055	300	.00	.00	.00	0.

 TOTAL RAINFALL = 4.00, TOTAL LOSS = 1.18, TOTAL EXCESS = 2.82

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (INCHES)	24.92-HR (INCHES)
1124.	12.33	152.	2.344	2.820	2.820
			76.	91.	91.

CUMULATIVE AREA = .60 SQ MI

20 KK

 * OUTLT2 *

COMBINE ROUTE 1 AND BASIN TO OUTLET 2

HYDROGRAPH AT STATION OUTLT2
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1917.	*	1		1845	226	75.
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1996.	*	1		1850	227	74.
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	2065.	*	1		1855	228	72.
1		0015	4	0.	*	1		0630	79	1.	*	1		1245	154	2067.	*	1		1900	229	71.
1		0020	5	0.	*	1		0635	80	1.	*	1		1250	155	1996.	*	1		1905	230	69.
1		0025	6	0.	*	1		0640	81	1.	*	1		1255	156	1856.	*	1		1910	231	68.
1		0030	7	0.	*	1		0645	82	2.	*	1		1300	157	1676.	*	1		1915	232	67.
1		0035	8	0.	*	1		0650	83	2.	*	1		1305	158	1458.	*	1		1920	233	66.
1		0040	9	0.	*	1		0655	84	3.	*	1		1310	159	1235.	*	1		1925	234	65.
1		0045	10	0.	*	1		0700	85	3.	*	1		1315	160	1050.	*	1		1930	235	64.
1		0050	11	0.	*	1		0705	86	4.	*	1		1320	161	900.	*	1		1935	236	64.
1		0055	12	0.	*	1		0710	87	5.	*	1		1325	162	781.	*	1		1940	237	63.
1		0100	13	0.	*	1		0715	88	6.	*	1		1330	163	681.	*	1		1945	238	62.
1		0105	14	0.	*	1		0720	89	6.	*	1		1335	164	595.	*	1		1950	239	62.
1		0110	15	0.	*	1		0725	90	7.	*	1		1340	165	526.	*	1		1955	240	61.
1		0115	16	0.	*	1		0730	91	8.	*	1		1345	166	470.	*	1		2000	241	60.
1		0120	17	0.	*	1		0735	92	9.	*	1		1350	167	424.	*	1		2005	242	60.
1		0125	18	0.	*	1		0740	93	10.	*	1		1355	168	387.	*	1		2010	243	59.
1		0130	19	0.	*	1		0745	94	11.	*	1		1400	169	357.	*	1		2015	244	59.
1		0135	20	0.	*	1		0750	95	12.	*	1		1405	170	332.	*	1		2020	245	58.
1		0140	21	0.	*	1		0755	96	13.	*	1		1410	171	312.	*	1		2025	246	58.
1		0145	22	0.	*	1		0800	97	14.	*	1		1415	172	295.	*	1		2030	247	57.
1		0150	23	0.	*	1		0805	98	15.	*	1		1420	173	281.	*	1		2035	248	57.
1		0155	24	0.	*	1		0810	99	16.	*	1		1425	174	268.	*	1		2040	249	56.
1		0200	25	0.	*	1		0815	100	17.	*	1		1430	175	258.	*	1		2045	250	56.
1		0205	26	0.	*	1		0820	101	18.	*	1		1435	176	248.	*	1		2050	251	55.
1		0210	27	0.	*	1		0825	102	20.	*	1		1440	177	239.	*	1		2055	252	55.
1		0215	28	0.	*	1		0830	103	21.	*	1		1445	178	231.	*	1		2100	253	54.
1		0220	29	0.	*	1		0835	104	22.	*	1		1450	179	222.	*	1		2105	254	54.
1		0225	30	0.	*	1		0840	105	24.	*	1		1455	180	215.	*	1		2110	255	53.
1		0230	31	0.	*	1		0845	106	25.	*	1		1500	181	207.	*	1		2115	256	53.
1		0235	32	0.	*	1		0850	107	26.	*	1		1505	182	200.	*	1		2120	257	52.
1		0240	33	0.	*	1		0855	108	28.	*	1		1510	183	193.	*	1		2125	258	52.
1		0245	34	0.	*	1		0900	109	29.	*	1		1515	184	187.	*	1		2130	259	52.
1		0250	35	0.	*	1		0905	110	31.	*	1		1520	185	181.	*	1		2135	260	51.
1		0255	36	0.	*	1		0910	111	33.	*	1		1525	186	175.	*	1		2140	261	51.
1		0300	37	0.	*	1		0915	112	35.	*	1		1530	187	169.	*	1		2145	262	51.
1		0305	38	0.	*	1		0920	113	38.	*	1		1535	188	163.	*	1		2150	263	50.
1		0310	39	0.	*	1		0925	114	40.	*	1		1540	189	157.	*	1		2155	264	50.
1		0315	40	0.	*	1		0930	115	43.	*	1		1545	190	152.	*	1		2200	265	49.
1		0320	41	0.	*	1		0935	116	46.	*	1		1550	191	147.	*	1		2205	266	49.
1		0325	42	0.	*	1		0940	117	49.	*	1		1555	192	142.	*	1		2210	267	49.
1		0330	43	0.	*	1		0945	118	52.	*	1		1600	193	137.	*	1		2215	268	48.
1		0335	44	0.	*	1		0950	119	56.	*	1		1605	194	134.	*	1		2220	269	48.
1		0340	45	0.	*	1		0955	120	59.	*	1		1610	195	130.	*	1		2225	270	48.
1		0345	46	0.	*	1		1000	121	63.	*	1		1615	196	127.	*	1		2230	271	47.
1		0350	47	0.	*	1		1005	122	67.	*	1		1620	197	124.	*	1		2235	272	47.
1		0355	48	0.	*	1		1010	123	71.	*	1		1625	198	121.	*	1		2240	273	47.
1		0400	49	0.	*	1		1015	124	75.	*	1		1630	199	119.	*	1		2245	274	46.
1		0405	50	0.	*	1		1020	125	79.	*	1		1635	200	116.	*	1		2250	275	46.
1		0410	51	0.	*	1		1025	126	83.	*	1		1640	201	114.	*	1		2255	276	46.
1		0415	52	0.	*	1		1030	127	88.	*	1		1645	202	112.	*	1		2300	277	46.
1		0420	53	0.	*	1		1035	128	93.	*	1		1650	203	110.	*	1		2305	278	45.
1		0425	54	0.	*	1		1040	129	97.	*	1		1655	204	108.	*	1		2310	279	45.
1		0430	55	0.	*	1		1045	130	101.	*	1		1700	205	106.	*	1		2315	280	45.
1		0435	56	0.	*	1		1050	131	105.	*	1		1705	206	105.	*	1		2320	281	44.
1		0440	57	0.	*	1		1055	132	109.	*	1		1710	207	103.	*	1		2325	282	44.
1		0445	58	0.	*	1		1100	133	113.	*	1		1715	208	101.	*	1		2330	283	44.
1		0450	59	0.	*	1		1105	134	118.	*	1		1720	209	100.	*	1		2335	284	44.
1		0455	60	0.	*	1		1110	135	123.	*	1		1725	210	99.	*	1		2340	285	43.
1		0500	61	0.	*	1		1115	136	129.	*	1		1730	211	97.	*	1		2345	286	43.

1	0505	62	0.	*	1	1120	137	135.	*	1	173 ^c	212	96.	*	1	2350	287	43.
1	0510	63	0.	*	1	1125	138	143.	*	1	1740	213	95.	*	1	2355	288	43.
1	0515	64	0.	*	1	1130	139	152.	*	1	1745	214	93.	*	2	0000	289	42.
1	0520	65	0.	*	1	1135	140	163.	*	1	1750	215	92.	*	2	0005	290	42.
1	0523	66	0.	*	1	1140	141	178.	*	1	1755	216	91.	*	2	0010	291	40.
1	0530	67	0.	*	1	1145	142	196.	*	1	1800	217	90.	*	2	0015	292	38.
1	0535	68	0.	*	1	1150	143	220.	*	1	1805	218	89.	*	2	0020	293	35.
1	0540	69	0.	*	1	1155	144	254.	*	1	1810	219	87.	*	2	0025	294	32.
1	0545	70	0.	*	1	1200	145	311.	*	1	1815	220	86.	*	2	0030	295	29.
1	0550	71	0.	*	1	1205	146	497.	*	1	1820	221	84.	*	2	0035	296	26.
1	0555	72	0.	*	1	1210	147	837.	*	1	1825	222	82.	*	2	0040	297	22.
1	0600	73	0.	*	1	1215	148	1292.	*	1	1830	223	80.	*	2	0045	298	19.
1	0605	74	0.	*	1	1220	149	1600.	*	1	1835	224	79.	*	2	0050	299	15.
1	0610	75	0.	*	1	1225	150	1783.	*	1	1840	225	77.	*	2	0055	300	13.

PEAK FLOW (CFS)	TIME (HR)	(CFS)	6-HR	24-HR	72-HR	24.92-HR
2067.	12.75	(INCHES)	515.	155.	149.	149.
		(AC-FT)	2.336	2.814	2.814	2.814
			256.	308.	308.	308.

CUMULATIVE AREA = 2.05 SQ MI

23 KK

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*****
* ROUTE2 *
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ROUTE OUTLET 2 TO BASIN 3 OUTLET

HYDROGRAPH ROUTING DATA

25 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK      .06 MUSKINGUM K
X          .40 MUSKINGUM X
    
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**** WARNING **** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE2.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE2

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1815.	*	1		1845	226	77.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1937.	*	1		1850	227	75.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	2012.	*	1		1855	228	73.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	2067.	*	1		1900	229	72.	*
1		0020	5	0.	*	1		0635	80	1.	*	1		1250	155	2053.	*	1		1905	230	70.	*
1		0025	6	0.	*	1		0640	81	1.	*	1		1255	156	1966.	*	1		1910	231	69.	*
1		0030	7	0.	*	1		0645	82	1.	*	1		1300	157	1816.	*	1		1915	232	68.	*
1		0035	8	0.	*	1		0650	83	2.	*	1		1305	158	1627.	*	1		1920	233	67.	*
1		0040	9	0.	*	1		0655	84	2.	*	1		1310	159	1407.	*	1		1925	234	66.	*
1		0045	10	0.	*	1		0700	85	3.	*	1		1315	160	1191.	*	1		1930	235	65.	*
1		0050	11	0.	*	1		0705	86	4.	*	1		1320	161	1014.	*	1		1935	236	64.	*
1		0055	12	0.	*	1		0710	87	4.	*	1		1325	162	872.	*	1		1940	237	63.	*
1		0100	13	0.	*	1		0715	88	5.	*	1		1330	163	757.	*	1		1945	238	63.	*
1		0105	14	0.	*	1		0720	89	6.	*	1		1335	164	660.	*	1		1950	239	62.	*
1		0110	15	0.	*	1		0725	90	7.	*	1		1340	165	578.	*	1		1955	240	61.	*
1		0115	16	0.	*	1		0730	91	7.	*	1		1345	166	512.	*	1		2000	241	61.	*
1		0120	17	0.	*	1		0735	92	8.	*	1		1350	167	459.	*	1		2005	242	60.	*
1		0125	18	0.	*	1		0740	93	9.	*	1		1355	168	415.	*	1		2010	243	60.	*

1	0130	19	0.	*	1	0745	94	10.	*	1	1400	169	380.	*	1	2015	244	59.
1	0135	20	0.	*	1	0750	95	11.	*	1	1405	170	351.	*	1	2020	245	58.
1	0140	21	0.	*	1	0755	96	12.	*	1	1410	171	328.	*	1	2025	246	58.
1	0145	22	0.	*	1	0800	97	13.	*	1	1415	172	308.	*	1	2030	247	57.
1	0150	23	0.	*	1	0805	98	14.	*	1	1420	173	292.	*	1	2035	248	57.
1	0155	24	0.	*	1	0810	99	15.	*	1	1425	174	278.	*	1	2040	249	56.
1	0200	25	0.	*	1	0815	100	16.	*	1	1430	175	266.	*	1	2045	250	56.
1	0205	26	0.	*	1	0820	101	18.	*	1	1435	176	255.	*	1	2050	251	55.
1	0210	27	0.	*	1	0825	102	19.	*	1	1440	177	246.	*	1	2055	252	55.
1	0215	28	0.	*	1	0830	103	20.	*	1	1445	178	237.	*	1	2100	253	55.
1	0220	29	0.	*	1	0835	104	21.	*	1	1450	179	229.	*	1	2105	254	54.
1	0225	30	0.	*	1	0840	105	22.	*	1	1455	180	221.	*	1	2110	255	54.
1	0230	31	0.	*	1	0845	106	24.	*	1	1500	181	213.	*	1	2115	256	53.
1	0235	32	0.	*	1	0850	107	25.	*	1	1505	182	206.	*	1	2120	257	53.
1	0240	33	0.	*	1	0855	108	27.	*	1	1510	183	199.	*	1	2125	258	52.
1	0245	34	0.	*	1	0900	109	28.	*	1	1515	184	192.	*	1	2130	259	52.
1	0250	35	0.	*	1	0905	110	30.	*	1	1520	185	185.	*	1	2135	260	52.
1	0255	36	0.	*	1	0910	111	31.	*	1	1525	186	179.	*	1	2140	261	51.
1	0300	37	0.	*	1	0915	112	33.	*	1	1530	187	173.	*	1	2145	262	51.
1	0305	38	0.	*	1	0920	113	36.	*	1	1535	188	167.	*	1	2150	263	50.
1	0310	39	0.	*	1	0925	114	38.	*	1	1540	189	162.	*	1	2155	264	50.
1	0315	40	0.	*	1	0930	115	41.	*	1	1545	190	156.	*	1	2200	265	50.
1	0320	41	0.	*	1	0935	116	44.	*	1	1550	191	151.	*	1	2205	266	49.
1	0325	42	0.	*	1	0940	117	47.	*	1	1555	192	146.	*	1	2210	267	49.
1	0330	43	0.	*	1	0945	118	50.	*	1	1600	193	141.	*	1	2215	268	49.
1	0335	44	0.	*	1	0950	119	53.	*	1	1605	194	137.	*	1	2220	269	48.
1	0340	45	0.	*	1	0955	120	56.	*	1	1610	195	133.	*	1	2225	270	48.
1	0345	46	0.	*	1	1000	121	60.	*	1	1615	196	129.	*	1	2230	271	48.
1	0350	47	0.	*	1	1005	122	64.	*	1	1620	197	126.	*	1	2235	272	47.
1	0355	48	0.	*	1	1010	123	68.	*	1	1625	198	123.	*	1	2240	273	47.
1	0400	49	0.	*	1	1015	124	72.	*	1	1630	199	120.	*	1	2245	274	47.
1	0405	50	0.	*	1	1020	125	76.	*	1	1635	200	118.	*	1	2250	275	46.
1	0410	51	0.	*	1	1025	126	80.	*	1	1640	201	116.	*	1	2255	276	46.
1	0415	52	0.	*	1	1030	127	84.	*	1	1645	202	114.	*	1	2300	277	46.
1	0420	53	0.	*	1	1035	128	89.	*	1	1650	203	111.	*	1	2305	278	45.
1	0425	54	0.	*	1	1040	129	94.	*	1	1655	204	110.	*	1	2310	279	45.
1	0430	55	0.	*	1	1045	130	98.	*	1	1700	205	108.	*	1	2315	280	45.
1	0435	56	0.	*	1	1050	131	102.	*	1	1705	206	106.	*	1	2320	281	45.
1	0440	57	0.	*	1	1055	132	106.	*	1	1710	207	104.	*	1	2325	282	44.
1	0445	58	0.	*	1	1100	133	110.	*	1	1715	208	103.	*	1	2330	283	44.
1	0450	59	0.	*	1	1105	134	115.	*	1	1720	209	101.	*	1	2335	284	44.
1	0455	60	0.	*	1	1110	135	119.	*	1	1725	210	100.	*	1	2340	285	43.
1	0500	61	0.	*	1	1115	136	124.	*	1	1730	211	98.	*	1	2345	286	43.
1	0505	62	0.	*	1	1120	137	130.	*	1	1735	212	97.	*	1	2350	287	43.
1	0510	63	0.	*	1	1125	138	137.	*	1	1740	213	96.	*	1	2355	288	43.
1	0515	64	0.	*	1	1130	139	145.	*	1	1745	214	94.	*	2	0000	289	42.
1	0520	65	0.	*	1	1135	140	154.	*	1	1750	215	93.	*	2	0005	290	42.
1	0525	66	0.	*	1	1140	141	167.	*	1	1755	216	92.	*	2	0010	291	41.
1	0530	67	0.	*	1	1145	142	182.	*	1	1800	217	91.	*	2	0015	292	40.
1	0535	68	0.	*	1	1150	143	201.	*	1	1805	218	90.	*	2	0020	293	38.
1	0540	69	0.	*	1	1155	144	227.	*	1	1810	219	88.	*	2	0025	294	35.
1	0545	70	0.	*	1	1200	145	267.	*	1	1815	220	87.	*	2	0030	295	32.
1	0550	71	0.	*	1	1205	146	350.	*	1	1820	221	85.	*	2	0035	296	28.
1	0555	72	0.	*	1	1210	147	571.	*	1	1825	222	84.	*	2	0040	297	25.
1	0600	73	0.	*	1	1215	148	939.	*	1	1830	223	82.	*	2	0045	298	21.
1	0605	74	0.	*	1	1220	149	1368.	*	1	1835	224	80.	*	2	0050	299	18.
1	0610	75	0.	*	1	1225	150	1646.	*	1	1840	225	78.	*	2	0055	300	15.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
2067.	12.75	(CFS) 515.	155.	149.	149.
		(INCHES) 2.336	2.813	2.813	2.813
		(AC-FT) 256.	308.	308.	308.

CUMULATIVE AREA = 2.05 SQ MI

26 KK

* *
* AREA 3 *
* *

BASIN NO. 3 RUNOFF

SUBBASIN RUNOFF DATA

28 BA

SUBBASIN CHARACTERISTICS
TAREA .24 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
..... HYDRO-35 TP-40 TP-49
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
1.15 1.48 2.00 2.30 2.50 3.00 3.50 4.00 .00 .00 .00 .00

STORM AREA = .24

29 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

30 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .31 LAG

UNIT HYDROGRAPH
21 END-OF-PERIOD ORDINATES

43. 17. 268. 322. 306. 250. 167. 111. 77. 53.
36. 24. 17. 11. 8. 5. 4. 3. 2. 1.
0.

HYDROGRAPH AT STATION AREA 3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1	1230	151	.04	.00	.03	358.	
1		0005	2	.00	.00	.00	0.	*	1	1235	152	.03	.00	.00	271.	
1		0010	3	.00	.00	.00	0.	*	1	1240	153	.03	.00	.03	205.	
1		0015	4	.00	.00	.00	0.	*	1	1245	154	.03	.00	.02	160.	
1		0020	5	.00	.00	.00	0.	*	1	1250	155	.02	.00	.02	126.	
1		0025	6	.00	.00	.00	0.	*	1	1255	156	.02	.00	.02	100.	
1		0030	7	.00	.00	.00	0.	*	1	1300	157	.02	.00	.02	82.	
1		0035	8	.00	.00	.00	0.	*	1	1305	158	.02	.00	.02	68.	
1		0040	9	.00	.00	.00	0.	*	1	1310	159	.02	.00	.02	58.	
1		0045	10	.00	.00	.00	0.	*	1	1315	160	.02	.00	.02	50.	
1		0050	11	.00	.00	.00	0.	*	1	1320	161	.02	.00	.01	44.	
1		0055	12	.00	.00	.00	0.	*	1	1325	162	.02	.00	.01	40.	
1		0100	13	.00	.00	.00	0.	*	1	1330	163	.01	.00	.01	36.	
1		0105	14	.00	.00	.00	0.	*	1	1335	164	.02	.00	.02	33.	
1		0110	15	.00	.00	.00	0.	*	1	1340	165	.02	.00	.02	31.	
1		0115	16	.00	.00	.00	0.	*	1	1345	166	.02	.00	.02	30.	
1		0120	17	.00	.00	.00	0.	*	1	1350	167	.02	.00	.01	29.	
1		0125	18	.00	.00	.00	0.	*	1	1355	168	.02	.00	.01	29.	
1		0130	19	.00	.00	.00	0.	*	1	1400	169	.02	.00	.01	28.	
1		0135	20	.00	.00	.00	0.	*	1	1405	170	.01	.00	.01	28.	
1		0140	21	.00	.00	.00	0.	*	1	1410	171	.01	.00	.01	27.	
1		0145	22	.00	.00	.00	0.	*	1	1415	172	.01	.00	.01	27.	
1		0150	23	.00	.00	.00	0.	*	1	1420	173	.01	.00	.01	26.	
1		0155	24	.00	.00	.00	0.	*	1	1425	174	.01	.00	.01	25.	
1		0200	25	.00	.00	.00	0.	*	1	1430	175	.01	.00	.01	25.	
1		0205	26	.00	.00	.00	0.	*	1	1435	176	.01	.00	.01	24.	
1		0210	27	.00	.00	.00	0.	*	1	1440	177	.01	.00	.01	23.	
1		0215	28	.00	.00	.00	0.	*	1	1445	178	.01	.00	.01	23.	
1		0220	29	.00	.00	.00	0.	*	1	1450	179	.01	.00	.01	22.	
1		0225	30	.00	.00	.00	0.	*	1	1455	180	.01	.00	.01	22.	
1		0230	31	.00	.00	.00	0.	*	1	1500	181	.01	.00	.01	21.	

1	0235	32	.00	.00	.00	0.	*	1	1505	182	.01	.00	.01	20.
1	0240	33	.00	.00	.00	0.	*	1	1510	183	.01	.00	.01	20.
1	0245	34	.00	.00	.00	0.	*	1	1515	184	.01	.00	.01	19.
1	0250	35	.00	.00	.00	0.	*	1	1520	185	.01	.00	.01	18.
1	0255	36	.00	.00	.00	0.	*	1	1525	186	.01	.00	.01	17.
1	0300	37	.00	.00	.00	0.	*	1	1530	187	.01	.00	.01	16.
1	0305	38	.00	.00	.00	0.	*	1	1535	188	.01	.00	.01	16.
1	0310	39	.00	.00	.00	0.	*	1	1540	189	.01	.00	.01	15.
1	0315	40	.00	.00	.00	0.	*	1	1545	190	.01	.00	.01	15.
1	0320	41	.00	.00	.00	0.	*	1	1550	191	.01	.00	.01	15.
1	0325	42	.00	.00	.00	0.	*	1	1555	192	.01	.00	.01	14.
1	0330	43	.00	.00	.00	0.	*	1	1600	193	.01	.00	.01	14.
1	0335	44	.00	.00	.00	0.	*	1	1605	194	.01	.00	.01	14.
1	0340	45	.00	.00	.00	0.	*	1	1610	195	.01	.00	.01	13.
1	0345	46	.00	.00	.00	0.	*	1	1615	196	.01	.00	.01	13.
1	0350	47	.00	.00	.00	0.	*	1	1620	197	.01	.00	.01	13.
1	0355	48	.00	.00	.00	0.	*	1	1625	198	.01	.00	.01	13.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.01	.00	.01	13.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.01	.00	.01	12.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.01	.00	.01	12.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.01	.00	.01	12.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.01	.00	.01	12.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.01	.00	.01	12.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.01	.00	.01	11.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.01	.00	.01	11.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.01	.00	.01	11.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.01	.00	.01	11.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.01	.00	.01	11.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.01	.00	.01	11.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.01	.00	.01	11.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.01	.00	.01	10.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.01	.00	.01	10.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.01	.00	.01	10.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.01	.00	.01	10.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.01	.00	.01	10.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.01	.00	.01	10.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	10.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	10.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	9.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	9.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	9.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	8.
1	0605	74	.01	.01	.00	0.	*	1	1835	224	.00	.00	.00	8.
1	0610	75	.01	.01	.00	0.	*	1	1840	225	.00	.00	.00	8.
1	0615	76	.01	.01	.00	0.	*	1	1845	226	.00	.00	.00	8.
1	0620	77	.01	.01	.00	0.	*	1	1850	227	.00	.00	.00	8.
1	0625	78	.01	.01	.00	0.	*	1	1855	228	.00	.00	.00	8.
1	0630	79	.01	.01	.00	0.	*	1	1900	229	.00	.00	.00	8.
1	0635	80	.01	.01	.00	0.	*	1	1905	230	.00	.00	.00	7.
1	0640	81	.01	.01	.00	0.	*	1	1910	231	.00	.00	.00	7.
1	0645	82	.01	.01	.00	0.	*	1	1915	232	.00	.00	.00	7.
1	0650	83	.01	.01	.00	1.	*	1	1920	233	.00	.00	.00	7.
1	0655	84	.01	.01	.00	1.	*	1	1925	234	.00	.00	.00	7.
1	0700	85	.01	.01	.00	1.	*	1	1930	235	.00	.00	.00	7.
1	0705	86	.01	.01	.00	1.	*	1	1935	236	.00	.00	.00	7.
1	0710	87	.01	.01	.00	1.	*	1	1940	237	.00	.00	.00	7.
1	0715	88	.01	.01	.00	1.	*	1	1945	238	.00	.00	.00	7.
1	0720	89	.01	.01	.00	1.	*	1	1950	239	.00	.00	.00	7.
1	0725	90	.01	.01	.00	1.	*	1	1955	240	.00	.00	.00	7.
1	0730	91	.01	.01	.00	1.	*	1	2000	241	.00	.00	.00	7.
1	0735	92	.01	.01	.00	1.	*	1	2005	242	.00	.00	.00	7.
1	0740	93	.01	.01	.00	2.	*	1	2010	243	.00	.00	.00	7.
1	0745	94	.01	.01	.00	2.	*	1	2015	244	.00	.00	.00	7.
1	0750	95	.01	.01	.00	2.	*	1	2020	245	.00	.00	.00	6.
1	0755	96	.01	.01	.00	2.	*	1	2025	246	.00	.00	.00	6.
1	0800	97	.01	.01	.00	2.	*	1	2030	247	.00	.00	.00	6.
1	0805	98	.01	.01	.00	2.	*	1	2035	248	.00	.00	.00	6.
1	0810	99	.01	.01	.00	2.	*	1	2040	249	.00	.00	.00	6.
1	0815	100	.01	.01	.00	3.	*	1	2045	250	.00	.00	.00	6.
1	0820	101	.01	.01	.00	3.	*	1	2050	251	.00	.00	.00	6.
1	0825	102	.01	.01	.00	3.	*	1	2055	252	.00	.00	.00	6.
1	0830	103	.01	.01	.00	3.	*	1	2100	253	.00	.00	.00	6.
1	0835	104	.01	.01	.00	3.	*	1	2105	254	.00	.00	.00	6.
1	0840	105	.01	.01	.00	3.	*	1	2110	255	.00	.00	.00	6.
1	0845	106	.01	.01	.00	4.	*	1	2115	256	.00	.00	.00	6.

1	0850	107	.01	.01	.00	4.	*	1	2120	257	.00	.00	.00	6.
1	0855	108	.01	.01	.00	4.	*	1	2125	258	.00	.00	.00	6.
1	0900	109	.01	.01	.00	4.	*	1	2130	259	.00	.00	.00	6.
1	0905	110	.01	.01	.00	4.	*	1	2135	260	.00	.00	.00	6.
1	0910	111	.01	.01	.00	5.	*	1	2140	261	.00	.00	.00	6.
1	0915	112	.01	.01	.00	5.	*	1	2145	262	.00	.00	.00	6.
1	0920	113	.01	.01	.00	5.	*	1	2150	263	.00	.00	.00	6.
1	0925	114	.01	.01	.00	6.	*	1	2155	264	.00	.00	.00	6.
1	0930	115	.01	.01	.00	6.	*	1	2200	265	.00	.00	.00	6.
1	0935	116	.01	.01	.00	7.	*	1	2205	266	.00	.00	.00	6.
1	0940	117	.01	.01	.00	7.	*	1	2210	267	.00	.00	.00	5.
1	0945	118	.01	.01	.01	8.	*	1	2215	268	.00	.00	.00	5.
1	0950	119	.01	.01	.01	8.	*	1	2220	269	.00	.00	.00	5.
1	0955	120	.01	.01	.01	9.	*	1	2225	270	.00	.00	.00	5.
1	1000	121	.01	.01	.01	9.	*	1	2230	271	.00	.00	.00	5.
1	1005	122	.01	.01	.01	10.	*	1	2235	272	.00	.00	.00	5.
1	1010	123	.02	.01	.01	10.	*	1	2240	273	.00	.00	.00	5.
1	1015	124	.02	.01	.01	11.	*	1	2245	274	.00	.00	.00	5.
1	1020	125	.02	.01	.01	11.	*	1	2250	275	.00	.00	.00	5.
1	1025	126	.02	.01	.01	12.	*	1	2255	276	.00	.00	.00	5.
1	1030	127	.02	.01	.01	12.	*	1	2300	277	.00	.00	.00	5.
1	1035	128	.01	.01	.01	13.	*	1	2305	278	.00	.00	.00	5.
1	1040	129	.02	.01	.01	14.	*	1	2310	279	.00	.00	.00	5.
1	1045	130	.02	.01	.01	14.	*	1	2315	280	.00	.00	.00	5.
1	1050	131	.02	.01	.01	14.	*	1	2320	281	.00	.00	.00	5.
1	1055	132	.02	.01	.01	14.	*	1	2325	282	.00	.00	.00	5.
1	1100	133	.02	.01	.01	15.	*	1	2330	283	.00	.00	.00	5.
1	1105	134	.02	.01	.01	16.	*	1	2335	284	.00	.00	.00	5.
1	1110	135	.02	.01	.01	16.	*	1	2340	285	.00	.00	.00	5.
1	1115	136	.02	.01	.01	17.	*	1	2345	286	.00	.00	.00	5.
1	1120	137	.02	.01	.01	19.	*	1	2350	287	.00	.00	.00	5.
1	1125	138	.03	.01	.02	20.	*	1	2355	288	.00	.00	.00	5.
1	1130	139	.03	.01	.02	22.	*	2	0000	289	.00	.00	.00	5.
1	1135	140	.04	.01	.02	24.	*	2	0005	290	.00	.00	.00	5.
1	1140	141	.04	.02	.03	27.	*	2	0010	291	.00	.00	.00	4.
1	1145	142	.05	.02	.03	31.	*	2	0015	292	.00	.00	.00	4.
1	1150	143	.07	.02	.05	37.	*	2	0020	293	.00	.00	.00	3.
1	1155	144	.10	.03	.07	45.	*	2	0025	294	.00	.00	.00	2.
1	1200	145	.19	.05	.14	60.	*	2	0030	295	.00	.00	.00	1.
1	1205	146	1.15	.20	.95	119.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.14	.02	.12	229.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.08	.01	.07	366.	*	2	0045	298	.00	.00	.00	0.
1	1220	149	.06	.01	.05	428.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.05	.00	.04	417.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 4.00, TOTAL LOSS = 1.18, TOTAL EXCESS = 2.82

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
428.	12.33	(CFS) 60.	18.	17.	17.
		(INCHES) 2.346	2.822	2.822	2.822
		(AC-FT) 30.	36.	36.	36.

CUMULATIVE AREA = .24 SQ MI

31 KK

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*           *
*   OUTL3   *
*           *
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COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3

33 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTL13
 SUM OF 2 HYDROGRAPHS

D	MLV	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0615	76	0.	*	1	1230	151	2173.	*	1	1845	226	84.				
1	0015	2	0.	*	1	0620	77	0.	*	1	1235	152	2208.	*	1	1850	227	83.				
1	0030	3	0.	*	1	0625	78	0.	*	1	1240	153	2217.	*	1	1855	228	81.				
1	0045	4	0.	*	1	0630	79	1.	*	1	1245	154	2227.	*	1	1900	229	79.				
1	0050	5	0.	*	1	0635	80	1.	*	1	1250	155	2179.	*	1	1905	230	78.				
1	0055	6	0.	*	1	0640	81	1.	*	1	1255	156	2066.	*	1	1910	231	76.				
1	0100	7	0.	*	1	0645	82	2.	*	1	1300	157	1897.	*	1	1915	232	75.				
1	0105	8	0.	*	1	0650	83	2.	*	1	1305	158	1694.	*	1	1920	233	74.				
1	0110	9	0.	*	1	0655	84	3.	*	1	1310	159	1464.	*	1	1925	234	73.				
1	0115	10	0.	*	1	0700	85	4.	*	1	1315	160	1241.	*	1	1930	235	72.				
1	0120	11	0.	*	1	0705	86	4.	*	1	1320	161	1058.	*	1	1935	236	71.				
1	0125	12	0.	*	1	0710	87	5.	*	1	1325	162	911.	*	1	1940	237	70.				
1	0130	13	0.	*	1	0715	88	6.	*	1	1330	163	793.	*	1	1945	238	70.				
1	0135	14	0.	*	1	0720	89	7.	*	1	1335	164	694.	*	1	1950	239	69.				
1	0140	15	0.	*	1	0725	90	8.	*	1	1340	165	609.	*	1	1955	240	68.				
1	0145	16	0.	*	1	0730	91	9.	*	1	1345	166	542.	*	1	2000	241	67.				
1	0150	17	0.	*	1	0735	92	10.	*	1	1350	167	488.	*	1	2005	242	67.				
1	0155	18	0.	*	1	0740	93	11.	*	1	1355	168	444.	*	1	2010	243	66.				
1	0200	19	0.	*	1	0745	94	12.	*	1	1400	169	409.	*	1	2015	244	66.				
1	0205	20	0.	*	1	0750	95	13.	*	1	1405	170	379.	*	1	2020	245	65.				
1	0210	21	0.	*	1	0755	96	14.	*	1	1410	171	355.	*	1	2025	246	64.				
1	0215	22	0.	*	1	0800	97	15.	*	1	1415	172	335.	*	1	2030	247	64.				
1	0220	23	0.	*	1	0805	98	16.	*	1	1420	173	318.	*	1	2035	248	63.				
1	0225	24	0.	*	1	0810	99	18.	*	1	1425	174	303.	*	1	2040	249	63.				
1	0230	25	0.	*	1	0815	100	19.	*	1	1430	175	290.	*	1	2045	250	62.				
1	0235	26	0.	*	1	0820	101	20.	*	1	1435	176	279.	*	1	2050	251	62.				
1	0240	27	0.	*	1	0825	102	22.	*	1	1440	177	269.	*	1	2055	252	61.				
1	0245	28	0.	*	1	0830	103	23.	*	1	1445	178	260.	*	1	2100	253	61.				
1	0250	29	0.	*	1	0835	104	24.	*	1	1450	179	251.	*	1	2105	254	60.				
1	0255	30	0.	*	1	0840	105	26.	*	1	1455	180	242.	*	1	2110	255	60.				
1	0300	31	0.	*	1	0845	106	27.	*	1	1500	181	234.	*	1	2115	256	59.				
1	0305	32	0.	*	1	0850	107	29.	*	1	1505	182	226.	*	1	2120	257	59.				
1	0310	33	0.	*	1	0855	108	31.	*	1	1510	183	218.	*	1	2125	258	58.				
1	0315	34	0.	*	1	0900	109	32.	*	1	1515	184	211.	*	1	2130	259	58.				
1	0320	35	0.	*	1	0905	110	34.	*	1	1520	185	204.	*	1	2135	260	57.				
1	0325	36	0.	*	1	0910	111	36.	*	1	1525	186	196.	*	1	2140	261	57.				
1	0330	37	0.	*	1	0915	112	38.	*	1	1530	187	190.	*	1	2145	262	56.				
1	0335	38	0.	*	1	0920	113	41.	*	1	1535	188	183.	*	1	2150	263	56.				
1	0340	39	0.	*	1	0925	114	44.	*	1	1540	189	177.	*	1	2155	264	56.				
1	0345	40	0.	*	1	0930	115	47.	*	1	1545	190	171.	*	1	2200	265	55.				
1	0350	41	0.	*	1	0935	116	50.	*	1	1550	191	165.	*	1	2205	266	55.				
1	0355	42	0.	*	1	0940	117	54.	*	1	1555	192	160.	*	1	2210	267	54.				
1	0400	43	0.	*	1	0945	118	57.	*	1	1600	193	155.	*	1	2215	268	54.				
1	0405	44	0.	*	1	0950	119	61.	*	1	1605	194	150.	*	1	2220	269	54.				
1	0410	45	0.	*	1	0955	120	65.	*	1	1610	195	146.	*	1	2225	270	53.				
1	0415	46	0.	*	1	1000	121	69.	*	1	1615	196	142.	*	1	2230	271	53.				
1	0420	47	0.	*	1	1005	122	73.	*	1	1620	197	139.	*	1	2235	272	53.				
1	0425	48	0.	*	1	1010	123	78.	*	1	1625	198	136.	*	1	2240	273	52.				
1	0430	49	0.	*	1	1015	124	82.	*	1	1630	199	133.	*	1	2245	274	52.				
1	0435	50	0.	*	1	1020	125	87.	*	1	1635	200	130.	*	1	2250	275	52.				
1	0440	51	0.	*	1	1025	126	92.	*	1	1640	201	128.	*	1	2255	276	51.				
1	0445	52	0.	*	1	1030	127	97.	*	1	1645	202	126.	*	1	2300	277	51.				
1	0450	53	0.	*	1	1035	128	102.	*	1	1650	203	123.	*	1	2305	278	51.				
1	0455	54	0.	*	1	1040	129	107.	*	1	1655	204	121.	*	1	2310	279	50.				
1	0500	55	0.	*	1	1045	130	112.	*	1	1700	205	119.	*	1	2315	280	49.				
1	0505	56	0.	*	1	1050	131	116.	*	1	1705	206	117.	*	1	2320	281	49.				
1	0510	57	0.	*	1	1055	132	121.	*	1	1710	207	115.	*	1	2325	282	49.				
1	0515	58	0.	*	1	1100	133	125.	*	1	1715	208	114.	*	1	2330	283	49.				
1	0520	59	0.	*	1	1105	134	130.	*	1	1720	209	112.	*	1	2335	284	49.				
1	0525	60	0.	*	1	1110	135	136.	*	1	1725	210	110.	*	1	2340	285	48.				
1	0530	61	0.	*	1	1115	136	142.	*	1	1730	211	109.	*	1	2345	286	48.				
1	0535	62	0.	*	1	1120	137	149.	*	1	1735	212	107.	*	1	2350	287	48.				
1	0540	63	0.	*	1	1125	138	157.	*	1	1740	213	106.	*	1	2355	288	48.				
1	0545	64	0.	*	1	1130	139	167.	*	1	1745	214	104.	*	2	0000	289	47.				
1	0550	65	0.	*	1	1135	140	179.	*	1	1750	215	103.	*	2	0005	290	47.				
1	0555	66	0.	*	1	1140	141	194.	*	1	1755	216	102.	*	2	0010	291	46.				

1	0530	67	0.	*	1	1145	142	213.	*	1	1800	217	101.	*	2	0015	292	44.
1	0535	68	0.	*	1	1150	143	230.	*	1	1805	218	99.	*	2	0020	293	40.
1	0540	69	0.	*	1	1155	144	272.	*	1	1810	219	98.	*	2	0025	294	37.
1	0545	70	0.	*	1	1200	145	327.	*	1	1815	220	96.	*	2	0030	295	33.
1	0550	71	0.	*	1	1205	146	469.	*	1	1820	221	94.	*	2	0035	296	29.
1	0555	72	0.	*	1	1210	147	800.	*	1	1825	222	92.	*	2	0040	297	26.
1	0600	73	0.	*	1	1215	148	1305.	*	1	1830	223	90.	*	2	0045	298	22.
1	0605	74	0.	*	1	1220	149	1796.	*	1	1835	224	88.	*	2	0050	299	18.
1	0610	75	0.	*	1	1225	150	2063.	*	1	1840	225	86.	*	2	0055	300	15.

PEAK FLOW (CFS)	TIME (HR)	(CFS)	6-HR	24-HR	72-HR	24.92-HR
2227.	12.75	(CFS)	575.	173.	167.	167.
		(INCHES)	2.337	2.814	2.814	2.814
		(AC-FT)	285.	344.	344.	344.

CUMULATIVE AREA = 2.29 SQ MI

34 KK

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*****
* ROUTE3 *
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ROUTE OUTLET 3 TO BASIN 4 OUTLET

HYDROGRAPH ROUTING DATA

36 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .13 MUSKINGUM K
X         .30 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE3

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1887.	*	1		1845	226	87.
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	2073.	*	1		1850	227	85.
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	2160.	*	1		1855	228	83.
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	2198.	*	1		1900	229	82.
1		0020	5	0.	*	1		0635	80	1.	*	1		1250	155	2215.	*	1		1905	230	80.
1		0025	6	0.	*	1		0640	81	1.	*	1		1255	156	2188.	*	1		1910	231	78.
1		0030	7	0.	*	1		0645	82	1.	*	1		1300	157	2104.	*	1		1915	232	77.
1		0035	8	0.	*	1		0650	83	2.	*	1		1305	158	1964.	*	1		1920	233	76.
1		0040	9	0.	*	1		0655	84	2.	*	1		1310	159	1783.	*	1		1925	234	75.
1		0045	10	0.	*	1		0700	85	3.	*	1		1315	160	1570.	*	1		1930	235	74.
1		0050	11	0.	*	1		0705	86	3.	*	1		1320	161	1352.	*	1		1935	236	73.
1		0055	12	0.	*	1		0710	87	4.	*	1		1325	162	1158.	*	1		1940	237	72.
1		0100	13	0.	*	1		0715	88	5.	*	1		1330	163	995.	*	1		1945	238	71.
1		0105	14	0.	*	1		0720	89	6.	*	1		1335	164	862.	*	1		1950	239	70.
1		0110	15	0.	*	1		0725	90	6.	*	1		1340	165	750.	*	1		1955	240	69.
1		0115	16	0.	*	1		0730	91	7.	*	1		1345	166	657.	*	1		2000	241	69.
1		0120	17	0.	*	1		0735	92	8.	*	1		1350	167	581.	*	1		2005	242	68.
1		0125	18	0.	*	1		0740	93	9.	*	1		1355	168	519.	*	1		2010	243	67.
1		0130	19	0.	*	1		0745	94	10.	*	1		1400	169	470.	*	1		2015	244	66.
1		0135	20	0.	*	1		0750	95	11.	*	1		1405	170	429.	*	1		2020	245	66.
1		0140	21	0.	*	1		0755	96	12.	*	1		1410	171	396.	*	1		2025	246	65.
1		0145	22	0.	*	1		0800	97	14.	*	1		1415	172	369.	*	1		2030	247	65.
1		0150	23	0.	*	1		0805	98	15.	*	1		1420	173	346.	*	1		2035	248	64.
1		0155	24	0.	*	1		0810	99	16.	*	1		1425	174	327.	*	1		2040	249	64.
1		0200	25	0.	*	1		0815	100	17.	*	1		1430	175	311.	*	1		2045	250	63.

1	0205	26	0.	*	1	0820	101	18.	*	1	1435	176	297.	*	1	2050	251	62.
1	0210	27	0.	*	1	0825	102	20.	*	1	1440	177	285.	*	1	2055	252	62.
1	0215	28	0.	*	1	0830	103	21.	*	1	1445	178	275.	*	1	2100	253	61.
1	0220	29	0.	*	1	0835	104	22.	*	1	1450	179	265.	*	1	2105	254	61.
1	0225	30	0.	*	1	0840	105	24.	*	1	1455	180	256.	*	1	2110	255	60.
1	0230	31	0.	*	1	0845	106	25.	*	1	1500	181	247.	*	1	2115	256	60.
1	0235	32	0.	*	1	0850	107	27.	*	1	1505	182	238.	*	1	2120	257	59.
1	0240	33	0.	*	1	0855	108	28.	*	1	1510	183	230.	*	1	2125	258	59.
1	0245	34	0.	*	1	0900	109	30.	*	1	1515	184	222.	*	1	2130	259	58.
1	0250	35	0.	*	1	0905	110	31.	*	1	1520	185	215.	*	1	2135	260	58.
1	0255	36	0.	*	1	0910	111	33.	*	1	1525	186	207.	*	1	2140	261	58.
1	0300	37	0.	*	1	0915	112	35.	*	1	1530	187	200.	*	1	2145	262	57.
1	0305	38	0.	*	1	0920	113	37.	*	1	1535	188	193.	*	1	2150	263	57.
1	0310	39	0.	*	1	0925	114	40.	*	1	1540	189	187.	*	1	2155	264	56.
1	0315	40	0.	*	1	0930	115	43.	*	1	1545	190	180.	*	1	2200	265	56.
1	0320	41	0.	*	1	0935	116	46.	*	1	1550	191	174.	*	1	2205	266	55.
1	0325	42	0.	*	1	0940	117	49.	*	1	1555	192	168.	*	1	2210	267	55.
1	0330	43	0.	*	1	0945	118	52.	*	1	1600	193	163.	*	1	2215	268	55.
1	0335	44	0.	*	1	0950	119	56.	*	1	1605	194	157.	*	1	2220	269	54.
1	0340	45	0.	*	1	0955	120	59.	*	1	1610	195	153.	*	1	2225	270	54.
1	0345	46	0.	*	1	1000	121	63.	*	1	1615	196	148.	*	1	2230	271	54.
1	0350	47	0.	*	1	1005	122	67.	*	1	1620	197	144.	*	1	2235	272	53.
1	0355	48	0.	*	1	1010	123	71.	*	1	1625	198	141.	*	1	2240	273	53.
1	0400	49	0.	*	1	1015	124	76.	*	1	1630	199	138.	*	1	2245	274	52.
1	0405	50	0.	*	1	1020	125	80.	*	1	1635	200	135.	*	1	2250	275	52.
1	0410	51	0.	*	1	1025	126	85.	*	1	1640	201	132.	*	1	2255	276	52.
1	0415	52	0.	*	1	1030	127	89.	*	1	1645	202	129.	*	1	2300	277	51.
1	0420	53	0.	*	1	1035	128	94.	*	1	1650	203	127.	*	1	2305	278	51.
1	0425	54	0.	*	1	1040	129	100.	*	1	1655	204	124.	*	1	2310	279	51.
1	0430	55	0.	*	1	1045	130	105.	*	1	1700	205	122.	*	1	2315	280	50.
1	0435	56	0.	*	1	1050	131	110.	*	1	1705	206	120.	*	1	2320	281	50.
1	0440	57	0.	*	1	1055	132	114.	*	1	1710	207	118.	*	1	2325	282	50.
1	0445	58	0.	*	1	1100	133	118.	*	1	1715	208	116.	*	1	2330	283	49.
1	0450	59	0.	*	1	1105	134	123.	*	1	1720	209	115.	*	1	2335	284	49.
1	0455	60	0.	*	1	1110	135	128.	*	1	1725	210	113.	*	1	2340	285	49.
1	0500	61	0.	*	1	1115	136	133.	*	1	1730	211	111.	*	1	2345	286	49.
1	0505	62	0.	*	1	1120	137	139.	*	1	1735	212	110.	*	1	2350	287	48.
1	0510	63	0.	*	1	1125	138	146.	*	1	1740	213	108.	*	1	2355	288	48.
1	0515	64	0.	*	1	1130	139	153.	*	1	1745	214	107.	*	2	0000	289	48.
1	0520	65	0.	*	1	1135	140	162.	*	1	1750	215	105.	*	2	0005	290	47.
1	0525	66	0.	*	1	1140	141	174.	*	1	1755	216	104.	*	2	0010	291	47.
1	0530	67	0.	*	1	1145	142	187.	*	1	1800	217	102.	*	2	0015	292	46.
1	0535	68	0.	*	1	1150	143	205.	*	1	1805	218	101.	*	2	0020	293	44.
1	0540	69	0.	*	1	1155	144	227.	*	1	1810	219	100.	*	2	0025	294	42.
1	0545	70	0.	*	1	1200	145	258.	*	1	1815	220	98.	*	2	0030	295	38.
1	0550	71	0.	*	1	1205	146	307.	*	1	1820	221	97.	*	2	0035	296	35.
1	0555	72	0.	*	1	1210	147	422.	*	1	1825	222	95.	*	2	0040	297	31.
1	0600	73	0.	*	1	1215	148	682.	*	1	1830	223	93.	*	2	0045	298	27.
1	0605	74	0.	*	1	1220	149	1100.	*	1	1835	224	91.	*	2	0050	299	24.
1	0610	75	0.	*	1	1225	150	1558.	*	1	1840	225	89.	*	2	0055	300	20.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
2215.	12.83	575.	173.	167.	167.
		(INCHES)	2.337	2.812	2.812
		(AC-FT)	285.	343.	343.

CUMULATIVE AREA = 2.29 SQ MI

37 KK

* AREA 4 *

BASIN NO. 4 RUNOFF

SUBBASIN RUNOFF DATA

39 BA SUBBASIN CHARACTERISTICS
TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	2.50	3.00	3.50	4.00	.00	.00	.00	.00

STORM AREA = .60

40 LS SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

41 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

121.	392.	739.	856.	780.	604.	381.	254.	174.	116.
78.	52.	34.	23.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 4

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1	1230	151	.04	.00	.03	875.	
1		0005	2	.00	.00	.00	0.	*	1	1235	152	.03	.00	.03	641.	
1		0010	3	.00	.00	.00	0.	*	1	1240	153	.03	.00	.03	485.	
1		0015	4	.00	.00	.00	0.	*	1	1245	154	.03	.00	.02	377.	
1		0020	5	.00	.00	.00	0.	*	1	1250	155	.02	.00	.02	295.	
1		0025	6	.00	.00	.00	0.	*	1	1255	156	.02	.00	.02	236.	
1		0030	7	.00	.00	.00	0.	*	1	1300	157	.02	.00	.02	192.	
1		0035	8	.00	.00	.00	0.	*	1	1305	158	.02	.00	.02	160.	
1		0040	9	.00	.00	.00	0.	*	1	1310	159	.02	.00	.02	137.	
1		0045	10	.00	.00	.00	0.	*	1	1315	160	.02	.00	.02	119.	
1		0050	11	.00	.00	.00	0.	*	1	1320	161	.02	.00	.01	106.	
1		0055	12	.00	.00	.00	0.	*	1	1325	162	.02	.00	.01	96.	
1		0100	13	.00	.00	.00	0.	*	1	1330	163	.01	.00	.01	87.	
1		0105	14	.00	.00	.00	0.	*	1	1335	164	.02	.00	.02	80.	
1		0110	15	.00	.00	.00	0.	*	1	1340	165	.02	.00	.02	75.	
1		0115	16	.00	.00	.00	0.	*	1	1345	166	.02	.00	.02	73.	
1		0120	17	.00	.00	.00	0.	*	1	1350	167	.02	.00	.01	73.	
1		0125	18	.00	.00	.00	0.	*	1	1355	168	.02	.00	.01	72.	
1		0130	19	.00	.00	.00	0.	*	1	1400	169	.02	.00	.01	71.	
1		0135	20	.00	.00	.00	0.	*	1	1405	170	.01	.00	.01	70.	
1		0140	21	.00	.00	.00	0.	*	1	1410	171	.01	.00	.01	68.	
1		0145	22	.00	.00	.00	0.	*	1	1415	172	.01	.00	.01	67.	
1		0150	23	.00	.00	.00	0.	*	1	1420	173	.01	.00	.01	65.	
1		0155	24	.00	.00	.00	0.	*	1	1425	174	.01	.00	.01	63.	
1		0200	25	.00	.00	.00	0.	*	1	1430	175	.01	.00	.01	61.	
1		0205	26	.00	.00	.00	0.	*	1	1435	176	.01	.00	.01	60.	
1		0210	27	.00	.00	.00	0.	*	1	1440	177	.01	.00	.01	58.	
1		0215	28	.00	.00	.00	0.	*	1	1445	178	.01	.00	.01	57.	
1		0220	29	.00	.00	.00	0.	*	1	1450	179	.01	.00	.01	55.	
1		0225	30	.00	.00	.00	0.	*	1	1455	180	.01	.00	.01	54.	
1		0230	31	.00	.00	.00	0.	*	1	1500	181	.01	.00	.01	53.	
1		0235	32	.00	.00	.00	0.	*	1	1505	182	.01	.00	.01	51.	
1		0240	33	.00	.00	.00	0.	*	1	1510	183	.01	.00	.01	50.	
1		0245	34	.00	.00	.00	0.	*	1	1515	184	.01	.00	.01	47.	
1		0250	35	.00	.00	.00	0.	*	1	1520	185	.01	.00	.01	45.	
1		0255	36	.00	.00	.00	0.	*	1	1525	186	.01	.00	.01	43.	
1		0300	37	.00	.00	.00	0.	*	1	1530	187	.01	.00	.01	41.	
1		0305	38	.00	.00	.00	0.	*	1	1535	188	.01	.00	.01	40.	
1		0310	39	.00	.00	.00	0.	*	1	1540	189	.01	.00	.01	38.	

1	0315	40	.00	.00	.00	0.	*	1	1545	190	.01	.00	.01	37.
1	0320	41	.00	.00	.00	0.	*	1	1550	191	.01	.00	.01	37.
1	0325	42	.00	.00	.00	0.	*	1	1555	192	.01	.00	.01	36.
1	0330	43	.00	.00	.00	0.	*	1	1600	193	.01	.00	.01	35.
1	0335	44	.00	.00	.00	0.	*	1	1605	194	.01	.00	.01	34.
1	0340	45	.00	.00	.00	0.	*	1	1610	195	.01	.00	.01	34.
1	0345	46	.00	.00	.00	0.	*	1	1615	196	.01	.00	.01	33.
1	0350	47	.00	.00	.00	0.	*	1	1620	197	.01	.00	.01	33.
1	0355	48	.00	.00	.00	0.	*	1	1625	198	.01	.00	.01	32.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.01	.00	.01	32.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.01	.00	.01	31.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.01	.00	.01	31.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.01	.00	.01	30.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.01	.00	.01	30.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.01	.00	.01	29.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.01	.00	.01	29.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.01	.00	.01	28.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.01	.00	.01	28.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.01	.00	.01	28.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.01	.00	.01	27.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.01	.00	.01	27.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.01	.00	.01	27.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.01	.00	.01	26.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.01	.00	.01	26.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.01	.00	.01	26.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.01	.00	.01	25.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.01	.00	.01	25.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.01	.00	.01	25.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	24.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	24.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	23.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	22.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	22.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	21.
1	0605	74	.01	.01	.00	0.	*	1	1835	224	.00	.00	.00	20.
1	0610	75	.01	.01	.00	0.	*	1	1840	225	.00	.00	.00	20.
1	0615	76	.01	.01	.00	0.	*	1	1845	226	.00	.00	.00	20.
1	0620	77	.01	.01	.00	0.	*	1	1850	227	.00	.00	.00	19.
1	0625	78	.01	.01	.00	0.	*	1	1855	228	.00	.00	.00	19.
1	0630	79	.01	.01	.00	1.	*	1	1900	229	.00	.00	.00	19.
1	0635	80	.01	.01	.00	1.	*	1	1905	230	.00	.00	.00	19.
1	0640	81	.01	.01	.00	1.	*	1	1910	231	.00	.00	.00	19.
1	0645	82	.01	.01	.00	1.	*	1	1915	232	.00	.00	.00	18.
1	0650	83	.01	.01	.00	1.	*	1	1920	233	.00	.00	.00	18.
1	0655	84	.01	.01	.00	2.	*	1	1925	234	.00	.00	.00	18.
1	0700	85	.01	.01	.00	2.	*	1	1930	235	.00	.00	.00	18.
1	0705	86	.01	.01	.00	2.	*	1	1935	236	.00	.00	.00	18.
1	0710	87	.01	.01	.00	2.	*	1	1940	237	.00	.00	.00	17.
1	0715	88	.01	.01	.00	3.	*	1	1945	238	.00	.00	.00	17.
1	0720	89	.01	.01	.00	3.	*	1	1950	239	.00	.00	.00	17.
1	0725	90	.01	.01	.00	3.	*	1	1955	240	.00	.00	.00	17.
1	0730	91	.01	.01	.00	3.	*	1	2000	241	.00	.00	.00	17.
1	0735	92	.01	.01	.00	4.	*	1	2005	242	.00	.00	.00	17.
1	0740	93	.01	.01	.00	4.	*	1	2010	243	.00	.00	.00	17.
1	0745	94	.01	.01	.00	4.	*	1	2015	244	.00	.00	.00	16.
1	0750	95	.01	.01	.00	5.	*	1	2020	245	.00	.00	.00	16.
1	0755	96	.01	.01	.00	5.	*	1	2025	246	.00	.00	.00	16.
1	0800	97	.01	.01	.00	5.	*	1	2030	247	.00	.00	.00	16.
1	0805	98	.01	.01	.00	6.	*	1	2035	248	.00	.00	.00	16.
1	0810	99	.01	.01	.00	6.	*	1	2040	249	.00	.00	.00	16.
1	0815	100	.01	.01	.00	7.	*	1	2045	250	.00	.00	.00	16.
1	0820	101	.01	.01	.00	7.	*	1	2050	251	.00	.00	.00	16.
1	0825	102	.01	.01	.00	7.	*	1	2055	252	.00	.00	.00	15.
1	0830	103	.01	.01	.00	8.	*	1	2100	253	.00	.00	.00	15.
1	0835	104	.01	.01	.00	8.	*	1	2105	254	.00	.00	.00	15.
1	0840	105	.01	.01	.00	9.	*	1	2110	255	.00	.00	.00	15.
1	0845	106	.01	.01	.00	9.	*	1	2115	256	.00	.00	.00	15.
1	0850	107	.01	.01	.00	10.	*	1	2120	257	.00	.00	.00	15.
1	0855	108	.01	.01	.00	10.	*	1	2125	258	.00	.00	.00	15.
1	0900	109	.01	.01	.00	11.	*	1	2130	259	.00	.00	.00	15.
1	0905	110	.01	.01	.00	11.	*	1	2135	260	.00	.00	.00	14.
1	0910	111	.01	.01	.00	12.	*	1	2140	261	.00	.00	.00	14.
1	0915	112	.01	.01	.00	13.	*	1	2145	262	.00	.00	.00	14.
1	0920	113	.01	.01	.00	14.	*	1	2150	263	.00	.00	.00	14.
1	0925	114	.01	.01	.00	15.	*	1	2155	264	.00	.00	.00	14.

1	0930	115	.01	.01	.00	16.	*	1	2200	265	.00	.00	.00	14.
1	0935	116	.01	.01	.00	17.	*	1	2205	266	.00	.00	.00	14.
1	0940	117	.01	.01	.00	19.	*	1	2210	267	.00	.00	.00	14.
1	0945	118	.01	.01	.01	20.	*	1	2215	268	.00	.00	.00	14.
1	0950	119	.01	.01	.01	21.	*	1	2220	269	.00	.00	.00	14.
1	0955	120	.01	.01	.01	22.	*	1	2225	270	.00	.00	.00	14.
1	1000	121	.01	.01	.01	23.	*	1	2230	271	.00	.00	.00	13.
1	1005	122	.01	.01	.01	24.	*	1	2235	272	.00	.00	.00	13.
1	1010	123	.02	.01	.01	26.	*	1	2240	273	.00	.00	.00	13.
1	1015	124	.02	.01	.01	27.	*	1	2245	274	.00	.00	.00	13.
1	1020	125	.02	.01	.01	29.	*	1	2250	275	.00	.00	.00	13.
1	1025	126	.02	.01	.01	30.	*	1	2255	276	.00	.00	.00	13.
1	1030	127	.02	.01	.01	32.	*	1	2300	277	.00	.00	.00	13.
1	1035	128	.01	.01	.01	33.	*	1	2305	278	.00	.00	.00	13.
1	1040	129	.02	.01	.01	35.	*	1	2310	279	.00	.00	.00	13.
1	1045	130	.02	.01	.01	35.	*	1	2315	280	.00	.00	.00	13.
1	1050	131	.02	.01	.01	36.	*	1	2320	281	.00	.00	.00	13.
1	1055	132	.02	.01	.01	37.	*	1	2325	282	.00	.00	.00	13.
1	1100	133	.02	.01	.01	38.	*	1	2330	283	.00	.00	.00	12.
1	1105	134	.02	.01	.01	40.	*	1	2335	284	.00	.00	.00	12.
1	1110	135	.02	.01	.01	42.	*	1	2340	285	.00	.00	.00	12.
1	1115	136	.02	.01	.01	45.	*	1	2345	286	.00	.00	.00	12.
1	1120	137	.02	.01	.01	48.	*	1	2350	287	.00	.00	.00	12.
1	1125	138	.03	.01	.02	52.	*	1	2355	288	.00	.00	.00	12.
1	1130	139	.03	.01	.02	57.	*	2	0000	289	.00	.00	.00	12.
1	1135	140	.04	.01	.02	63.	*	2	0005	290	.00	.00	.00	12.
1	1140	141	.04	.02	.03	71.	*	2	0010	291	.00	.00	.00	11.
1	1145	142	.05	.02	.03	81.	*	2	0015	292	.00	.00	.00	9.
1	1150	143	.07	.02	.05	95.	*	2	0020	293	.00	.00	.00	6.
1	1155	144	.10	.03	.07	117.	*	2	0025	294	.00	.00	.00	4.
1	1200	145	.19	.05	.14	158.	*	2	0030	295	.00	.00	.00	3.
1	1205	146	1.15	.20	.95	324.	*	2	0035	296	.00	.00	.00	2.
1	1210	147	.13	.02	.12	631.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.08	.01	.07	990.	*	2	0045	298	.00	.00	.00	1.
1	1220	149	.06	.01	.05	1126.	*	2	0050	299	.00	.00	.00	1.
1	1225	150	.05	.00	.04	1058.	*	2	0055	300	.00	.00	.00	0.

 TOTAL RAINFALL = 4.00, TOTAL LOSS = 1.18, TOTAL EXCESS = 2.82

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
1126.	12.33	(CFS)	151.	45.	44.	44.
		(INCHES)	2.3	2.820	2.820	2.820
		(AC-FT)	7	90.	90.	90.

CUMUL / Δ = .60 SQ MI

42 KK

 * OUTLT4 *

COMBINE ROUTE 3 AND BASIN 4 TO OUTLET 4

44 HC

HYDROGRAPH COMBINATION
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

 HYDROGRAPH AT STATION OUTLT4
 SUM OF 2 HYDROGRAPHS

 DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW

1	0000	1	0.	*	1	0615	76	0.	*	1	1230	151	2763.	*	1	1845	226	107.
1	0005	2	0.	*	1	0620	77	0.	*	1	1235	152	2714.	*	1	1850	227	105.
1	0010	3	0.	*	1	0625	78	0.	*	1	1240	153	2646.	*	1	1855	228	103.
1	0015	4	0.	*	1	0630	79	1.	*	1	1245	154	2574.	*	1	1900	229	101.
1	0020	5	0.	*	1	0635	80	1.	*	1	1250	155	2510.	*	1	1905	230	99.
1	0025	6	0.	*	1	0640	81	2.	*	1	1255	156	2424.	*	1	1910	231	97.
1	0030	7	0.	*	1	0645	82	2.	*	1	1300	157	2296.	*	1	1915	232	95.
1	0035	8	0.	*	1	0650	83	3.	*	1	1305	158	2124.	*	1	1920	233	94.
1	0040	9	0.	*	1	0655	84	4.	*	1	1310	159	1919.	*	1	1925	234	93.
1	0045	10	0.	*	1	0700	85	5.	*	1	1315	160	1689.	*	1	1930	235	91.
1	0050	11	0.	*	1	0705	86	5.	*	1	1320	161	1458.	*	1	1935	236	90.
1	0055	12	0.	*	1	0710	87	6.	*	1	1325	162	1253.	*	1	1940	237	89.
1	0100	13	0.	*	1	0715	88	7.	*	1	1330	163	1082.	*	1	1945	238	88.
1	0105	14	0.	*	1	0720	89	9.	*	1	1335	164	942.	*	1	1950	239	87.
1	0110	15	0.	*	1	0725	90	10.	*	1	1340	165	826.	*	1	1955	240	86.
1	0115	16	0.	*	1	0730	91	11.	*	1	1345	166	730.	*	1	2000	241	85.
1	0120	17	0.	*	1	0735	92	12.	*	1	1350	167	654.	*	1	2005	242	85.
1	0125	18	0.	*	1	0740	93	13.	*	1	1355	168	592.	*	1	2010	243	84.
1	0130	19	0.	*	1	0745	94	15.	*	1	1400	169	541.	*	1	2015	244	83.
1	0135	20	0.	*	1	0750	95	16.	*	1	1405	170	499.	*	1	2020	245	82.
1	0140	21	0.	*	1	0755	96	17.	*	1	1410	171	465.	*	1	2025	246	81.
1	0145	22	0.	*	1	0800	97	19.	*	1	1415	172	436.	*	1	2030	247	81.
1	0150	23	0.	*	1	0805	98	20.	*	1	1420	173	411.	*	1	2035	248	80.
1	0155	24	0.	*	1	0810	99	22.	*	1	1425	174	391.	*	1	2040	249	79.
1	0200	25	0.	*	1	0815	100	24.	*	1	1430	175	373.	*	1	2045	250	79.
1	0205	26	0.	*	1	0820	101	25.	*	1	1435	176	357.	*	1	2050	251	78.
1	0210	27	0.	*	1	0825	102	27.	*	1	1440	177	344.	*	1	2055	252	77.
1	0215	28	0.	*	1	0830	103	29.	*	1	1445	178	331.	*	1	2100	253	77.
1	0220	29	0.	*	1	0835	104	30.	*	1	1450	179	320.	*	1	2105	254	76.
1	0225	30	0.	*	1	0840	105	32.	*	1	1455	180	310.	*	1	2110	255	75.
1	0230	31	0.	*	1	0845	106	34.	*	1	1500	181	299.	*	1	2115	256	75.
1	0235	32	0.	*	1	0850	107	36.	*	1	1505	182	290.	*	1	2120	257	74.
1	0240	33	0.	*	1	0855	108	38.	*	1	1510	183	280.	*	1	2125	258	74.
1	0245	34	0.	*	1	0900	109	40.	*	1	1515	184	270.	*	1	2130	259	73.
1	0250	35	0.	*	1	0905	110	43.	*	1	1520	185	260.	*	1	2135	260	73.
1	0255	36	0.	*	1	0910	111	45.	*	1	1525	186	250.	*	1	2140	261	72.
1	0300	37	0.	*	1	0915	112	48.	*	1	1530	187	241.	*	1	2145	262	71.
1	0305	38	0.	*	1	0920	113	52.	*	1	1535	188	233.	*	1	2150	263	71.
1	0310	39	0.	*	1	0925	114	55.	*	1	1540	189	225.	*	1	2155	264	70.
1	0315	40	0.	*	1	0930	115	59.	*	1	1545	190	218.	*	1	2200	265	70.
1	0320	41	0.	*	1	0935	116	63.	*	1	1550	191	211.	*	1	2205	266	69.
1	0325	42	0.	*	1	0940	117	67.	*	1	1555	192	204.	*	1	2210	267	69.
1	0330	43	0.	*	1	0945	118	72.	*	1	1600	193	198.	*	1	2215	268	68.
1	0335	44	0.	*	1	0950	119	76.	*	1	1605	194	192.	*	1	2220	269	68.
1	0340	45	0.	*	1	0955	120	81.	*	1	1610	195	186.	*	1	2225	270	67.
1	0345	46	0.	*	1	1000	121	86.	*	1	1615	196	181.	*	1	2230	271	67.
1	0350	47	0.	*	1	1005	122	91.	*	1	1620	197	177.	*	1	2235	272	67.
1	0355	48	0.	*	1	1010	123	97.	*	1	1625	198	173.	*	1	2240	273	66.
1	0400	49	0.	*	1	1015	124	103.	*	1	1630	199	169.	*	1	2245	274	66.
1	0405	50	0.	*	1	1020	125	108.	*	1	1635	200	166.	*	1	2250	275	65.
1	0410	51	0.	*	1	1025	126	115.	*	1	1640	201	162.	*	1	2255	276	65.
1	0415	52	0.	*	1	1030	127	121.	*	1	1645	202	159.	*	1	2300	277	64.
1	0420	53	0.	*	1	1035	128	128.	*	1	1650	203	156.	*	1	2305	278	64.
1	0425	54	0.	*	1	1040	129	134.	*	1	1655	204	154.	*	1	2310	279	63.
1	0430	55	0.	*	1	1045	130	140.	*	1	1700	205	151.	*	1	2315	280	63.
1	0435	56	0.	*	1	1050	131	145.	*	1	1705	206	149.	*	1	2320	281	63.
1	0440	57	0.	*	1	1055	132	151.	*	1	1710	207	146.	*	1	2325	282	62.
1	0445	58	0.	*	1	1100	133	156.	*	1	1715	208	144.	*	1	2330	283	62.
1	0450	59	0.	*	1	1105	134	162.	*	1	1720	209	142.	*	1	2335	284	62.
1	0455	60	0.	*	1	1110	135	170.	*	1	1725	210	140.	*	1	2340	285	61.
1	0500	61	0.	*	1	1115	136	171.	*	1	1730	211	138.	*	1	2345	286	61.
1	0505	62	0.	*	1	1120	137	181.	*	1	1735	212	136.	*	1	2350	287	60.
1	0510	63	0.	*	1	1125	138	191.	*	1	1740	213	134.	*	1	2355	288	60.
1	0515	64	0.	*	1	1130	139	211.	*	1	1745	214	132.	*	2	0000	289	60.
1	0520	65	0.	*	1	1135	140	223.	*	1	1750	215	131.	*	2	0005	290	59.
1	0525	66	0.	*	1	1140	141	244.	*	1	1755	216	129.	*	2	0010	291	58.
1	0530	67	0.	*	1	1145	142	268.	*	1	1800	217	127.	*	2	0015	292	55.
1	0535	68	0.	*	1	1150	143	300.	*	1	1805	218	126.	*	2	0020	293	51.
1	0540	69	0.	*	1	1155	144	344.	*	1	1810	219	124.	*	2	0025	294	46.
1	0545	70	0.	*	1	1200	145	416.	*	1	1815	220	122.	*	2	0030	295	41.
1	0550	71	0.	*	1	1205	146	631.	*	1	1820	221	119.	*	2	0035	296	37.
1	0555	72	0.	*	1	1210	147	1053.	*	1	1825	222	117.	*	2	0040	297	32.
1	0600	73	0.	*	1	1215	148	1672.	*	1	1830	223	114.	*	2	0045	298	28.
1	0605	74	0.	*	1	1220	149	2226.	*	1	1835	224	112.	*	2	0050	299	24.

1 0610 75 0. * 1 1225 150 2616. * 1 1840 225 109. * 2 0055 300

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
(CFS) (HR) (CFS) 6-HR 24-HR 72-HR 24.92-HR
2763. 12.50 (CFS) 726. 219. 211. 211.
(INCHES) 2.337 2.814 2.814 2.814
(AC-FT) 360. 434. 434. 434.

CUMULATIVE AREA = 2.89 SQ MI

45 KK * ROUTE4 *

ROUTE OUTLET 4 TO BASIN 5 OUTLET

HYDROGRAPH ROUTING DATA

47 RM MUSKINGUM ROUTING
NSTPS 2 NUMBER OF SUBREACHES
AMSKK .36 MUSKINGUM K
X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE4

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1	0615	76	0.	1	1230	151	1236.	1	1845	226	117.			
1		0005	2	0.	1	0620	77	0.	1	1235	152	1629.	1	1850	227	115.			
1		0010	3	0.	1	0625	78	0.	1	1240	153	1975.	1	1855	228	112.			
1		0015	4	0.	1	0630	79	0.	1	1245	154	2227.	1	1900	229	110.			
1		0020	5	0.	1	0635	80	0.	1	1250	155	2386.	1	1905	230	108.			
1		0025	6	0.	1	0640	81	0.	1	1255	156	2470.	1	1910	231	106.			
1		0030	7	0.	1	0645	82	1.	1	1300	157	2502.	1	1915	232	104.			
1		0035	8	0.	1	0650	83	1.	1	1305	158	2492.	1	1920	233	102.			
1		0040	9	0.	1	0655	84	1.	1	1310	159	2445.	1	1925	234	100.			
1		0045	10	0.	1	0700	85	2.	1	1315	160	2361.	1	1930	235	98.			
1		0050	11	0.	1	0705	86	2.	1	1320	161	2241.	1	1935	236	96.			
1		0055	12	0.	1	0710	87	3.	1	1325	162	2087.	1	1940	237	95.			
1		0100	13	0.	1	0715	88	4.	1	1330	163	1909.	1	1945	238	93.			
1		0105	14	0.	1	0720	89	4.	1	1335	164	1718.	1	1950	239	92.			
1		0110	15	0.	1	0725	90	5.	1	1340	165	1529.	1	1955	240	91.			
1		0115	16	0.	1	0730	91	6.	1	1345	166	1350.	1	2000	241	90.			
1		0120	17	0.	1	0735	92	7.	1	1350	167	1188.	1	2005	242	89.			
1		0125	18	0.	1	0740	93	8.	1	1355	168	1045.	1	2010	243	88.			
1		0130	19	0.	1	0745	94	9.	1	1400	169	921.	1	2015	244	87.			
1		0135	20	0.	1	0750	95	11.	1	1405	170	816.	1	2020	245	86.			
1		0140	21	0.	1	0755	96	12.	1	1410	171	728.	1	2025	246	85.			
1		0145	22	0.	1	0800	97	13.	1	1415	172	654.	1	2030	247	84.			
1		0150	23	0.	1	0805	98	14.	1	1420	173	593.	1	2035	248	83.			
1		0155	24	0.	1	0810	99	16.	1	1425	174	542.	1	2040	249	82.			
1		0200	25	0.	1	0815	100	17.	1	1430	175	500.	1	2045	250	82.			
1		0205	26	0.	1	0820	101	19.	1	1435	176	464.	1	2050	251	81.			
1		0210	27	0.	1	0825	102	20.	1	1440	177	435.	1	2055	252	80.			
1		0215	28	0.	1	0830	103	22.	1	1445	178	410.	1	2100	253	80.			
1		0220	29	0.	1	0835	104	23.	1	1450	179	389.	1	2105	254	79.			
1		0225	30	0.	1	0840	105	25.	1	1455	180	370.	1	2110	255	78.			
1		0230	31	0.	1	0845	106	26.	1	1500	181	354.	1	2115	256	78.			
1		0235	32	0.	1	0850	107	28.	1	1505	182	340.	1	2120	257	77.			
1		0240	33	0.	1	0855	108	30.	1	1510	183	328.	1	2125	258	76.			

1	0245	34	0.	*	1	0900	109	32.	*	1	1515	184	316.	*	1	2130	259	76.
1	0250	35	0.	*	1	0905	110	34.	*	1	1520	185	305.	*	1	2135	260	75.
1	0255	36	0.	*	1	0910	111	36.	*	1	1525	186	294.	*	1	2140	261	74.
1	0300	37	0.	*	1	0915	112	38.	*	1	1530	187	284.	*	1	2145	262	74.
1	0305	38	0.	*	1	0920	113	40.	*	1	1535	188	274.	*	1	2150	263	73.
1	0310	39	0.	*	1	0925	114	42.	*	1	1540	189	264.	*	1	2155	264	73.
1	0315	40	0.	*	1	0930	115	45.	*	1	1545	190	254.	*	1	2200	265	72.
1	0320	41	0.	*	1	0935	116	48.	*	1	1550	191	245.	*	1	2205	266	72.
1	0325	42	0.	*	1	0940	117	51.	*	1	1555	192	237.	*	1	2210	267	71.
1	0330	43	0.	*	1	0945	118	55.	*	1	1600	193	229.	*	1	2215	268	71.
1	0335	44	0.	*	1	0950	119	58.	*	1	1605	194	221.	*	1	2220	269	70.
1	0340	45	0.	*	1	0955	120	62.	*	1	1610	195	214.	*	1	2225	270	70.
1	0345	46	0.	*	1	1000	121	67.	*	1	1615	196	207.	*	1	2230	271	69.
1	0350	47	0.	*	1	1005	122	71.	*	1	1620	197	201.	*	1	2235	272	69.
1	0355	48	0.	*	1	1010	123	75.	*	1	1625	198	195.	*	1	2240	273	68.
1	0400	49	0.	*	1	1015	124	80.	*	1	1630	199	189.	*	1	2245	274	68.
1	0405	50	0.	*	1	1020	125	85.	*	1	1635	200	184.	*	1	2250	275	67.
1	0410	51	0.	*	1	1025	126	90.	*	1	1640	201	180.	*	1	2255	276	67.
1	0415	52	0.	*	1	1030	127	96.	*	1	1645	202	175.	*	1	2300	277	66.
1	0420	53	0.	*	1	1035	128	101.	*	1	1650	203	171.	*	1	2305	278	66.
1	0425	54	0.	*	1	1040	129	107.	*	1	1655	204	168.	*	1	2310	279	65.
1	0430	55	0.	*	1	1045	130	113.	*	1	1700	205	164.	*	1	2315	280	65.
1	0435	56	0.	*	1	1050	131	120.	*	1	1705	206	161.	*	1	2320	281	64.
1	0440	57	0.	*	1	1055	132	126.	*	1	1710	207	158.	*	1	2325	282	64.
1	0445	58	0.	*	1	1100	133	132.	*	1	1715	208	155.	*	1	2330	283	64.
1	0450	59	0.	*	1	1105	134	137.	*	1	1720	209	152.	*	1	2335	284	63.
1	0455	60	0.	*	1	1110	135	143.	*	1	1725	210	150.	*	1	2340	285	63.
1	0500	61	0.	*	1	1115	136	149.	*	1	1730	211	147.	*	1	2345	286	62.
1	0505	62	0.	*	1	1120	137	155.	*	1	1735	212	145.	*	1	2350	287	62.
1	0510	63	0.	*	1	1125	138	162.	*	1	1740	213	143.	*	1	2355	288	62.
1	0515	64	0.	*	1	1130	139	169.	*	1	1745	214	141.	*	2	0000	289	61.
1	0520	65	0.	*	1	1135	140	177.	*	1	1750	215	139.	*	2	0005	290	61.
1	0525	66	0.	*	1	1140	141	187.	*	1	1755	216	137.	*	2	0010	291	61.
1	0530	67	0.	*	1	1145	142	198.	*	1	1800	217	135.	*	2	0015	292	60.
1	0535	68	0.	*	1	1150	143	211.	*	1	1805	218	133.	*	2	0020	293	59.
1	0540	69	0.	*	1	1155	144	228.	*	1	1810	219	131.	*	2	0025	294	58.
1	0545	70	0.	*	1	1200	145	248.	*	1	1815	220	130.	*	2	0030	295	56.
1	0550	71	0.	*	1	1205	146	276.	*	1	1820	221	128.	*	2	0035	296	53.
1	0555	72	0.	*	1	1210	147	318.	*	1	1825	222	126.	*	2	0040	297	50.
1	0600	73	0.	*	1	1215	148	406.	*	1	1830	223	124.	*	2	0045	298	46.
1	0605	74	0.	*	1	1220	149	579.	*	1	1835	224	122.	*	2	0050	299	42.
1	0610	75	0.	*	1	1225	150	865.	*	1	1840	225	120.	*	2	0055	300	38.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
2502.	13.00	(CFS) 726.	218.	210.	210.
		(INCHES) 2.336	2.808	2.808	2.808
		(AC-FT) 360.	433.	433.	433.

CUMULATIVE AREA = 2.89 SQ MI

* * * * *
48 KK * AREA 5 *
* * * * *

BASIN NO. 5 RUNOFF

SUBBASIN RUNOFF DATA

50 BA SUBBASIN CHARACTERISTICS
TAREA .59 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
..... HYDRO-35 TP-40 TP-49

5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 2.50 3.00 3.50 4.00 .00 .00 .00 .00

STORM AREA = .59

51 LS SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

52 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

119. 384. 725. 839. 764. 591. 373. 249. 170. 113.
 76. 51. 34. 23. 15. 10. 7. 5. 3. 1.

HYDROGRAPH AT STATION AREA 5

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q
1		0000	1	.00	.00	.00	0.	*	1	1230	151	.04	.01	.03				761.
1		0005	2	.00	.00	.00	0.	*	1	1235	152	.03	.01	.03				560.
1		0010	3	.00	.00	.00	0.	*	1	1240	153	.03	.00	.02				426.
1		0015	4	.00	.00	.00	0.	*	1	1245	154	.03	.00	.02				332.
1		0020	5	.00	.00	.00	0.	*	1	1250	155	.02	.00	.02				261.
1		0025	6	.00	.00	.00	0.	*	1	1255	156	.02	.00	.02				210.
1		0030	7	.00	.00	.00	0.	*	1	1300	157	.02	.00	.02				172.
1		0035	8	.00	.00	.00	0.	*	1	1305	158	.02	.00	.02				144.
1		0040	9	.00	.00	.00	0.	*	1	1310	159	.02	.00	.02				123.
1		0045	10	.00	.00	.00	0.	*	1	1315	160	.02	.00	.01				108.
1		0050	11	.00	.00	.00	0.	*	1	1320	161	.02	.00	.01				96.
1		0055	12	.00	.00	.00	0.	*	1	1325	162	.02	.00	.01				87.
1		0100	13	.00	.00	.00	0.	*	1	1330	163	.01	.00	.01				80.
1		0105	14	.00	.00	.00	0.	*	1	1335	164	.02	.00	.02				73.
1		0110	15	.00	.00	.00	0.	*	1	1340	165	.02	.00	.01				69.
1		0115	16	.00	.00	.00	0.	*	1	1345	166	.02	.00	.01				67.
1		0120	17	.00	.00	.00	0.	*	1	1350	167	.02	.00	.01				67.
1		0125	18	.00	.00	.00	0.	*	1	1355	168	.02	.00	.01				66.
1		0130	19	.00	.00	.00	0.	*	1	1400	169	.02	.00	.01				66.
1		0135	20	.00	.00	.00	0.	*	1	1405	170	.01	.00	.01				64.
1		0140	21	.00	.00	.00	0.	*	1	1410	171	.01	.00	.01				63.
1		0145	22	.00	.00	.00	0.	*	1	1415	172	.01	.00	.01				61.
1		0150	23	.00	.00	.00	0.	*	1	1420	173	.01	.00	.01				60.
1		0155	24	.00	.00	.00	0.	*	1	1425	174	.01	.00	.01				58.
1		0200	25	.00	.00	.00	0.	*	1	1430	175	.01	.00	.01				57.
1		0205	26	.00	.00	.00	0.	*	1	1435	176	.01	.00	.01				55.
1		0210	27	.00	.00	.00	0.	*	1	1440	177	.01	.00	.01				54.
1		0215	28	.00	.00	.00	0.	*	1	1445	178	.01	.00	.01				52.
1		0220	29	.00	.00	.00	0.	*	1	1450	179	.01	.00	.01				51.
1		0225	30	.00	.00	.00	0.	*	1	1455	180	.01	.00	.01				50.
1		0230	31	.00	.00	.00	0.	*	1	1500	181	.01	.00	.01				49.
1		0235	32	.00	.00	.00	0.	*	1	1505	182	.01	.00	.01				47.
1		0240	33	.00	.00	.00	0.	*	1	1510	183	.01	.00	.01				46.
1		0245	34	.00	.00	.00	0.	*	1	1515	184	.01	.00	.01				44.
1		0250	35	.00	.00	.00	0.	*	1	1520	185	.01	.00	.01				42.
1		0255	36	.00	.00	.00	0.	*	1	1525	186	.01	.00	.01				40.
1		0300	37	.00	.00	.00	0.	*	1	1530	187	.01	.00	.01				38.
1		0305	38	.00	.00	.00	0.	*	1	1535	188	.01	.00	.01				37.
1		0310	39	.00	.00	.00	0.	*	1	1540	189	.01	.00	.01				36.
1		0315	40	.00	.00	.00	0.	*	1	1545	190	.01	.00	.01				35.
1		0320	41	.00	.00	.00	0.	*	1	1550	191	.01	.00	.01				34.
1		0325	42	.00	.00	.00	0.	*	1	1555	192	.01	.00	.01				33.
1		0330	43	.00	.00	.00	0.	*	1	1600	193	.01	.00	.01				32.
1		0335	44	.00	.00	.00	0.	*	1	1605	194	.01	.00	.01				32.
1		0340	45	.00	.00	.00	0.	*	1	1610	195	.01	.00	.01				31.
1		0345	46	.00	.00	.00	0.	*	1	1615	196	.01	.00	.01				31.
1		0350	47	.00	.00	.00	0.	*	1	1620	197	.01	.00	.01				30.

1	0355	48	.00	.00	.00	0.	*	1	1625	198	.01	.00	.01	30.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.01	.00	.01	29.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.01	.00	.01	29.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.01	.00	.01	28.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.01	.00	.01	28.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.01	.00	.01	28.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.01	.00	.01	27.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.01	.00	.01	27.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.01	.00	.01	26.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.01	.00	.01	26.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.01	.00	.01	26.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.01	.00	.01	25.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.01	.00	.01	25.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.01	.00	.01	25.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.01	.00	.01	24.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.01	.00	.01	24.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.01	.00	.00	24.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.01	.00	.00	24.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.01	.00	.00	23.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.01	.00	.00	23.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	23.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	22.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	21.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	21.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	20.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	19.
1	0605	74	.01	.01	.00	0.	*	1	1835	224	.00	.00	.00	19.
1	0610	75	.01	.01	.00	0.	*	1	1840	225	.00	.00	.00	19.
1	0615	76	.01	.01	.00	0.	*	1	1845	226	.00	.00	.00	18.
1	0620	77	.01	.01	.00	0.	*	1	1850	227	.00	.00	.00	18.
1	0625	78	.01	.01	.00	0.	*	1	1855	228	.00	.00	.00	18.
1	0630	79	.01	.01	.00	0.	*	1	1900	229	.00	.00	.00	18.
1	0635	80	.01	.01	.00	0.	*	1	1905	230	.00	.00	.00	17.
1	0640	81	.01	.01	.00	0.	*	1	1910	231	.00	.00	.00	17.
1	0645	82	.01	.01	.00	0.	*	1	1915	232	.00	.00	.00	17.
1	0650	83	.01	.01	.00	0.	*	1	1920	233	.00	.00	.00	17.
1	0655	84	.01	.01	.00	0.	*	1	1925	234	.00	.00	.00	17.
1	0700	85	.01	.01	.00	0.	*	1	1930	235	.00	.00	.00	17.
1	0705	86	.01	.01	.00	0.	*	1	1935	236	.00	.00	.00	16.
1	0710	87	.01	.01	.00	0.	*	1	1940	237	.00	.00	.00	16.
1	0715	88	.01	.01	.00	0.	*	1	1945	238	.00	.00	.00	16.
1	0720	89	.01	.01	.00	0.	*	1	1950	239	.00	.00	.00	16.
1	0725	90	.01	.01	.00	0.	*	1	1955	240	.00	.00	.00	16.
1	0730	91	.01	.01	.00	0.	*	1	2000	241	.00	.00	.00	16.
1	0735	92	.01	.01	.00	0.	*	1	2005	242	.00	.00	.00	16.
1	0740	93	.01	.01	.00	0.	*	1	2010	243	.00	.00	.00	15.
1	0745	94	.01	.01	.00	0.	*	1	2015	244	.00	.00	.00	15.
1	0750	95	.01	.01	.00	0.	*	1	2020	245	.00	.00	.00	15.
1	0755	96	.01	.01	.00	0.	*	1	2025	246	.00	.00	.00	15.
1	0800	97	.01	.01	.00	1.	*	1	2030	247	.00	.00	.00	15.
1	0805	98	.01	.01	.00	1.	*	1	2035	248	.00	.00	.00	15.
1	0810	99	.01	.01	.00	1.	*	1	2040	249	.00	.00	.00	15.
1	0815	100	.01	.01	.00	1.	*	1	2045	250	.00	.00	.00	15.
1	0820	101	.01	.01	.00	2.	*	1	2050	251	.00	.00	.00	14.
1	0825	102	.01	.01	.00	2.	*	1	2055	252	.00	.00	.00	14.
1	0830	103	.01	.01	.00	2.	*	1	2100	253	.00	.00	.00	14.
1	0835	104	.01	.01	.00	2.	*	1	2105	254	.00	.00	.00	14.
1	0840	105	.01	.01	.00	3.	*	1	2110	255	.00	.00	.00	14.
1	0845	106	.01	.01	.00	3.	*	1	2115	256	.00	.00	.00	14.
1	0850	107	.01	.01	.00	3.	*	1	2120	257	.00	.00	.00	14.
1	0855	108	.01	.01	.00	4.	*	1	2125	258	.00	.00	.00	14.
1	0900	109	.01	.01	.00	4.	*	1	2130	259	.00	.00	.00	14.
1	0905	110	.01	.01	.00	5.	*	1	2135	260	.00	.00	.00	13.
1	0910	111	.01	.01	.00	5.	*	1	2140	261	.00	.00	.00	13.
1	0915	112	.01	.01	.00	6.	*	1	2145	262	.00	.00	.00	13.
1	0920	113	.01	.01	.00	7.	*	1	2150	263	.00	.00	.00	13.
1	0925	114	.01	.01	.00	7.	*	1	2155	264	.00	.00	.00	13.
1	0930	115	.01	.01	.00	8.	*	1	2200	265	.00	.00	.00	13.
1	0935	116	.01	.01	.00	9.	*	1	2205	266	.00	.00	.00	13.
1	0940	117	.01	.01	.00	10.	*	1	2210	267	.00	.00	.00	13.
1	0945	118	.01	.01	.00	10.	*	1	2215	268	.00	.00	.00	13.
1	0950	119	.01	.01	.00	11.	*	1	2220	269	.00	.00	.00	13.
1	0955	120	.01	.01	.00	12.	*	1	2225	270	.00	.00	.00	13.
1	1000	121	.01	.01	.00	13.	*	1	2230	271	.00	.00	.00	13.
1	1005	122	.01	.01	.00	14.	*	1	2235	272	.00	.00	.00	12.

1	1010	123	.02	.01	.00	15.	*	1	2240	273	.00	.00	.00	12.
1	1015	124	.02	.01	.00	16.	*	1	2245	274	.00	.00	.00	12.
1	1020	125	.02	.01	.01	17.	*	1	2250	275	.00	.00	.00	12.
1	1025	126	.02	.01	.01	18.	*	1	2255	276	.00	.00	.00	12.
1	1030	127	.02	.01	.01	20.	*	1	2300	277	.00	.00	.00	12.
1	1035	128	.01	.01	.00	21.	*	1	2305	278	.00	.00	.00	12.
1	1040	129	.02	.01	.01	22.	*	1	2310	279	.00	.00	.00	12.
1	1045	130	.02	.01	.01	23.	*	1	2315	280	.00	.00	.00	12.
1	1050	131	.02	.01	.01	23.	*	1	2320	281	.00	.00	.00	12.
1	1055	132	.02	.01	.01	24.	*	1	2325	282	.00	.00	.00	12.
1	1100	133	.02	.01	.01	25.	*	1	2330	283	.00	.00	.00	12.
1	1105	134	.02	.01	.01	27.	*	1	2335	284	.00	.00	.00	12.
1	1110	135	.02	.01	.01	29.	*	1	2340	285	.00	.00	.00	11.
1	1115	136	.02	.01	.01	31.	*	1	2345	286	.00	.00	.00	11.
1	1120	137	.02	.01	.01	33.	*	1	2350	287	.00	.00	.00	11.
1	1125	138	.03	.02	.01	37.	*	1	2355	288	.00	.00	.00	11.
1	1130	139	.03	.02	.01	40.	*	2	0000	289	.00	.00	.00	11.
1	1135	140	.04	.02	.02	45.	*	2	0005	290	.00	.00	.00	11.
1	1140	141	.04	.02	.02	51.	*	2	0010	291	.00	.00	.00	10.
1	1145	142	.05	.02	.03	59.	*	2	0015	292	.00	.00	.00	8.
1	1150	143	.07	.03	.04	71.	*	2	0020	293	.00	.00	.00	6.
1	1155	144	.10	.04	.06	88.	*	2	0025	294	.00	.00	.00	4.
1	1200	145	.19	.08	.12	122.	*	2	0030	295	.00	.00	.00	3.
1	1205	146	1.15	.30	.84	263.	*	2	0035	296	.00	.00	.00	2.
1	1210	147	.13	.02	.11	529.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.08	.01	.07	843.	*	2	0045	298	.00	.00	.00	1.
1	1220	149	.06	.01	.05	967.	*	2	0050	299	.00	.00	.00	1.
1	1225	150	.05	.01	.04	915.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 4.00, TOTAL LOSS = 1.54, TOTAL EXCESS = 2.45

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
967.	12.33	131.	131.	39.	37.	37.
		(INCHES)	2.065	2.455	2.455	2.455
		(AC-FT)	65.	77.	77.	77.

CUMULATIVE AREA = .59 SQ MI

53 KK

* OUTLT5 *

COMBINE ROUTE 4 AND BASIN 5 TO OUTLET 5

55 HC

HYDROGRAPH COMBINATION
1COMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT5
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0615	76	0.	*	1	1230	151	1996.	*	1	1845	226	136.					
1	0005	2	0.	*	1	0620	77	0.	*	1	1235	152	2189.	*	1	1850	227	133.					
1	0010	3	0.	*	1	0625	78	0.	*	1	1240	153	2401.	*	1	1855	228	130.					
1	0015	4	0.	*	1	0630	79	0.	*	1	1245	154	2559.	*	1	1900	229	128.					
1	0020	5	0.	*	1	0635	80	0.	*	1	1250	155	2647.	*	1	1905	230	125.					
1	0025	6	0.	*	1	0640	81	0.	*	1	1255	156	2680.	*	1	1910	231	123.					
1	0030	7	0.	*	1	0645	82	1.	*	1	1300	157	2673.	*	1	1915	232	121.					

1	0035	8	0.	*	1	0650	83	1.	*	1	1305	158	2636.	*	1	1920	233	118.
1	0040	9	0.	*	1	0655	84	1.	*	1	1310	159	2568.	*	1	1925	234	116.
1	0045	10	0.	*	1	0700	85	2.	*	1	1315	160	2469.	*	1	1930	235	114.
1	0050	11	0.	*	1	0705	86	2.	*	1	1320	161	2337.	*	1	1935	236	113.
1	0055	12	0.	*	1	0710	87	3.	*	1	1325	162	2174.	*	1	1940	237	111.
1	0100	13	0.	*	1	0715	88	4.	*	1	1330	163	1988.	*	1	1945	238	109.
1	0105	14	0.	*	1	0720	89	4.	*	1	1335	164	1792.	*	1	1950	239	108.
1	0110	15	0.	*	1	0725	90	5.	*	1	1340	165	1598.	*	1	1955	240	107.
1	0115	16	0.	*	1	0730	91	6.	*	1	1345	166	1417.	*	1	2000	241	105.
1	0120	17	0.	*	1	0735	92	7.	*	1	1350	167	1255.	*	1	2005	242	104.
1	0125	18	0.	*	1	0740	93	8.	*	1	1355	168	1111.	*	1	2010	243	103.
1	0130	19	0.	*	1	0745	94	10.	*	1	1400	169	987.	*	1	2015	244	102.
1	0135	20	0.	*	1	0750	95	11.	*	1	1405	170	880.	*	1	2020	245	101.
1	0140	21	0.	*	1	0755	96	12.	*	1	1410	171	790.	*	1	2025	246	100.
1	0145	22	0.	*	1	0800	97	14.	*	1	1415	172	715.	*	1	2030	247	99.
1	0150	23	0.	*	1	0805	98	15.	*	1	1420	173	652.	*	1	2035	248	98.
1	0155	24	0.	*	1	0810	99	17.	*	1	1425	174	600.	*	1	2040	249	97.
1	0200	25	0.	*	1	0815	100	18.	*	1	1430	175	556.	*	1	2045	250	96.
1	0205	26	0.	*	1	0820	101	20.	*	1	1435	176	519.	*	1	2050	251	95.
1	0210	27	0.	*	1	0825	102	22.	*	1	1440	177	488.	*	1	2055	252	95.
1	0215	28	0.	*	1	0830	103	24.	*	1	1445	178	462.	*	1	2100	253	94.
1	0220	29	0.	*	1	0835	104	26.	*	1	1450	179	440.	*	1	2105	254	93.
1	0225	30	0.	*	1	0840	105	28.	*	1	1455	180	420.	*	1	2110	255	92.
1	0230	31	0.	*	1	0845	106	30.	*	1	1500	181	403.	*	1	2115	256	91.
1	0235	32	0.	*	1	0850	107	32.	*	1	1505	182	388.	*	1	2120	257	91.
1	0240	33	0.	*	1	0855	108	34.	*	1	1510	183	373.	*	1	2125	258	90.
1	0245	34	0.	*	1	0900	109	36.	*	1	1515	184	360.	*	1	2130	259	89.
1	0250	35	0.	*	1	0905	110	38.	*	1	1520	185	346.	*	1	2135	260	89.
1	0255	36	0.	*	1	0910	111	41.	*	1	1525	186	334.	*	1	2140	261	88.
1	0300	37	0.	*	1	0915	112	44.	*	1	1530	187	322.	*	1	2145	262	87.
1	0305	38	0.	*	1	0920	113	47.	*	1	1535	188	310.	*	1	2150	263	86.
1	0310	39	0.	*	1	0925	114	50.	*	1	1540	189	299.	*	1	2155	264	86.
1	0315	40	0.	*	1	0930	115	53.	*	1	1545	190	289.	*	1	2200	265	85.
1	0320	41	0.	*	1	0935	116	57.	*	1	1550	191	279.	*	1	2205	266	85.
1	0325	42	0.	*	1	0940	117	61.	*	1	1555	192	270.	*	1	2210	267	84.
1	0330	43	0.	*	1	0945	118	65.	*	1	1600	193	261.	*	1	2215	268	83.
1	0335	44	0.	*	1	0950	119	70.	*	1	1605	194	253.	*	1	2220	269	83.
1	0340	45	0.	*	1	0955	120	74.	*	1	1610	195	245.	*	1	2225	270	82.
1	0345	46	0.	*	1	1000	121	79.	*	1	1615	196	238.	*	1	2230	271	82.
1	0350	47	0.	*	1	1005	122	85.	*	1	1620	197	231.	*	1	2235	272	81.
1	0355	48	0.	*	1	1010	123	90.	*	1	1625	198	225.	*	1	2240	273	80.
1	0400	49	0.	*	1	1015	124	96.	*	1	1630	199	219.	*	1	2245	274	80.
1	0405	50	0.	*	1	1020	125	102.	*	1	1635	200	213.	*	1	2250	275	79.
1	0410	51	0.	*	1	1025	126	109.	*	1	1640	201	208.	*	1	2255	276	79.
1	0415	52	0.	*	1	1030	127	116.	*	1	1645	202	203.	*	1	2300	277	78.
1	0420	53	0.	*	1	1035	128	122.	*	1	1650	203	199.	*	1	2305	278	78.
1	0425	54	0.	*	1	1040	129	129.	*	1	1655	204	195.	*	1	2310	279	77.
1	0430	55	0.	*	1	1045	130	136.	*	1	1700	205	191.	*	1	2315	280	77.
1	0435	56	0.	*	1	1050	131	143.	*	1	1705	206	187.	*	1	2320	281	76.
1	0440	57	0.	*	1	1055	132	150.	*	1	1710	207	184.	*	1	2325	282	76.
1	0445	58	0.	*	1	1100	133	157.	*	1	1715	208	181.	*	1	2330	283	75.
1	0450	59	0.	*	1	1105	134	164.	*	1	1720	209	178.	*	1	2335	284	75.
1	0455	60	0.	*	1	1110	135	172.	*	1	1725	210	175.	*	1	2340	285	74.
1	0500	61	0.	*	1	1115	136	180.	*	1	1730	211	172.	*	1	2345	286	74.
1	0505	62	0.	*	1	1120	137	188.	*	1	1735	212	170.	*	1	2350	287	73.
1	0510	63	0.	*	1	1125	138	198.	*	1	1740	213	167.	*	1	2355	288	73.
1	0515	64	0.	*	1	1130	139	209.	*	1	1745	214	165.	*	2	0000	289	72.
1	0520	65	0.	*	1	1135	140	223.	*	1	1750	215	162.	*	2	0005	290	72.
1	0525	66	0.	*	1	1140	141	238.	*	1	1755	216	160.	*	2	0010	291	70.
1	0530	67	0.	*	1	1145	142	257.	*	1	1800	217	158.	*	2	0015	292	68.
1	0535	68	0.	*	1	1150	143	282.	*	1	1805	218	156.	*	2	0020	293	65.
1	0540	69	0.	*	1	1155	144	316.	*	1	1810	219	153.	*	2	0025	294	62.
1	0545	70	0.	*	1	1200	145	370.	*	1	1815	220	151.	*	2	0030	295	59.
1	0550	71	0.	*	1	1205	146	539.	*	1	1820	221	149.	*	2	0035	296	55.
1	0555	72	0.	*	1	1210	147	847.	*	1	1825	222	146.	*	2	0040	297	51.
1	0600	73	0.	*	1	1215	148	1249.	*	1	1830	223	143.	*	2	0045	298	47.
1	0605	74	0.	*	1	1220	149	1546.	*	1	1835	224	141.	*	2	0050	299	43.
1	0610	75	0.	*	1	1225	150	1780.	*	1	1840	225	138.	*	2	0055	300	38.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	24.92-HR
2680.	12.92	(CFS)	856.	257.	247.	247.
		(INCHES)	2.290	2.748	2.748	2.748

CUMULATIVE AREA = 3.48 SQ MI

56 KK

* ROUTE5 *

ROUTE OUTLET 5 TO BASIN 6 OUTLET

HYDROGRAPH ROUTING DATA

58 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
AMSKK .11 MUSKINGUM K
X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTES

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1686.	*	1		1845	226	139.
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1913.	*	1		1850	227	136.
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	2121.	*	1		1855	228	134.
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	2324.	*	1		1900	229	131.
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	2487.	*	1		1905	230	129.
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	2594.	*	1		1910	231	126.
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	2648.	*	1		1915	232	124.
1		0035	8	0.	*	1		0650	83	1.	*	1		1305	158	2659.	*	1		1920	233	121.
1		0040	9	0.	*	1		0655	84	1.	*	1		1310	159	2634.	*	1		1925	234	119.
1		0045	10	0.	*	1		0700	85	1.	*	1		1315	160	2577.	*	1		1930	235	117.
1		0050	11	0.	*	1		0705	86	2.	*	1		1320	161	2488.	*	1		1935	236	115.
1		0055	12	0.	*	1		0710	87	2.	*	1		1325	162	2367.	*	1		1940	237	113.
1		0100	13	0.	*	1		0715	88	3.	*	1		1330	163	2216.	*	1		1945	238	112.
1		0105	14	0.	*	1		0720	89	3.	*	1		1335	164	2041.	*	1		1950	239	110.
1		0110	15	0.	*	1		0725	90	4.	*	1		1340	165	1853.	*	1		1955	240	109.
1		0115	16	0.	*	1		0730	91	5.	*	1		1345	166	1663.	*	1		2000	241	107.
1		0120	17	0.	*	1		0735	92	6.	*	1		1350	167	1482.	*	1		2005	242	106.
1		0125	18	0.	*	1		0740	93	7.	*	1		1355	168	1315.	*	1		2010	243	105.
1		0130	19	0.	*	1		0745	94	8.	*	1		1400	169	1166.	*	1		2015	244	103.
1		0135	20	0.	*	1		0750	95	9.	*	1		1405	170	1036.	*	1		2020	245	102.
1		0140	21	0.	*	1		0755	96	10.	*	1		1410	171	923.	*	1		2025	246	101.
1		0145	22	0.	*	1		0800	97	12.	*	1		1415	172	827.	*	1		2030	247	100.
1		0150	23	0.	*	1		0805	98	13.	*	1		1420	173	746.	*	1		2035	248	99.
1		0155	24	0.	*	1		0810	99	15.	*	1		1425	174	679.	*	1		2040	249	98.
1		0200	25	0.	*	1		0815	100	16.	*	1		1430	175	622.	*	1		2045	250	97.
1		0205	26	0.	*	1		0820	101	18.	*	1		1435	176	574.	*	1		2050	251	97.
1		0210	27	0.	*	1		0825	102	20.	*	1		1440	177	535.	*	1		2055	252	96.
1		0215	28	0.	*	1		0830	103	21.	*	1		1445	178	501.	*	1		2100	253	95.
1		0220	29	0.	*	1		0835	104	23.	*	1		1450	179	473.	*	1		2105	254	94.
1		0225	30	0.	*	1		0840	105	25.	*	1		1455	180	449.	*	1		2110	255	93.
1		0230	31	0.	*	1		0845	106	27.	*	1		1500	181	428.	*	1		2115	256	92.
1		0235	32	0.	*	1		0850	107	29.	*	1		1505	182	410.	*	1		2120	257	92.
1		0240	33	0.	*	1		0855	108	31.	*	1		1510	183	394.	*	1		2125	258	91.
1		0245	34	0.	*	1		0900	109	33.	*	1		1515	184	379.	*	1		2130	259	90.
1		0250	35	0.	*	1		0905	110	35.	*	1		1520	185	364.	*	1		2135	260	89.
1		0255	36	0.	*	1		0910	111	38.	*	1		1525	186	351.	*	1		2140	261	89.
1		0300	37	0.	*	1		0915	112	40.	*	1		1530	187	338.	*	1		2145	262	88.
1		0305	38	0.	*	1		0920	113	43.	*	1		1535	188	326.	*	1		2150	263	87.
1		0310	39	0.	*	1		0925	114	46.	*	1		1540	189	314.	*	1		2155	264	87.
1		0315	40	0.	*	1		0930	115	49.	*	1		1545	190	303.	*	1		2200	265	86.
1		0320	41	0.	*	1		0935	116	52.	*	1		1550	191	293.	*	1		2205	266	85.

1	0325	42	0.	*	1	0940	117	56.	*	1	1555	192	283.	*	1	2210	267	85.
1	0330	43	0.	*	1	0945	118	60.	*	1	1600	193	273.	*	1	2215	268	84.
1	0335	44	0.	*	1	0950	119	64.	*	1	1605	194	264.	*	1	2220	269	84.
1	0340	45	0.	*	1	0955	120	68.	*	1	1610	195	256.	*	1	2225	270	83.
1	0345	46	0.	*	1	1000	121	73.	*	1	1615	196	248.	*	1	2230	271	82.
1	0350	47	0.	*	1	1005	122	78.	*	1	1620	197	241.	*	1	2235	272	82.
1	0355	48	0.	*	1	1010	123	83.	*	1	1625	198	233.	*	1	2240	273	81.
1	0400	49	0.	*	1	1015	124	89.	*	1	1630	199	227.	*	1	2245	274	81.
1	0405	50	0.	*	1	1020	125	94.	*	1	1635	200	221.	*	1	2250	275	80.
1	0410	51	0.	*	1	1025	126	100.	*	1	1640	201	215.	*	1	2255	276	80.
1	0415	52	0.	*	1	1030	127	107.	*	1	1645	202	210.	*	1	2300	277	79.
1	0420	53	0.	*	1	1035	128	113.	*	1	1650	203	205.	*	1	2305	278	78.
1	0425	54	0.	*	1	1040	129	120.	*	1	1655	204	200.	*	1	2310	279	78.
1	0430	55	0.	*	1	1045	130	127.	*	1	1700	205	196.	*	1	2315	280	77.
1	0435	56	0.	*	1	1050	131	134.	*	1	1705	206	192.	*	1	2320	281	77.
1	0440	57	0.	*	1	1055	132	141.	*	1	1710	207	189.	*	1	2325	282	76.
1	0445	58	0.	*	1	1100	133	148.	*	1	1715	208	185.	*	1	2330	283	76.
1	0450	59	0.	*	1	1105	134	155.	*	1	1720	209	182.	*	1	2335	284	75.
1	0455	60	0.	*	1	1110	135	162.	*	1	1725	210	179.	*	1	2340	285	75.
1	0500	61	0.	*	1	1115	136	169.	*	1	1730	211	176.	*	1	2345	286	74.
1	0505	62	0.	*	1	1120	137	177.	*	1	1735	212	173.	*	1	2350	287	74.
1	0510	63	0.	*	1	1125	138	186.	*	1	1740	213	170.	*	1	2355	288	74.
1	0515	64	0.	*	1	1130	139	195.	*	1	1745	214	168.	*	2	0000	289	73.
1	0520	65	0.	*	1	1135	140	206.	*	1	1750	215	165.	*	2	0005	290	73.
1	0525	66	0.	*	1	1140	141	219.	*	1	1755	216	163.	*	2	0010	291	72.
1	0530	67	0.	*	1	1145	142	234.	*	1	1800	217	161.	*	2	0015	292	71.
1	0535	68	0.	*	1	1150	143	253.	*	1	1805	218	159.	*	2	0020	293	69.
1	0540	69	0.	*	1	1155	144	276.	*	1	1810	219	156.	*	2	0025	294	66.
1	0545	70	0.	*	1	1200	145	310.	*	1	1815	220	154.	*	2	0030	295	63.
1	0550	71	0.	*	1	1205	146	373.	*	1	1820	221	152.	*	2	0035	296	60.
1	0555	72	0.	*	1	1210	147	525.	*	1	1825	222	149.	*	2	0040	297	56.
1	0600	73	0.	*	1	1215	148	791.	*	1	1830	223	147.	*	2	0045	298	52.
1	0605	74	0.	*	1	1220	149	1128.	*	1	1835	224	144.	*	2	0050	299	48.
1	0610	75	0.	*	1	1225	150	1430.	*	1	1840	225	142.	*	2	0055	300	44.

PEAK FLOW (CFS)	TIME (HR)		6-HR	24-HR	72-HR	24.92-HR
2659.	13.08	(CFS)	856.	257.	247.	247.
		(INCHES)	2.289	2.746	2.746	2.746
		(AC-FT)	425.	509.	509.	509.

CUMULATIVE AREA = 3.48 SQ MI

* AREA 6 *

BASIN NO. 6 RUNOFF

SUBBASIN RUNOFF DATA

61 BA SUBBASIN CHARACTERISTICS
TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

8 PH	DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM											
	HYDRO-35			TP-40				TP-49				
	5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
	1.15	1.48	2.00	2.30	2.50	3.00	3.50	4.00	.00	.00	.00	.00

STORM AREA = .40

62 LS SCS LOSS RATE
SYRTL .35 INITIAL ABSTRACTION
CRVNBR 85.00 CURVE NUMBER

RTIMP .00 PERCENT IMPERVIOUS AREA

63 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH

20 END-OF-PERIOD ORDINATES

79. 256. 486. 567. 521. 407. 259. 173. 119. 79.
54. 36. 24. 16. 11. 7. 5. 4. 2. 1.

HYDROGRAPH AT STATION AREA 6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.04	.01	.03	522.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.03	.01	.03	386.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.03	.00	.02	294.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.03	.00	.02	230.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.02	180.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.02	.00	.02	145.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.02	.00	.02	119.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	99.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.02	85.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.01	74.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	66.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	60.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	55.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.02	50.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.01	47.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.01	46.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	45.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	45.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	45.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	44.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	43.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	42.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	41.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	40.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	39.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	38.
1		0210	27	.00	.00	.00	0.	*	1		1440	177	.01	.00	.01	37.
1		0215	28	.00	.00	.00	0.	*	1		1445	178	.01	.00	.01	36.
1		0220	29	.00	.00	.00	0.	*	1		1450	179	.01	.00	.01	35.
1		0225	30	.00	.00	.00	0.	*	1		1455	180	.01	.00	.01	34.
1		0230	31	.00	.00	.00	0.	*	1		1500	181	.01	.00	.01	33.
1		0235	32	.00	.00	.00	0.	*	1		1505	182	.01	.00	.01	32.
1		0240	33	.00	.00	.00	0.	*	1		1510	183	.01	.00	.01	31.
1		0245	34	.00	.00	.00	0.	*	1		1515	184	.01	.00	.01	30.
1		0250	35	.00	.00	.00	0.	*	1		1520	185	.01	.00	.01	28.
1		0255	36	.00	.00	.00	0.	*	1		1525	186	.01	.00	.01	27.
1		0300	37	.00	.00	.00	0.	*	1		1530	187	.01	.00	.01	26.
1		0305	38	.00	.00	.00	0.	*	1		1535	188	.01	.00	.01	25.
1		0310	39	.00	.00	.00	0.	*	1		1540	189	.01	.00	.01	24.
1		0315	40	.00	.00	.00	0.	*	1		1545	190	.01	.00	.01	24.
1		0320	41	.00	.00	.00	0.	*	1		1550	191	.01	.00	.01	23.
1		0325	42	.00	.00	.00	0.	*	1		1555	192	.01	.00	.01	23.
1		0330	43	.00	.00	.00	0.	*	1		1600	193	.01	.00	.01	22.
1		0335	44	.00	.00	.00	0.	*	1		1605	194	.01	.00	.01	22.
1		0340	45	.00	.00	.00	0.	*	1		1610	195	.01	.00	.01	21.
1		0345	46	.00	.00	.00	0.	*	1		1615	196	.01	.00	.01	21.
1		0350	47	.00	.00	.00	0.	*	1		1620	197	.01	.00	.01	21.
1		0355	48	.00	.00	.00	0.	*	1		1625	198	.01	.00	.01	20.
1		0400	49	.00	.00	.00	0.	*	1		1630	199	.01	.00	.01	20.
1		0405	50	.00	.00	.00	0.	*	1		1635	200	.01	.00	.01	20.
1		0410	51	.00	.00	.00	0.	*	1		1640	201	.01	.00	.01	19.
1		0415	52	.00	.00	.00	0.	*	1		1645	202	.01	.00	.01	19.
1		0420	53	.00	.00	.00	0.	*	1		1650	203	.01	.00	.01	19.
1		0425	54	.00	.00	.00	0.	*	1		1655	204	.01	.00	.01	18.
1		0430	55	.00	.00	.00	0.	*	1		1700	205	.01	.00	.01	18.

1	0435	56	.00	.00	.00	0.	*	1	1705	206	.01	.00	.01	18.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.01	.00	.01	18.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.01	.00	.01	18.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.01	.00	.01	17.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.01	.00	.01	17.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.01	.00	.01	17.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.01	.00	.01	17.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.01	.00	.01	16.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.01	.00	.00	16.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.01	.00	.00	16.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.01	.00	.00	16.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.01	.00	.00	16.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	15.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	15.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	15.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	14.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	14.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	13.
1	0605	74	.01	.01	.00	0.	*	1	1835	224	.00	.00	.00	13.
1	0610	75	.01	.01	.00	0.	*	1	1840	225	.00	.00	.00	13.
1	0615	76	.01	.01	.00	0.	*	1	1845	226	.00	.00	.00	12.
1	0620	77	.01	.01	.00	0.	*	1	1850	227	.00	.00	.00	12.
1	0625	78	.01	.01	.00	0.	*	1	1855	228	.00	.00	.00	12.
1	0630	79	.01	.01	.00	0.	*	1	1900	229	.00	.00	.00	12.
1	0635	80	.01	.01	.00	0.	*	1	1905	230	.00	.00	.00	12.
1	0640	81	.01	.01	.00	0.	*	1	1910	231	.00	.00	.00	12.
1	0645	82	.01	.01	.00	0.	*	1	1915	232	.00	.00	.00	12.
1	0650	83	.01	.01	.00	0.	*	1	1920	233	.00	.00	.00	12.
1	0655	84	.01	.01	.00	0.	*	1	1925	234	.00	.00	.00	11.
1	0700	85	.01	.01	.00	0.	*	1	1930	235	.00	.00	.00	11.
1	0705	86	.01	.01	.00	0.	*	1	1935	236	.00	.00	.00	11.
1	0710	87	.01	.01	.00	0.	*	1	1940	237	.00	.00	.00	11.
1	0715	88	.01	.01	.00	0.	*	1	1945	238	.00	.00	.00	11.
1	0720	89	.01	.01	.00	0.	*	1	1950	239	.00	.00	.00	11.
1	0725	90	.01	.01	.00	0.	*	1	1955	240	.00	.00	.00	11.
1	0730	91	.01	.01	.00	0.	*	1	2000	241	.00	.00	.00	11.
1	0735	92	.01	.01	.00	0.	*	1	2005	242	.00	.00	.00	11.
1	0740	93	.01	.01	.00	0.	*	1	2010	243	.00	.00	.00	11.
1	0745	94	.01	.01	.00	0.	*	1	2015	244	.00	.00	.00	10.
1	0750	95	.01	.01	.00	0.	*	1	2020	245	.00	.00	.00	10.
1	0755	96	.01	.01	.00	0.	*	1	2025	246	.00	.00	.00	10.
1	0800	97	.01	.01	.00	0.	*	1	2030	247	.00	.00	.00	10.
1	0805	98	.01	.01	.00	1.	*	1	2035	248	.00	.00	.00	10.
1	0810	99	.01	.01	.00	1.	*	1	2040	249	.00	.00	.00	10.
1	0815	100	.01	.01	.00	1.	*	1	2045	250	.00	.00	.00	10.
1	0820	101	.01	.01	.00	1.	*	1	2050	251	.00	.00	.00	10.
1	0825	102	.01	.01	.00	1.	*	1	2055	252	.00	.00	.00	10.
1	0830	103	.01	.01	.00	1.	*	1	2100	253	.00	.00	.00	10.
1	0835	104	.01	.01	.00	2.	*	1	2105	254	.00	.00	.00	10.
1	0840	105	.01	.01	.00	2.	*	1	2110	255	.00	.00	.00	10.
1	0845	106	.01	.01	.00	2.	*	1	2115	256	.00	.00	.00	9.
1	0850	107	.01	.01	.00	2.	*	1	2120	257	.00	.00	.00	9.
1	0855	108	.01	.01	.00	3.	*	1	2125	258	.00	.00	.00	9.
1	0900	109	.01	.01	.00	3.	*	1	2130	259	.00	.00	.00	9.
1	0905	110	.01	.01	.00	3.	*	1	2135	260	.00	.00	.00	9.
1	0910	111	.01	.01	.00	3.	*	1	2140	261	.00	.00	.00	9.
1	0915	112	.01	.01	.00	4.	*	1	2145	262	.00	.00	.00	9.
1	0920	113	.01	.01	.00	4.	*	1	2150	263	.00	.00	.00	9.
1	0925	114	.01	.01	.00	5.	*	1	2155	264	.00	.00	.00	9.
1	0930	115	.01	.01	.00	5.	*	1	2200	265	.00	.00	.00	9.
1	0935	116	.01	.01	.00	6.	*	1	2205	266	.00	.00	.00	9.
1	0940	117	.01	.01	.00	6.	*	1	2210	267	.00	.00	.00	9.
1	0945	118	.01	.01	.00	7.	*	1	2215	268	.00	.00	.00	9.
1	0950	119	.01	.01	.00	8.	*	1	2220	269	.00	.00	.00	9.
1	0955	120	.01	.01	.00	8.	*	1	2225	270	.00	.00	.00	9.
1	1000	121	.01	.01	.00	9.	*	1	2230	271	.00	.00	.00	9.
1	1005	122	.01	.01	.00	9.	*	1	2235	272	.00	.00	.00	8.
1	1010	123	.02	.01	.00	10.	*	1	2240	273	.00	.00	.00	8.
1	1015	124	.02	.01	.00	11.	*	1	2245	274	.00	.00	.00	8.
1	1020	125	.02	.01	.01	12.	*	1	2250	275	.00	.00	.00	8.
1	1025	126	.02	.01	.01	13.	*	1	2255	276	.00	.00	.00	8.
1	1030	127	.02	.01	.01	13.	*	1	2300	277	.00	.00	.00	8.
1	1035	128	.01	.01	.00	14.	*	1	2305	278	.00	.00	.00	8.
1	1040	129	.02	.01	.01	15.	*	1	2310	279	.00	.00	.00	8.
1	1045	130	.02	.01	.01	16.	*	1	2315	280	.00	.00	.00	8.

1	1050	131	.02	.01	.01	16.	*	1	2320	281	.00	.00	.00	8.
1	1055	132	.02	.01	.01	16.	*	1	2325	282	.00	.00	.00	8.
1	1100	133	.02	.01	.01	17.	*	1	2330	283	.00	.00	.00	8.
1	1105	134	.02	.01	.01	18.	*	1	2335	284	.00	.00	.00	8.
1	1110	135	.02	.01	.01	19.	*	1	2340	285	.00	.00	.00	8.
1	1115	136	.02	.01	.01	21.	*	1	2345	286	.00	.00	.00	8.
1	1120	137	.02	.01	.01	23.	*	1	2350	287	.00	.00	.00	8.
1	1125	138	.03	.02	.01	25.	*	1	2355	288	.00	.00	.00	8.
1	1130	139	.03	.02	.01	27.	*	2	0000	289	.00	.00	.00	8.
1	1135	140	.04	.02	.02	31.	*	2	0005	290	.00	.00	.00	7.
1	1140	141	.04	.02	.02	35.	*	2	0010	291	.00	.00	.00	7.
1	1145	142	.05	.02	.03	40.	*	2	0015	292	.00	.00	.00	6.
1	1150	143	.07	.03	.04	48.	*	2	0020	293	.00	.00	.00	4.
1	1155	144	.10	.04	.06	60.	*	2	0025	294	.00	.00	.00	3.
1	1200	145	.19	.08	.12	82.	*	2	0030	295	.00	.00	.00	2.
1	1205	146	1.15	.30	.84	177.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.13	.02	.11	355.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.08	.01	.07	568.	*	2	0045	298	.00	.00	.00	1.
1	1220	149	.06	.01	.05	655.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.05	.01	.04	624.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 4.00, TOTAL LOSS = 1.54, TOTAL EXCESS = 2.46

EAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		(CFS)	6-HR	24-HR	72-HR	24.92-HR
		655.	89.	26.	26.	26.
		(INCHES)	2.066	2.456	2.456	2.456
		(AC-FT)	44.	53.	53.	53.

CUMULATIVE AREA = .40 SQ MI

64 KK

* OUTLT6 *

COMBINE ROUTE 5 AND BASIN 6 TO OUTLET 6

66 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT6
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0615	76	0.	*	1	1230	151	2208.	*	1	1845	226	152.
1	0005	2	0.	*	1	0620	77	0.	*	1	1235	152	2299.	*	1	1850	227	149.
1	0010	3	0.	*	1	0625	78	0.	*	1	1240	153	2415.	*	1	1855	228	146.
1	0015	4	0.	*	1	0630	79	0.	*	1	1245	154	2553.	*	1	1900	229	143.
1	0020	5	0.	*	1	0635	80	0.	*	1	1250	155	2668.	*	1	1905	230	140.
1	0025	6	0.	*	1	0640	81	0.	*	1	1255	156	2739.	*	1	1910	231	138.
1	0030	7	0.	*	1	0645	82	0.	*	1	1300	157	2767.	*	1	1915	232	135.
1	0035	8	0.	*	1	0650	83	1.	*	1	1305	158	2758.	*	1	1920	233	133.
1	0040	9	0.	*	1	0655	84	1.	*	1	1310	159	2719.	*	1	1925	234	131.
1	0045	10	0.	*	1	0700	85	1.	*	1	1315	160	2652.	*	1	1930	235	128.
1	0050	11	0.	*	1	0705	86	2.	*	1	1320	161	2554.	*	1	1935	236	126.
1	0055	12	0.	*	1	0710	87	2.	*	1	1325	162	2427.	*	1	1940	237	124.
1	0100	13	0.	*	1	0715	88	3.	*	1	1330	163	2271.	*	1	1945	238	123.
1	0105	14	0.	*	1	0720	89	3.	*	1	1335	164	2092.	*	1	1950	239	121.
1	0110	15	0.	*	1	0725	90	4.	*	1	1340	165	1900.	*	1	1955	240	119.

1	0115	16	0.	*	1	0730	91	5.	*	1	1345	166	1709.	*	1	2000	241	118.
1	0120	17	0.	*	1	0735	92	6.	*	1	1350	167	1527.	*	1	2005	242	116.
1	0125	18	0.	*	1	0740	93	7.	*	1	1355	168	1361.	*	1	2010	243	115.
1	0130	19	0.	*	1	0745	94	8.	*	1	1400	169	1211.	*	1	2015	244	114.
1	0135	20	0.	*	1	0750	95	9.	*	1	1405	170	1079.	*	1	2020	245	113.
1	0140	21	0.	*	1	0755	96	11.	*	1	1410	171	966.	*	1	2025	246	112.
1	0145	22	0.	*	1	0800	97	12.	*	1	1415	172	869.	*	1	2030	247	110.
1	0150	23	0.	*	1	0805	98	14.	*	1	1420	173	787.	*	1	2035	248	109.
1	0155	24	0.	*	1	0810	99	15.	*	1	1425	174	718.	*	1	2040	249	108.
1	0200	25	0.	*	1	0815	100	17.	*	1	1430	175	660.	*	1	2045	250	107.
1	0205	26	0.	*	1	0820	101	19.	*	1	1435	176	612.	*	1	2050	251	106.
1	0210	27	0.	*	1	0825	102	21.	*	1	1440	177	571.	*	1	2055	252	105.
1	0215	28	0.	*	1	0830	103	23.	*	1	1445	178	537.	*	1	2100	253	105.
1	0220	29	0.	*	1	0835	104	25.	*	1	1450	179	508.	*	1	2105	254	104.
1	0225	30	0.	*	1	0840	105	27.	*	1	1455	180	483.	*	1	2110	255	103.
1	0230	31	0.	*	1	0845	106	29.	*	1	1500	181	461.	*	1	2115	256	102.
1	0235	32	0.	*	1	0850	107	31.	*	1	1505	182	442.	*	1	2120	257	101.
1	0240	33	0.	*	1	0855	108	34.	*	1	1510	183	425.	*	1	2125	258	100.
1	0245	34	0.	*	1	0900	109	36.	*	1	1515	184	408.	*	1	2130	259	99.
1	0250	35	0.	*	1	0905	110	38.	*	1	1520	185	393.	*	1	2135	260	99.
1	0255	36	0.	*	1	0910	111	41.	*	1	1525	186	378.	*	1	2140	261	98.
1	0300	37	0.	*	1	0915	112	44.	*	1	1530	187	364.	*	1	2145	262	97.
1	0305	38	0.	*	1	0920	113	47.	*	1	1535	188	351.	*	1	2150	263	96.
1	0310	39	0.	*	1	0925	114	51.	*	1	1540	189	338.	*	1	2155	264	96.
1	0315	40	0.	*	1	0930	115	54.	*	1	1545	190	327.	*	1	2200	265	95.
1	0320	41	0.	*	1	0935	116	58.	*	1	1550	191	316.	*	1	2205	266	94.
1	0325	42	0.	*	1	0940	117	62.	*	1	1555	192	305.	*	1	2210	267	94.
1	0330	43	0.	*	1	0945	118	67.	*	1	1600	193	295.	*	1	2215	268	93.
1	0335	44	0.	*	1	0950	119	71.	*	1	1605	194	286.	*	1	2220	269	92.
1	0340	45	0.	*	1	0955	120	76.	*	1	1610	195	277.	*	1	2225	270	92.
1	0345	46	0.	*	1	1000	121	82.	*	1	1615	196	269.	*	1	2230	271	91.
1	0350	47	0.	*	1	1005	122	87.	*	1	1620	197	261.	*	1	2235	272	90.
1	0355	48	0.	*	1	1010	123	93.	*	1	1625	198	254.	*	1	2240	273	90.
1	0400	49	0.	*	1	1015	124	100.	*	1	1630	199	247.	*	1	2245	274	89.
1	0405	50	0.	*	1	1020	125	106.	*	1	1635	200	240.	*	1	2250	275	88.
1	0410	51	0.	*	1	1025	126	113.	*	1	1640	201	234.	*	1	2255	276	88.
1	0415	52	0.	*	1	1030	127	120.	*	1	1645	202	229.	*	1	2300	277	87.
1	0420	53	0.	*	1	1035	128	128.	*	1	1650	203	224.	*	1	2305	278	87.
1	0425	54	0.	*	1	1040	129	135.	*	1	1655	204	219.	*	1	2310	279	86.
1	0430	55	0.	*	1	1045	130	143.	*	1	1700	205	214.	*	1	2315	280	85.
1	0435	56	0.	*	1	1050	131	150.	*	1	1705	206	210.	*	1	2320	281	85.
1	0440	57	0.	*	1	1055	132	157.	*	1	1710	207	206.	*	1	2325	282	84.
1	0445	58	0.	*	1	1100	133	165.	*	1	1715	208	203.	*	1	2330	283	84.
1	0450	59	0.	*	1	1105	134	173.	*	1	1720	209	199.	*	1	2335	284	83.
1	0455	60	0.	*	1	1110	135	181.	*	1	1725	210	196.	*	1	2340	285	83.
1	0500	61	0.	*	1	1115	136	190.	*	1	1730	211	193.	*	1	2345	286	82.
1	0505	62	0.	*	1	1120	137	200.	*	1	1735	212	190.	*	1	2350	287	82.
1	0510	63	0.	*	1	1125	138	211.	*	1	1740	213	187.	*	1	2355	288	81.
1	0515	64	0.	*	1	1130	139	223.	*	1	1745	214	184.	*	2	0000	289	81.
1	0520	65	0.	*	1	1135	140	237.	*	1	1750	215	182.	*	2	0005	290	80.
1	0525	66	0.	*	1	1140	141	254.	*	1	1755	216	179.	*	2	0010	291	79.
1	0530	67	0.	*	1	1145	142	274.	*	1	1800	217	177.	*	2	0015	292	76.
1	0535	68	0.	*	1	1150	143	300.	*	1	1805	218	174.	*	2	0020	293	73.
1	0540	69	0.	*	1	1155	144	336.	*	1	1810	219	172.	*	2	0025	294	69.
1	0545	70	0.	*	1	1200	145	392.	*	1	1815	220	169.	*	2	0030	295	65.
1	0550	71	0.	*	1	1205	146	550.	*	1	1820	221	166.	*	2	0035	296	61.
1	0555	72	0.	*	1	1210	147	880.	*	1	1825	222	163.	*	2	0040	297	57.
1	0600	73	0.	*	1	1215	148	1359.	*	1	1830	223	160.	*	2	0045	298	53.
1	0605	74	0.	*	1	1220	149	1783.	*	1	1835	224	157.	*	2	0050	299	49.
1	0610	75	0.	*	1	1225	150	2054.	*	1	1840	225	154.	*	2	0055	300	44.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
2767.	13.00	6-HR	24-HR	72-HR	24.92-HR
		945.	283.	273.	273.
		(INCHES) 2.266	2.716	2.716	2.716
		(AC-FT) 469.	562.	562.	562.

CUMULATIVE AREA = 3.88 SQ MI

RUNOFF SUMMARY
 FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW 6-HOUR	FLOW FOR 24-HOUR	PERIOD FOR 72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	AREA 1	1723.	12.58	363.	109.	105.	1.45		
ROUTED TO	ROUTE1	1696.	12.83	363.	109.	105.	1.45		
HYDROGRAPH AT	AREA 2	1124.	12.33	152.	46.	44.	.60		
2 COMBINED AT	OUTLT2	2067.	12.75	515.	155.	149.	2.05		
ROUTED TO	ROUTE2	2067.	12.75	515.	155.	149.	2.05		
HYDROGRAPH AT	AREA 3	428.	12.33	60.	18.	17.	.24		
2 COMBINED AT	OUTLT3	2227.	12.75	575.	173.	167.	2.29		
ROUTED TO	ROUTE3	2215.	12.83	575.	173.	167.	2.29		
HYDROGRAPH AT	AREA 4	1126.	12.33	151.	45.	44.	.60		
2 COMBINED AT	OUTLT4	2763.	12.50	726.	219.	211.	2.89		
ROUTED TO	ROUTE4	2502.	13.00	726.	218.	210.	2.89		
HYDROGRAPH AT	AREA 5	967.	12.33	131.	39.	37.	.59		
2 COMBINED AT	OUTLT5	2680.	12.92	856.	257.	247.	3.48		
ROUTED TO	ROUTE5	2659.	13.08	856.	257.	247.	3.48		
HYDROGRAPH AT	AREA 6	655.	12.33	89.	26.	26.	.40		
2 COMBINED AT	OUTLT6	2767.	13.00	945.	283.	273.	3.88		

*** NORMAL END OF HEC-1 ***

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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1) *
SEPTEMBER 1990 *
VERSION 4.0 *
RUN DATE 08/27/1993 TIME 09:18:07 *
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*****
U.S. ARMY CORPS OF ENGINEERS *
HYDROLOGIC ENGINEERING CENTER *
609 SECOND STREET *
DAVIS, CALIFORNIA 95616 *
(916) 756-1104 *
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X   X  XXXXXXXX  XXXXX      X
X   X  X        X   X      XX
X   X  X        X           X
XXXXXXX XXXX   X           XXXXX X
X   X  X        X           X
X   X  X        X   X      X
X   X  XXXXXXXX  XXXXX      XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	CHURCH ROCK, NEW MEXICO									15608-01
2	ID	100-YEAR, 6-HOUR DURATION STORM BALANCED STORM DISTRIBUTION AMC=II									
3	ID	FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE									
4	IT	5	150								
5	IO	0									
6	KK	AREA 1									
7	KM	BASIN NO. 1 RUNOFF									
8	PH	1	0	1.15	1.48	2	2.3	2.5	3		
9	BA	1.447									
10	LS	0	89								
11	UD	0.552									
12	KK	ROUTE1									
13	KM	ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET									
14	RM	2	0.19	0.4							
15	KK	AREA 2									
16	KM	BASIN NO. 2 RUNOFF									
17	BA	0.604									
18	LS	0	89								
19	UD	0.3									
20	KK	OUTLT2									
21	KM	COMBINE ROUTE 1 AND BASIN TO OUTLET 2									
22	HC	2									
23	KK	ROUTE2									
24	KM	ROUTE OUTLET 2 TO BASIN 3 OUTLET									
25	RM	1	0.064	0.4							
26	KK	AREA 3									
27	KM	BASIN NO. 3 RUNOFF									
28	BA	0.238									
29	LS	0	89								
30	UD	0.313									
31	KK	OUTLT3									
32	KM	COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3									
33	HC	2									
34	KK	ROUTE3									
35	KM	ROUTE OUTLET 3 TO BASIN 4 OUTLET									
36	RM	1	0.125	0.3							
37	KK	AREA 4									
38	KM	BASIN NO. 4 RUNOFF									
39	BA	0.6									
40	LS	0	89								
41	UD	0.297									


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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1)
SEPTEMBER 1990
VERSION 4.0
RUN DATE 08/27/1993 TIME 09:18:07
*****

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*****
U.S. ARMY CORPS OF ENGINEERS
HYDROLOGIC ENGINEERING CENTER
609 SECOND STREET
DAVIS, CALIFORNIA 95616
(916) 756-1104
*****

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CHURCH ROCK, NEW MEXICO 15608-01
 100-YEAR, 6-HOUR DURATION STORM BALANCED STORM DISTRIBUTION AMC-II
 FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANINIUM MINE

5 IO OUTPUT CONTROL VARIABLES
 IPRNT 0 PRINT CONTROL
 IPLOT 0 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA
 NMIN 5 MINUTES IN COMPUTATION INTERVAL
 IDATE 1 0 STARTING DATE
 ITIME 0000 STARTING TIME
 NQ 150 NUMBER OF HYDROGRAPH ORDINATES
 NDDATE 1 0 ENDING DATE
 NDTIME 1225 ENDING TIME
 ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
 TOTAL TIME BASE 12.42 HOURS

ENGLISH UNITS
 DRAINAGE AREA SQUARE MILES
 PRECIPITATION DEPTH INCHES
 LENGTH, ELEVATION FEET
 FLOW CUBIC FEET PER SECOND
 STORAGE VOLUME ACRE-Feet
 SURFACE AREA ACRES
 TEMPERATURE DEGREES FAHRENHEIT

6 KK *****
 * AREA 1 *

BASIN NO. 1 RUNOFF

SUBBASIN RUNOFF DATA

9 BA SUBBASIN CHARACTERISTICS
 TAREA 1.45 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
 HYDRO-35 TP-40 TP-49
 5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 2.50 3.00 .00 .00 .00 .00 .00 .00

STORM AREA = 1.45

10 LS SCS LOSS RATE
 STRTL .25 INITIAL ABSTRACTION
 CRVNR 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

UNIT HYDROGRAPH
35 END-OF-PERIOD ORDINATES

69.	203.	405.	691.	968.	1125.	1175.	1149.	1043.	914.
738.	560.	442.	350.	284.	227.	178.	143.	114.	90.
72.	57.	45.	36.	29.	23.	18.	15.	12.	10.
8.	6.	4.	3.	1.					

HYDROGRAPH AT STATION AREA 1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0615	76	.00	.00	.00	122.
1		0005	2	.01	.01	.00	0.	*	1		0620	77	.00	.00	.00	112.
1		0010	3	.01	.01	.00	0.	*	1		0625	78	.00	.00	.00	100.
1		0015	4	.01	.01	.00	0.	*	1		0630	79	.00	.00	.00	86.
1		0020	5	.01	.01	.00	0.	*	1		0635	80	.00	.00	.00	73.
1		0025	6	.01	.01	.00	0.	*	1		0640	81	.00	.00	.00	60.
1		0030	7	.01	.01	.00	0.	*	1		0645	82	.00	.00	.00	48.
1		0035	8	.01	.01	.00	0.	*	1		0650	83	.00	.00	.00	38.
1		0040	9	.01	.01	.00	0.	*	1		0655	84	.00	.00	.00	30.
1		0045	10	.01	.01	.00	0.	*	1		0700	85	.00	.00	.00	24.
1		0050	11	.01	.01	.00	0.	*	1		0705	86	.00	.00	.00	19.
1		0055	12	.01	.01	.00	0.	*	1		0710	87	.00	.00	.00	15.
1		0100	13	.01	.01	.00	0.	*	1		0715	88	.00	.00	.00	12.
1		0105	14	.01	.01	.00	0.	*	1		0720	89	.00	.00	.00	9.
1		0110	15	.02	.02	.00	0.	*	1		0725	90	.00	.00	.00	8.
1		0115	16	.02	.02	.00	0.	*	1		0730	91	.00	.00	.00	6.
1		0120	17	.02	.02	.00	0.	*	1		0735	92	.00	.00	.00	5.
1		0125	18	.02	.02	.00	0.	*	1		0740	93	.00	.00	.00	4.
1		0130	19	.02	.02	.00	0.	*	1		0745	94	.00	.00	.00	3.
1		0135	20	.01	.01	.00	0.	*	1		0750	95	.00	.00	.00	2.
1		0140	21	.02	.01	.00	0.	*	1		0755	96	.00	.00	.00	2.
1		0145	22	.02	.12	.00	0.	*	1		0800	97	.00	.00	.00	1.
1		0150	23	.02	.02	.00	1.	*	1		0805	98	.00	.00	.00	1.
1		0155	24	.02	.02	.00	1.	*	1		0810	99	.00	.00	.00	1.
1		0200	25	.02	.02	.00	3.	*	1		0815	100	.00	.00	.00	1.
1		0205	26	.02	.02	.00	4.	*	1		0820	101	.00	.00	.00	0.
1		0210	27	.02	.02	.00	7.	*	1		0825	102	.00	.00	.00	0.
1		0215	28	.02	.02	.00	10.	*	1		0830	103	.00	.00	.00	0.
1		0220	29	.03	.02	.01	13.	*	1		0835	104	.00	.00	.00	0.
1		0225	30	.03	.02	.01	18.	*	1		0840	105	.00	.00	.00	0.
1		0230	31	.03	.02	.01	23.	*	1		0845	106	.00	.00	.00	0.
1		0235	32	.04	.02	.01	30.	*	1		0850	107	.00	.00	.00	0.
1		0240	33	.04	.03	.01	38.	*	1		0855	108	.00	.00	.00	0.
1		0245	34	.05	.03	.02	47.	*	1		0900	109	.00	.00	.00	0.
1		0250	35	.07	.04	.03	60.	*	1		0905	110	.00	.00	.00	0.
1		0255	36	.10	.05	.05	78.	*	1		0910	111	.00	.00	.00	0.
1		0300	37	.19	.08	.11	107.	*	1		0915	112	.00	.00	.00	0.
1		0305	38	1.14	.28	.86	204.	*	1		0920	113	.00	.00	.00	0.
1		0310	39	.13	.02	.11	370.	*	1		0925	114	.00	.00	.00	0.
1		0315	40	.08	.01	.07	606.	*	1		0930	115	.00	.00	.00	0.
1		0320	41	.06	.01	.05	918.	*	1		0935	116	.00	.00	.00	0.
1		0325	42	.05	.01	.04	1219.	*	1		0940	117	.00	.00	.00	0.
1		0330	43	.04	.00	.03	1414.	*	1		0945	118	.00	.00	.00	0.
1		0335	44	.03	.00	.03	1501.	*	1		0950	119	.00	.00	.00	0.
1		0340	45	.03	.00	.03	1501.	*	1		0955	120	.00	.00	.00	0.
1		0345	46	.03	.00	.02	1415.	*	1		1000	121	.00	.00	.00	0.
1		0350	47	.02	.00	.02	1291.	*	1		1005	122	.00	.00	.00	0.
1		0355	48	.02	.00	.02	1117.	*	1		1010	123	.00	.00	.00	0.
1		0400	49	.02	.00	.02	935.	*	1		1015	124	.00	.00	.00	0.
1		0405	50	.02	.00	.02	798.	*	1		1020	125	.00	.00	.00	0.
1		0410	51	.02	.00	.02	686.	*	1		1025	126	.00	.00	.00	0.
1		0415	52	.02	.00	.02	598.	*	1		1030	127	.00	.00	.00	0.
1		0420	53	.02	.00	.01	520.	*	1		1035	128	.00	.00	.00	0.
1		0425	54	.02	.00	.01	453.	*	1		1040	129	.00	.00	.00	0.
1		0430	55	.01	.00	.01	400.	*	1		1045	130	.00	.00	.00	0.

1	0435	56	.02	.00	.02	355.	*	1	1050	131	.00	.00	.00	0.
1	0440	57	.02	.00	.02	317.	*	1	1055	132	.00	.00	.00	0.
1	0445	58	.02	.00	.01	286.	*	1	1100	133	.00	.00	.00	0.
1	0450	59	.02	.00	.01	262.	*	1	1105	134	.00	.00	.00	0.
1	0455	60	.02	.00	.01	242.	*	1	1110	135	.00	.00	.00	0.
1	0500	61	.02	.00	.01	227.	*	1	1115	136	.00	.00	.00	0.
1	0505	62	.01	.00	.01	214.	*	1	1120	137	.00	.00	.00	0.
1	0510	63	.01	.00	.01	203.	*	1	1125	138	.00	.00	.00	0.
1	0515	64	.01	.00	.01	194.	*	1	1130	139	.00	.00	.00	0.
1	0520	65	.01	.00	.01	186.	*	1	1135	140	.00	.00	.00	0.
1	0525	66	.01	.00	.01	179.	*	1	1140	141	.00	.00	.00	0.
1	0530	67	.01	.00	.01	173.	*	1	1145	142	.00	.00	.00	0.
1	0535	68	.01	.00	.01	166.	*	1	1150	143	.00	.00	.00	0.
1	0540	69	.01	.00	.01	160.	*	1	1155	144	.00	.00	.00	0.
1	0545	70	.01	.00	.01	154.	*	1	1200	145	.00	.00	.00	0.
1	0550	71	.01	.00	.01	149.	*	1	1205	146	.00	.00	.00	0.
1	0555	72	.01	.00	.01	143.	*	1	1210	147	.00	.00	.00	0.
1	0600	73	.01	.00	.01	138.	*	1	1215	148	.00	.00	.00	0.
1	0605	74	.00	.00	.00	134.	*	1	1220	149	.00	.00	.00	0.
1	0610	75	.00	.00	.00	129.	*	1	1225	150	.00	.00	.00	0.

TOTAL RAINFALL = 2.99, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.89

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	12.42-HR
1501.	3.67	294.	142.	142.	142.
		(INCHES)	1.889	1.890	1.890
		(AC-FT)	146.	146.	146.

CUMULATIVE AREA = 1.45 SQ MI

12 KK

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*****
* ROUTE1 *
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ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET

HYDROGRAPH ROUTING DATA

14 RM

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MUSKINGUM ROUTING
NSTPS      2 NUMBER OF SUBREACHES
AMSKK      .19 MUSK. VOLUM K
X          .40 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE1

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0310	39	105.	1		0620	77	130.	1		0930	115	0.
1		0005	2	0.	1		0315	40	186.	1		0625	78	123.	1		0935	116	0.
1		0010	3	0.	1		0320	41	334.	1		0630	79	114.	1		0940	117	0.
1		0015	4	0.	1		0325	42	551.	1		0635	80	103.	1		0945	118	0.
1		0020	5	0.	1		0330	43	837.	1		0640	81	90.	1		0950	119	0.
1		0025	6	0.	1		0335	44	1129.	1		0645	82	77.	1		0955	120	0.
1		0030	7	0.	1		0340	45	1344.	1		0650	83	64.	1		1000	121	0.
1		0035	8	0.	1		0345	46	1461.	1		0655	84	52.	1		1005	122	0.
1		0040	9	0.	1		0350	47	1487.	1		0700	85	41.	1		1010	123	0.
1		0045	10	0.	1		0355	48	1429.	1		0705	86	33.	1		1015	124	0.
1		0050	11	0.	1		0400	49	1318.	1		0710	87	26.	1		1020	125	0.
1		0055	12	0.	1		0405	50	1161.	1		0715	88	21.	1		1025	126	0.

1	0100	13	0.	*	1	0410	51	987.	*	1	0720	89	16.	*	1	1030	127	0.
1	0105	14	0.	*	1	0415	52	841.	*	1	0725	90	13.	*	1	1035	128	0.
1	0110	15	0.	*	1	0420	53	721.	*	1	0730	91	10.	*	1	1040	129	0.
1	0115	16	0.	*	1	0425	54	625.	*	1	0735	92	8.	*	1	1045	130	0.
1	0120	17	0.	*	1	0430	55	544.	*	1	0740	93	6.	*	1	1050	131	0.
1	0125	18	0.	*	1	0435	56	474.	*	1	0745	94	5.	*	1	1055	132	0.
1	0130	19	0.	*	1	0440	57	417.	*	1	0750	95	4.	*	1	1100	133	0.
1	0135	20	0.	*	1	0445	58	369.	*	1	0755	96	3.	*	1	1105	134	0.
1	0140	21	0.	*	1	0450	59	329.	*	1	0800	97	2.	*	1	1110	135	0.
1	0145	22	0.	*	1	0455	60	296.	*	1	0805	98	2.	*	1	1115	136	0.
1	0150	23	0.	*	1	0500	61	269.	*	1	0810	99	2.	*	1	1120	137	0.
1	0155	24	0.	*	1	0505	62	248.	*	1	0815	100	1.	*	1	1125	138	0.
1	0200	25	1.	*	1	0510	63	231.	*	1	0820	101	1.	*	1	1130	139	0.
1	0205	26	1.	*	1	0515	64	218.	*	1	0825	102	1.	*	1	1135	140	0.
1	0210	27	2.	*	1	0520	65	206.	*	1	0830	103	1.	*	1	1140	141	0.
1	0215	28	4.	*	1	0525	66	197.	*	1	0835	104	0.	*	1	1145	142	0.
1	0220	29	6.	*	1	0530	67	188.	*	1	0840	105	0.	*	1	1150	143	0.
1	0225	30	9.	*	1	0535	68	181.	*	1	0845	106	0.	*	1	1155	144	0.
1	0230	31	12.	*	1	0540	69	175.	*	1	0850	107	0.	*	1	1200	145	0.
1	0235	32	17.	*	1	0545	70	168.	*	1	0855	108	0.	*	1	1205	146	0.
1	0240	33	22.	*	1	0550	71	162.	*	1	0900	109	0.	*	1	1210	147	0.
1	0245	34	28.	*	1	0555	72	156.	*	1	0905	110	0.	*	1	1215	148	0.
1	0250	35	36.	*	1	0600	73	150.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	45.	*	1	0605	74	145.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	57.	*	1	0610	75	140.	*	1	0920	113	0.	*				
1	0305	38	75.	*	1	0615	76	135.	*	1	0925	114	0.	*				

PEAK FLOW (CFS)	TIME (HR)	6-HR	24-HR	72-HR	12.42-HR
1487.	3.83	294.	142.	142.	142.
(INCHES)		1.889	1.890	1.890	1.890
(AC-FT)		146.	146.	146.	146.

CUMULATIVE AREA = 1.45 SQ MI

 * AREA 2 *

 BASIN NO. 2 RUNOFF

SUBBASIN RUNOFF DATA

1 BA SUBBASIN CHARACTERISTICS
 TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	2.50	3.00	.00	.00	.00	.00	.00	.00

STORM AREA = .60

18 LS SCS LOSS RATE
 STRL .25 INITIAL ABSTRACTION
 CRVNB 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

19 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH

20 END-OF-PERIOD ORDINATES

119. 386. 732. 854. 784. 613. 389. 261. 179. 119.
81. 54. 36. 24. 16. 11. 8. 5. 3. 1.

HYDROGRAPH AT STATION AREA 2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0615	76	.00	.00	.00	36.
1		0005	2	.01	.01	.00	0.	*	1		0620	77	.00	.00	.00	27.
1		0010	3	.01	.01	.00	0.	*	1		0625	78	.00	.00	.00	19.
1		0015	4	.01	.01	.00	0.	*	1		0630	79	.00	.00	.00	13.
1		0020	5	.01	.01	.00	0.	*	1		0635	80	.00	.00	.00	8.
1		0025	6	.01	.01	.00	0.	*	1		0640	81	.00	.00	.00	6.
1		0030	7	.01	.01	.00	0.	*	1		0645	82	.00	.00	.00	4.
1		0035	8	.01	.01	.00	0.	*	1		0650	83	.00	.00	.00	3.
1		0040	9	.01	.01	.00	0.	*	1		0655	84	.00	.00	.00	2.
1		0045	10	.01	.01	.00	0.	*	1		0700	85	.00	.00	.00	1.
1		0050	11	.01	.01	.00	0.	*	1		0705	86	.00	.00	.00	1.
1		0055	12	.01	.01	.00	0.	*	1		0710	87	.00	.00	.00	0.
1		0100	13	.01	.01	.00	0.	*	1		0715	88	.00	.00	.00	0.
1		0105	14	.01	.01	.00	0.	*	1		0720	89	.00	.00	.00	0.
1		0110	15	.02	.02	.00	0.	*	1		0725	90	.00	.00	.00	0.
1		0115	16	.02	.02	.00	0.	*	1		0730	91	.00	.00	.00	0.
1		0120	17	.02	.02	.00	0.	*	1		0735	92	.00	.00	.00	0.
1		0125	18	.02	.02	.00	0.	*	1		0740	93	.00	.00	.00	0.
1		0130	19	.02	.02	.00	0.	*	1		0745	94	.00	.00	.00	0.
1		0135	20	.01	.01	.00	0.	*	1		0750	95	.00	.00	.00	0.
1		0140	21	.02	.01	.00	0.	*	1		0755	96	.00	.00	.00	0.
1		0145	22	.02	.01	.00	0.	*	1		0800	97	.00	.00	.00	0.
1		0150	23	.02	.02	.00	1.	*	1		0805	98	.00	.00	.00	0.
1		0155	24	.02	.02	.00	2.	*	1		0810	99	.00	.00	.00	0.
1		0200	25	.02	.02	.00	3.	*	1		0815	100	.00	.00	.00	0.
1		0205	26	.02	.02	.00	5.	*	1		0820	101	.00	.00	.00	0.
1		0210	27	.02	.02	.00	7.	*	1		0825	102	.00	.00	.00	0.
1		0215	28	.02	.02	.00	9.	*	1		0830	103	.00	.00	.00	0.
1		0220	29	.02	.02	.01	12.	*	1		0835	104	.00	.00	.00	0.
1		0225	30	.03	.02	.01	15.	*	1		0840	105	.00	.00	.00	0.
1		0230	31	.03	.02	.01	19.	*	1		0845	106	.00	.00	.00	0.
1		0235	32	.04	.02	.01	24.	*	1		0850	107	.00	.00	.00	0.
1		0240	33	.04	.03	.01	29.	*	1		0855	108	.00	.00	.00	0.
1		0245	34	.05	.03	.02	37.	*	1		0900	109	.00	.00	.00	0.
1		0250	35	.07	.04	.03	48.	*	1		0905	110	.00	.00	.00	0.
1		0255	36	.10	.05	.05	65.	*	1		0910	111	.00	.00	.00	0.
1		0300	37	.19	.08	.11	97.	*	1		0915	112	.00	.00	.00	0.
1		0305	38	1.15	.28	.86	241.	*	1		0920	113	.00	.00	.00	0.
1		0310	39	.13	.02	.11	516.	*	1		0925	114	.00	.00	.00	0.
1		0315	40	.08	.01	.07	850.	*	1		0930	115	.00	.00	.00	0.
1		0320	41	.06	.01	.05	991.	*	1		0935	116	.00	.00	.00	0.
1		0325	42	.05	.01	.04	950.	*	1		0940	117	.00	.00	.00	0.
1		0330	43	.04	.00	.03	799.	*	1		0945	118	.00	.00	.00	0.
1		0335	44	.03	.00	.03	592.	*	1		0950	119	.00	.00	.00	0.
1		0340	45	.03	.00	.03	453.	*	1		0955	120	.00	.00	.00	0.
1		0345	46	.03	.00	.02	354.	*	1		1000	121	.00	.00	.00	0.
1		0350	47	.02	.00	.02	279.	*	1		1005	122	.00	.00	.00	0.
1		0355	48	.02	.00	.02	225.	*	1		1010	123	.00	.00	.00	0.
1		0400	49	.02	.00	.02	184.	*	1		1015	124	.00	.00	.00	0.
1		0405	50	.02	.00	.02	154.	*	1		1020	125	.00	.00	.00	0.
1		0410	51	.02	.00	.02	132.	*	1		1025	126	.00	.00	.00	0.
1		0415	52	.02	.00	.02	116.	*	1		1030	127	.00	.00	.00	0.
1		0420	53	.02	.00	.01	103.	*	1		1035	128	.00	.00	.00	0.
1		0425	54	.02	.00	.01	94.	*	1		1040	129	.00	.00	.00	0.
1		0430	55	.01	.00	.01	86.	*	1		1045	130	.00	.00	.00	0.
1		0435	56	.02	.00	.02	79.	*	1		1050	131	.00	.00	.00	0.
1		0440	57	.02	.00	.02	74.	*	1		1055	132	.00	.00	.00	0.
1		0445	58	.02	.00	.01	72.	*	1		1100	133	.00	.00	.00	0.
1		0450	59	.02	.00	.01	71.	*	1		1105	134	.00	.00	.00	0.
1		0455	60	.02	.00	.01	71.	*	1		1110	135	.00	.00	.00	0.
1		0500	61	.02	.00	.01	70.	*	1		1115	136	.00	.00	.00	0.
1		0505	62	.01	.00	.01	69.	*	1		1120	137	.00	.00	.00	0.
1		0510	63	.01	.00	.01	67.	*	1		1125	138	.00	.00	.00	0.

1	0515	64	.01	.00	.01	65.	*	1	1130	139	.00	.00	.00	0.
1	0520	65	.01	.00	.01	64.	*	1	1135	140	.00	.00	.00	0.
1	0525	66	.01	.00	.01	62.	*	1	1140	141	.00	.00	.00	0.
1	0530	67	.01	.00	.01	60.	*	1	1145	142	.00	.00	.00	0.
1	0535	68	.01	.00	.01	59.	*	1	1150	143	.00	.00	.00	0.
1	0540	69	.01	.00	.01	57.	*	1	1155	144	.00	.00	.00	0.
1	0545	70	.01	.00	.01	56.	*	1	1200	145	.00	.00	.00	0.
1	0550	71	.01	.00	.01	54.	*	1	1205	146	.00	.00	.00	0.
1	0555	72	.01	.00	.01	53.	*	1	1210	147	.00	.00	.00	0.
1	0600	73	.01	.00	.01	52.	*	1	1215	148	.00	.00	.00	0.
1	0605	74	.00	.00	.00	50.	*	1	1220	149	.00	.00	.00	0.
1	0610	75	.00	.00	.00	45.	*	1	1225	150	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.90

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM (CFS)	AVERAGE (INCHES)	6-HR (AC-FT)	24-HR	72-HR	12.42-HR
991.	3.33	123.	1.896	61.	60.	60.	60.
					1.896	1.896	1.896
					61.	61.	61.

CUMULATIVE AREA = .60 SQ MI

20 KK

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*****
*          *
* OUTLT2  *
*          *
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COMBINE ROUTE 1 AND BASIN TO OUTLET 2

22 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT2
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0310	39	621.	*	1		0620	77	157.	*	1		0930	115	0.	*
1		0005	2	0.	*	1		0315	40	1036.	*	1		0625	78	142.	*	1		0935	116	0.	*
1		0010	3	0.	*	1		0320	41	1325.	*	1		0630	79	127.	*	1		1040	117	0.	*
1		0015	4	0.	*	1		0325	42	1501.	*	1		0635	80	111.	*	1		1045	118	0.	*
1		0020	5	0.	*	1		0330	43	1636.	*	1		0640	81	96.	*	1		0950	119	0.	*
1		0025	6	0.	*	1		0335	44	1720.	*	1		0645	82	80.	*	1		0955	120	0.	*
1		0030	7	0.	*	1		0340	45	1797.	*	1		0650	83	66.	*	1		1000	121	0.	*
1		0035	8	0.	*	1		0345	46	1815.	*	1		0655	84	53.	*	1		1005	122	0.	*
1		0040	9	0.	*	1		0350	47	1766.	*	1		0700	85	42.	*	1		1010	123	0.	*
1		0045	10	0.	*	1		0355	48	1654.	*	1		0705	86	33.	*	1		1015	124	0.	*
1		0050	11	0.	*	1		0400	49	1503.	*	1		0710	87	26.	*	1		1020	125	0.	*
1		0055	12	0.	*	1		0405	50	1315.	*	1		0715	88	21.	*	1		1025	126	0.	*
1		0100	13	0.	*	1		0410	51	1120.	*	1		0720	89	17.	*	1		1030	127	0.	*
1		0105	14	0.	*	1		0415	52	957.	*	1		0725	90	13.	*	1		1035	128	0.	*
1		0110	15	0.	*	1		0420	53	824.	*	1		0730	91	10.	*	1		1040	129	0.	*
1		0115	16	0.	*	1		0425	54	719.	*	1		0735	92	8.	*	1		1045	130	0.	*
1		0120	17	0.	*	1		0430	55	630.	*	1		0740	93	6.	*	1		1050	131	0.	*
1		0125	18	0.	*	1		0435	56	553.	*	1		0745	94	5.	*	1		1055	132	0.	*
1		0130	19	0.	*	1		0440	57	491.	*	1		0750	95	4.	*	1		1100	133	0.	*
1		0135	20	0.	*	1		0445	58	441.	*	1		0755	96	3.	*	1		1105	134	0.	*
1		0140	21	0.	*	1		0450	59	400.	*	1		0800	97	2.	*	1		1110	135	0.	*
1		0145	22	0.	*	1		0455	60	367.	*	1		0805	98	2.	*	1		1115	136	0.	*
1		0150	23	1.	*	1		0500	61	340.	*	1		0810	99	2.	*	1		1120	137	0.	*

1	0155	24	2.	*	1	0505	62	317.	*	1	0815	100	1.	*	1	1125	138	0.
1	0200	25	4.	*	1	0510	63	299.	*	1	0820	101	1.	*	1	1130	139	0.
1	0205	26	6.	*	1	0515	64	283.	*	1	0825	102	1.	*	1	1135	140	0.
1	0210	27	9.	*	1	0520	65	270.	*	1	0830	103	1.	*	1	1140	141	0.
1	0215	28	13.	*	1	0525	66	259.	*	1	0835	104	0.	*	1	1145	142	0.
1	0220	29	18.	*	1	0530	67	249.	*	1	0840	105	0.	*	1	1150	143	0.
1	0225	30	24.	*	1	0535	68	240.	*	1	0845	106	0.	*	1	1155	144	0.
1	0230	31	31.	*	1	0540	69	232.	*	1	0850	107	0.	*	1	1200	145	0.
1	0235	32	40.	*	1	0545	70	224.	*	1	0855	108	0.	*	1	1205	146	0.
1	0240	33	51.	*	1	0550	71	216.	*	1	0900	109	0.	*	1	1210	147	0.
1	0245	34	65.	*	1	0555	72	209.	*	1	0905	110	0.	*	1	1215	148	0.
1	0250	35	84.	*	1	0600	73	202.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	110.	*	1	0605	74	194.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	155.	*	1	0610	75	184.	*	1	0920	113	0.	*	1			
1	0305	38	316.	*	1	0615	76	172.	*	1	0925	114	0.	*	1			

PEAK FLOW (CFS)	TIME (HR)		6-HR	24-HR	72-HR	12.42-HR
1815.	3.75	(CFS)	417.	202.	202.	202.
		(INCHES)	1.891	1.892	1.892	1.892
		(AC-FT)	207.	207.	207.	207.

CUMULATIVE AREA = 2.05 SQ MI

23 KK

* ROUTE2 *

ROUTE OUTLET 2 TO BASIN 3 OUTLET

HYDROGRAPH ROUTING DATA

25 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
AMSKK .06 MUSKINGUM K
X .40 MUSKINGUM X

**** WARNING **** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE2.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE2

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0310	39	382.	*	1		0620	77	168.	*	1		0930	115	0.	*
1		0005	2	0.	*	1		0315	40	714.	*	1		0625	78	154.	*	1		0935	116	0.	*
1		0010	3	0.	*	1		0320	41	1107.	*	1		0630	79	139.	*	1		0940	117	0.	*
1		0015	4	0.	*	1		0325	42	1369.	*	1		0635	80	123.	*	1		0945	118	0.	*
1		0020	5	0.	*	1		0330	43	1534.	*	1		0640	81	108.	*	1		0950	119	0.	*
1		0025	6	0.	*	1		0335	44	1657.	*	1		0645	82	92.	*	1		0955	120	0.	*
1		0030	7	0.	*	1		0340	45	1738.	*	1		0650	83	77.	*	1		1000	121	0.	*
1		0035	8	0.	*	1		0345	46	1803.	*	1		0655	84	63.	*	1		1005	122	0.	*
1		0040	9	0.	*	1		0350	47	1806.	*	1		0700	85	51.	*	1		1010	123	0.	*
1		0045	10	0.	*	1		0355	48	1742.	*	1		0705	86	40.	*	1		1015	124	0.	*
1		0050	11	0.	*	1		0400	49	1620.	*	1		0710	87	32.	*	1		1020	125	0.	*
1		0055	12	0.	*	1		0405	50	1460.	*	1		0715	88	25.	*	1		1025	126	0.	*
1		0100	13	0.	*	1		0410	51	1270.	*	1		0720	89	20.	*	1		1030	127	0.	*
1		0105	14	0.	*	1		0415	52	1081.	*	1		0725	90	16.	*	1		1035	128	0.	*
1		0110	15	0.	*	1		0420	53	925.	*	1		0730	91	12.	*	1		1040	129	0.	*
1		0115	16	0.	*	1		0425	54	799.	*	1		0735	92	10.	*	1		1045	130	0.	*
1		0120	17	0.	*	1		0430	55	698.	*	1		0740	93	8.	*	1		1050	131	0.	*

1	0125	18	0.	*	1	0435	56	611.	*	1	0745	94	6.	*	1	1055	132	0.
1	0130	19	0.	*	1	0440	57	538.	*	1	0750	95	5.	*	1	1100	133	0.
1	0135	20	0.	*	1	0445	58	479.	*	1	0755	96	4.	*	1	1105	134	0.
1	0140	21	0.	*	1	0450	59	431.	*	1	0800	97	3.	*	1	1110	135	0.
1	0145	22	0.	*	1	0455	60	392.	*	1	0805	98	2.	*	1	1115	136	0.
1	0150	23	1.	*	1	0500	61	360.	*	1	0810	99	2.	*	1	1120	137	0.
1	0155	24	1.	*	1	0505	62	334.	*	1	0815	100	1.	*	1	1125	138	0.
1	0200	25	3.	*	1	0510	63	313.	*	1	0820	101	1.	*	1	1130	139	0.
1	0205	26	5.	*	1	0515	64	295.	*	1	0825	102	1.	*	1	1135	140	0.
1	0210	27	7.	*	1	0520	65	280.	*	1	0830	103	1.	*	1	1140	141	0.
1	0215	28	10.	*	1	0525	66	268.	*	1	0835	104	0.	*	1	1145	142	0.
1	0220	29	14.	*	1	0530	67	256.	*	1	0840	105	0.	*	1	1150	143	0.
1	0225	30	19.	*	1	0535	68	247.	*	1	0845	106	0.	*	1	1155	144	0.
1	0230	31	26.	*	1	0540	69	238.	*	1	0850	107	0.	*	1	1200	145	0.
1	0235	32	33.	*	1	0545	70	230.	*	1	0855	108	0.	*	1	1205	146	0.
1	0240	33	43.	*	1	0550	71	222.	*	1	0900	109	0.	*	1	1210	147	0.
1	0245	34	54.	*	1	0555	72	215.	*	1	0905	110	0.	*	1	1215	148	0.
1	0250	35	69.	*	1	0600	73	207.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	90.	*	1	0605	74	200.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	120.	*	1	0610	75	192.	*	1	0920	113	0.	*	1			
1	0305	38	189.	*	1	0615	76	182.	*	1	0925	114	0.	*	1			

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 (CFS) (HR) (CFS) 6-HR 24-HR 72-HR 12.42-HR
 1806. 3.83 (CFS) 417. 202. 202. 202.
 (INCHES) 1.891 1.892 1.892 1.892
 (AC-FT) 207. 207. 207. 207.
 CUMULATIVE AREA = 2.05 SQ MI

 * *
 26 KK * AREA 3 *
 * *

 BA SIN NO. 3 RUNOFF

SUBBASIN RUNOFF DATA
 SUBBASIN CHARACTERISTICS
 TAREA .24 SUBBASIN AREA

PRECIPITATION DATA
 8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
 HYDRO-35 TP-40 TP-49
 5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 2.50 3.00 .00 .00 .00 .00 .00 .00
 STORM AREA = .24

29 LS SCS LOSS RATE
 STRL .25 INITIAL ABSTRACTION
 CRVNR 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

30 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .31 LAG

 UNIT HYDROGRAPH
 21 END-OF-PERIOD ORDINATES
 43. 137. 268. 322. 306. 250. 167. 111. 77. 53.
 36. 24. 17. 11. 8. 5. 4. 3. 2. 1.
 0.

HYDROGRAPH AT STATION AREA 3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q
1	0000	1	.00	.00	.00	0.	*	1	0615	76	.00	.00	.00	15.				
1	0005	2	.01	.01	.00	0.	*	1	0620	77	.00	.00	.00	11.				
1	0010	3	.01	.01	.00	0.	*	1	0625	78	.00	.00	.00	8.				
1	0015	4	.01	.01	.00	0.	*	1	0630	79	.00	.00	.00	5.				
1	0020	5	.01	.01	.00	0.	*	1	0635	80	.00	.00	.00	4.				
1	0025	6	.01	.01	.00	0.	*	1	0640	81	.00	.00	.00	3.				
1	0030	7	.01	.01	.00	0.	*	1	0645	82	.00	.00	.00	2.				
1	0035	8	.01	.01	.00	0.	*	1	0650	83	.00	.00	.00	1.				
1	0040	9	.01	.01	.00	0.	*	1	0655	84	.00	.00	.00	1.				
1	0045	10	.01	.01	.00	0.	*	1	0700	85	.00	.00	.00	1.				
1	0050	11	.01	.01	.00	0.	*	1	0705	86	.00	.00	.00	0.				
1	0055	12	.01	.01	.00	0.	*	1	0710	87	.00	.00	.00	0.				
1	0100	13	.01	.01	.00	0.	*	1	0715	88	.00	.00	.00	0.				
1	0105	14	.01	.01	.00	0.	*	1	0720	89	.00	.00	.00	0.				
1	0110	15	.02	.02	.00	0.	*	1	0725	90	.00	.00	.00	0.				
1	0115	16	.02	.02	.00	0.	*	1	0730	91	.00	.00	.00	0.				
1	0120	17	.02	.02	.00	0.	*	1	0735	92	.00	.00	.00	0.				
1	0125	18	.02	.02	.00	0.	*	1	0740	93	.00	.00	.00	0.				
1	0130	19	.02	.02	.00	0.	*	1	0745	94	.00	.00	.00	0.				
1	0135	20	.01	.01	.00	0.	*	1	0750	95	.00	.00	.00	0.				
1	0140	21	.02	.01	.00	0.	*	1	0755	96	.00	.00	.00	0.				
1	0145	22	.02	.01	.00	0.	*	1	0800	97	.00	.00	.00	0.				
1	0150	23	.02	.02	.00	0.	*	1	0805	98	.00	.00	.00	0.				
1	0155	24	.02	.02	.00	1.	*	1	0810	99	.00	.00	.00	0.				
1	0200	25	.02	.02	.00	1.	*	1	0815	100	.00	.00	.00	0.				
1	0205	26	.02	.02	.00	2.	*	1	0820	101	.00	.00	.00	0.				
1	0210	27	.02	.02	.00	3.	*	1	0825	102	.00	.00	.00	0.				
1	0215	28	.02	.02	.00	4.	*	1	0830	103	.00	.00	.00	0.				
1	0220	29	.02	.02	.01	5.	*	1	0835	104	.00	.00	.00	0.				
1	0225	30	.03	.02	.01	6.	*	1	0840	105	.00	.00	.00	0.				
1	0230	31	.03	.02	.01	7.	*	1	0845	106	.00	.00	.00	0.				
1	0235	32	.04	.02	.01	9.	*	1	0850	107	.00	.00	.00	0.				
1	0240	33	.04	.03	.01	11.	*	1	0855	108	.00	.00	.00	0.				
1	0245	34	.05	.03	.02	14.	*	1	0900	109	.00	.00	.00	0.				
1	0250	35	.07	.04	.03	18.	*	1	0905	110	.00	.00	.00	0.				
1	0255	36	.10	.05	.05	25.	*	1	0910	111	.00	.00	.00	0.				
1	0300	37	.19	.08	.11	37.	*	1	0915	112	.00	.00	.00	0.				
1	0305	38	1.15	.28	.86	89.	*	1	0920	113	.00	.00	.00	0.				
1	0310	39	.14	.02	.11	188.	*	1	0925	114	.00	.00	.00	0.				
1	0315	40	.08	.01	.07	315.	*	1	0930	115	.00	.00	.00	0.				
1	0320	41	.06	.01	.05	377.	*	1	0935	116	.00	.00	.00	0.				
1	0325	42	.05	.01	.04	371.	*	1	0940	117	.00	.00	.00	0.				
1	0330	43	.04	.00	.03	322.	*	1	0945	118	.00	.00	.00	0.				
1	0335	44	.03	.00	.03	246.	*	1	0950	119	.00	.00	.00	0.				
1	0340	45	.03	.00	.03	187.	*	1	0955	120	.00	.00	.00	0.				
1	0345	46	.03	.00	.02	147.	*	1	1000	121	.00	.00	.00	0.				
1	0350	47	.02	.00	.02	116.	*	1	1005	122	.00	.00	.00	0.				
1	0355	48	.02	.00	.02	93.	*	1	1010	123	.00	.00	.00	0.				
1	0400	49	.02	.00	.02	77.	*	1	1015	124	.00	.00	.00	0.				
1	0405	50	.02	.00	.02	64.	*	1	1020	125	.00	.00	.00	0.				
1	0410	51	.02	.00	.02	55.	*	1	1025	126	.00	.00	.00	0.				
1	0415	52	.02	.00	.02	48.	*	1	1030	127	.00	.00	.00	0.				
1	0420	53	.02	.00	.01	42.	*	1	1035	128	.00	.00	.00	0.				
1	0425	54	.02	.00	.01	38.	*	1	1040	129	.00	.00	.00	0.				
1	0430	55	.01	.00	.01	35.	*	1	1045	130	.00	.00	.00	0.				
1	0435	56	.02	.00	.02	32.	*	1	1050	131	.00	.00	.00	0.				
1	0440	57	.02	.00	.02	30.	*	1	1055	132	.00	.00	.00	0.				
1	0445	58	.02	.00	.01	29.	*	1	1100	133	.00	.00	.00	0.				
1	0450	59	.02	.00	.01	28.	*	1	1105	134	.00	.00	.00	0.				
1	0455	60	.02	.00	.01	28.	*	1	1110	135	.00	.00	.00	0.				
1	0500	61	.02	.00	.01	28.	*	1	1115	136	.00	.00	.00	0.				
1	0505	62	.01	.00	.01	27.	*	1	1120	137	.00	.00	.00	0.				
1	0510	63	.01	.00	.01	27.	*	1	1125	138	.00	.00	.00	0.				
1	0515	64	.01	.00	.01	26.	*	1	1130	139	.00	.00	.00	0.				
1	0520	65	.01	.00	.01	25.	*	1	1135	140	.00	.00	.00	0.				
1	0525	66	.01	.00	.01	25.	*	1	1140	141	.00	.00	.00	0.				
1	0530	67	.01	.00	.01	24.	*	1	1145	142	.00	.00	.00	0.				

1	0535	68	.01	.00	.01	23.	*	1	1150	143	.00	.00	.00	0.
1	0540	69	.01	.00	.01	23.	*	1	1155	144	.00	.00	.00	0.
1	0545	70	.01	.00	.01	22.	*	1	1200	145	.00	.00	.00	0.
1	0550	71	.01	.00	.01	22.	*	1	1205	146	.00	.00	.00	0.
1	0555	72	.01	.00	.01	21.	*	1	1210	147	.00	.00	.00	0.
1	0600	73	.01	.00	.01	21.	*	1	1215	148	.00	.00	.00	0.
1	0605	74	.00	.00	.00	20.	*	1	1220	149	.00	.00	.00	0.
1	0610	75	.00	.00	.00	18.	*	1	1225	150	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.90

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR (INCHES)	24-HR (AC-FT)	72-HR (INCHES)	12.42-HR (AC-FT)
377.	3.33	49.	1.898	24.	23.	23.

CUMULATIVE AREA = .24 SQ MI

31 KK

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*****
* OUTLT3 *
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COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3

33 HC

HYDROGRAPH COMBINATION
1COMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT3
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0310	39	570.	*	1		0620	77	180.	*	1		0930	115	0.	*
1		0005	2	0.	*	1		0315	40	1029.	*	1		0625	78	162.	*	1		0935	116	0.	*
1		0010	3	0.	*	1		0320	41	1484.	*	1		0630	79	144.	*	1		0940	117	0.	*
1		0015	4	0.	*	1		0325	42	1741.	*	1		0635	80	127.	*	1		0945	118	0.	*
1		0020	5	0.	*	1		0330	43	1856.	*	1		0640	81	110.	*	1		0950	119	0.	*
1		0025	6	0.	*	1		0335	44	1903.	*	1		0645	82	94.	*	1		0955	120	0.	*
1		0030	7	0.	*	1		0340	45	1926.	*	1		0650	83	78.	*	1		1000	121	0.	*
1		0035	8	0.	*	1		0345	46	1950.	*	1		0655	84	64.	*	1		1005	122	0.	*
1		0040	9	0.	*	1		0350	47	1922.	*	1		0700	85	51.	*	1		1010	123	0.	*
1		0045	10	0.	*	1		0355	48	1835.	*	1		0705	86	41.	*	1		1015	124	0.	*
1		0050	11	0.	*	1		0400	49	1696.	*	1		0710	87	32.	*	1		1020	125	0.	*
1		0055	12	0.	*	1		0405	50	1524.	*	1		0715	88	25.	*	1		1025	126	0.	*
1		0100	13	0.	*	1		0410	51	1325.	*	1		0720	89	20.	*	1		1030	127	0.	*
1		0105	14	0.	*	1		0415	52	1129.	*	1		0725	90	16.	*	1		1035	128	0.	*
1		0110	15	0.	*	1		0420	53	967.	*	1		0730	91	12.	*	1		1040	129	0.	*
1		0115	16	0.	*	1		0425	54	837.	*	1		0735	92	10.	*	1		1045	130	0.	*
1		0120	17	0.	*	1		0430	55	733.	*	1		0740	93	8.	*	1		1050	131	0.	*
1		0125	18	0.	*	1		0435	56	644.	*	1		0745	94	6.	*	1		1055	132	0.	*
1		0130	19	0.	*	1		0440	57	568.	*	1		0750	95	5.	*	1		1100	133	0.	*
1		0135	20	0.	*	1		0445	58	508.	*	1		0755	96	4.	*	1		1105	134	0.	*
1		0140	21	0.	*	1		0450	59	459.	*	1		0800	97	3.	*	1		1110	135	0.	*
1		0145	22	0.	*	1		0455	60	420.	*	1		0805	98	2.	*	1		1115	136	0.	*
1		0150	23	1.	*	1		0500	61	388.	*	1		0810	99	2.	*	1		1120	137	0.	*
1		0155	24	2.	*	1		0505	62	361.	*	1		0815	100	1.	*	1		1125	138	0.	*
1		0200	25	4.	*	1		0510	63	339.	*	1		0820	101	1.	*	1		1130	139	0.	*
1		0205	26	6.	*	1		0515	64	321.	*	1		0825	102	1.	*	1		1135	140	0.	*
1		0210	27	10.	*	1		0520	65	305.	*	1		0830	103	1.	*	1		1140	141	0.	*

1	0215	28	14.	*	1	0525	66	292.	*	1	0835	104	0.	*	1	1145	142	0.
1	0220	29	19.	*	1	0530	67	280.	*	1	0840	105	0.	*	1	1150	143	0.
1	0225	30	25.	*	1	0535	68	270.	*	1	0845	106	0.	*	1	1155	144	0.
1	0230	31	33.	*	1	0540	69	261.	*	1	0850	107	0.	*	1	1200	145	0.
1	0235	32	42.	*	1	0545	70	252.	*	1	0855	108	0.	*	1	1205	146	0.
1	0240	33	54.	*	1	0550	71	244.	*	1	0900	109	0.	*	1	1210	147	0.
1	0245	34	68.	*	1	0555	72	236.	*	1	0905	110	0.	*	1	1215	148	0.
1	0250	35	87.	*	1	0600	73	228.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	114.	*	1	0605	74	220.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	157.	*	1	0610	75	210.	*	1	0920	113	0.	*	1			
1	0305	38	277.	*	1	0615	76	196.	*	1	0925	114	0.	*	1			

PEAK FLOW (CFS)	TIME (HR)	1950.	3.75	(CFS)	6-HR	24-HR	72-HR	12.42-HR
					466.	225.	225.	225.
				(INCHES)	1.891	1.892	1.892	1.892
				(AC-FT)	231.	231.	231.	231.

CUMULATIVE AREA = 2.29 SQ MI

34 KK

*
* ROUTE3 *
*

ROUTE OUTLET 3 TO BASIN 4 OUTLET

HYDROGRAPH ROUTING DATA

36 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
AMSKK .13 MUSKINGUM K
X .30 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE3

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0310	39	239.	*	1		0620	77	202.	*	1		0930	115	0.	*
1		0005	2	0.	*	1		0315	40	467.	*	1		0625	78	187.	*	1		0935	116	0.	*
1		0010	3	0.	*	1		0320	41	844.	*	1		0630	79	170.	*	1		0940	117	0.	*
1		0015	4	0.	*	1		0325	42	1265.	*	1		0635	80	153.	*	1		0945	118	0.	*
1		0020	5	0.	*	1		0330	43	1576.	*	1		0640	81	136.	*	1		0950	119	0.	*
1		0025	6	0.	*	1		0335	44	1758.	*	1		0645	82	119.	*	1		0955	120	0.	*
1		0030	7	0.	*	1		0340	45	1852.	*	1		0650	83	102.	*	1		1000	121	0.	*
1		0035	8	0.	*	1		0345	46	1900.	*	1		0655	84	86.	*	1		1005	122	0.	*
1		0040	9	0.	*	1		0350	47	1931.	*	1		0700	85	71.	*	1		1010	123	0.	*
1		0045	10	0.	*	1		0355	48	1922.	*	1		0705	86	58.	*	1		1015	124	0.	*
1		0050	11	0.	*	1		0400	49	1862.	*	1		0710	87	47.	*	1		1020	125	0.	*
1		0055	12	0.	*	1		0405	50	1749.	*	1		0715	88	37.	*	1		1025	126	0.	*
1		0100	13	0.	*	1		0410	51	1598.	*	1		0720	89	29.	*	1		1030	127	0.	*
1		0105	14	0.	*	1		0415	52	1415.	*	1		0725	90	23.	*	1		1035	128	0.	*
1		0110	15	0.	*	1		0420	53	1225.	*	1		0730	91	18.	*	1		1040	129	0.	*
1		0115	16	0.	*	1		0425	54	1055.	*	1		0735	92	14.	*	1		1045	130	0.	*
1		0120	17	0.	*	1		0430	55	911.	*	1		0740	93	11.	*	1		1050	131	0.	*
1		0125	18	0.	*	1		0435	56	793.	*	1		0745	94	9.	*	1		1055	132	0.	*
1		0130	19	0.	*	1		0440	57	694.	*	1		0750	95	7.	*	1		1100	133	0.	*
1		0135	20	0.	*	1		0445	58	611.	*	1		0755	96	6.	*	1		1105	134	0.	*
1		0140	21	0.	*	1		0450	59	543.	*	1		0800	97	4.	*	1		1110	135	0.	*
1		0145	22	0.	*	1		0455	60	487.	*	1		0805	98	3.	*	1		1115	136	0.	*
1		0150	23	0.	*	1		0500	61	443.	*	1		0810	99	3.	*	1		1120	137	0.	*

1	0155	24	1.	*	1	0505	62	407.	*	1	0815	100	2.	*	1	1125	138	0.
1	0200	25	2.	*	1	0510	63	377.	*	1	0820	101	2.	*	1	1130	139	0.
1	0205	26	3.	*	1	0515	64	352.	*	1	0825	102	1.	*	1	1135	140	0.
1	0210	27	5.	*	1	0520	65	331.	*	1	0830	103	1.	*	1	1140	141	0.
1	0215	28	8.	*	1	0525	66	314.	*	1	0835	104	1.	*	1	1145	142	0.
1	0220	29	12.	*	1	0530	67	300.	*	1	0840	105	1.	*	1	1150	143	0.
1	0225	30	17.	*	1	0535	68	287.	*	1	0845	106	0.	*	1	1155	144	0.
1	0230	31	22.	*	1	0540	69	276.	*	1	0850	107	0.	*	1	1200	145	0.
1	0235	32	29.	*	1	0545	70	266.	*	1	0855	108	0.	*	1	1205	146	0.
1	0240	33	38.	*	1	0550	71	257.	*	1	0900	109	0.	*	1	1210	147	0.
1	0245	34	49.	*	1	0555	72	248.	*	1	0905	110	0.	*	1	1215	148	0.
1	0250	35	62.	*	1	0600	73	240.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	79.	*	1	0605	74	232.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	103.	*	1	0610	75	224.	*	1	0920	113	0.	*				
1	0305	38	141.	*	1	0615	76	214.	*	1	0925	114	0.	*				

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	12.42-HR (INCHES)
1931.	3.83	466.	1.891	231.	1.892

CUMULATIVE AREA = 2.29 SQ MI

37 KK

* AREA 4 *

BASIN NO. 4 RUNOFF

SUBBASIN RUNOFF DATA

39 BA

SUBBASIN CHARACTERISTICS
TAREA .50 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	2.50	3.00	.00	.00	.00	.00	.00	.00

STORM AREA = .60

40 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNBR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

41 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

121.	392.	739.	856.	780.	604.	381.	254.	174.	116.
78.	52.	34.	23.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 4

DA MON HRMN ORD RAIN LOSS EXCESS COMP Q * DA MON HRMN ORD RAIN LOSS EXCESS COMP Q

1	0000	1	.00	.00	.00	0.	*	1	0615	76	.00	.00	.00	36.
1	0005	2	.01	.01	.00	0.	*	1	0620	77	.00	.00	.00	27.
1	0010	3	.01	.01	.00	0.	*	1	0625	78	.00	.00	.00	18.
1	0015	4	.01	.01	.00	0.	*	1	0630	79	.00	.00	.00	12.
1	0020	5	.01	.01	.00	0.	*	1	0635	80	.00	.00	.00	8.
1	0025	6	.01	.01	.00	0.	*	1	0640	81	.00	.00	.00	5.
1	0030	7	.01	.01	.00	0.	*	1	0645	82	.00	.00	.00	4.
1	0035	8	.01	.01	.00	0.	*	1	0650	83	.00	.00	.00	2.
1	0040	9	.01	.01	.00	0.	*	1	0655	84	.00	.00	.00	2.
1	0045	10	.01	.01	.00	0.	*	1	0700	85	.00	.00	.00	1.
1	0050	11	.01	.01	.00	0.	*	1	0705	86	.00	.00	.00	1.
1	0055	12	.01	.01	.00	0.	*	1	0710	87	.00	.00	.00	0.
1	0100	13	.01	.01	.00	0.	*	1	0715	88	.00	.00	.00	0.
1	0105	14	.01	.01	.00	0.	*	1	0720	89	.00	.00	.00	0.
1	0110	15	.02	.02	.00	0.	*	1	0725	90	.00	.00	.00	0.
1	0115	16	.02	.02	.00	0.	*	1	0730	91	.00	.00	.00	0.
1	0120	17	.02	.02	.00	0.	*	1	0735	92	.00	.00	.00	0.
1	0125	18	.02	.02	.00	0.	*	1	0740	93	.00	.00	.00	0.
1	0130	19	.02	.02	.00	0.	*	1	0745	94	.00	.00	.00	0.
1	0135	20	.01	.01	.00	0.	*	1	0750	95	.00	.00	.00	0.
1	0140	21	.02	.01	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0145	22	.02	.01	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0150	23	.02	.02	.00	1.	*	1	0805	98	.00	.00	.00	0.
1	0155	24	.02	.02	.00	2.	*	1	0810	99	.00	.00	.00	0.
1	0200	25	.02	.02	.00	3.	*	1	0815	100	.00	.00	.00	0.
1	0205	26	.02	.02	.00	5.	*	1	0820	101	.00	.00	.00	0.
1	0210	27	.02	.02	.00	7.	*	1	0825	102	.00	.00	.00	0.
1	0215	28	.02	.02	.00	9.	*	1	0830	103	.00	.00	.00	0.
1	0220	29	.02	.02	.01	12.	*	1	0835	104	.00	.00	.00	0.
1	0225	30	.03	.02	.01	15.	*	1	0840	105	.00	.00	.00	0.
1	0230	31	.03	.02	.01	19.	*	1	0845	106	.00	.00	.00	0.
1	0235	32	.04	.02	.01	24.	*	1	0850	107	.00	.00	.00	0.
1	0240	33	.04	.03	.01	30.	*	1	0855	108	.00	.00	.00	0.
1	0245	34	.05	.03	.02	37.	*	1	0900	109	.00	.00	.00	0.
1	0250	35	.07	.04	.03	48.	*	1	0905	110	.00	.00	.00	0.
1	0255	36	.10	.05	.05	65.	*	1	0910	111	.00	.00	.00	0.
1	0300	37	.19	.08	.11	98.	*	1	0915	112	.00	.00	.00	0.
1	0305	38	1.15	.28	.86	244.	*	1	0920	113	.00	.00	.00	0.
1	0310	39	.13	.02	.11	523.	*	1	0925	114	.00	.00	.00	0.
1	0315	40	.08	.01	.07	856.	*	1	0930	115	.00	.00	.00	0.
1	0320	41	.06	.01	.05	993.	*	1	0935	11	.00	.00	.00	0.
1	0325	42	.05	.01	.04	945.	*	1	0940	117	.00	.00	.00	0.
1	0330	43	.04	.00	.03	789.	*	1	0945	118	.00	.00	.00	0.
1	0335	44	.03	.00	.03	583.	*	1	0950	119	.00	.00	.00	0.
1	0340	45	.03	.00	.03	444.	*	1	0955	120	.00	.00	.00	0.
1	0345	46	.03	.00	.02	348.	*	1	1000	121	.00	.00	.00	0.
1	0350	47	.02	.00	.02	274.	*	1	1005	122	.00	.00	.00	0.
1	0355	48	.02	.00	.02	220.	*	1	1010	123	.00	.00	.00	0.
1	0400	49	.02	.00	.02	181.	*	1	1015	124	.00	.00	.00	0.
1	0405	50	.02	.00	.02	151.	*	1	1020	125	.00	.00	.00	0.
1	0410	51	.02	.00	.02	130.	*	1	1025	126	.00	.00	.00	0.
1	0415	52	.02	.00	.02	114.	*	1	1030	127	.00	.00	.00	0.
1	0420	53	.02	.00	.01	102.	*	1	1035	128	.00	.00	.00	0.
1	0425	54	.02	.00	.01	92.	*	1	1040	129	.00	.00	.00	0.
1	0430	55	.01	.00	.01	84.	*	1	1045	130	.00	.00	.00	0.
1	0435	56	.02	.00	.02	78.	*	1	1050	131	.00	.00	.00	0.
1	0440	57	.02	.00	.02	73.	*	1	1055	132	.00	.00	.00	0.
1	0445	58	.02	.00	.01	71.	*	1	1100	133	.00	.00	.00	0.
1	0450	59	.02	.00	.01	71.	*	1	1105	134	.00	.00	.00	0.
1	0455	60	.02	.00	.01	70.	*	1	1110	135	.00	.00	.00	0.
1	0500	61	.02	.00	.01	70.	*	1	1115	136	.00	.00	.00	0.
1	0505	62	.01	.00	.01	68.	*	1	1120	137	.00	.00	.00	0.
1	0510	63	.01	.00	.01	67.	*	1	1125	138	.00	.00	.00	0.
1	0515	64	.01	.00	.01	65.	*	1	1130	139	.00	.00	.00	0.
1	0520	65	.01	.00	.01	63.	*	1	1135	140	.00	.00	.00	0.
1	0525	66	.01	.00	.01	62.	*	1	1140	141	.00	.00	.00	0.
1	0530	67	.01	.00	.01	60.	*	1	1145	142	.00	.00	.00	0.
1	0535	68	.01	.00	.01	58.	*	1	1150	143	.00	.00	.00	0.
1	0540	69	.01	.00	.01	57.	*	1	1155	144	.00	.00	.00	0.
1	0545	70	.01	.00	.01	55.	*	1	1200	145	.00	.00	.00	0.
1	0550	71	.01	.00	.01	54.	*	1	1205	146	.00	.00	.00	0.
1	0555	72	.01	.00	.01	53.	*	1	1210	147	.00	.00	.00	0.
1	0600	73	.01	.00	.01	52.	*	1	1215	148	.00	.00	.00	0.
1	0605	74	.00	.00	.00	49.	*	1	1220	149	.00	.00	.00	0.

1 0610 75 .00 .00 .00 44. * 1 1225 150 .00 .00 .00 0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.90

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	12.42-HR
993.	3.33	(CFS) 122.	59.	59.	59.
		(INCHES) 1.896	1.896	1.896	1.896
		(AC-FT) 61.	61.	61.	61.

CUMULATIVE AREA = .60 SQ MI

42 KK * OUTLT4 *

COMBINE ROUTE 3 AND BASIN 4 TO OUTLET 4

44 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT4
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0310	39	761.	*	1	0620	77	229.	*	1	0930	115	0.					0.
1	0005	2	0.	*	1	0315	40	1324.	*	1	0625	78	206.	*	1	0935	116	0.					0.
1	0010	3	0.	*	1	0320	41	1837.	*	1	0630	79	183.	*	1	0940	117	0.					0.
1	0015	4	0.	*	1	0325	42	2210.	*	1	0635	80	161.	*	1	0945	118	0.					0.
1	0020	5	0.	*	1	0330	43	2365.	*	1	0640	81	141.	*	1	0950	119	0.					0.
1	0025	6	0.	*	1	0335	44	2341.	*	1	0645	82	122.	*	1	0955	120	0.					0.
1	0030	7	0.	*	1	0340	45	2296.	*	1	0650	83	105.	*	1	1000	121	0.					0.
1	0035	8	0.	*	1	0345	46	2248.	*	1	0655	84	88.	*	1	1005	122	0.					0.
1	0040	9	0.	*	1	0350	47	2205.	*	1	0700	85	73.	*	1	1010	123	0.					0.
1	0045	10	0.	*	1	0355	48	2143.	*	1	0705	86	59.	*	1	1015	124	0.					0.
1	0050	11	0.	*	1	0400	49	2042.	*	1	0710	87	47.	*	1	1020	125	0.					0.
1	0055	12	0.	*	1	0405	50	1901.	*	1	0715	88	37.	*	1	1025	126	0.					0.
1	0100	13	0.	*	1	0410	51	1728.	*	1	0720	89	29.	*	1	1030	127	0.					0.
1	0105	14	0.	*	1	0415	52	1529.	*	1	0725	90	23.	*	1	1035	128	0.					0.
1	0110	15	0.	*	1	0420	53	1327.	*	1	0730	91	18.	*	1	1040	129	0.					0.
1	0115	16	0.	*	1	0425	54	1147.	*	1	0735	92	14.	*	1	1045	130	0.					0.
1	0120	17	0.	*	1	0430	55	995.	*	1	0740	93	11.	*	1	1050	131	0.					0.
1	0125	18	0.	*	1	0435	56	871.	*	1	0745	94	9.	*	1	1055	132	0.					0.
1	0130	19	0.	*	1	0440	57	767.	*	1	0750	95	7.	*	1	1100	133	0.					0.
1	0135	20	0.	*	1	0445	58	682.	*	1	0755	96	6.	*	1	1105	134	0.					0.
1	0140	21	0.	*	1	0450	59	613.	*	1	0800	97	4.	*	1	1110	135	0.					0.
1	0145	22	1.	*	1	0455	60	558.	*	1	0805	98	3.	*	1	1115	136	0.					0.
1	0150	23	1.	*	1	0500	61	512.	*	1	0810	99	3.	*	1	1120	137	0.					0.
1	0155	24	3.	*	1	0505	62	475.	*	1	0815	100	2.	*	1	1125	138	0.					0.
1	0200	25	5.	*	1	0510	63	443.	*	1	0820	101	2.	*	1	1130	139	0.					0.
1	0205	26	8.	*	1	0515	64	417.	*	1	0825	102	1.	*	1	1135	140	0.					0.
1	0210	27	12.	*	1	0520	65	395.	*	1	0830	103	1.	*	1	1140	141	0.					0.
1	0215	28	18.	*	1	0525	66	376.	*	1	0835	104	1.	*	1	1145	142	0.					0.
1	0220	29	24.	*	1	0530	67	360.	*	1	0840	105	1.	*	1	1150	143	0.					0.
1	0225	30	32.	*	1	0535	68	345.	*	1	0845	106	0.	*	1	1155	144	0.					0.
1	0230	31	41.	*	1	0540	69	333.	*	1	0850	107	0.	*	1	1200	145	0.					0.
1	0235	32	53.	*	1	0545	70	321.	*	1	0855	108	0.	*	1	1205	146	0.					0.
1	0240	33	68.	*	1	0550	71	311.	*	1	0900	109	0.	*	1	1210	147	0.					0.
1	0245	34	86.	*	1	0555	72	301.	*	1	0905	110	0.	*	1	1215	148	0.					0.

1	0250	35	110.	*	1	0600	73	291.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	145.	*	1	0605	74	281.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	201.	*	1	0610	75	268.	*	1	0920	113	0.	*				
1	0305	38	385.	*	1	0615	76	250.	*	1	0925	114	0.	*				

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	12.42-HR
2365.	3.50	(CFS) 588.	284.	284.	284.
		(INCHES) 1.892	1.893	1.893	1.893
		(AC-FT) 292.	292.	292.	292.

CUMULATIVE AREA = 2.89 SQ MI

45 KK

* *
* ROUTE4 *
* *

ROUTE OUTLET 4 TO BASIN 5 OUTLET

HYDROGRAPH ROUTING DATA

47 RM

MUSKINGUM ROUTING

NSTPS 2 NUMBER OF SUBREACHES
AMSKK .36 MUSKINGUM K
K .20 MUSKINGUM K

HYDROGRAPH AT STATION ROUTE4

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0310	39	126.	*	1	0620	77	295.	*	1	0930	115	0.				
1	0005	2	0.	*	1	0315	40	198.	*	1	0625	78	282.	*	1	0935	116	0.				
1	0010	3	0.	*	1	0320	41	348.	*	1	0630	79	267.	*	1	0940	117	0.				
1	0015	4	0.	*	1	0325	42	603.	*	1	0635	80	249.	*	1	0945	118	0.				
1	0020	5	0.	*	1	0330	43	938.	*	1	0640	81	230.	*	1	0950	119	0.				
1	0025	6	0.	*	1	0335	44	1300.	*	1	0645	82	210.	*	1	0955	120	0.				
1	0030	7	0.	*	1	0340	45	1623.	*	1	0650	83	189.	*	1	1000	121	0.				
1	0035	8	0.	*	1	0345	46	1864.	*	1	0655	84	169.	*	1	1005	122	0.				
1	0040	9	0.	*	1	0350	47	2023.	*	1	0700	85	150.	*	1	1010	123	0.				
1	0045	10	0.	*	1	0355	48	2115.	*	1	0705	86	131.	*	1	1015	124	0.				
1	0050	11	0.	*	1	0400	49	2160.	*	1	0710	87	113.	*	1	1020	125	0.				
1	0055	12	0.	*	1	0405	50	2167.	*	1	0715	88	96.	*	1	1025	126	0.				
1	0100	13	0.	*	1	0410	51	2141.	*	1	0720	89	81.	*	1	1030	127	0.				
1	0105	14	0.	*	1	0415	52	2080.	*	1	0725	90	68.	*	1	1035	128	0.				
1	0110	15	0.	*	1	0420	53	1985.	*	1	0730	91	56.	*	1	1040	129	0.				
1	0115	16	0.	*	1	0425	54	1860.	*	1	0735	92	45.	*	1	1045	130	0.				
1	0120	17	0.	*	1	0430	55	1710.	*	1	0740	93	37.	*	1	1050	131	0.				
1	0125	18	0.	*	1	0435	56	1547.	*	1	0745	94	29.	*	1	1055	132	0.				
1	0130	19	0.	*	1	0440	57	1384.	*	1	0750	95	24.	*	1	1100	133	0.				
1	0135	20	0.	*	1	0445	58	1228.	*	1	0755	96	19.	*	1	1105	134	0.				
1	0140	21	0.	*	1	0450	59	1086.	*	1	0800	97	15.	*	1	1110	135	0.				
1	0145	22	0.	*	1	0455	60	960.	*	1	0805	98	12.	*	1	1115	136	0.				
1	0150	23	0.	*	1	0500	61	850.	*	1	0810	99	9.	*	1	1120	137	0.				
1	0155	24	0.	*	1	0505	62	757.	*	1	0815	100	7.	*	1	1125	138	0.				
1	0200	25	1.	*	1	0510	63	679.	*	1	0820	101	6.	*	1	1130	139	0.				
1	0205	26	1.	*	1	0515	64	613.	*	1	0825	102	5.	*	1	1135	140	0.				
1	0210	27	2.	*	1	0520	65	558.	*	1	0830	103	4.	*	1	1140	141	0.				
1	0215	28	4.	*	1	0525	66	513.	*	1	0835	104	3.	*	1	1145	142	0.				
1	0220	29	6.	*	1	0530	67	474.	*	1	0840	105	2.	*	1	1150	143	0.				
1	0225	30	9.	*	1	0535	68	443.	*	1	0845	106	2.	*	1	1155	144	0.				

1	0230	31	14.	*	1	0540	69	416.	*	1	0850	107	1.	*	1	1200	145	0.
1	0235	32	19.	*	1	0545	70	393.	*	1	0855	108	1.	*	1	1205	146	0.
1	0240	33	25.	*	1	0550	71	374.	*	1	0900	109	1.	*	1	1210	147	0.
1	0245	34	33.	*	1	0555	72	357.	*	1	0905	110	1.	*	1	1215	148	0.
1	0250	35	43.	*	1	0600	73	342.	*	1	0910	111	0.	*	1	1220	149	0.
1	0255	36	55.	*	1	0605	74	329.	*	1	0915	112	0.	*	1	1225	150	0.
1	0300	37	71.	*	1	0610	75	317.	*	1	0920	113	0.	*				
1	0305	38	92.	*	1	0615	76	306.	*	1	0925	114	0.	*				

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	12.42-HR
2167.	4.08	588.	284.	284.	284.
		(INCHES)	1.891	1.893	1.893
		(AC-FT)	291.	292.	292.

CUMULATIVE AREA = 2.89 SQ MI

 * *
 48 KK * AREA 5 *
 * *

 BASIN NO. 5 RUNOFF

SUBBASIN RUNOFF DATA

50 BA SUBBASIN CHARACTERISTICS
 TAREA .59 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	2.50	3.00	.00	.00	.00	.00	.00	.00

STORM AREA = .59

51 LS SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

52 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

119.	384.	725.	839.	764.	591.	373.	249.	170.	113.
76.	51.	34.	23.	15.	10.	7.	5.	3.	1.

HYDROGRAPH AT STATION AREA 5

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1		.00	.00	.00	0.	*	1	0615	76		.00	.00	.00	33.
1	0005	2		.01	.01	.00	0.	*	1	0620	77		.00	.00	.00	24.
1	0010	3		.01	.01	.00	0.	*	1	0625	78		.00	.00	.00	17.
1	0015	4		.01	.01	.00	0.	*	1	0630	79		.00	.00	.00	11.
1	0020	5		.01	.01	.00	0.	*	1	0635	80		.00	.00	.00	7.
1	0025	6		.01	.01	.00	0.	*	1	0640	81		.00	.00	.00	5.

1	0030	7	.01	.01	.00	0.	*	1	0645	82	.00	.00	.00	3.
1	0035	8	.01	.01	.00	0.	*	1	0650	83	.00	.00	.00	2.
1	0040	9	.01	.01	.00	0.	*	1	0655	84	.00	.00	.00	1.
1	0045	10	.01	.01	.00	0.	*	1	0700	85	.00	.00	.00	1.
1	0050	11	.01	.01	.00	0.	*	1	0705	86	.00	.00	.00	1.
1	0055	12	.01	.01	.00	0.	*	1	0710	87	.00	.00	.00	0.
1	0100	13	.01	.01	.00	0.	*	1	0715	88	.00	.00	.00	0.
1	0105	14	.01	.01	.00	0.	*	1	0720	89	.00	.00	.00	0.
1	0110	15	.02	.02	.00	0.	*	1	0725	90	.00	.00	.00	0.
1	0115	16	.02	.02	.00	0.	*	1	0730	91	.00	.00	.00	0.
1	0120	17	.02	.02	.00	0.	*	1	0735	92	.00	.00	.00	0.
1	0125	18	.02	.02	.00	0.	*	1	0740	93	.00	.00	.00	0.
1	0130	19	.02	.02	.00	0.	*	1	0745	94	.00	.00	.00	0.
1	0135	20	.01	.01	.00	0.	*	1	0750	95	.00	.00	.00	0.
1	0140	21	.02	.02	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0145	22	.02	.02	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0150	23	.02	.02	.00	0.	*	1	0805	98	.00	.00	.00	0.
1	0155	24	.02	.02	.00	0.	*	1	0810	99	.00	.00	.00	0.
1	0200	25	.02	.02	.00	0.	*	1	0815	100	.00	.00	.00	0.
1	0205	26	.02	.02	.00	0.	*	1	0820	101	.00	.00	.00	0.
1	0210	27	.02	.02	.00	0.	*	1	0825	102	.00	.00	.00	0.
1	0215	28	.02	.02	.00	0.	*	1	0830	103	.00	.00	.00	0.
1	0220	29	.02	.02	.00	1.	*	1	0835	104	.00	.00	.00	0.
1	0225	30	.03	.02	.10	2.	*	1	0840	105	.00	.00	.00	0.
1	0230	31	.03	.03	.00	4.	*	1	0845	106	.00	.00	.00	0.
1	0235	32	.04	.03	.01	7.	*	1	0850	107	.00	.00	.00	0.
1	0240	33	.04	.03	.01	11.	*	1	0855	108	.00	.00	.00	0.
1	0245	34	.05	.04	.01	16.	*	1	0900	109	.00	.00	.00	0.
1	0250	35	.07	.05	.02	23.	*	1	0905	110	.00	.00	.00	0.
1	0255	36	.10	.07	.03	35.	*	1	0910	111	.00	.00	.00	0.
1	0300	37	.19	.11	.08	58.	*	1	0915	112	.00	.00	.00	0.
1	0305	38	1.15	.42	.73	174.	*	1	0920	113	.00	.00	.00	0.
1	0310	39	.13	.03	.10	403.	*	1	0925	114	.00	.00	.00	0.
1	0315	40	.08	.02	.06	684.	*	1	0930	115	.00	.00	.00	0.
1	0320	41	.06	.01	.04	806.	*	1	0935	116	.00	.00	.00	0.
1	0325	42	.05	.01	.04	775.	*	1	0940	117	.00	.00	.00	0.
1	0330	43	.04	.01	.03	654.	*	1	0945	118	.00	.00	.00	0.
1	0335	44	.03	.01	.03	487.	*	1	0950	119	.00	.00	.00	0.
1	0340	45	.03	.01	.02	374.	*	1	0955	120	.00	.00	.00	0.
1	0345	46	.03	.01	.02	295.	*	1	1000	121	.00	.00	.00	0.
1	0350	47	.02	.00	.02	234.	*	1	1005	122	.00	.00	.00	0.
1	0355	48	.02	.00	.02	190.	*	1	1010	123	.00	.00	.00	0.
1	0400	49	.02	.00	.02	157.	*	1	1015	124	.00	.00	.00	0.
1	0405	50	.02	.00	.02	132.	*	1	1020	125	.00	.00	.00	0.
1	0410	51	.02	.00	.01	115.	*	1	1025	126	.00	.00	.00	0.
1	0415	52	.02	.00	.01	101.	*	1	1030	127	.00	.00	.00	0.
1	0420	53	.02	.00	.01	90.	*	1	1035	128	.00	.00	.00	0.
1	0425	54	.02	.00	.01	82.	*	1	1040	129	.00	.00	.00	0.
1	0430	55	.01	.00	.01	75.	*	1	1045	130	.00	.00	.00	0.
1	0435	56	.02	.00	.01	70.	*	1	1050	131	.00	.00	.00	0.
1	0440	57	.02	.00	.01	66.	*	1	1055	132	.00	.00	.00	0.
1	0445	58	.02	.00	.01	64.	*	1	1100	133	.00	.00	.00	0.
1	0450	59	.02	.00	.01	64.	*	1	1105	134	.00	.00	.00	0.
1	0455	60	.02	.00	.01	63.	*	1	1110	135	.00	.00	.00	0.
1	0500	61	.02	.00	.01	63.	*	1	1115	136	.00	.00	.00	0.
1	0505	62	.01	.00	.01	62.	*	1	1120	137	.00	.00	.00	0.
1	0510	63	.01	.00	.01	60.	*	1	1125	138	.00	.00	.00	0.
1	0515	64	.01	.00	.01	59.	*	1	1130	139	.00	.00	.00	0.
1	0520	65	.01	.00	.01	57.	*	1	1135	140	.00	.00	.00	0.
1	0525	66	.01	.00	.01	56.	*	1	1140	141	.00	.00	.00	0.
1	0530	67	.01	.00	.01	54.	*	1	1145	142	.00	.00	.00	0.
1	0535	68	.01	.00	.01	53.	*	1	1150	143	.00	.00	.00	0.
1	0540	69	.01	.00	.01	52.	*	1	1155	144	.00	.00	.00	0.
1	0545	70	.01	.00	.01	50.	*	1	1200	145	.00	.00	.00	0.
1	0550	71	.01	.00	.01	49.	*	1	1205	146	.00	.00	.00	0.
1	0555	72	.01	.00	.01	48.	*	1	1210	147	.00	.00	.00	0.
1	0600	73	.01	.00	.01	47.	*	1	1215	148	.00	.00	.00	0.
1	0605	74	.00	.00	.00	45.	*	1	1220	149	.00	.00	.00	0.
1	0610	75	.00	.00	.00	40.	*	1	1225	150	.00	.00	.00	0.

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TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.41, TOTAL EXCESS = 1.58

PEAK FLOW TIME

MAXIMUM AVERAGE FLOW

(CFS)	(HR)		6-HR	24-HR	72-HR	12.42-HR
806.	3.33	(CFS)	100.	48.	48.	48.
		(INCHES)	1.584	1.584	1.584	1.584
		(AC-FT)	50.	50.	50.	50.

CUMULATIVE AREA = .59 SQ MI

53 KK

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*****
*           *
*  OUTLTS  *
*           *
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COMBINE ROUTE 4 AND BASIN 5 TO OUTLET 5

55 HC

HYDROGRAPH COMBINATION
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLTS
 SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0310	39	529.	*	1		0620	77	319.	*	1		0930	115	0.	*	
1		0005	2	0.	*	1		0315	40	882.	*	1		0625	78	298.	*	1		0935	116	0.	*	
1		0010	3	0.	*	1		0320	41	1154.	*	1		0630	79	278.	*	1		0940	117	0.	*	
1		0015	4	0.	*	1		0325	42	1379.	*	1		0635	80	257.	*	1		0945	118	0.	*	
1		0020	5	0.	*	1		0330	43	1592.	*	1		0640	81	235.	*	1		0950	119	0.	*	
1		0025	6	0.	*	1		0335	44	1787.	*	1		0645	82	213.	*	1		0955	120	0.	*	
1		0030	7	0.	*	1		0340	45	1997.	*	1		0650	83	191.	*	1		1000	121	0.	*	
1		0035	8	0.	*	1		0345	46	2159.	*	1		0655	84	171.	*	1		1005	122	0.	*	
1		0040	9	0.	*	1		0350	47	2257.	*	1		0700	85	151.	*	1		1010	123	0.	*	
1		0045	10	0.	*	1		0355	48	2306.	*	1		0705	86	131.	*	1		1015	124	0.	*	
1		0050	11	0.	*	1		0400	49	2317.	*	1		0710	87	113.	*	1		1020	125	0.	*	
1		0055	12	0.	*	1		0405	50	2300.	*	1		0715	88	97.	*	1		1025	126	0.	*	
1		0100	13	0.	*	1		0410	51	2255.	*	1		0720	89	81.	*	1		1030	127	0.	*	
1		0105	14	0.	*	1		0415	52	2181.	*	1		0725	90	68.	*	1		1035	128	0.	*	
1		0110	15	0.	*	1		0420	53	2076.	*	1		0730	91	56.	*	1		1040	129	0.	*	
1		0115	16	0.	*	1		0425	54	1942.	*	1		0735	92	45.	*	1		1045	130	0.	*	
1		0120	17	0.	*	1		0430	55	1785.	*	1		0740	93	37.	*	1		1050	131	0.	*	
1		0125	18	0.	*	1		0435	56	1617.	*	1		0745	94	29.	*	1		1055	132	0.	*	
1		0130	19	0.	*	1		0440	57	1449.	*	1		0750	95	24.	*	1		1100	133	0.	*	
1		0135	20	0.	*	1		0445	58	1292.	*	1		0755	96	19.	*	1		1105	134	0.	*	
1		0140	21	0.	*	1		0450	59	1150.	*	1		0800	97	15.	*	1		1110	135	0.	*	
1		0145	22	0.	*	1		0455	60	1023.	*	1		0805	98	12.	*	1		1115	136	0.	*	
1		0150	23	0.	*	1		0500	61	913.	*	1		0810	99	9.	*	1		1120	137	0.	*	
1		0155	24	0.	*	1		0505	62	819.	*	1		0815	100	7.	*	1		1125	138	0.	*	
1		0200	25	1.	*	1		0510	63	739.	*	1		0820	101	6.	*	1		1130	139	0.	*	
1		0205	26	1.	*	1		0515	64	672.	*	1		0825	102	5.	*	1		1135	140	0.	*	
1		0210	27	2.	*	1		0520	65	615.	*	1		0830	103	4.	*	1		1140	141	0.	*	
1		0215	28	4.	*	1		0525	66	568.	*	1		0835	104	3.	*	1		1145	142	0.	*	
1		0220	29	7.	*	1		0530	67	529.	*	1		0840	105	2.	*	1		1150	143	0.	*	
1		0225	30	12.	*	1		0535	68	496.	*	1		0845	106	2.	*	1		1155	144	0.	*	
1		0230	31	18.	*	1		0540	69	467.	*	1		0850	107	1.	*	1		1200	145	0.	*	
1		0235	32	26.	*	1		0545	70	444.	*	1		0855	108	1.	*	1		1205	146	0.	*	
1		0240	33	36.	*	1		0550	71	423.	*	1		0900	109	1.	*	1		1210	147	0.	*	
1		0245	34	49.	*	1		0555	72	405.	*	1		0905	110	1.	*	1		1215	148	0.	*	
1		0250	35	66.	*	1		0600	73	389.	*	1		0910	111	0.	*	1		1220	149	0.	*	
1		0255	36	90.	*	1		0605	74	374.	*	1		0915	112	0.	*	1		1225	150	0.	*	
1		0300	37	129.	*	1		0610	75	358.	*	1		0920	113	0.	*	1						*
1		0305	38	266.	*	1		0615	76	339.	*	1		0925	114	0.	*	1						*

PEAK FLOW (CFS)	TIME (HR)	(CFS)	6-HR	24-HR	72-HR	12.42-HR
2317.	4.00	688.	1.840	333.	333.	333.
		(INCHES)	1.841	1.841	1.841	1.841
		(AC-FT)	341.	341.	341.	341.

CUMULATIVE AREA = 3.48 SQ MI

56 KK

* ROUTE5 *

ROUTE OUTLET 5 TO BASIN 6 OUTLET

HYDROGRAPH ROUTING DATA

58 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
AMSKK .11 MUSKINGUM K
X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE5

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0310	39	258.	*	1		0620	77	345.	*	1		0930	115	0.	*	
1		0005	2	0.	*	1		0315	40	484.	*	1		0625	78	325.	*	1		0935	116	0.	*	
1		0010	3	0.	*	1		0320	41	779.	*	1		0630	79	305.	*	1		0940	117	0.	*	
1		0015	4	0.	*	1		0325	42	1052.	*	1		0635	80	284.	*	1		0945	118	0.	*	
1		0020	5	0.	*	1		0330	43	1292.	*	1		0640	81	263.	*	1		0950	119	0.	*	
1		0025	6	0.	*	1		0335	44	1513.	*	1		0645	82	242.	*	1		0955	120	0.	*	
1		0030	7	0.	*	1		0340	45	1719.	*	1		0650	83	220.	*	1		1000	121	0.	*	
1		0035	8	0.	*	1		0345	46	1921.	*	1		0655	84	199.	*	1		1005	122	0.	*	
1		0040	9	0.	*	1		0350	47	2088.	*	1		0700	85	178.	*	1		1010	123	0.	*	
1		0045	10	0.	*	1		0355	48	2203.	*	1		0705	86	158.	*	1		1015	124	0.	*	
1		0050	11	0.	*	1		0400	49	2270.	*	1		0710	87	138.	*	1		1020	125	0.	*	
1		0055	12	0.	*	1		0405	50	2297.	*	1		0715	88	120.	*	1		1025	126	0.	*	
1		0100	13	0.	*	1		0410	51	2292.	*	1		0720	89	103.	*	1		1030	127	0.	*	
1		0105	14	0.	*	1		0415	52	2257.	*	1		0725	90	87.	*	1		1035	128	0.	*	
1		0110	15	0.	*	1		0420	53	2193.	*	1		0730	91	73.	*	1		1040	129	0.	*	
1		0115	16	0.	*	1		0425	54	2098.	*	1		0735	92	60.	*	1		1045	130	0.	*	
1		0120	17	0.	*	1		0430	55	1975.	*	1		0740	93	49.	*	1		1050	131	0.	*	
1		0125	18	0.	*	1		0435	56	1829.	*	1		0745	94	40.	*	1		1055	132	0.	*	
1		0130	19	0.	*	1		0440	57	1668.	*	1		0750	95	32.	*	1		1100	133	0.	*	
1		0135	20	0.	*	1		0445	58	1505.	*	1		0755	96	26.	*	1		1105	134	0.	*	
1		0140	21	0.	*	1		0450	59	1348.	*	1		0800	97	21.	*	1		1110	135	0.	*	
1		0145	22	0.	*	1		0455	60	1202.	*	1		0805	98	17.	*	1		1115	136	0.	*	
1		0150	23	0.	*	1		0500	61	1072.	*	1		0810	99	13.	*	1		1120	137	0.	*	
1		0155	24	0.	*	1		0505	62	956.	*	1		0815	100	11.	*	1		1125	138	0.	*	
1		0200	25	0.	*	1		0510	63	856.	*	1		0820	101	8.	*	1		1130	139	0.	*	
1		0205	26	0.	*	1		0515	64	771.	*	1		0825	102	7.	*	1		1135	140	0.	*	
1		0210	27	1.	*	1		0520	65	699.	*	1		0830	103	5.	*	1		1140	141	0.	*	
1		0215	28	2.	*	1		0525	66	639.	*	1		0835	104	4.	*	1		1145	142	0.	*	
1		0220	29	4.	*	1		0530	67	588.	*	1		0840	105	3.	*	1		1150	143	0.	*	
1		0225	30	7.	*	1		0535	68	545.	*	1		0845	106	3.	*			1155	144	0.	*	
1		0230	31	11.	*	1		0540	69	509.	*	1		0850	107	2.	*			1200	145	0.	*	
1		0235	32	17.	*	1		0545	70	479.	*	1		0855	108	2.	*			1205	146	0.	*	
1		0240	33	24.	*	1		0550	71	453.	*	1		0900	109	1.	*			1210	147	0.	*	
1		0245	34	33.	*	1		0555	72	431.	*	1		0905	110	1.	*			1215	148	0.	*	
1		0250	35	46.	*	1		0600	73	412.	*	1		0910	111	1.	*			1220	149	0.	*	
1		0255	36	62.	*	1		0605	74	395.	*	1		0915	112	1.	*			1225	150	0.	*	
1		0300	37	86.	*	1		0610	75	379.	*	1		0920	113	0.	*							*

1 0305 38 134. * 1 0615 76 363. * 1 0925 114 0. *

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 (CFS) (HR) 6-HR 24-HR 72-HR 12.42-HR
 2297. 4.08 (CFS) 688. 333. 333. 333.
 (INCHES) 1.839 1.841 1.841 1.841
 (AC-FT) 341. 341. 341. 341.

CUMULATIVE AREA = 3.48 SQ MI

59 KK

 * AREA 6 *

BASIN NO. 6 RUNOFF

SUBBASIN RUNOFF DATA

61 BA

SUBBASIN CHARACTERISTICS
 TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
 HYDRO-35 TP-40 TP-49
 5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 2.50 3.00 .00 .00 .00 .00 .00 .00

STORM AREA = .40

62 LS

SCS LOSS RATE
 STRL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

63 UD

SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

79. 256. 486. 567. 521. 407. 259. 173. 119. 79.
 54. 36. 24. 16. 11. 7. 5. 4. 2. 1.

HYDROGRAPH AT STATION AREA 6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q		DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0615	76	.00	.00	.00	.00	22.	
1	0005	2	.01	.01	.00	0.	*	1	0620	77	.00	.00	.00	.00	17.	
1	0010	3	.01	.01	.00	0.	*	1	0625	78	.00	.00	.00	.00	12.	
1	0015	4	.01	.01	.00	0.	*	1	0630	79	.00	.00	.00	.00	8.	
1	0020	5	.01	.01	.00	0.	*	1	0635	80	.00	.00	.00	.00	5.	
1	0025	6	.01	.01	.00	0.	*	1	0640	81	.00	.00	.00	.00	3.	
1	0030	7	.01	.01	.00	0.	*	1	0645	82	.00	.00	.00	.00	2.	
1	0035	8	.01	.01	.00	0.	*	1	0650	83	.00	.00	.00	.00	2.	
1	0040	9	.01	.01	.00	0.	*	1	0655	84	.00	.00	.00	.00	1.	
1	0045	10	.01	.01	.00	0.	*	1	0700	85	.00	.00	.00	.00	1.	
1	0050	11	.01	.01	.00	0.	*	1	0705	86	.00	.00	.00	.00	0.	
1	0055	12	.01	.01	.00	0.	*	1	0710	87	.00	.00	.00	.00	0.	
1	0100	13	.01	.01	.00	0.	*	1	0715	88	.00	.00	.00	.00	0.	

1	0105	14	.01	.01	.00	0.	*	1	0720	89	.00	.00	.00	0.
1	0110	15	.02	.02	.00	0.	*	1	0725	90	.00	.00	.00	0.
1	0115	16	.02	.02	.00	0.	*	1	0730	91	.00	.00	.00	0.
1	0120	17	.02	.02	.00	0.	*	1	0735	92	.00	.00	.00	0.
1	0125	18	.02	.02	.00	0.	*	1	0740	93	.00	.00	.00	0.
1	0130	19	.02	.02	.00	0.	*	1	0745	94	.00	.00	.00	0.
1	0135	20	.01	.01	.00	0.	*	1	0750	95	.00	.00	.00	0.
1	0140	21	.02	.02	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0145	22	.02	.02	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0150	23	.02	.02	.00	0.	*	1	0805	98	.00	.00	.00	0.
1	0155	24	.02	.02	.00	0.	*	1	0810	99	.00	.00	.00	0.
1	0200	25	.02	.02	.00	0.	*	1	0815	100	.00	.00	.00	0.
1	0205	26	.02	.02	.00	0.	*	1	0820	101	.00	.00	.00	0.
1	0210	27	.02	.02	.00	0.	*	1	0825	102	.00	.00	.00	0.
1	0215	28	.02	.02	.00	0.	*	1	0830	103	.00	.00	.00	0.
1	0220	29	.02	.02	.00	1.	*	1	0835	104	.00	.00	.00	0.
1	0225	30	.03	.02	.00	2.	*	1	0840	105	.00	.00	.00	0.
1	0230	31	.03	.03	.00	3.	*	1	0845	106	.00	.00	.00	0.
1	0235	32	.04	.03	.01	5.	*	1	0850	107	.00	.00	.00	0.
1	0240	33	.04	.03	.01	7.	*	1	0855	108	.00	.00	.00	0.
1	0245	34	.05	.04	.01	10.	*	1	0900	109	.00	.00	.00	0.
1	0250	35	.07	.05	.02	15.	*	1	0905	110	.00	.00	.00	0.
1	0255	36	.10	.07	.03	23.	*	1	0910	111	.00	.00	.00	0.
1	0300	37	.19	.11	.08	39.	*	1	0915	112	.00	.00	.00	0.
1	0305	38	1.15	.42	.73	117.	*	1	0920	113	.00	.00	.00	0.
1	0310	39	.13	.03	.10	270.	*	1	0925	114	.00	.00	.00	0.
1	0315	40	.08	.02	.06	460.	*	1	0930	115	.00	.00	.00	0.
1	0320	41	.06	.01	.04	545.	*	1	0935	116	.00	.00	.00	0.
1	0325	42	.05	.01	.04	529.	*	1	0940	117	.00	.00	.00	0.
1	0330	43	.04	.01	.03	449.	*	1	0945	118	.00	.00	.00	0.
1	0335	44	.03	.01	.03	335.	*	1	0950	119	.00	.00	.00	0.
1	0340	45	.03	.01	.02	258.	*	1	0955	120	.00	.00	.00	0.
1	0345	46	.03	.01	.02	204.	*	1	100	121	.00	.00	.00	0.
1	0350	47	.02	.00	.02	162.	*	1	1005	122	.00	.00	.00	0.
1	0355	48	.02	.00	.02	131.	*	1	1010	123	.00	.00	.00	0.
1	0400	49	.02	.00	.02	108.	*	1	1015	124	.00	.00	.00	0.
1	0405	50	.02	.00	.02	91.	*	1	1020	125	.00	.00	.00	0.
1	0410	51	.02	.00	.01	79.	*	1	1025	126	.00	.00	.00	0.
1	0415	52	.02	.00	.01	69.	*	1	1030	127	.00	.00	.00	0.
1	0420	53	.02	.00	.01	62.	*	1	1035	128	.00	.00	.00	0.
1	0425	54	.02	.00	.01	56.	*	1	1040	129	.00	.00	.00	0.
1	0430	55	.01	.00	.01	52.	*	1	1045	130	.00	.00	.00	0.
1	0435	56	.02	.00	.01	48.	*	1	1050	131	.00	.00	.00	0.
1	0440	57	.02	.00	.01	45.	*	1	1055	132	.00	.00	.00	0.
1	0445	58	.02	.00	.01	44.	*	1	1100	133	.00	.00	.00	0.
1	0450	59	.02	.00	.01	44.	*	1	1105	134	.00	.00	.00	0.
1	0455	60	.02	.00	.01	43.	*	1	1110	135	.00	.00	.00	0.
1	0500	61	.02	.00	.01	43.	*	1	1115	136	.00	.00	.00	0.
1	0505	62	.01	.00	.01	42.	*	1	1120	137	.00	.00	.00	0.
1	0510	63	.01	.00	.01	41.	*	1	1125	138	.00	.00	.00	0.
1	0515	64	.01	.00	.01	40.	*	1	1130	139	.00	.00	.00	0.
1	0520	65	.01	.00	.01	39.	*	1	1135	140	.00	.00	.00	0.
1	0525	66	.01	.00	.01	38.	*	1	1140	141	.00	.00	.00	0.
1	0530	67	.01	.00	.01	37.	*	1	1145	142	.00	.00	.00	0.
1	0535	68	.01	.00	.01	36.	*	1	1150	143	.00	.00	.00	0.
1	0540	69	.01	.00	.01	35.	*	1	1155	144	.00	.00	.00	0.
1	0545	70	.01	.00	.01	34.	*	1	1200	145	.00	.00	.00	0.
1	0550	71	.01	.00	.01	34.	*	1	1205	146	.00	.00	.00	0.
1	0555	72	.01	.00	.01	33.	*	1	1210	147	.00	.00	.00	0.
1	0600	73	.01	.00	.01	32.	*	1	1215	148	.00	.00	.00	0.
1	0605	74	.00	.00	.00	31.	*	1	1220	149	.00	.00	.00	0.
1	0610	75	.00	.00	.00	28.	*	1	1225	150	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.41, TOTAL EXCESS = 1.59

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	12.42-HR
545.	3.33	(INCHES)	68.	33.	33.	33.
		(AC-FT)	1.586	1.586	1.586	1.586
			34.	34.	34.	34.

CUMULATIVE AREA = .40 SQ MI

64 KK

* OUTLT6 *

COMBINE ROUTE 5 AND BASIN 6 TO OUTLET 6

66 HC

"HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT6
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	
1		0000	1	0.	*	1		0310	39	528.	*	1		0620	77	361.	*	1		0930	115	0.	
1		0005	2	0.	*	1		0315	40	944.	*	1		0625	78	337.	*	1		0935	116	0.	
1		0010	3	0.	*	1		0320	41	1324.	*	1		0630	79	313.	*	1		0940	117	0.	
1		0015	4	0.	*	1		0325	42	1581.	*	1		0635	80	290.	*	1		0945	118	0.	
1		0020	5	0.	*	1		0330	43	1741.	*	1		0640	81	267.	*	1		0950	119	0.	
1		0025	6	0.	*	1		0335	44	1848.	*	1		0645	82	244.	*	1		0955	120	0.	
1		0030	7	0.	*	1		0340	45	1978.	*	1		0650	83	222.	*	1		1000	121	0.	
1		0035	8	0.	*	1		0345	46	2125.	*	1		0655	84	200.	*	1		1005	122	0.	
1		0040	9	0.	*	1		0350	47	2249.	*	1		0700	85	178.	*	1		1010	123	0.	
1		0045	10	0.	*	1		0355	48	2334.	*	1		0705	86	158.	*	1		1015	124	0.	
1		0050	11	0.	*	1		0400	49	2379.	*	1		0710	87	138.	*	1		1020	125	0.	
1		0055	12	0.	*	1		0405	50	2389.	*	1		0715	88	120.	*	1		1025	126	0.	
1		0100	13	0.	*	1		0410	51	2371.	*	1		0720	89	103.	*	1		1030	127	0.	
1		0105	14	0.	*	1		0415	52	2327.	*	1		0725	90	87.	*	1		1035	128	0.	
1		0110	15	0.	*	1		0420	53	2255.	*	1		0730	91	73.	*	1		1040	129	0.	
1		0115	16	0.	*	1		0425	54	2154.	*	1		0735	92	60.	*	1		1045	130	0.	
1		0120	17	0.	*	1		0430	55	2027.	*	1		0740	93	49.	*	1		1050	131	0.	
1		0125	18	0.	*	1		0435	56	1877.	*	1		0745	94	40.	*	1		1055	132	0.	
1		0130	19	0.	*	1		0440	57	1714.	*	1		0750	95	32.	*	1		1100	133	0.	
1		0135	20	0.	*	1		0445	58	1549.	*	1		0755	96	26.	*	1		1105	134	0.	
1		0140	21	0.	*	1		0450	59	1391.	*	1		0800	97	21.	*	1		1110	135	0.	
1		0145	22	0.	*	1		0455	60	1246.	*	1		0805	98	17.	*	1		1115	136	0.	
1		0150	23	0.	*	1		0500	61	1114.	*	1		0810	99	13.	*	1		1120	137	0.	
1		0155	24	0.	*	1		0505	62	998.	*	1		0815	100	11.	*	1		1125	138	0.	
1		0200	25	0.	*	1		0510	63	898.	*	1		0820	101	8.	*	1		1130	139	0.	
1		0205	26	1.	*	1		0515	64	811.	*	1		0825	102	7.	*	1		1135	140	0.	
1		0210	27	1.	*	1		0520	65	738.	*	1		0830	103	5.	*	1		1140	141	0.	
1		0215	28	3.	*	1		0525	66	677.	*	1		0835	104	4.	*	1		1145	142	0.	
1		0220	29	5.	*	1		0530	67	625.	*	1		0840	105	3.	*	1		1150	143	0.	
1		0225	30	9.	*	1		0535	68	581.	*	1		0845	106	3.	*	1		1155	144	0.	
1		0230	31	14.	*	1		0540	69	545.	*	1		0850	107	2.	*	1		1200	145	0.	
1		0235	32	21.	*	1		0545	70	513.	*	1		0855	108	2.	*	1		1205	146	0.	
1		0240	33	31.	*	1		0550	71	487.	*	1		0900	109	1.	*	1		1210	147	0.	
1		0245	34	44.	*	1		0555	72	464.	*	1		0905	110	1.	*	1		1215	148	0.	
1		0250	35	61.	*	1		0600	73	444.	*	1		0910	111	1.	*	1		1220	149	0.	
1		0255	36	85.	*	1		0605	74	426.	*	1		0915	112	1.	*	1		1225	150	0.	
1		0300	37	124.	*	1		0610	75	407.	*	1		0920	113	0.	*	1					0.
1		0305	38	250.	*	1		0615	76	385.	*	1		0925	114	0.	*	1					0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	12.42-HR
2389.	4.08	(CFS)	756.	366.	366.	366.
		(INCHES)	1.813	1.814	1.814	1.814
		(AC-FT)	375.	375.	375.	375.

CUMULATIVE AREA = 3.88 SQ MI

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
HYDROGRAPH AT	AREA 1	1501.	3.67	294.	142.	142.	1.45		
ROUTED TO	ROUTE1	1487.	3.83	294.	142.	142.	1.45		
HYDROGRAPH AT	AREA 2	991.	3.33	123.	60.	60.	.60		
2 COMBINED AT	OUTLT2	1815.	3.75	417.	202.	202.	2.05		
ROUTED TO	ROUTE2	1806.	3.83	417.	202.	202.	2.05		
HYDROGRAPH AT	AREA 3	377.	3.33	49.	23.	23.	.24		
2 COMBINED AT	OUTLT3	1950.	3.75	466.	225.	225.	2.29		
ROUTED TO	ROUTE3	1931.	3.83	466.	225.	225.	2.29		
HYDROGRAPH AT	AREA 4	993.	3.33	122.	59.	59.	.60		
2 COMBINED AT	OUTLT4	2365.	3.50	588.	284.	284.	2.89		
ROUTED TO	ROUTE4	2167.	4.08	588.	284.	284.	2.89		
HYDROGRAPH AT	AREA 5	806.	3.33	100.	48.	48.	.59		
2 COMBINED AT	OUTLT5	2317.	4.00	688.	333.	333.	3.48		
ROUTED TO	ROUTE5	2297.	4.08	688.	333.	333.	3.48		
HYDROGRAPH AT	AREA 6	545.	3.33	68.	33.	33.	.40		
2 COMBINED AT	OUTLT6	2389.	4.08	756.	366.	366.	3.88		

** NORMAL END OF HEC-1 ***


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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1) *
  SEPTEMBER 1990 *
  VERSION 4.0 *
RUN DATE 08/27/1993 TIME 09:15:52 *
*****
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*****
U.S. ARMY CORPS OF ENGINEERS *
HYDROLOGIC ENGINEERING CENTER *
  609 SECOND STREET *
  DAVIS, CALIFORNIA 95616 *
  (916) 756-1104 *
*****
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X   X  XXXXXXX  XXXXX      X
X   X  X      X   X      XX
X   X  X      X           X
XXXXXXX XXXX  X           XXXXX X
X   X  X      X           X
X   X  X      X   X      X
X   X  XXXXXXX  XXXXX      XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HFC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	CHURCH ROCK, NEW MEXICO									15608-01
2	ID	100-YEAR, 2-HOUR DURATION STORM BALANCED STORM DISTRIBUTION AMC=II									
3	ID	FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HR1, INC. URANINIUM MINE									
4	IT	5	60								
5	ID	0									
6	KK	AREA 1									
7	KM	BASIN NO. 1 RUNOFF									
8	PH	1	0	1.15	1.48	2	2.3				
9	BA	1.447									
10	LS	0	89								
11	UD	0.552									
12	KK	ROUTE1									
13	KM	ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET									
14	RM	2	0.19	0.4							
15	KK	AREA 2									
16	KM	BASIN NO. 2 RUNOFF									
17	BA	0.604									
18	LS	0	89								
19	UD	0.3									
20	KK	OUTLT2									
21	KM	COMBINE ROUTE 1 AND BASIN TO OUTLET 2									
22	HC	2									
23	KK	ROUTE2									
24	KM	ROUTE OUTLET 2 TO BASIN 3 OUTLET									
25	RM	1	0.064	0.4							
26	KK	AREA 3									
27	KM	BASIN NO. 3 RUNOFF									
28	BA	0.238									
29	LS	0	89								
30	UD	0.313									
31	KK	OUTLT3									
32	KM	COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3									
33	HC	2									
34	KK	ROUTE3									
35	KM	ROUTE OUTLET 3 TO BASIN 4 OUTLET									
36	RM	1	0.125	0.3							
37	KK	AREA 4									
38	KM	BASIN NO. 4 RUNOFF									
39	BA	0.6									
40	LS	0	89								
41	UD	0.297									

 FLOOD HYDROGRAPH PACKAGE (HEC-1)
 SEPTEMBER 1990
 VERSION 4.0

RUN DATE 08/27/1993 TIME 09:15:52

 U.S. ARMY CORPS OF ENGINEERS
 HYDROLOGIC ENGINEERING CENTER
 609 SECOND STREET
 DAVIS, CALIFORNIA 95616
 (916) 756-1104

CHURCH ROCK, NEW MEXICO 15608-01
 100-YEAR, 2-HOUR DURATION STORM BALANCED STORM DISTRIBUTION AMC=11
 FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE

5 IO OUTPUT CONTROL VARIABLES
 IPRT 0 PRINT CONTROL
 IPLOT 0 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA
 NMIN 5 MINUTES IN COMPUTATION INTERVAL
 IDATE 1 0 STARTING DATE
 ITIME 0000 STARTING TIME
 NQ 60 NUMBER OF HYDROGRAPH ORDINATES
 NDDATE 1 0 ENDING DATE
 NDTIME 0455 ENDING TIME
 ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
 TOTAL TIME BASE 4.92 HOURS

ENGLISH UNITS
 DRAINAGE AREA SQUARE MILES
 PRECIPITATION DPTH INCHES
 LENGTH, ELEVATION FEET
 FLOW CUBIC FEET PER SECOND
 STORAGE VOLUME ACRE-Feet
 SURFACE AREA ACRES
 TEMPERATURE DEGREES FAHRENHEIT

6 KK

 * AREA 1 *
 * *

BASIN NO. 1 RUNOFF

SUBBASIN RUNOFF DATA

9 BA

SUBBASIN CHARACTERISTICS
 TAREA 1.45 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM
 HYDRO-35 TP-40 TP-49
 5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 .00 .00 .00 .00 .00 .00 .00 .00

STORM AREA = 1.45

10 LS

SCS LOSS RATE
 STRTL .25 INITIAL ABSTRACTION
 CRVNR 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

11 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .55 LAG

UNIT HYDROGRAPH
35 END-OF-PERIOD ORDINATES

69.	203.	405.	691.	968.	1125.	1175.	1149.	1043.	914.
738.	560.	442.	350.	284.	227.	178.	143.	114.	90.
72.	57.	45.	36.	29.	23.	18.	15.	12.	10.
8.	6.	4.	3.	1.					

HYDROGRAPH AT STATION AREA 1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0230	31	.00	.00	.00	311.
1		0005	2	.02	.02	.00	0.	*	1		0235	32	.00	.00	.00	255.
1		0010	3	.02	.02	.00	0.	*	1		0240	33	.00	.00	.00	206.
1		0015	4	.02	.02	.00	0.	*	1		0245	34	.00	.00	.00	165.
1		0020	5	.03	.03	.00	0.	*	1		0250	35	.00	.00	.00	131.
1		0025	6	.03	.03	.00	0.	*	1		0255	36	.00	.00	.00	104.
1		0030	7	.03	.03	.00	0.	*	1		0300	37	.00	.00	.00	83.
1		0035	8	.04	.04	.00	0.	*	1		0305	38	.00	.00	.00	66.
1		0040	9	.04	.04	.00	0.	*	1		0310	39	.00	.00	.00	52.
1		0045	10	.05	.05	.00	0.	*	1		0315	40	.00	.00	.00	42.
1		0050	11	.07	.06	.01	1.	*	1		0320	41	.00	.00	.00	33.
1		0055	12	.10	.08	.02	3.	*	1		0325	42	.00	.00	.00	27.
1		0100	13	.19	.13	.07	12.	*	1		0330	43	.00	.00	.00	22.
1		0105	14	1.14	.39	.75	78.	*	1		0335	44	.00	.00	.00	17.
1		0110	15	.13	.03	.11	208.	*	1		0340	45	.00	.00	.00	14.
1		0115	16	.08	.01	.07	404.	*	1		0345	46	.00	.00	.00	10.
1		0120	17	.06	.01	.05	676.	*	1		0350	47	.00	.00	.00	8.
1		0125	18	.05	.01	.04	948.	*	1		0355	48	.00	.00	.00	5.
1		0130	19	.04	.01	.03	1125.	*	1		0400	49	.00	.00	.00	3.
1		0135	20	.03	.01	.03	1231.	*	1		0405	50	.00	.00	.00	2.
1		0140	21	.03	.00	.02	1252.	*	1		0410	51	.00	.00	.00	2.
1		0145	22	.03	.00	.02	1197.	*	1		0415	52	.00	.00	.00	1.
1		0150	23	.02	.00	.02	1105.	*	1		0420	53	.00	.00	.00	1.
1		0155	24	.02	.00	.02	966.	*	1		0425	54	.00	.00	.00	1.
1		0200	25	.02	.00	.02	815.	*	1		0430	55	.00	.00	.00	0.
1		0205	26	.00	.00	.00	700.	*	1		0435	56	.00	.00	.00	0.
1		0210	27	.00	.00	.00	603.	*	1		0440	57	.00	.00	.00	0.
1		0215	28	.00	.00	.00	522.	*	1		0445	58	.00	.00	.00	0.
1		0220	29	.00	.00	.00	446.	*	1		0450	59	.00	.00	.00	0.
1		0225	30	.00	.00	.00	373.	*	1		0455	60	.00	.00	.00	0.

TOTAL RAINFALL = 2.29, TOTAL LOSS = 1.02, TOTAL EXCESS = 1.27

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	4.92-HR
1252.	1.67	241.	241.	241.	241.	241.
		(INCHES)	1.270	1.270	1.270	1.270
		(AC-FT)	98.	98.	98.	98.

CUMULATIVE AREA = 1.45 SQ MI

12 KK

* ROUTE1 *

ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET

HYDROGRAPH ROUTING DATA

14 RM

MUSKINGUM ROUTING

NSTPS 2 NUMBER OF SUBREACHES
 AMSKK .19 MUSKINGUM K
 X .40 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE1

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0115	16	68.	*	1		0230	31	468.	*	1		0345	46	19.	*
1		0005	2	0.	*	1		0120	17	182.	*	1		0235	32	394.	*	1		0350	47	15.	*
1		0010	3	0.	*	1		0125	18	360.	*	1		0240	33	330.	*	1		0355	48	11.	*
1		0015	4	0.	*	1		0130	19	607.	*	1		0245	34	272.	*	1		0400	49	8.	*
1		0020	5	0.	*	1		0135	20	868.	*	1		0250	35	221.	*	1		0405	50	6.	*
1		0025	6	0.	*	1		0140	21	1070.	*	1		0255	36	177.	*	1		0410	51	4.	*
1		0030	7	0.	*	1		0145	22	1191.	*	1		0300	37	141.	*	1		0415	52	3.	*
1		0035	8	0.	*	1		0150	23	1234.	*	1		0305	38	112.	*	1		0420	53	2.	*
1		0040	9	0.	*	1		0155	24	1203.	*	1		0310	39	89.	*	1		0425	54	1.	*
1		0045	10	0.	*	1		0200	25	1124.	*	1		0315	40	71.	*	1		0430	55	1.	*
1		0050	11	0.	*	1		0205	26	1000.	*	1		0320	41	57.	*	1		0435	56	1.	*
1		0055	12	0.	*	1		0210	27	858.	*	1		0325	42	45.	*	1		0440	57	0.	*
1		0100	13	1.	*	1		0215	28	736.	*	1		0330	43	36.	*	1		0445	58	0.	*
1		0105	14	3.	*	1		0220	29	633.	*	1		0335	44	29.	*	1		0450	59	0.	*
1		0110	15	14.	*	1		0225	30	546.	*	1		0340	45	23.	*	1		0455	60	0.	*

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (CFS)	72-HR (CFS)	4.92-HR (CFS)
1234.	1.83	241.	241.	241.	241.
		(INCHES) 1.270	(INCHES) 1.270	(INCHES) 1.270	(INCHES) 1.270
		(AC-FT) 98.	(AC-FT) 98.	(AC-FT) 98.	(AC-FT) 98.

CUMULATIVE AREA = 1.45 SQ MI

15 KK

 * AREA 2 *

BASIN NO. 2 RUNOFF

SUBBASIN RUNOFF DATA

17 BA

SUBBASIN CHARACTERISTICS

TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .60

18 LS

SCS LOSS RATE

STRTL .25 INITIAL ABSTRACTION
 CRVNR 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

19 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

119. 386. 732. 854. 784. 613. 389. 261. 179. 119.
81. 54. 36. 24. 16. 11. 8. 5. 3. 1.

HYDROGRAPH AT STATION AREA 2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0230	31	.00	.00	.00	30.
1		0005	2	.02	.02	.00	0.	*	1		0235	32	.00	.00	.00	20.
1		0010	3	.02	.02	.00	0.	*	1		0240	33	.00	.00	.00	13.
1		0015	4	.02	.02	.00	0.	*	1		0245	34	.00	.00	.00	8.
1		0020	5	.02	.02	.00	0.	*	1		0250	35	.00	.00	.00	5.
1		0025	6	.03	.03	.00	0.	*	1		0255	36	.00	.00	.00	3.
1		0030	7	.03	.03	.00	0.	*	1		0300	37	.00	.00	.00	2.
1		0035	8	.04	.04	.00	0.	*	1		0305	38	.00	.00	.00	1.
1		0040	9	.04	.04	.00	0.	*	1		0310	39	.00	.00	.00	1.
1		0045	10	.05	.05	.00	0.	*	1		0315	40	.00	.00	.00	1.
1		0050	11	.07	.06	.01	1.	*	1		0320	41	.00	.00	.00	0.
1		0055	12	.10	.08	.02	5.	*	1		0325	42	.00	.00	.00	0.
1		0100	13	.19	.13	.07	21.	*	1		0330	43	.00	.00	.00	0.
1		0105	14	1.15	.39	.76	137.	*	1		0335	44	.00	.00	.00	0.
1		0110	15	.13	.03	.11	377.	*	1		0340	45	.00	.00	.00	0.
1		0115	16	.08	.01	.07	682.	*	1		0345	46	.00	.00	.00	0.
1		0120	17	.06	.01	.05	826.	*	1		0350	47	.00	.00	.00	0.
1		0125	18	.05	.01	.04	810.	*	1		0355	48	.00	.00	.00	0.
1		0130	19	.04	.01	.03	694.	*	1		0400	49	.00	.00	.00	0.
1		0135	20	.03	.01	.03	520.	*	1		0405	50	.00	.00	.00	0.
1		0140	21	.03	.00	.02	403.	*	1		0410	51	.00	.00	.00	0.
1		0145	22	.03	.00	.02	318.	*	1		0415	52	.00	.00	.00	0.
1		0150	23	.02	.00	.02	254.	*	1		0420	53	.00	.00	.00	0.
1		0155	24	.02	.00	.02	207.	*	1		0425	54	.00	.00	.00	0.
1		0200	25	.02	.00	.02	171.	*	1		0430	55	.00	.00	.00	0.
1		0205	26	.00	.00	.00	143.	*	1		0435	56	.00	.00	.00	0.
1		0210	27	.00	.00	.00	117.	*	1		0440	57	.00	.00	.00	0.
1		0215	28	.00	.00	.00	90.	*	1		0445	58	.00	.00	.00	0.
1		0220	29	.00	.00	.00	66.	*	1		0450	59	.00	.00	.00	0.
1		0225	30	.00	.00	.00	46.	*	1		0455	60	.00	.00	.00	0.

TOTAL RAINFALL = 2.29, TOTAL LOSS = 1.02, TOTAL EXCESS = 1.28

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (INCHES)	4.92-HR (AC-FT)
826.	1.33	101.	1.277	1.277	41.

CUMULATIVE AREA = .60 SQ MI

20 KK

* OUTLT2 *

COMBINE ROUTE 1 AND BASIN TO OUTLET 2

HYDROGRAPH AT STATION OUTLT2
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0115	16	750.	*	1		0230	31	498.	*	1		0345	46	19.	*
1		0005	2	0.	*	1		0120	17	1008.	*	1		0235	32	414.	*	1		0350	47	15.	*
1		0010	3	0.	*	1		0125	18	1171.	*	1		0240	33	342.	*	1		0355	48	11.	*
1		0015	4	0.	*	1		0130	19	1300.	*	1		0245	34	280.	*	1		0400	49	8.	*
1		0020	5	0.	*	1		0135	20	1388.	*	1		0250	35	226.	*	1		0405	50	6.	*
1		0025	6	0.	*	1		0140	21	1473.	*	1		0255	36	181.	*	1		0410	51	4.	*
1		0030	7	0.	*	1		0145	22	1509.	*	1		0300	37	144.	*	1		0415	52	3.	*
1		0035	8	0.	*	1		0150	23	1487.	*	1		0305	38	114.	*	1		0420	53	2.	*
1		0040	9	0.	*	1		0155	24	1409.	*	1		0310	39	90.	*	1		0425	54	1.	*
1		0045	10	0.	*	1		0200	25	1295.	*	1		0315	40	72.	*	1		0430	55	1.	*
1		0050	11	1.	*	1		0205	26	1143.	*	1		0320	41	57.	*	1		0435	56	1.	*
1		0055	12	5.	*	1		0210	27	975.	*	1		0325	42	45.	*	1		0440	57	0.	*
1		0100	13	22.	*	1		0215	28	826.	*	1		0330	43	36.	*	1		0445	58	0.	*
1		0105	14	140.	*	1		0220	29	698.	*	1		0335	44	29.	*	1		0450	59	0.	*
1		0110	15	390.	*	1		0225	30	592.	*	1		0340	45	23.	*	1		0455	60	0.	*

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR (INCHES)	24-HR (INCHES)	72-HR (INCHES)	4.92-HR (INCHES)
1509.	1.75	342.	1.272	1.272	1.272	1.272
		(AC-FT)	139.	139.	139.	139.

CUMULATIVE AREA = 2.05 SQ MI

23 KK

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*****
*                               *
* ROUTE2                       *
*                               *
*****

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ROUTE OUTLET 2 TO BASIN 3 OUTLET

HYDROGRAPH ROUTING DATA

25 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK      .06 MUSKINGUM K
X          .40 MUSKINGUM X

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*** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE2.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE2

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0115	16	471.	*	1		0230	31	570.	*	1		0345	46	22.	*
1		0005	2	0.	*	1		0120	17	813.	*	1		0235	32	479.	*	1		0350	47	18.	*
1		0010	3	0.	*	1		0125	18	1049.	*	1		0240	33	397.	*	1		0355	48	14.	*

1	0015	4	0.	*	1	0130	19	1202.	*	1	0245	34	327.	*	1	0400	49	11.
1	0020	5	0.	*	1	0135	20	1322.	*	1	0250	35	267.	*	1	0405	50	8.
1	0025	6	0.	*	1	0140	21	1408.	*	1	0255	36	215.	*	1	0410	51	5.
1	0030	7	0.	*	1	0145	22	1483.	*	1	0300	37	172.	*	1	0415	52	4.
1	0035	8	0.	*	1	0150	23	1506.	*	1	0305	38	136.	*	1	0420	53	2.
1	0040	9	0.	*	1	0155	24	1471.	*	1	0310	39	108.	*	1	0425	54	2.
1	0045	10	0.	*	1	0200	25	1384.	*	1	0315	40	86.	*	1	0430	55	1.
1	0050	11	0.	*	1	0205	26	1261.	*	1	0320	41	68.	*	1	0435	56	1.
1	0055	12	2.	*	1	0210	27	1104.	*	1	0325	42	54.	*	1	0440	57	1.
1	0100	13	9.	*	1	0215	28	940.	*	1	0330	43	43.	*	1	0445	58	0.
1	0105	14	46.	*	1	0220	29	796.	*	1	0335	44	34.	*	1	0450	59	0.
1	0110	15	194.	*	1	0225	30	673.	*	1	0340	45	28.	*	1	0455	60	0.

PEAK FLOW (CFS) 1506. TIME (HR) 1.83

		MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	4.92-HR
(CFS)		342.	342.	342.	342.
(INCHES)		1.272	1.272	1.272	1.272
(AC-FT)		139.	139.	139.	139.

CUMULATIVE AREA = 2.05 SQ MI

 * AREA 3 *

 BASIN NO. 3 RUNOFF

SUBBASIN RUNOFF DATA

28 BA SUBBASIN CHARACTERISTICS
 TAREA .24 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .24

29 LS SCS LOSS RATE
 STRTL .25 INITIAL ABSTRACTION
 CRVNB 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

30 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .31 LAG

UNIT HYDROGRAPH
 21 END-OF-PERIOD ORDINATES

43.	137.	268.	322.	306.	250.	167.	111.	77.	53.
36.	24.	17.	11.	8.	5.	4.	3.	2.	1.
0.									

HYDROGRAPH AT STATION AREA 3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1		.00	.00	.00	0.	1	0230	31		.00	.00	.00	14.

1	0005	2	.02	.02	.00	0.	*	1	0235	32	.00	.00	.00	9.
1	0010	3	.02	.02	.00	0.	*	1	0240	33	.00	.00	.00	6.
1	0015	4	.02	.02	.00	0.	*	1	0245	34	.00	.00	.00	4.
1	0020	5	.02	.02	.00	0.	*	1	0250	35	.00	.00	.00	2.
1	0025	6	.03	.03	.00	0.	*	1	0255	36	.00	.00	.00	2.
1	0030	7	.03	.03	.00	0.	*	1	0300	37	.00	.00	.00	1.
1	0035	8	.04	.04	.00	0.	*	1	0305	38	.00	.00	.00	1.
1	0040	9	.04	.04	.00	0.	*	1	0310	39	.00	.00	.00	0.
1	0045	10	.05	.05	.00	0.	*	1	0315	40	.00	.00	.00	0.
1	0050	11	.07	.06	.01	0.	*	1	0320	41	.00	.00	.00	0.
1	0055	12	.10	.08	.02	2.	*	1	0325	42	.00	.00	.00	0.
1	0100	13	.19	.13	.07	8.	*	1	0330	43	.00	.00	.00	0.
1	0105	14	1.15	.39	.76	49.	*	1	0335	44	.00	.00	.00	0.
1	0110	15	.14	.03	.11	135.	*	1	0340	45	.00	.00	.00	0.
1	0115	16	.08	.01	.07	251.	*	1	0345	46	.00	.00	.00	0.
1	0120	17	.06	.01	.05	312.	*	1	0350	47	.00	.00	.00	0.
1	0125	18	.05	.01	.04	315.	*	1	0355	48	.00	.00	.00	0.
1	0130	19	.04	.01	.03	278.	*	1	0400	49	.00	.00	.00	0.
1	0135	20	.03	.01	.03	215.	*	1	0405	50	.00	.00	.00	0.
1	0140	21	.03	.00	.02	166.	*	1	0410	51	.00	.00	.00	0.
1	0145	22	.03	.00	.02	132.	*	1	0415	52	.00	.00	.00	0.
1	0150	23	.02	.00	.02	105.	*	1	0420	53	.00	.00	.00	0.
1	0155	24	.02	.00	.02	86.	*	1	0425	54	.00	.00	.00	0.
1	0200	25	.02	.00	.02	71.	*	1	0430	55	.00	.00	.00	0.
1	0205	26	.00	.00	.00	59.	*	1	0435	56	.00	.00	.00	0.
1	0210	27	.00	.00	.00	49.	*	1	0440	57	.00	.00	.00	0.
1	0215	28	.00	.00	.00	38.	*	1	0445	58	.00	.00	.00	0.
1	0220	29	.00	.00	.00	28.	*	1	0450	59	.00	.00	.00	0.
1	0225	30	.00	.00	.00	20.	*	1	0455	60	.00	.00	.00	0.

TOTAL RAINFALL = 2.30, TOTAL LOSS = 1.02, TOTAL EXCESS = 1.28

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	4.92-HR
315.	1.42	(CFS) 40.	40.	40.	40.
		(INCHES) 1.280	1.280	1.280	1.280
		(AC-FT) 16.	16.	16.	16.

CUMULATIVE AREA = .24 SQ MI

31 KK

* OUTLT3 *

COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3

33 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT3
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0115	16	721.	*	1		0230	31	583.	*	1		0345	46	22.	*
1		0005	2	0.	*	1		0120	17	1126.	*	1		0235	32	488.	*	1		0350	47	18.	*
1		0010	3	0.	*	1		0125	18	1364.	*	1		0240	33	403.	*	1		0355	48	14.	*
1		0015	4	0.	*	1		0130	19	1480.	*	1		0245	34	331.	*	1		0400	49	11.	*
1		0020	5	0.	*	1		0135	20	1537.	*	1		0250	35	269.	*	1		0405	50	8.	*
1		0025	6	0.	*	1		0140	21	1574.	*	1		0255	36	217.	*	1		0410	51	5.	*

1	0030	7	0.	*	1	0145	22	1615.	*	1	0300	37	173.	*	1	0415	52	4.
1	0035	8	0.	*	1	0150	23	1611.	*	1	0305	38	137.	*	1	0420	53	2.
1	0040	9	0.	*	1	0155	24	1557.	*	1	0310	39	108.	*	1	0425	54	2.
1	0045	10	0.	*	1	0200	25	1455.	*	1	0315	40	86.	*	1	0430	55	1.
1	0050	11	1.	*	1	0205	26	1320.	*	1	0320	41	68.	*	1	0435	56	1.
1	0055	12	4.	*	1	0210	27	1153.	*	1	0325	42	54.	*	1	0440	57	1.
1	0100	13	16.	*	1	0215	28	978.	*	1	0330	43	43.	*	1	0445	58	0.
1	0105	14	95.	*	1	0220	29	824.	*	1	0335	44	34.	*	1	0450	59	0.
1	0110	15	329.	*	1	0225	30	693.	*	1	0340	45	28.	*	1	0455	60	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	4.92-HR
1615.	1.75	382.	382.	382.	382.	382.
		(INCHES)	1.273	1.273	1.273	1.273
		(AC-FT)	155.	155.	155.	155.

CUMULATIVE AREA = 2.29 SQ MI

34 KK

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*****
* ROUTE3 *
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ROUTE OUTLET 3 TO BASIN 4 OUTLET

HYDROGRAPH ROUTING DATA

36 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .13 MUSKINGUM K
X         .30 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE3

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0115	16	251.	*	1	0230	31	764.	*	1	0345	46	32.	*				
1	0005	2	0.	*	1	0120	17	568.	*	1	0235	32	644.	*	1	0350	47	25.	*				
1	0010	3	0.	*	1	0125	18	935.	*	1	0240	33	541.	*	1	0355	48	20.	*				
1	0015	4	0.	*	1	0130	19	1216.	*	1	0245	34	450.	*	1	0400	49	16.	*				
1	0020	5	0.	*	1	0135	20	1388.	*	1	0250	35	371.	*	1	0405	50	12.	*				
1	0025	6	0.	*	1	0140	21	1485.	*	1	0255	36	304.	*	1	0410	51	9.	*				
1	0030	7	0.	*	1	0145	22	1544.	*	1	0300	37	246.	*	1	0415	52	7.	*				
1	0035	8	0.	*	1	0150	23	1590.	*	1	0305	38	198.	*	1	0420	53	5.	*				
1	0040	9	0.	*	1	0155	24	1602.	*	1	0310	39	158.	*	1	0425	54	3.	*				
1	0045	10	0.	*	1	0200	25	1569.	*	1	0315	40	125.	*	1	0430	55	2.	*				
1	0050	11	0.	*	1	0205	26	1491.	*	1	0320	41	99.	*	1	0435	56	2.	*				
1	0055	12	1.	*	1	0210	27	1375.	*	1	0325	42	79.	*	1	0440	57	1.	*				
1	0100	13	3.	*	1	0215	28	1226.	*	1	0330	43	63.	*	1	0445	58	1.	*				
1	0105	14	14.	*	1	0220	29	1061.	*	1	0335	44	50.	*	1	0450	59	1.	*				
1	0110	15	74.	*	1	0225	30	904.	*	1	0340	45	40.	*	1	0455	60	0.	*				

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	4.92-HR
1602.	1.92	382.	382.	382.	382.	382.
		(INCHES)	1.273	1.273	1.273	1.273
		(AC-FT)	155.	155.	155.	155.

CUMULATIVE AREA = 2.29 SQ MI

37 KK

* AREA *

BASIN NO. 4 RUNOFF

SUBBASIN RUNOFF DATA

39 BA

SUBBASIN CHARACTERISTICS

TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

.....	HYDR0-35	.....	.....	TP-40	.....	.....	TP-49	.....		
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
1.15	1.48	2.00	2.30	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .60

40 LS

SCS LOSS RATE

STRTL .25 INITIAL ABSTRACTION
CRVNBR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

41 UD

SCS DIMENSIONLESS UNITGRAPH

TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

121.	392.	739.	856.	780.	604.	381.	254.	174.	116.
78.	52.	34.	23.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 4

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0230	31	.00	.00	.00	29.
1		0005	2	.02	.02	.00	0.	*	1		0235	32	.00	.00	.00	19.
1		0010	3	.02	.02	.00	0.	*	1		0240	33	.00	.00	.00	12.
1		0015	4	.02	.02	.00	0.	*	1		0245	34	.00	.00	.00	7.
1		0020	5	.02	.02	.00	0.	*	1		0250	35	.00	.00	.00	5.
1		0025	6	.03	.03	.00	0.	*	1		0255	36	.00	.00	.00	3.
1		0030	7	.03	.03	.00	0.	*	1		0300	37	.00	.00	.00	2.
1		0035	8	.04	.04	.00	0.	*	1		0305	38	.00	.00	.00	1.
1		0040	9	.04	.04	.00	0.	*	1		0310	39	.00	.00	.00	1.
1		0045	10	.05	.05	.00	0.	*	1		0315	40	.00	.00	.00	1.
1		0050	11	.07	.06	.01	1.	*	1		0320	41	.00	.00	.00	0.
1		0055	12	.10	.08	.02	5.	*	1		0325	42	.00	.00	.00	0.
1		0100	13	.19	.13	.07	21.	*	1		0330	43	.00	.00	.00	0.
1		0105	14	1.15	.39	.76	139.	*	1		0335	44	.00	.00	.00	0.
1		0110	15	.13	.03	.11	383.	*	1		0340	45	.00	.00	.00	0.
1		0115	16	.08	.01	.07	688.	*	1		0345	46	.00	.00	.00	0.
1		0120	17	.06	.01	.05	829.	*	1		0350	47	.00	.00	.00	0.
1		0125	18	.05	.01	.04	807.	*	1		0355	48	.00	.00	.00	0.
1		0130	19	.04	.01	.03	686.	*	1		0400	49	.00	.00	.00	0.
1		0135	20	.03	.01	.03	513.	*	1		0405	50	.00	.00	.00	0.
1		0140	21	.03	.00	.02	396.	*	1		0410	51	.00	.00	.00	0.
1		0145	22	.03	.00	.02	313.	*	1		0415	52	.00	.00	.00	0.
1		0150	23	.02	.00	.02	249.	*	1		0420	53	.00	.00	.00	0.
1		0155	24	.02	.00	.02	203.	*	1		0425	54	.00	.00	.00	0.

1	0200	25	.02	.00	.02	168.	*	1	0430	55	.00	.00	.00	0.
1	0205	26	.00	.00	.00	140.	*	1	0435	56	.00	.00	.00	0.
1	0210	27	.00	.00	.00	115.	*	1	0440	57	.00	.00	.00	0.
1	0215	28	.00	.00	.00	88.	*	1	0445	58	.00	.00	.00	0.
1	0220	29	.00	.00	.00	64.	*	1	0450	59	.00	.00	.00	0.
1	0225	30	.00	.00	.00	44.	*	1	0455	60	.00	.00	.00	0.

TOTAL RAINFALL = 2.29, TOTAL LOSS = 1.02, TOTAL EXCESS = 1.28

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	4.92-HR
829.	1.33	(CFS) 101.	101.	101.	101.
		(INCHES) 1.277	1.277	1.277	1.277
		(AC-FT) 41.	41.	41.	41.

CUMULATIVE AREA = .60 SQ MI

42 KK

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*           *
*   OUTLT4 *
*           *
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COMBINE ROUTE 3 AND BASIN 4 TO OUTLET 4

44 KC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT4
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0115	16	940.	*	1	0230	31	793.	*	1	0345	46	32.					
1	0005	2	0.	*	1	0120	17	1396.	*	1	0235	32	663.	*	1	0350	47	25.					
1	0010	3	0.	*	1	0125	18	1742.	*	1	0240	33	552.	*	1	0355	48	20.					
1	0015	4	0.	*	1	0130	19	1901.	*	1	0245	34	457.	*	1	0400	49	16.					
1	0020	5	0.	*	1	0135	20	1901.	*	1	0250	35	376.	*	1	0405	50	12.					
1	0025	6	0.	*	1	0140	21	1881.	*	1	0255	36	307.	*	1	0410	51	9.					
1	0030	7	0.	*	1	0145	22	1857.	*	1	0300	37	248.	*	1	0415	52	7.					
1	0035	8	0.	*	1	0150	23	1839.	*	1	0305	38	199.	*	1	0420	53	5.					
1	0040	9	0.	*	1	0155	24	1805.	*	1	0310	39	159.	*	1	0425	54	3.					
1	0045	10	0.	*	1	0200	25	1737.	*	1	0315	40	126.	*	1	0430	55	2.					
1	0050	11	1.	*	1	0205	26	1631.	*	1	0320	41	100.	*	1	0435	56	2.					
1	0055	12	6.	*	1	0210	27	1490.	*	1	0325	42	79.	*	1	0440	57	1.					
1	0100	13	24.	*	1	0215	28	1314.	*	1	0330	43	63.	*	1	0445	58	1.					
1	0105	14	153.	*	1	0220	29	1125.	*	1	0335	44	50.	*	1	0450	59	1.					
1	0110	15	457.	*	1	0225	30	948.	*	1	0340	45	40.	*	1	0455	60	0.					

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	4.92-HR
1901.	1.50	(CFS) 483.	483.	483.	483.
		(INCHES) 1.274	1.274	1.274	1.274
		(AC-FT) 196.	196.	196.	196.

CUMULATIVE AREA = 2.89 SQ MI

45 KK

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*           *
*  ROUTE4  *
*           *
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ROUTE OUTLET 4 TO BASIN 5 OUTLET

HYDROGRAPH ROUTING DATA

47 RM

MUSKINGUM ROUTING

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NSTPS      2 NUMBER OF SUBREACHES
AMSKK     .36 MUSKINGUM K
X         .20 MUSKINGUM X

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HYDROGRAPH AT STATION ROUTE4

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0115	16	50.	*	1		0230	31	1453.	*	1		0345	46	102.	*
1		0005	2	0.	*	1		0120	17	157.	*	1		0235	32	1310.	*	1		0350	47	82.	*
1		0010	3	0.	*	1		0125	18	358.	*	1		0240	33	1159.	*	1		0355	48	65.	*
1		0015	4	0.	*	1		0130	19	637.	*	1		0245	34	1010.	*	1		0400	49	52.	*
1		0020	5	0.	*	1		0135	20	948.	*	1		0250	35	871.	*	1		0405	50	42.	*
1		0025	6	0.	*	1		0140	21	1234.	*	1		0255	36	743.	*	1		0410	51	33.	*
1		0030	7	0.	*	1		0145	22	1454.	*	1		0300	37	629.	*	1		0415	52	26.	*
1		0035	8	0.	*	1		0150	23	1606.	*	1		0305	38	528.	*	1		0420	53	21.	*
1		0040	9	0.	*	1		0155	24	1703.	*	1		0310	39	440.	*	1		0425	54	16.	*
1		0045	10	0.	*	1		0200	25	1758.	*	1		0315	40	363.	*	1		0430	55	12.	*
1		0050	11	0.	*	1		0205	26	1783.	*	1		0320	41	298.	*	1		0435	56	9.	*
1		0055	12	0.	*	1		0210	27	1778.	*	1		0325	42	243.	*	1		0440	57	7.	*
1		0100	13	0.	*	1		0215	28	1743.	*	1		0330	43	197.	*	1		0445	58	5.	*
1		0105	14	2.	*	1		0220	29	1677.	*	1		0335	44	159.	*	1		0450	59	4.	*
1		0110	15	11.	*	1		0225	30	1579.	*	1		0340	45	128.	*	1		0455	60	3.	*

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	4.92-HR
1783.	2.08	483.	483.	483.	483.	483.
		(INCHES)	1.273	1.273	1.273	1.273
		(AC-FT)	196.	196.	196.	196.

CUMULATIVE AREA = 2.89 SQ MI

48 KK

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*           *
*  AREA 5  *
*           *
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BASIN NO. 5 RUNOFF

SUBBASIN RUNOFF DATA

50 BA

SUBBASIN CHARACTERISTICS

TAREA .59 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

..... HYDRO-35 TP-40 TP-49

5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 .00 .00 .00 .00 .00 .00 .00 .00

STORM AREA = .59

51 LS SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNB 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

52 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

119. 384. 725. 839. 764. 591. 373. 249. 170. 113.
 76. 51. 34. 23. 15. 10. 7. 5. 3. 1.

HYDROGRAPH AT STATION AREA 5

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0230	31	.00	.00	.00	25.
1		0005	2	.02	.02	.00	0.	*	1		0235	32	.00	.00	.00	17.
1		0010	3	.02	.02	.00	0.	*	1		0240	33	.00	.00	.00	10.
1		0015	4	.02	.02	.00	0.	*	1		0245	34	.00	.00	.00	7.
1		0020	5	.02	.02	.00	0.	*	1		0250	35	.00	.00	.00	4.
1		0025	6	.03	.03	.00	0.	*	1		0255	36	.00	.00	.00	3.
1		0030	7	.03	.03	.00	0.	*	1		0300	37	.00	.00	.00	2.
1		0035	8	.04	.04	.00	0.	*	1		0305	38	.00	.00	.00	1.
1		0040	9	.04	.04	.00	0.	*	1		0310	39	.00	.00	.00	1.
1		0045	10	.05	.05	.00	0.	*	1		0315	40	.00	.00	.00	0.
1		0050	11	.07	.07	.00	0.	*	1		0320	41	.00	.00	.00	0.
1		0055	12	.10	.10	.00	1.	*	1		0325	42	.00	.00	.00	0.
1		0100	13	.19	.16	.04	6.	*	1		0330	43	.00	.00	.00	0.
1		0105	14	1.15	.54	.60	88.	*	1		0335	44	.00	.00	.00	0.
1		0110	15	.13	.04	.10	272.	*	1		0340	45	.00	.00	.00	0.
1		0115	16	.08	.02	.06	512.	*	1		0345	46	.00	.00	.00	0.
1		0120	17	.06	.01	.04	631.	*	1		0350	47	.00	.00	.00	0.
1		0125	18	.05	.01	.03	625.	*	1		0355	48	.00	.00	.00	0.
1		0130	19	.04	.01	.03	539.	*	1		0400	49	.00	.00	.00	0.
1		0135	20	.03	.01	.02	409.	*	1		0405	50	.00	.00	.00	0.
1		0140	21	.03	.01	.02	320.	*	1		0410	51	.00	.00	.00	0.
1		0145	22	.03	.01	.02	256.	*	1		0415	52	.00	.00	.00	0.
1		0150	23	.02	.01	.02	206.	*	1		0420	53	.00	.00	.00	0.
1		0155	24	.02	.01	.02	170.	*	1		0425	54	.00	.00	.00	0.
1		0200	25	.02	.00	.02	142.	*	1		0430	55	.00	.00	.00	0.
1		0205	26	.00	.00	.00	119.	*	1		0435	56	.00	.00	.00	0.
1		0210	27	.00	.00	.00	98.	*	1		0440	57	.00	.00	.00	0.
1		0215	28	.00	.00	.00	76.	*	1		0445	58	.00	.00	.00	0.
1		0220	29	.00	.00	.00	55.	*	1		0450	59	.00	.00	.00	0.
1		0225	30	.00	.00	.00	38.	*	1		0455	60	.00	.00	.00	0.

TOTAL RAINFALL = 2.29, TOTAL LOSS = 1.28, TOTAL EXCESS = 1.02

PEAK FLOW (CFS) 631. TIME (HR) 1.33
 MAXIMUM AVERAGE FLOW
 6-HR 79. 24-HR 79. 72-HR 79. 4.92-HR 79.
 (INCHES) 1.017 1.017 1.017 1.017
 (AC-FT) 32. 32. 32. 32.

CUMULATIVE AREA = .59 SQ MI

53 KK

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*       *
* OUTLT5 *
*       *
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COMBINE ROUTE 4 AND BASIN 5 TO OUTLET 5

55 HC

HYDROGRAPH COMBINATION
1COMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT5
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0115	16	563.	*	1		0230	31	1479.	*	1		0345	46	102.
1		0005	2	0.	*	1		0120	17	788.	*	1		0235	32	1326.	*	1		0350	47	82.
1		0010	3	0.	*	1		0125	18	983.	*	1		0240	33	1169.	*	1		0355	48	65.
1		0015	4	0.	*	1		0130	19	1176.	*	1		0245	34	1017.	*	1		0400	49	52.
1		0020	5	0.	*	1		0135	20	1357.	*	1		0250	35	875.	*	1		0405	50	42.
1		0025	6	0.	*	1		0140	21	1553.	*	1		0255	36	746.	*	1		0410	51	33.
1		0030	7	0.	*	1		0145	22	1710.	*	1		0300	37	630.	*	1		0415	52	26.
1		0035	8	0.	*	1		0150	23	1812.	*	1		0305	38	539.	*	1		0420	53	21.
1		0040	9	0.	*	1		0155	24	1872.	*	1		0310	39	440.	*	1		0425	54	16.
1		0045	10	0.	*	1		0200	25	1900.	*	1		0315	40	364.	*	1		0430	55	12.
1		0050	11	0.	*	1		0205	26	1902.	*	1		0320	41	298.	*	1		0435	56	9.
1		0055	12	1.	*	1		0210	27	1876.	*	1		0325	42	243.	*	1		0440	57	7.
1		0100	13	6.	*	1		0215	28	1819.	*	1		0330	43	197.	*	1		0445	58	5.
1		0105	14	91.	*	1		0220	29	1732.	*	1		0335	44	159.	*	1		0450	59	4.
1		0110	15	283.	*	1		0225	30	1617.	*	1		0340	45	128.	*	1		0455	60	3.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	4.92-HR
1902.	2.08	(CFS)	561.	561.	561.	561.
		(INCHES)	1.230	1.230	1.230	1.230
		(AC-FT)	228.	228.	228.	228.

CUMULATIVE AREA = 3.48 SQ MI

56 KK

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*       *
* ROUTES *
*       *
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ROUTE OUTLET 5 TO BASIN 6 OUTLET

HYDROGRAPH ROUTING DATA

58 RM

MUSKINGUM ROUTING
NSTPS 1 NUMBER OF SUBREACHES
AMSKK .11 MUSKINGUM K
X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTES

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0115	16	256.	*	1		0230	31	1644.	*	1		0345	46	141.	*
1		0005	2	0.	*	1		0120	17	485.	*	1		0235	32	1516.	*	1		0350	47	113.	*
1		0010	3	0.	*	1		0125	18	708.	*	1		0240	33	1371.	*	1		0355	48	91.	*
1		0015	4	0.	*	1		0130	19	913.	*	1		0245	34	1219.	*	1		0400	49	72.	*
1		0020	5	0.	*	1		0135	20	1108.	*	1		0250	35	1069.	*	1		0405	50	58.	*
1		0025	6	0.	*	1		0140	21	1296.	*	1		0255	36	926.	*	1		0410	51	46.	*
1		0030	7	0.	*	1		0145	22	1484.	*	1		0300	37	794.	*	1		0415	52	37.	*
1		0035	8	0.	*	1		0150	23	1644.	*	1		0305	38	674.	*	1		0420	53	29.	*
1		0040	9	0.	*	1		0155	24	1760.	*	1		0310	39	568.	*	1		0425	54	23.	*
1		0045	10	0.	*	1		0200	25	1836.	*	1		0315	40	475.	*	1		0430	55	18.	*
1		0050	11	0.	*	1		0205	26	1877.	*	1		0320	41	394.	*	1		0435	56	14.	*
1		0055	12	0.	*	1		0210	27	1889.	*	1		0325	42	325.	*	1		0440	57	11.	*
1		0100	13	1.	*	1		0215	28	1872.	*	1		0330	43	266.	*	1		0445	58	8.	*
1		0105	14	17.	*	1		0220	29	1825.	*	1		0335	44	216.	*	1		0450	59	6.	*
1		0110	15	93.	*	1		0225	30	1749.	*	1		0340	45	175.	*	1		0455	60	5.	*

PEAK FLOW (CFS) 1889. TIME (HR) 2.17
 MAXIMUM AVERAGE FLOW
 6-HR 561. 24-HR 561. 72-HR 561. 4.92-HR 561.
 (INCHES) 1.230 1.230 1.230 1.230
 (AC-FT) 228. 228. 228. 228.

CUMULATIVE AREA = 3.48 SQ MI

59 KK

 * AREA 6 *

BASIN NO. 6 RUNOFF

SUBBASIN RUNOFF DATA

61 BA

SUBBASIN CHARACTERISTICS
 TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 1-PERCENT HYPOTHETICAL STORM

..... HYDRO-35 TP-40 TP-49
 5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 1.15 1.48 2.00 2.30 .00 .00 .00 .00 .00 .00 .00 .00

STORM AREA = .40

62 LS

SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

63 UD

SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

79. 256. 486. 567. 521. 407. 259. 173. 119. 79.
 54. 36. 24. 16. 11. 7. 5. 4. 2. 1.

HYDROGRAPH AT STATION AREA 6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0230	31	.00	.00	.00	18.
1		0005	2	.02	.02	.00	0.	*	1		0235	32	.00	.00	.00	12.
1		0010	3	.02	.02	.00	0.	*	1		0240	33	.00	.00	.00	7.
1		0015	4	.02	.02	.00	0.	*	1		0245	34	.00	.00	.00	5.
1		0020	5	.02	.02	.00	0.	*	1		0250	35	.00	.00	.00	3.
1		0025	6	.03	.03	.00	0.	*	1		0255	36	.00	.00	.00	2.
1		0030	7	.03	.03	.00	0.	*	1		0300	37	.00	.00	.00	1.
1		0035	8	.04	.04	.00	0.	*	1		0305	38	.00	.00	.00	1.
1		0040	9	.04	.04	.00	0.	*	1		0310	39	.00	.00	.00	1.
1		0045	10	.05	.05	.00	0.	*	1		0315	40	.00	.00	.00	0.
1		0050	11	.07	.07	.00	0.	*	1		0320	41	.00	.00	.00	0.
1		0055	12	.10	.10	.00	0.	*	1		0325	42	.00	.00	.00	0.
1		0100	13	.19	.16	.04	4.	*	1		0330	43	.00	.00	.00	0.
1		0105	14	1.15	.54	.60	59.	*	1		0335	44	.00	.00	.00	0.
1		0110	15	.13	.04	.10	181.	*	1		0340	45	.00	.00	.00	0.
1		0115	16	.08	.02	.06	344.	*	1		0345	46	.00	.00	.00	0.
1		0120	17	.06	.01	.04	427.	*	1		0350	47	.00	.00	.00	0.
1		0125	18	.05	.01	.03	426.	*	1		0355	48	.00	.00	.00	0.
1		0130	19	.04	.01	.03	370.	*	1		0400	49	.00	.00	.00	0.
1		0135	20	.03	.01	.02	282.	*	1		0405	50	.00	.00	.00	0.
1		0140	21	.03	.01	.02	220.	*	1		0410	51	.00	.00	.00	0.
1		0145	22	.03	.01	.02	176.	*	1		0415	52	.00	.00	.00	0.
1		0150	23	.02	.01	.02	142.	*	1		0420	53	.00	.00	.00	0.
1		0155	24	.02	.01	.02	117.	*	1		0425	54	.00	.00	.00	0.
1		0200	25	.02	.00	.02	98.	*	1		0430	55	.00	.00	.00	0.
1		0205	26	.00	.00	.00	82.	*	1		0435	56	.00	.00	.00	0.
1		0210	27	.00	.00	.00	68.	*	1		0440	57	.00	.00	.00	0.
1		0215	28	.00	.00	.00	52.	*	1		0445	58	.00	.00	.00	0.
1		0220	29	.00	.00	.00	38.	*	1		0450	59	.00	.00	.00	0.
1		0225	30	.00	.00	.00	27.	*	1		0455	60	.00	.00	.00	0.

TOTAL RAINFALL = 2.30, TOTAL LOSS = 1.28, TOTAL EXCESS = 1.02

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	4.92-HR (INCHES)
427.	1.33	54.	1.019	22.	1.019

CUMULATIVE AREA = .40 SQ MI

64 KK

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*****
*       *
* OUTLT6 *
*       *
*****
    
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COMBINE ROUTE 5 AND BASIN 6 TO OUTLET 6

66 HC

HYDROGRAPH COMBINATION
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT6
 SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
----	-----	------	-----	------	----	-----	------	-----	------	----	-----	------	-----	------	----	-----	------	-----	------

1	0000	1	0.	*	1	0115	16	600.	*	1	0230	31	1662.	*	1	0345	46	141.
1	0005	2	0.	*	1	0120	17	912.	*	1	0235	32	1527.	*	1	0350	47	113.
1	0010	3	0.	*	1	0125	18	1133.	*	1	0240	33	1379.	*	1	0355	48	91.
1	0015	4	0.	*	1	0130	19	1282.	*	1	0245	34	1224.	*	1	0400	49	72.
1	0020	5	0.	*	1	0135	20	1390.	*	1	0250	35	1072.	*	1	0405	50	58.
1	0025	6	0.	*	1	0140	21	1517.	*	1	0255	36	928.	*	1	0410	51	46.
1	0030	7	0.	*	1	0145	22	1660.	*	1	0300	37	795.	*	1	0415	52	37.
1	0035	8	0.	*	1	0150	23	1786.	*	1	0305	38	675.	*	1	0420	53	29.
1	0040	9	0.	*	1	0155	24	1877.	*	1	0310	39	569.	*	1	0425	54	23.
1	0045	10	0.	*	1	0200	25	1934.	*	1	0315	40	475.	*	1	0430	55	18.
1	0050	11	0.	*	1	0205	26	1959.	*	1	0320	41	394.	*	1	0435	56	14.
1	0055	12	0.	*	1	0210	27	1957.	*	1	0325	42	325.	*	1	0440	57	11.
1	0100	13	5.	*	1	0215	28	1925.	*	1	0330	43	266.	*	1	0445	58	8.
1	0105	14	76.	*	1	0220	29	1864.	*	1	0335	44	216.	*	1	0450	59	6.
1	0110	15	274.	*	1	0225	30	1775.	*	1	0340	45	175.	*	1	0455	60	5.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	4.92-HR
1959.	2.08	(CFS) 615.	615.	615.	615.
		(INCHES) 1.208	1.208	1.208	1.208
		(AC-FT) 250.	250.	250.	250.

CUMULATIVE AREA = 3.88 SQ MI

RUNOFF SUMMARY
 FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
HYDROGRAPH AT	AREA 1	1252.	1.67	241.	241.	241.	1.45		
ROUTED TO	ROUTE1	1234.	1.83	241.	241.	241.	1.45		
HYDROGRAPH AT	AREA 2	826.	1.33	101.	101.	101.	.60		
2 COMBINED AT	OUTLT2	1509.	1.75	342.	342.	342.	2.05		
ROUTED TO	ROUTE2	1506.	1.83	342.	342.	342.	2.05		
HYDROGRAPH AT	AREA 3	315.	1.42	40.	40.	40.	.24		
2 COMBINED AT	OUTLT3	1615.	1.75	382.	382.	382.	2.29		
ROUTED TO	ROUTE3	1602.	1.92	382.	382.	382.	2.29		
HYDROGRAPH AT	AREA 4	829.	1.33	101.	101.	101.	.60		
2 COMBINED AT	OUTLT4	1901.	1.50	483.	483.	483.	2.89		
ROUTED TO	ROUTE4	1783.	2.08	483.	483.	483.	2.89		
HYDROGRAPH AT	AREA 5	631.	1.33	79.	79.	79.	.59		
2 COMBINED AT	OUTLT5	1902.	2.08	561.	561.	561.	3.48		
ROUTED TO	ROUTE5	1889.	2.17	561.	561.	561.	3.48		
HYDROGRAPH AT	AREA 6	427.	1.33	54.	54.	54.	.40		
2 COMBINED AT	OUTLT6	1959.	2.08	615.	615.	615.	3.88		

*** NORMAL END OF REC-1 ***

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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1) *
  SEPTEMBER 1990 *
  VERSION 4.0 *
*
RUN DATE 08/27/1993 TIME 09:10:00 *
*****
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*****
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET *
* DAVIS, CALIFORNIA 95616 *
* (916) 756-1104 *
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X   X XXXXXXXX XXXXX      X
X   X X      X   X      XX
X   X X      X           X
XXXXXXXX XXXX   X       XXXXX X
X   X X      X           X
X   X X      X   X      X
X   X XXXXXXXX XXXXX      XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPY INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	CHURCH ROCK, NEW MEXICO									15608-01
2	ID	25-YEAR, 24-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC=II									
3	ID	FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE									
4	IT	5	300								
5	IO	0									
6	KK	AREA 1									
7	KM	BASIN NO. 1 RUNOFF									
8	PH	4	0	0.9	1.2	1.6	1.8	2	2.5	2.7	3
9	BA	1.447									
10	LS	0	89								
11	UD	0.552									
12	KK	ROUTE1									
13	KM	ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET									
14	RM	2	0.19	0.4							
15	KK	AREA 2									
16	KM	BASIN NO. 2 RUNOFF									
17	BA	0.604									
18	LS	0	89								
19	UD	0.3									
20	KK	OUTLT2									
21	KM	COMBINE ROUTE 1 AND BASIN TO OUTLET 2									
22	HC	2									
23	KK	ROUTE2									
24	KM	ROUTE OUTLET 2 TO BASIN 3 OUTLET									
25	RM	1	0.064	0.4							
26	KK	AREA 3									
27	KM	BASIN NO. 3 RUNOFF									
28	BA	0.238									
29	LS	0	89								
30	UD	0.313									
31	KK	OUTLT3									
32	KM	COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3									
33	HC	2									
34	KK	ROUTE3									
35	KM	ROUTE OUTLET 3 TO BASIN 4 OUTLET									
36	RM	1	0.125	0.3							
37	KK	AREA 4									
38	KM	BASIN NO. 4 RUNOFF									
39	BA	0.6									
40	LS	0	89								
41	UD	0.297									

FLOOD HYDROGRAPH PACKAGE (HEC-1)
SEPTEMBER 1970
VERSION 4.0

RUN DATE 08/27/1993 TIME 09:10:00

U.S. ARMY CORPS OF ENGINEERS
HYDROLOGIC ENGINEERING CENTER
609 SECOND STREET
DAVIS, CALIFORNIA 95616
(916) 756-1104

CHURCH ROCK, NEW MEXICO 15608-01
25-YEAR, 24-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC-II
FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE

5 IO OUTPUT CONTROL VARIABLES
IPRNT 0 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA
NMIN 5 MINUTES IN CL. PUTATION INTERVAL
IDATE 1 0 STARTING DATE
ITIME 0000 STARTING TIME
NQ 300 NUMBER OF HYDROGRAPH ORDINATES
NDDATE 2 0 ENDING DATE
NDTIME 0055 ENDING TIME
ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS
DRAINAGE AREA SQUARE MILES
PRECIPITATION DEPTH INCHES
LENGTH, ELEVATION FEET
FLOW CUBIC FEET PER SECOND
STORAGE VOLUME ACRE-FEET
SURFACE AREA ACRES
TEMPERATURE DEGREES FAHRENHEIT

6 KK

* AREA 1 *

BASIN NO. 1 RUNOFF

SUBBASIN RUNOFF DATA

9 BA

SUBBASIN CHARACTERISTICS
TAREA 1.45 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

..... HYDRO-35 TP-40 TP-49
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
.90 1.20 1.60 1.80 2.00 2.50 2.70 3.00 .00 .00 .00 .00

STORM AREA = 1.45

10 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

UNIT HYDROGRAPH
35 END-OF-PERIOD ORDINATES

69.	203.	405.	691.	968.	1125.	1175.	1149.	1043.	914.
738.	560.	442.	350.	284.	227.	178.	143.	114.	90.
72.	57.	45.	36.	29.	23.	18.	15.	12.	10.
8.	6.	4.	3.	1.					

HYDROGRAPH AT STATION AREA 1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.03	.00	.03	1174.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.02	.00	.02	1238.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.02	.00	.02	1230.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.02	.00	.02	1153.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.01	1045.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.01	.00	.01	897.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.01	.00	.01	744.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	628.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.02	535.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.01	463.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	402.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	351.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	314.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.02	283.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.01	257.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.01	238.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	222.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	210.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	200.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	192.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	185.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	178.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	173.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	168.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	163.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	158.
1		0210	27	.00	.00	.00	0.	*	1		1440	177	.01	.00	.01	153.
1		0215	28	.00	.00	.00	0.	*	1		1445	178	.01	.00	.01	148.
1		0220	29	.00	.00	.00	0.	*	1		1450	179	.01	.00	.01	144.
1		0225	30	.00	.00	.00	0.	*	1		1455	180	.01	.00	.01	139.
1		0230	31	.00	.00	.00	0.	*	1		1500	181	.01	.00	.01	135.
1		0235	32	.00	.00	.00	0.	*	1		1505	182	.00	.00	.00	132.
1		0240	33	.00	.00	.00	0.	*	1		1510	183	.00	.00	.00	128.
1		0245	34	.00	.00	.00	0.	*	1		1515	184	.00	.00	.00	122.
1		0250	35	.00	.00	.00	0.	*	1		1520	185	.00	.00	.00	115.
1		0255	36	.00	.00	.00	0.	*	1		1525	186	.00	.00	.00	107.
1		0300	37	.00	.00	.00	0.	*	1		1530	187	.00	.00	.00	97.
1		0305	38	.00	.00	.00	0.	*	1		1535	188	.00	.00	.00	88.
1		0310	39	.00	.00	.00	0.	*	1		1540	189	.00	.00	.00	78.
1		0315	40	.00	.00	.00	0.	*	1		1545	190	.00	.00	.00	70.
1		0320	41	.00	.00	.00	0.	*	1		1550	191	.00	.00	.00	63.
1		0325	42	.00	.00	.00	0.	*	1		1555	192	.00	.00	.00	57.
1		0330	43	.00	.00	.00	0.	*	1		1600	193	.00	.00	.00	52.
1		0335	44	.00	.00	.00	0.	*	1		1605	194	.00	.00	.00	48.
1		0340	45	.00	.00	.00	0.	*	1		1610	195	.00	.00	.00	45.
1		0345	46	.00	.00	.00	0.	*	1		1615	196	.00	.00	.00	42.
1		0350	47	.00	.00	.00	0.	*	1		1620	197	.00	.00	.00	40.
1		0355	48	.00	.00	.00	0.	*	1		1625	198	.00	.00	.00	38.
1		0400	49	.00	.00	.00	0.	*	1		1630	199	.00	.00	.00	36.
1		0405	50	.00	.00	.00	0.	*	1		1635	200	.00	.00	.00	35.
1		0410	51	.00	.00	.00	0.	*	1		1640	201	.00	.00	.00	33.
1		0415	52	.00	.00	.00	0.	*	1		1645	202	.00	.00	.00	32.
1		0420	53	.00	.00	.00	0.	*	1		1650	203	.00	.00	.00	31.
1		0425	54	.00	.00	.00	0.	*	1		1655	204	.00	.00	.00	30.
1		0430	55	.00	.00	.00	0.	*	1		1700	205	.00	.00	.00	30.

1	0435	56	.00	.00	.00	0.	*	1	1705	206	.00	.00	.00	29.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.00	.00	.00	28.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.00	.00	.00	28.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.00	.00	.00	27.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.00	.00	.00	27.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.00	.00	.00	26.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.00	.00	.00	26.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.00	.00	.00	25.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.00	.00	.00	25.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.00	.00	.00	25.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.00	.00	.00	24.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.00	.00	.00	24.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	24.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	23.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	23.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	24.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	24.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	24.
1	0605	74	.00	.00	.00	0.	*	1	1835	224	.00	.00	.00	25.
1	0610	75	.00	.00	.00	0.	*	1	1840	225	.00	.00	.00	25.
1	0615	76	.00	.00	.00	0.	*	1	1845	226	.00	.00	.00	26.
1	0620	77	.00	.00	.00	0.	*	1	1850	227	.00	.00	.00	26.
1	0625	78	.00	.00	.00	0.	*	1	1855	228	.00	.00	.00	26.
1	0630	79	.00	.00	.00	0.	*	1	1900	229	.00	.00	.00	26.
1	0635	80	.00	.00	.00	0.	*	1	1905	230	.00	.00	.00	26.
1	0640	81	.00	.00	.00	0.	*	1	1910	231	.00	.00	.00	26.
1	0645	82	.00	.00	.00	0.	*	1	1915	232	.00	.00	.00	26.
1	0650	83	.00	.00	.00	0.	*	1	1920	233	.00	.00	.00	26.
1	0655	84	.00	.00	.00	0.	*	1	1925	234	.00	.00	.00	26.
1	0700	85	.00	.00	.00	0.	*	1	1930	235	.00	.00	.00	26.
1	0705	86	.00	.00	.00	0.	*	1	1935	236	.00	.00	.00	26.
1	0710	87	.00	.00	.00	0.	*	1	1940	237	.00	.00	.00	25.
1	0715	88	.00	.00	.00	0.	*	1	1945	238	.00	.00	.00	25.
1	0720	89	.00	.00	.00	0.	*	1	1950	239	.00	.00	.00	25.
1	0725	90	.00	.00	.00	0.	*	1	1955	240	.00	.00	.00	25.
1	0730	91	.00	.00	.00	0.	*	1	2000	241	.00	.00	.00	24.
1	0735	92	.00	.00	.00	0.	*	1	2005	242	.00	.00	.00	24.
1	0740	93	.00	.00	.00	0.	*	1	2010	243	.00	.00	.00	24.
1	0745	94	.00	.00	.00	0.	*	1	2015	244	.00	.00	.00	24.
1	0750	95	.00	.00	.00	0.	*	1	2020	245	.00	.00	.00	24.
1	0755	96	.00	.00	.00	0.	*	1	2025	246	.00	.00	.00	23.
1	0800	97	.00	.00	.00	0.	*	1	2030	247	.00	.00	.00	23.
1	0805	98	.00	.00	.00	0.	*	1	2035	248	.00	.00	.00	23.
1	0810	99	.00	.00	.00	0.	*	1	2040	249	.00	.00	.00	23.
1	0815	100	.00	.00	.00	0.	*	1	2045	250	.00	.00	.00	23.
1	0820	101	.00	.00	.00	0.	*	1	2050	251	.00	.00	.00	22.
1	0825	102	.00	.00	.00	0.	*	1	2055	252	.00	.00	.00	22.
1	0830	103	.00	.00	.00	0.	*	1	2100	253	.00	.00	.00	22.
1	0835	104	.00	.00	.00	0.	*	1	2105	254	.00	.00	.00	22.
1	0840	105	.00	.00	.00	0.	*	1	2110	255	.00	.00	.00	22.
1	0845	106	.00	.00	.00	0.	*	1	2115	256	.00	.00	.00	22.
1	0850	107	.00	.00	.00	0.	*	1	2120	257	.00	.00	.00	21.
1	0855	108	.00	.00	.00	0.	*	1	2125	258	.00	.00	.00	21.
1	0900	109	.00	.00	.00	0.	*	1	2130	259	.00	.00	.00	21.
1	0905	110	.01	.01	.00	0.	*	1	2135	260	.00	.00	.00	21.
1	0910	111	.01	.01	.00	0.	*	1	2140	261	.00	.00	.00	21.
1	0915	112	.01	.01	.00	0.	*	1	2145	262	.00	.00	.00	21.
1	0920	113	.01	.01	.00	0.	*	1	2150	263	.00	.00	.00	20.
1	0925	114	.01	.01	.00	1.	*	1	2155	264	.00	.00	.00	20.
1	0930	115	.01	.01	.00	2.	*	1	2200	265	.00	.00	.00	20.
1	0935	116	.01	.01	.00	3.	*	1	2205	266	.00	.00	.00	20.
1	0940	117	.01	.01	.00	4.	*	1	2210	267	.00	.00	.00	20.
1	0945	118	.01	.01	.00	5.	*	1	2215	268	.00	.00	.00	20.
1	0950	119	.01	.01	.00	7.	*	1	2220	269	.00	.00	.00	19.
1	0955	120	.01	.01	.00	9.	*	1	2225	270	.00	.00	.00	19.
1	1000	121	.01	.01	.00	11.	*	1	2230	271	.00	.00	.00	19.
1	1005	122	.01	.01	.00	13.	*	1	2235	272	.00	.00	.00	19.
1	1010	123	.02	.01	.00	16.	*	1	2240	273	.00	.00	.00	19.
1	1015	124	.02	.01	.00	18.	*	1	2245	274	.00	.00	.00	19.
1	1020	125	.02	.01	.00	21.	*	1	2250	275	.00	.00	.00	19.
1	1025	126	.02	.01	.00	24.	*	1	2255	276	.00	.00	.00	19.
1	1030	127	.02	.01	.01	27.	*	1	2300	277	.00	.00	.00	18.
1	1035	128	.01	.01	.00	31.	*	1	2305	278	.00	.00	.00	18.
1	1040	129	.02	.01	.01	34.	*	1	2310	279	.00	.00	.00	18.
1	1045	130	.02	.01	.01	37.	*	1	2315	280	.00	.00	.00	18.

1	1050	131	.02	.01	.01	40.	*	1	2320	281	.00	.00	.00	18.
1	1055	132	.02	.01	.01	44.	*	1	2325	282	.00	.00	.00	18.
1	1100	133	.02	.01	.01	47.	*	1	2330	283	.00	.00	.00	18.
1	1105	134	.01	.01	.01	50.	*	1	2335	284	.00	.00	.00	18.
1	1110	135	.01	.01	.01	53.	*	1	2340	285	.00	.00	.00	17.
1	1115	136	.02	.01	.01	56.	*	1	2345	286	.00	.00	.00	17.
1	1120	137	.02	.01	.01	58.	*	1	2350	287	.00	.00	.00	17.
1	1125	138	.02	.01	.01	61.	*	1	2355	288	.00	.00	.00	17.
1	1130	139	.02	.01	.01	63.	*	2	0000	289	.00	.00	.00	17.
1	1135	140	.03	.01	.01	66.	*	2	0005	290	.00	.00	.00	17.
1	1140	141	.03	.02	.02	70.	*	2	0010	291	.00	.00	.00	16.
1	1145	142	.04	.02	.02	77.	*	2	0015	292	.00	.00	.00	16.
1	1150	143	.05	.03	.03	86.	*	2	0020	293	.00	.00	.00	15.
1	1155	144	.08	.03	.04	100.	*	2	0025	294	.00	.00	.00	13.
1	1200	145	.18	.07	.11	125.	*	2	0030	295	.00	.00	.00	11.
1	1205	146	.89	.22	.67	204.	*	2	0035	296	.00	.00	.00	10.
1	1210	147	.12	.02	.10	339.	*	2	0040	297	.00	.00	.00	8.
1	1215	148	.06	.01	.05	532.	*	2	0045	298	.00	.00	.00	6.
1	1220	149	.04	.01	.04	782.	*	2	0050	299	.00	.00	.00	5.
1	1225	150	.04	.01	.03	1022.	*	2	0055	300	.00	.00	.00	4.

TOTAL RAINFALL = 2.99, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.89

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
1238.	12.58	262.	74.	71.	71.
		(INCHES) 1.683	1.893	1.893	1.893
		(AC-FT) 130.	146.	146.	146.

CUMULATIVE AREA = 1.45 SQ MI

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*                               *
* 12 KK      * ROUTE1 *
*                               *
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ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET

HYDROGRAPH ROUTING DATA

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14 RM      MUSKINGUM ROUTING
           NSTPS      2 NUMBER OF SUBREACHES
           AMSKK      .19 MUSKINGUM K
           X          .40 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE1

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1845	226	25.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1850	227	25.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1855	228	26.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1900	229	26.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1905	230	26.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1910	231	26.	*
1		0030	7	0.	*	1		0645	82	0.	*	1		1915	232	26.	*
1		0035	8	0.	*	1		0650	83	0.	*	1		1920	233	26.	*
1		0040	9	0.	*	1		0655	84	0.	*	1		1925	234	26.	*
1		0045	10	0.	*	1		0700	85	0.	*	1		1930	235	26.	*
1		0050	11	0.	*	1		0705	86	0.	*	1		1935	236	26.	*
1		0055	12	0.	*	1		0710	87	0.	*	1		1940	237	26.	*

1	0100	13	0.	*	1	0715	88	0.	*	1	1330	163	421.	*	1	1945	238	26.
1	0105	14	0.	*	1	0720	89	0.	*	1	1335	164	367.	*	1	1950	239	25.
1	0110	15	0.	*	1	0725	90	0.	*	1	1340	165	326.	*	1	1955	240	25.
1	0115	16	0.	*	1	0730	91	0.	*	1	1345	166	293.	*	1	2000	241	25.
1	0120	17	0.	*	1	0735	92	0.	*	1	1350	167	266.	*	1	2005	242	25.
1	0125	18	0.	*	1	0740	93	0.	*	1	1355	168	244.	*	1	2010	243	25.
1	0130	19	0.	*	1	0745	94	0.	*	1	1400	169	227.	*	1	2015	244	24.
1	0135	20	0.	*	1	0750	95	0.	*	1	1405	170	214.	*	1	2020	245	24.
1	0140	21	0.	*	1	0755	96	0.	*	1	1410	171	203.	*	1	2025	246	24.
1	0145	22	0.	*	1	0800	97	0.	*	1	1415	172	194.	*	1	2030	247	24.
1	0150	23	0.	*	1	0805	98	0.	*	1	1420	173	187.	*	1	2035	248	23.
1	0155	24	0.	*	1	0810	99	0.	*	1	1425	174	180.	*	1	2040	249	23.
1	0200	25	0.	*	1	0815	100	0.	*	1	1430	175	175.	*	1	2045	250	23.
1	0205	26	0.	*	1	0820	101	0.	*	1	1435	176	169.	*	1	2050	251	23.
1	0210	27	0.	*	1	0825	102	0.	*	1	1440	177	164.	*	1	2055	252	23.
1	0215	28	0.	*	1	0830	103	0.	*	1	1445	178	159.	*	1	2100	253	22.
1	0220	29	0.	*	1	0835	104	0.	*	1	1450	179	154.	*	1	2105	254	22.
1	0225	30	0.	*	1	0840	105	0.	*	1	1455	180	150.	*	1	2110	255	22.
1	0230	31	0.	*	1	0845	106	0.	*	1	1500	181	145.	*	1	2115	256	22.
1	0235	32	0.	*	1	0850	107	0.	*	1	1505	182	141.	*	1	2120	257	22.
1	0240	33	0.	*	1	0855	108	0.	*	1	1510	183	137.	*	1	2125	258	22.
1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	133.	*	1	2130	259	21.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	129.	*	1	2135	260	21.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	124.	*	1	2140	261	21.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	117.	*	1	2145	262	21.
1	0305	38	0.	*	1	0920	113	0.	*	1	1535	188	109.	*	1	2150	263	21.
1	0310	39	0.	*	1	0925	114	0.	*	1	1540	189	100.	*	1	2155	264	21.
1	0315	40	0.	*	1	0930	115	0.	*	1	1545	190	90.	*	1	2200	265	20.
1	0320	41	0.	*	1	0935	116	1.	*	1	1550	191	81.	*	1	2205	266	20.
1	0325	42	0.	*	1	0940	117	1.	*	1	1555	192	73.	*	1	2210	267	20.
1	0330	43	0.	*	1	0945	118	2.	*	1	1600	193	65.	*	1	2215	268	20.
1	0335	44	0.	*	1	0950	119	3.	*	1	1605	194	59.	*	1	2220	269	20.
1	0340	45	0.	*	1	0955	120	5.	*	1	1610	195	53.	*	1	2225	270	20.
1	0345	46	0.	*	1	1000	121	6.	*	1	1615	196	49.	*	1	2230	271	20.
1	0350	47	0.	*	1	1005	122	8.	*	1	1620	197	46.	*	1	2235	272	19.
1	0355	48	0.	*	1	1010	123	10.	*	1	1625	198	43.	*	1	2240	273	19.
1	0400	49	0.	*	1	1015	124	13.	*	1	1630	199	40.	*	1	2245	274	19.
1	0405	50	0.	*	1	1020	125	15.	*	1	1635	200	38.	*	1	2250	275	19.
1	0410	51	0.	*	1	1025	126	18.	*	1	1640	201	37.	*	1	2255	276	19.
1	0415	52	0.	*	1	1030	127	20.	*	1	1645	202	35.	*	1	2300	277	19.
1	0420	53	0.	*	1	1035	128	23.	*	1	1650	203	34.	*	1	2305	278	19.
1	0425	54	0.	*	1	1040	129	26.	*	1	1655	204	33.	*	1	2310	279	18.
1	0430	55	0.	*	1	1045	130	30.	*	1	1700	205	32.	*	1	2315	280	18.
1	0435	56	0.	*	1	1050	131	33.	*	1	1705	206	31.	*	1	2320	281	18.
1	0440	57	0.	*	1	1055	132	36.	*	1	1710	207	30.	*	1	2325	282	18.
1	0445	58	0.	*	1	1100	133	40.	*	1	1715	208	29.	*	1	2330	283	18.
1	0450	59	0.	*	1	1105	134	43.	*	1	1720	209	29.	*	1	2335	284	18.
1	0455	60	0.	*	1	1110	135	46.	*	1	1725	210	28.	*	1	2340	285	18.
1	0500	61	0.	*	1	1115	136	49.	*	1	1730	211	27.	*	1	2345	286	18.
1	0505	62	0.	*	1	1120	137	52.	*	1	1735	212	27.	*	1	2350	287	17.
1	0510	63	0.	*	1	1125	138	55.	*	1	1740	213	26.	*	1	2355	288	17.
1	0515	64	0.	*	1	1130	139	58.	*	1	1745	214	26.	*	2	0000	289	17.
1	0520	65	0.	*	1	1135	140	60.	*	1	1750	215	25.	*	2	0005	290	17.
1	0525	66	0.	*	1	1140	141	62.	*	1	1755	216	25.	*	2	0010	291	17.
1	0530	67	0.	*	1	1145	142	65.	*	1	1800	217	25.	*	2	0015	292	17.
1	0535	68	0.	*	1	1150	143	69.	*	1	1805	218	24.	*	2	0020	293	16.
1	0540	69	0.	*	1	1155	144	75.	*	1	1810	219	24.	*	2	0025	294	16.
1	0545	70	0.	*	1	1200	145	84.	*	1	1815	220	24.	*	2	0030	295	15.
1	0550	71	0.	*	1	1205	146	97.	*	1	1820	221	23.	*	2	0035	296	14.
1	0555	72	0.	*	1	1210	147	122.	*	1	1825	222	23.	*	2	0040	297	12.
1	0600	73	0.	*	1	1215	148	189.	*	1	1830	223	23.	*	2	0045	298	10.
1	0605	74	0.	*	1	1220	149	310.	*	1	1835	224	24.	*	2	0050	299	9.
1	0610	75	0.	*	1	1225	150	487.	*	1	1840	225	24.	*	2	0055	300	7.

PEAK FLOW (CFS)	TIME (HR)		6-HR	24-HR	72-HR	24.92-HR
1221.	12.83	(CFS)	262.	74.	71.	71.
		(INCHES)	1.683	1.892	1.892	1.892
		(AC-FT)	130.	146.	146.	146.

CUMULATIVE AREA = 1.45 SQ MI

15 KK

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*
* AREA 2
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BASIN NO. 2 RUNOFF

SUBBASIN RUNOFF DATA

17 BA

SUBBASIN CHARACTERISTICS
TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	2.00	2.50	2.70	3.00	.12	.00	.00	.00

STORM AREA = .60

1 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNBR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

19 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

119.	386.	732.	854.	784.	613.	389.	261.	179.	119.
81.	54.	36.	24.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q		DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	.0	*	1		1230	151	.03	.00	.03	647.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.02	.00	.02	477.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.02	.00	.02	360.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.02	.00	.02	278.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.01	214.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.01	.00	.01	169.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.01	.00	.01	135.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	111.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.02	96.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.01	87.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	81.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	78.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	75.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.02	71.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.01	69.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.01	68.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	68.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	68.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	67.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	66.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	65.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	64.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	62.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	61.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	59.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	58.

1	0210	27	.00	.00	.00	0.	*	1	1440	177	.01	.00	.01	56.
1	0215	28	.00	.00	.00	0.	*	1	1445	178	.01	.00	.01	55.
1	0220	29	.00	.00	.00	0.	*	1	1450	179	.01	.00	.01	54.
1	0225	30	.00	.00	.00	0.	*	1	1455	180	.01	.00	.01	53.
1	0230	31	.00	.00	.00	0.	*	1	1500	181	.01	.00	.01	52.
1	0235	32	.00	.00	.00	0.	*	1	1505	182	.00	.00	.00	50.
1	0240	33	.00	.00	.00	0.	*	1	1510	183	.00	.00	.00	46.
1	0245	34	.00	.00	.00	0.	*	1	1515	184	.00	.00	.00	41.
1	0250	35	.00	.00	.00	0.	*	1	1520	185	.00	.00	.00	34.
1	0255	36	.00	.00	.00	0.	*	1	1525	186	.00	.00	.00	28.
1	0300	37	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	24.
1	0305	38	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	21.
1	0310	39	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	19.
1	0315	40	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	17.
1	0320	41	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	16.
1	0325	42	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	15.
1	0330	43	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	15.
1	0335	44	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	14.
1	0340	45	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	14.
1	0345	46	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	13.
1	0350	47	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	13.
1	0355	48	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	13.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	12.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	12.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.00	.00	.00	12.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.00	.00	.00	12.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.00	.00	.00	12.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.00	.00	.00	11.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.00	.00	.00	11.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.00	.00	.00	11.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.00	.00	.00	11.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.00	.00	.00	11.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.00	.00	.00	10.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.00	.00	.00	10.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.00	.00	.00	10.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.00	.00	.00	10.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.00	.00	.00	10.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.00	.00	.00	10.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.00	.00	.00	10.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.00	.00	.00	9.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.00	.00	.00	9.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	9.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	9.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	10.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	10.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	11.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	11.
1	0605	74	.00	.00	.00	0.	*	1	1835	224	.00	.00	.00	11.
1	0610	75	.00	.00	.00	0.	*	1	1840	225	.00	.00	.00	11.
1	0615	76	.00	.00	.00	0.	*	1	1845	226	.00	.00	.00	11.
1	0620	77	.00	.00	.00	0.	*	1	1850	227	.00	.00	.00	11.
1	0625	78	.00	.00	.00	0.	*	1	1855	228	.00	.00	.00	11.
1	0630	79	.00	.00	.00	0.	*	1	1900	229	.00	.00	.00	11.
1	0635	80	.00	.00	.00	0.	*	1	1905	230	.00	.00	.00	11.
1	0640	81	.00	.00	.00	0.	*	1	1910	231	.00	.00	.00	11.
1	0645	82	.00	.00	.00	0.	*	1	1915	232	.00	.00	.00	11.
1	0650	83	.00	.00	.00	0.	*	1	1920	233	.00	.00	.00	11.
1	0655	84	.00	.00	.00	0.	*	1	1925	234	.00	.00	.00	11.
1	0700	85	.00	.00	.00	0.	*	1	1930	235	.00	.00	.00	10.
1	0705	86	.00	.00	.00	0.	*	1	1935	236	.00	.00	.00	10.
1	0710	87	.00	.00	.00	0.	*	1	1940	237	.00	.00	.00	10.
1	0715	88	.00	.00	.00	0.	*	1	1945	238	.00	.00	.00	10.
1	0720	89	.00	.00	.00	0.	*	1	1950	239	.00	.00	.00	10.
1	0725	90	.00	.00	.00	0.	*	1	1955	240	.00	.00	.00	10.
1	0730	91	.00	.00	.00	0.	*	1	2000	241	.00	.00	.00	10.
1	0735	92	.00	.00	.00	0.	*	1	2005	242	.00	.00	.00	10.
1	0740	93	.00	.00	.00	0.	*	1	2010	243	.00	.00	.00	10.
1	0745	94	.00	.00	.00	0.	*	1	2015	244	.00	.00	.00	10.
1	0750	95	.00	.00	.00	0.	*	1	2020	245	.00	.00	.00	10.
1	0755	96	.00	.00	.00	0.	*	1	2025	246	.00	.00	.00	9.
1	0800	97	.00	.00	.00	0.	*	1	2030	247	.00	.00	.00	9.
1	0805	98	.00	.00	.00	0.	*	1	2035	248	.00	.00	.00	9.
1	0810	99	.00	.00	.00	0.	*	1	2040	249	.00	.00	.00	9.
1	0815	100	.00	.00	.00	0.	*	1	2045	250	.00	.00	.00	9.
1	0820	101	.00	.00	.00	0.	*	1	2050	251	.00	.00	.00	9.

1	0825	102	.00	.00	.00	0.	*	1	2055	252	.00	.00	.00	9.
1	0830	103	.00	.00	.00	0.	*	1	2100	253	.00	.00	.00	9.
1	0835	104	.00	.00	.00	0.	*	1	2105	254	.00	.00	.00	9.
1	0840	105	.00	.00	.00	0.	*	1	2110	255	.00	.00	.00	9.
1	0845	106	.00	.00	.00	0.	*	1	2115	256	.00	.00	.00	9.
1	0850	107	.00	.00	.00	0.	*	1	2120	257	.00	.00	.00	9.
1	0855	108	.00	.00	.00	0.	*	1	2125	258	.00	.00	.00	9.
1	0900	109	.00	.00	.00	0.	*	1	2130	259	.00	.00	.00	8.
1	0905	110	.01	.01	.00	0.	*	1	2135	260	.00	.00	.00	8.
1	0910	111	.01	.01	.00	0.	*	1	2140	261	.00	.00	.00	8.
1	0915	112	.01	.01	.00	0.	*	1	2145	262	.00	.00	.00	8.
1	0920	113	.01	.01	.00	1.	*	1	2150	263	.00	.00	.00	8.
1	0925	114	.01	.01	.00	1.	*	1	2155	264	.00	.00	.00	8.
1	0930	115	.01	.01	.00	2.	*	1	2200	265	.00	.00	.00	8.
1	0935	116	.01	.01	.00	3.	*	1	2205	266	.00	.00	.00	8.
1	0940	117	.01	.01	.00	4.	*	1	2210	267	.00	.00	.00	8.
1	0945	118	.01	.01	.00	5.	*	1	2215	268	.00	.00	.00	8.
1	0950	119	.01	.01	.00	6.	*	1	2220	269	.00	.00	.00	8.
1	0955	120	.01	.01	.00	7.	*	1	2225	270	.00	.00	.00	8.
1	1000	121	.01	.01	.00	8.	*	1	2230	271	.00	.00	.00	8.
1	1005	122	.01	.01	.00	9.	*	1	2235	272	.00	.00	.00	8.
1	1010	123	.02	.01	.00	11.	*	1	2240	273	.00	.00	.00	8.
1	1015	124	.02	.01	.00	12.	*	1	2245	274	.00	.00	.00	8.
1	1020	125	.02	.01	.00	13.	*	1	2250	275	.00	.00	.00	8.
1	1025	126	.02	.01	.00	15.	*	1	2255	276	.00	.00	.00	8.
1	1030	127	.02	.01	.01	17.	*	1	2300	277	.00	.00	.00	7.
1	1035	128	.01	.01	.00	18.	*	1	2305	278	.00	.00	.00	7.
1	1040	129	.02	.01	.01	20.	*	1	2310	279	.00	.00	.00	7.
1	1045	130	.02	.01	.01	21.	*	1	2315	280	.00	.00	.00	7.
1	1050	131	.02	.01	.01	22.	*	1	2320	281	.00	.00	.00	7.
1	1055	132	.02	.01	.01	23.	*	1	2325	282	.00	.00	.00	7.
1	1100	133	.02	.01	.01	24.	*	1	2330	283	.00	.00	.00	7.
1	1105	134	.01	.01	.01	26.	*	1	2335	284	.00	.00	.00	7.
1	1110	135	.01	.01	.01	27.	*	1	2340	285	.00	.00	.00	7.
1	1115	136	.02	.01	.01	28.	*	1	2345	286	.00	.00	.00	7.
1	1120	137	.02	.01	.01	28.	*	1	2350	287	.00	.00	.00	7.
1	1125	138	.02	.01	.01	29.	*	1	2355	288	.00	.00	.00	7.
1	1130	139	.02	.01	.01	30.	*	2	0000	289	.00	.00	.00	7.
1	1135	140	.03	.01	.01	33.	*	2	0005	290	.00	.00	.00	7.
1	1140	141	.03	.02	.02	37.	*	2	0010	291	.00	.00	.00	6.
1	1145	142	.04	.02	.02	44.	*	2	0015	292	.00	.00	.00	5.
1	1150	143	.05	.03	.03	53.	*	2	0020	293	.00	.00	.00	4.
1	1155	144	.08	.03	.04	68.	*	2	0025	294	.00	.00	.00	3.
1	1200	145	.18	.07	.11	97.	*	2	0030	295	.00	.00	.00	2.
1	1205	146	.90	.22	.68	216.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.12	.02	.10	438.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.06	.01	.05	703.	*	2	0045	298	.00	.00	.00	1.
1	1220	149	.04	.01	.04	813.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.03	.01	.03	774.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.90

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	24.92-HR (CFS)
813.	12.33	110.	1.690	61.	30.
			1.898	61.	1.898

CUMULATIVE AREA = .60 SQ MI

20 KK

 * OUTLT2 *

COMBINE ROUTE 1 AND BASIN TO OUTLET 2

HYDROGRAPH AT STATION OUTLT2
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1363.	*	1		1845	226	36.
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1426.	*	1		1850	227	36.
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1479.	*	1		1855	228	37.
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1485.	*	1		1900	229	37.
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1435.	*	1		1905	230	37.
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1335.	*	1		1910	231	37.
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	1204.	*	1		1915	232	37.
1		0035	8	0.	*	1		0650	83	0.	*	1		1305	158	1046.	*	1		1920	233	37.
1		0040	9	0.	*	1		0655	84	0.	*	1		1310	159	884.	*	1		1925	234	37.
1		0045	10	0.	*	1		0700	85	0.	*	1		1315	160	752.	*	1		1930	235	37.
1		0050	11	0.	*	1		0705	86	0.	*	1		1320	161	646.	*	1		1935	236	36.
1		0055	12	0.	*	1		0710	87	0.	*	1		1325	162	564.	*	1		1940	237	36.
1		0100	13	0.	*	1		0715	88	0.	*	1		1330	163	496.	*	1		1945	238	36.
1		0105	14	0.	*	1		0720	89	0.	*	1		1335	164	439.	*	1		1950	239	35.
1		0110	15	0.	*	1		0725	90	0.	*	1		1340	165	395.	*	1		1955	240	35.
1		0115	16	0.	*	1		0730	91	0.	*	1		1345	166	360.	*	1		2000	241	35.
1		0120	17	0.	*	1		0735	92	0.	*	1		1350	167	333.	*	1		2005	242	35.
1		0125	18	0.	*	1		0740	93	0.	*	1		1355	168	312.	*	1		2010	243	34.
1		0130	19	0.	*	1		0745	94	0.	*	1		1400	169	295.	*	1		2015	244	34.
1		0135	20	0.	*	1		0750	95	0.	*	1		1405	170	280.	*	1		2020	245	34.
1		0140	21	0.	*	1		0755	96	0.	*	1		1410	171	268.	*	1		2025	246	33.
1		0145	22	0.	*	1		0800	97	0.	*	1		1415	172	258.	*	1		2030	247	33.
1		0150	23	0.	*	1		0805	98	0.	*	1		1420	173	249.	*	1		2035	248	33.
1		0155	24	0.	*	1		0810	99	0.	*	1		1425	174	241.	*	1		2040	249	32.
1		0200	25	0.	*	1		0815	100	0.	*	1		1430	175	234.	*	1		2045	250	32.
1		0205	26	0.	*	1		0820	101	0.	*	1		1435	176	227.	*	1		2050	251	32.
1		0210	27	0.	*	1		0825	102	0.	*	1		1440	177	221.	*	1		2055	252	32.
1		0215	28	0.	*	1		0830	103	0.	*	1		1445	178	215.	*	1		2100	253	31.
1		0220	29	0.	*	1		0835	104	0.	*	1		1450	179	208.	*	1		2105	254	31.
1		0225	30	0.	*	1		0840	105	0.	*	1		1455	180	202.	*	1		2110	255	31.
1		0230	31	0.	*	1		0845	106	0.	*	1		1500	181	197.	*	1		2115	256	31.
1		0235	32	0.	*	1		0850	107	0.	*	1		1505	182	190.	*	1		2120	257	30.
1		0240	33	0.	*	1		0855	108	0.	*	1		1510	183	183.	*	1		2125	258	30.
1		0245	34	0.	*	1		0900	109	0.	*	1		1515	184	174.	*	1		2130	259	30.
1		0250	35	0.	*	1		0905	110	0.	*	1		1520	185	163.	*	1		2135	260	30.
1		0255	36	0.	*	1		0910	111	0.	*	1		1525	186	152.	*	1		2140	261	29.
1		0300	37	0.	*	1		0915	112	0.	*	1		1530	187	141.	*	1		2145	262	29.
1		0305	38	0.	*	1		0920	113	1.	*	1		1535	188	130.	*	1		2150	263	29.
1		0310	39	0.	*	1		0925	114	1.	*	1		1540	189	119.	*	1		2155	264	29.
1		0315	40	0.	*	1		0930	115	2.	*	1		1545	190	108.	*	1		2200	265	29.
1		0320	41	0.	*	1		0935	116	4.	*	1		1550	191	97.	*	1		2205	266	28.
1		0325	42	0.	*	1		0940	117	5.	*	1		1555	192	88.	*	1		2210	267	28.
1		0330	43	0.	*	1		0945	118	7.	*	1		1600	193	80.	*	1		2215	268	28.
1		0335	44	0.	*	1		0950	119	9.	*	1		1605	194	73.	*	1		2220	269	28.
1		0340	45	0.	*	1		0955	120	12.	*	1		1610	195	67.	*	1		2225	270	27.
1		0345	46	0.	*	1		1000	121	15.	*	1		1615	196	62.	*	1		2230	271	27.
1		0350	47	0.	*	1		1005	122	18.	*	1		1620	197	59.	*	1		2235	272	27.
1		0355	48	0.	*	1		1010	123	21.	*	1		1625	198	55.	*	1		2240	273	27.
1		0400	49	0.	*	1		1015	124	25.	*	1		1630	199	53.	*	1		2245	274	27.
1		0405	50	0.	*	1		1020	125	28.	*	1		1635	200	50.	*	1		2250	275	27.
1		0410	51	0.	*	1		1025	126	33.	*	1		1640	201	48.	*	1		2255	276	26.
1		0415	52	0.	*	1		1030	127	37.	*	1		1645	202	47.	*	1		2300	277	26.
1		0420	53	0.	*	1		1035	128	42.	*	1		1650	203	45.	*	1		2305	278	26.
1		0425	54	0.	*	1		1040	129	46.	*	1		1655	204	44.	*	1		2310	279	26.
1		0430	55	0.	*	1		1045	130	50.	*	1		1700	205	43.	*	1		2315	280	26.
1		0435	56	0.	*	1		1050	131	55.	*	1		1705	206	42.	*	1		2320	281	25.
1		0440	57	0.	*	1		1055	132	59.	*	1		1710	207	41.	*	1		2325	282	25.
1		0445	58	0.	*	1		1100	133	64.	*	1		1715	208	40.	*	1		2330	283	25.
1		0450	59	0.	*	1		1105	134	69.	*	1		1720	209	39.	*	1		2335	284	25.
1		0455	60	0.	*	1		1110	135	73.	*	1		1725	210	38.	*	1		2340	285	25.
1		0500	61	0.	*	1		1115	136	77.	*	1		1730	211	38.	*	1		2345	286	25.

1	0505	62	0.	*	1	1120	137	80.	*	1	1735	212	37.	*	1	2350	287	24.
1	0510	63	0.	*	1	1125	138	84.	*	1	1740	213	36.	*	1	2355	288	24.
1	0515	64	0.	*	1	1130	139	88.	*	1	1745	214	36.	*	2	0000	289	24.
1	0520	65	0.	*	1	1135	140	93.	*	1	1750	215	35.	*	2	0005	290	24.
1	0525	66	0.	*	1	1140	141	100.	*	1	1755	216	35.	*	2	0010	291	23.
1	0530	67	0.	*	1	1145	142	109.	*	1	1800	217	34.	*	2	0015	292	22.
1	0535	68	0.	*	1	1150	143	123.	*	1	1805	218	34.	*	2	0020	293	20.
1	0540	69	0.	*	1	1155	144	143.	*	1	1810	219	33.	*	2	0025	294	19.
1	0545	70	0.	*	1	1200	145	181.	*	1	1815	220	34.	*	2	0030	295	17.
1	0550	71	0.	*	1	1205	146	313.	*	1	1820	221	34.	*	2	0035	296	15.
1	0555	72	0.	*	1	1210	147	560.	*	1	1825	222	34.	*	2	0040	297	13.
1	0600	73	0.	*	1	1215	148	892.	*	1	1830	223	35.	*	2	0045	298	11.
1	0605	74	0.	*	1	1220	149	1123.	*	1	1835	224	35.	*	2	0050	299	9.
1	0610	75	0.	*	1	1225	150	1261.	*	1	1840	225	35.	*	2	0055	300	7.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
1485.	12.75	371.	371.	104.	101.	101.
		(INCHES)	1.683	1.894	1.894	1.894
		(AC-FT)	184.	207.	207.	207.

CUMULATIVE AREA = 2.05 SQ MI

23 KK

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*****
* ROUTE2 *
*****
    
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ROUTE OUTLET 2 TO BASIN 3 OUTLET

HYDROGRAPH ROUTING DATA

25 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .06 MUSKINGUM K
X         .40 MUSKINGUM X
    
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**** WARNING **** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE2.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE2

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1845	226	36.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1850	227	36.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1855	228	36.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1900	229	37.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1905	230	37.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1910	231	37.	*
1		0030	7	0.	*	1		0645	82	0.	*	1		1915	232	37.	*
1		0035	8	0.	*	1		0650	83	0.	*	1		1920	233	37.	*
1		0040	9	0.	*	1		0655	84	0.	*	1		1925	234	37.	*
1		0045	10	0.	*	1		0700	85	0.	*	1		1930	235	37.	*
1		0050	11	0.	*	1		0705	86	0.	*	1		1935	236	36.	*
1		0055	12	0.	*	1		0710	87	0.	*	1		1940	237	36.	*
1		0100	13	0.	*	1		0715	88	0.	*	1		1945	238	36.	*
1		0105	14	0.	*	1		0720	89	0.	*	1		1950	239	36.	*
1		0110	15	0.	*	1		0725	90	0.	*	1		1955	240	35.	*
1		0115	16	0.	*	1		0730	91	0.	*	1		2000	241	35.	*
1		0120	17	0.	*	1		0735	92	0.	*	1		2005	242	35.	*
1		0125	18	0.	*	1		0740	93	0.	*	1		2010	243	34.	*

1	0130	19	0.	*	1	0745	94	0.	*	1	1400	169	308.	*	1	2015	244	34.
1	0135	20	0.	*	1	0750	95	0.	*	1	1405	170	291.	*	1	2020	245	34.
1	0140	21	0.	*	1	0755	96	0.	*	1	1410	171	278.	*	1	2025	246	34.
1	0145	22	0.	*	1	0800	97	0.	*	1	1415	172	266.	*	1	2030	247	33.
1	0150	23	0.	*	1	0805	98	0.	*	1	1420	173	256.	*	1	2035	248	33.
1	0155	24	0.	*	1	0810	99	0.	*	1	1425	174	247.	*	1	2040	249	33.
1	0200	25	0.	*	1	0815	100	0.	*	1	1430	175	239.	*	1	2045	250	32.
1	0205	26	0.	*	1	0820	101	0.	*	1	1435	176	232.	*	1	2050	251	32.
1	0210	27	0.	*	1	0825	102	0.	*	1	1440	177	226.	*	1	2055	252	32.
1	0215	28	0.	*	1	0830	103	0.	*	1	1445	178	219.	*	1	2100	253	32.
1	0220	29	0.	*	1	0835	104	0.	*	1	1450	179	213.	*	1	2105	254	31.
1	0225	30	0.	*	1	0840	105	0.	*	1	1455	180	207.	*	1	2110	255	31.
1	0230	31	0.	*	1	0845	106	0.	*	1	1500	181	201.	*	1	2115	256	31.
1	0235	32	0.	*	1	0850	107	0.	*	1	1505	182	195.	*	1	2120	257	31.
1	0240	33	0.	*	1	0855	108	0.	*	1	1510	183	189.	*	1	2125	258	30.
1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	181.	*	1	2130	259	30.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	171.	*	1	2135	260	30.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	161.	*	1	2140	261	30.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	150.	*	1	2145	262	29.
1	0305	38	0.	*	1	0920	113	0.	*	1	1535	188	138.	*	1	2150	263	29.
1	0310	39	0.	*	1	0925	114	1.	*	1	1540	189	127.	*	1	2155	264	29.
1	0315	40	0.	*	1	0930	115	2.	*	1	1545	190	116.	*	1	2200	265	29.
1	0320	41	0.	*	1	0935	116	3.	*	1	1550	191	105.	*	1	2205	266	28.
1	0325	42	0.	*	1	0940	117	4.	*	1	1555	192	95.	*	1	2210	267	28.
1	0330	43	0.	*	1	0945	118	6.	*	1	1600	193	86.	*	1	2215	268	28.
1	0335	44	0.	*	1	0950	119	8.	*	1	1605	194	78.	*	1	2220	269	28.
1	0340	45	0.	*	1	0955	120	10.	*	1	1610	195	71.	*	1	2225	270	28.
1	0345	46	0.	*	1	1000	121	12.	*	1	1615	196	66.	*	1	2230	271	27.
1	0350	47	0.	*	1	1005	122	15.	*	1	1620	197	62.	*	1	2235	272	27.
1	0355	48	0.	*	1	1010	123	18.	*	1	1625	198	58.	*	1	2240	273	27.
1	0400	49	0.	*	1	1015	124	22.	*	1	1630	199	55.	*	1	2245	274	27.
1	0405	50	0.	*	1	1020	125	26.	*	1	1635	200	52.	*	1	2250	275	27.
1	0410	51	0.	*	1	1025	126	29.	*	1	1640	201	50.	*	1	2255	276	26.
1	0415	52	0.	*	1	1030	127	34.	*	1	1645	202	48.	*	1	2300	277	26.
1	0420	53	0.	*	1	1035	128	38.	*	1	1650	203	46.	*	1	2305	278	26.
1	0425	54	0.	*	1	1040	129	43.	*	1	1655	204	45.	*	1	2310	279	26.
1	0430	55	0.	*	1	1045	130	47.	*	1	1700	205	44.	*	1	2315	280	26.
1	0435	56	0.	*	1	1050	131	51.	*	1	1705	206	42.	*	1	2320	281	26.
1	0440	57	0.	*	1	1055	132	56.	*	1	1710	207	41.	*	1	2325	282	25.
1	0445	58	0.	*	1	1100	133	60.	*	1	1715	208	41.	*	1	2330	283	25.
1	0450	59	0.	*	1	1105	134	65.	*	1	1720	209	40.	*	1	2335	284	25.
1	0455	60	0.	*	1	1110	135	70.	*	1	1725	210	39.	*	1	2340	285	25.
1	0500	61	0.	*	1	1115	136	74.	*	1	1730	211	38.	*	1	2345	286	25.
1	0505	62	0.	*	1	1120	137	77.	*	1	1735	212	37.	*	1	2350	287	25.
1	0510	63	0.	*	1	1125	138	81.	*	1	1740	213	37.	*	1	2355	288	24.
1	0515	64	0.	*	1	1130	139	84.	*	1	1745	214	36.	*	2	0000	289	24.
1	0520	65	0.	*	1	1135	140	89.	*	1	1750	215	36.	*	2	0005	290	24.
1	0525	66	0.	*	1	1140	141	94.	*	1	1755	216	35.	*	2	0010	291	24.
1	0530	67	0.	*	1	1145	142	102.	*	1	1800	217	34.	*	2	0015	292	23.
1	0535	68	0.	*	1	1150	143	112.	*	1	1805	218	34.	*	2	0020	293	22.
1	0540	69	0.	*	1	1155	144	127.	*	1	1810	219	34.	*	2	0025	294	20.
1	0545	70	0.	*	1	1200	145	151.	*	1	1815	220	33.	*	2	0030	295	18.
1	0550	71	0.	*	1	1205	146	208.	*	1	1820	221	34.	*	2	0035	296	16.
1	0555	72	0.	*	1	1210	147	367.	*	1	1825	222	34.	*	2	0040	297	14.
1	0600	73	0.	*	1	1215	148	635.	*	1	1830	223	34.	*	2	0045	298	12.
1	0605	74	0.	*	1	1220	149	949.	*	1	1835	224	35.	*	2	0050	299	10.
1	0610	75	0.	*	1	1225	150	1158.	*	1	1840	225	35.	*	2	0055	300	8.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
		(CFS)	371.	104.	101.
		(INCHES)	1.683	1.893	1.893
(AC-FT)	184.	207.	207.	207.	

CUMULATIVE AREA = 2.05 SQ MI

26 KK

* *
* AREA 3 *
* *

BASIN NO. 3 RUNOFF

SUBBASIN RUNOFF DATA

28 BA

SUBBASIN CHARACTERISTICS
TAREA .24 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

..... HYDRO-35 TP-40 TP-49
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
.90 1.20 1.60 1.80 2.00 2.50 2.70 3.00 .00 .00 .00 .00

STORM AREA = .24

29 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNB 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

30 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .31 LAG

UNIT HYDROGRAPH
21 END-OF-PERIOD ORDINATES

43. 137. 268. 322. 306. 250. 167. 111. 77. 53.
36. 24. 17. 11. 8. 5. 4. 3. 2. 1.
0.

HYDROGRAPH AT STATION AREA 3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.03	.00	.03	261.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.02	.00	.02	198.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.02	.00	.02	149.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.02	.00	.02	116.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.01	90.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.01	.00	.01	71.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.01	.00	.01	57.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	46.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.02	40.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.01	36.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	30.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	31.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	30.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.02	29.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.01	28.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.01	27.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	27.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	27.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	27.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	26.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	26.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	25.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	25.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	24.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	23.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	23.
1		0210	27	.00	.00	.00	0.	*	1		1440	177	.01	.00	.01	22.
1		0215	28	.00	.00	.00	0.	*	1		1445	178	.01	.00	.01	22.
1		0220	29	.00	.00	.00	0.	*	1		1450	179	.01	.00	.01	21.
1		0225	30	.00	.00	.00	0.	*	1		1455	180	.01	.00	.01	21.
1		0230	31	.00	.00	.00	0.	*	1		1500	181	.01	.00	.01	20.

1	0235	32	.00	.00	.00	0.	*	1	1505	182	.00	.00	.00	20.
1	0240	33	.00	.00	.00	0.	*	1	1510	183	.00	.00	.00	18.
1	0245	34	.00	.00	.00	0.	*	1	1515	184	.00	.00	.00	16.
1	0250	35	.00	.00	.00	0.	*	1	1520	185	.00	.00	.00	14.
1	0255	36	.00	.00	.00	0.	*	1	1525	186	.00	.00	.00	12.
1	0300	37	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	10.
1	0305	38	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	9.
1	0310	39	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	8.
1	0315	40	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	7.
1	0320	41	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	6.
1	0325	42	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	6.
1	0330	43	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	6.
1	0335	44	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	6.
1	0340	45	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	5.
1	0345	46	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	5.
1	0350	47	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	5.
1	0355	48	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	5.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	5.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	5.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.00	.00	.00	5.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.00	.00	.00	5.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.00	.00	.00	5.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.00	.00	.00	4.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.00	.00	.00	4.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.00	.00	.00	4.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.00	.00	.00	4.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.00	.00	.00	4.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.00	.00	.00	4.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.00	.00	.00	4.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.00	.00	.00	4.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.00	.00	.00	4.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.00	.00	.00	4.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.00	.00	.00	4.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.00	.00	.00	4.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.00	.00	.00	4.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.00	.00	.00	4.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	4.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	4.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	4.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	4.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	4.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	4.
1	0605	74	.00	.00	.00	0.	*	1	1835	224	.00	.00	.00	4.
1	0610	75	.00	.00	.00	0.	*	1	1840	225	.00	.00	.00	4.
1	0615	76	.00	.00	.00	0.	*	1	1845	226	.00	.00	.00	4.
1	0620	77	.00	.00	.00	0.	*	1	1850	227	.00	.00	.00	4.
1	0625	78	.00	.00	.00	0.	*	1	1855	228	.00	.00	.00	4.
1	0630	79	.00	.00	.00	0.	*	1	1900	229	.00	.00	.00	4.
1	0635	80	.00	.00	.00	0.	*	1	1905	230	.00	.00	.00	4.
1	0640	81	.00	.00	.00	0.	*	1	1910	231	.00	.00	.00	4.
1	0645	82	.00	.00	.00	0.	*	1	1915	232	.00	.00	.00	4.
1	0650	83	.00	.00	.00	0.	*	1	1920	233	.00	.00	.00	4.
1	0655	84	.00	.00	.00	0.	*	1	1925	234	.00	.00	.00	4.
1	0700	85	.00	.00	.00	0.	*	1	1930	235	.00	.00	.00	4.
1	0705	86	.00	.00	.00	0.	*	1	1935	236	.00	.00	.00	4.
1	0710	87	.00	.00	.00	0.	*	1	1940	237	.00	.00	.00	4.
1	0715	88	.00	.00	.00	0.	*	1	1945	238	.00	.00	.00	4.
1	0720	89	.00	.00	.00	0.	*	1	1950	239	.00	.00	.00	4.
1	0725	90	.00	.00	.00	0.	*	1	1955	240	.00	.00	.00	4.
1	0730	91	.00	.00	.00	0.	*	1	2000	241	.00	.00	.00	4.
1	0735	92	.00	.00	.00	0.	*	1	2005	242	.00	.00	.00	4.
1	0740	93	.00	.00	.00	0.	*	1	2010	243	.00	.00	.00	4.
1	0745	94	.00	.00	.00	0.	*	1	2015	244	.00	.00	.00	4.
1	0750	95	.00	.00	.00	0.	*	1	2020	245	.00	.00	.00	4.
1	0755	96	.00	.00	.00	0.	*	1	2025	246	.00	.00	.00	4.
1	0800	97	.00	.00	.00	0.	*	1	2030	247	.00	.00	.00	4.
1	0805	98	.00	.00	.00	0.	*	1	2035	248	.00	.00	.00	4.
1	0810	99	.00	.00	.00	0.	*	1	2040	249	.00	.00	.00	4.
1	0815	100	.00	.00	.00	0.	*	1	2045	250	.00	.00	.00	4.
1	0820	101	.00	.00	.00	0.	*	1	2050	251	.00	.00	.00	4.
1	0825	102	.00	.00	.00	0.	*	1	2055	252	.00	.00	.00	4.
1	0830	103	.00	.00	.00	0.	*	1	2100	253	.00	.00	.00	4.
1	0835	104	.00	.00	.00	0.	*	1	2105	254	.00	.00	.00	3.
1	0840	105	.00	.00	.00	0.	*	1	2110	255	.00	.00	.00	3.
1	0845	106	.00	.00	.00	0.	*	1	2115	256	.00	.00	.00	3.

1	0850	107	.00	.00	.00	0.	*	1	2120	257	.00	.00	.00	3.
1	0855	108	.00	.00	.00	0.	*	1	2125	258	.00	.00	.00	3.
1	0900	109	.00	.00	.00	0.	*	1	2130	259	.00	.00	.00	3.
1	0905	110	.01	.01	.00	0.	*	1	2135	260	.00	.00	.00	3.
1	0910	111	.01	.01	.00	0.	*	1	2140	261	.00	.00	.00	3.
1	0915	112	.01	.01	.00	0.	*	1	2145	262	.00	.00	.00	3.
1	0920	113	.01	.01	.00	0.	*	1	2150	263	.00	.00	.00	3.
1	0925	114	.01	.01	.00	0.	*	1	2155	264	.00	.00	.00	3.
1	0930	115	.01	.01	.00	1.	*	1	2200	265	.00	.00	.00	3.
1	0935	116	.01	.01	.00	1.	*	1	2205	266	.00	.00	.00	3.
1	0940	117	.01	.01	.00	1.	*	1	2210	267	.00	.00	.00	3.
1	0945	118	.01	.01	.00	2.	*	1	2215	268	.00	.00	.00	3.
1	0950	119	.01	.01	.00	2.	*	1	2220	269	.00	.00	.00	3.
1	0955	120	.01	.01	.00	3.	*	1	2225	270	.00	.00	.00	3.
1	1000	121	.01	.01	.00	3.	*	1	2230	271	.00	.00	.00	3.
1	1005	122	.01	.01	.00	4.	*	1	2235	272	.00	.00	.00	3.
1	1010	123	.02	.01	.00	4.	*	1	2240	273	.00	.00	.00	3.
1	1015	124	.02	.01	.00	5.	*	1	2245	274	.00	.00	.00	3.
1	1020	125	.02	.01	.00	5.	*	1	2250	275	.00	.00	.00	3.
1	1025	126	.02	.01	.00	6.	*	1	2255	276	.00	.00	.00	3.
1	1030	127	.02	.01	.01	6.	*	1	2300	277	.00	.00	.00	3.
1	1035	128	.01	.01	.00	7.	*	1	2305	278	.00	.00	.00	3.
1	1040	129	.02	.01	.01	8.	*	1	2310	279	.00	.00	.00	3.
1	1045	130	.02	.01	.01	8.	*	1	2315	280	.00	.00	.00	3.
1	1050	131	.02	.01	.01	8.	*	1	2320	281	.00	.00	.00	3.
1	1055	132	.02	.01	.01	9.	*	1	2325	282	.00	.00	.00	3.
1	1100	133	.02	.01	.01	10.	*	1	2330	283	.00	.00	.00	3.
1	1105	134	.01	.01	.01	10.	*	1	2335	284	.00	.00	.00	3.
1	1110	135	.01	.01	.01	11.	*	1	2340	285	.00	.00	.00	3.
1	1115	136	.02	.01	.01	11.	*	1	2345	286	.00	.00	.00	3.
1	1120	137	.02	.01	.01	11.	*	1	2350	287	.00	.00	.00	3.
1	1125	138	.02	.01	.01	11.	*	1	2355	288	.00	.00	.00	3.
1	1130	139	.02	.01	.01	12.	*	2	0000	289	.00	.00	.00	3.
1	1135	140	.03	.01	.01	13.	*	2	0005	290	.00	.00	.00	3.
1	1140	141	.03	.02	.02	14.	*	2	0010	291	.00	.00	.00	2.
1	1145	142	.04	.02	.02	17.	*	2	0015	292	.00	.00	.00	2.
1	1150	143	.05	.03	.03	20.	*	2	0020	293	.00	.00	.00	2.
1	1155	144	.08	.03	.04	26.	*	2	0025	294	.00	.00	.00	1.
1	1200	145	.18	.07	.11	37.	*	2	0030	295	.00	.00	.00	1.
1	1205	146	.90	.22	.68	80.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.12	.02	.10	160.	*	2	0040	297	.00	.00	.00	0.
1	1215	148	.06	.01	.05	261.	*	2	0045	298	.00	.00	.00	0.
1	1220	149	.04	.01	.04	309.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.03	.01	.03	303.	*	2	0055	300	.00	.00	.00	0.

 TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.90

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	24.92-HR (INCHES)
309.	12.33	43.	1.692	21.	1.899
					24.

CUMULATIVE AREA = .24 SQ MI

31 KK

 * OUTLT3 *

COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3

33 HC

HYDROGRAPH COMBINATION
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT3
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1546.	*	1		1845	226	40.
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1577.	*	1		1850	227	40.
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1588.	*	1		1855	228	41.
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1598.	*	1		1900	229	41.
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1565.	*	1		1905	230	41.
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1484.	*	1		1910	231	41.
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	1362.	*	1		1915	232	41.
1		0035	8	0.	*	1		0650	83	0.	*	1		1305	158	1215.	*	1		1920	233	41.
1		0040	9	0.	*	1		0655	84	0.	*	1		1310	159	1048.	*	1		1925	234	41.
1		0045	10	0.	*	1		0700	85	0.	*	1		1315	160	888.	*	1		1930	235	41.
1		0050	11	0.	*	1		0705	86	0.	*	1		1320	161	759.	*	1		1935	236	41.
1		0055	12	0.	*	1		0710	87	0.	*	1		1325	162	658.	*	1		1940	237	40.
1		0100	13	0.	*	1		0715	88	0.	*	1		1330	163	578.	*	1		1945	238	40.
1		0105	14	0.	*	1		0720	89	0.	*	1		1335	164	511.	*	1		1950	239	40.
1		0110	15	0.	*	1		0725	90	0.	*	1		1340	165	456.	*	1		1955	240	39.
1		0115	16	0.	*	1		0730	91	0.	*	1		1345	166	413.	*	1		2000	241	39.
1		0120	17	0.	*	1		0735	92	0.	*	1		1350	167	381.	*	1		2005	242	39.
1		0125	18	0.	*	1		0740	93	0.	*	1		1355	168	355.	*	1		2010	243	38.
1		0130	19	0.	*	1		0745	94	0.	*	1		1400	169	334.	*	1		2015	244	38.
1		0135	20	0.	*	1		0750	95	0.	*	1		1405	170	318.	*	1		2020	245	38.
1		0140	21	0.	*	1		0755	96	0.	*	1		1410	171	303.	*	1		2025	246	37.
1		0145	22	0.	*	1		0800	97	0.	*	1		1415	172	291.	*	1		2030	247	37.
1		0150	23	0.	*	1		0805	98	0.	*	1		1420	173	281.	*	1		2035	248	37.
1		0155	24	0.	*	1		0810	99	0.	*	1		1425	174	271.	*	1		2040	249	36.
1		0200	25	0.	*	1		0815	100	0.	*	1		1430	175	263.	*	1		2045	250	36.
1		0205	26	0.	*	1		0820	101	0.	*	1		1435	176	255.	*	1		2050	251	36.
1		0210	27	0.	*	1		0825	102	0.	*	1		1440	177	248.	*	1		2055	252	35.
1		0215	28	0.	*	1		0830	103	0.	*	1		1445	178	241.	*	1		2100	253	35.
1		0220	29	0.	*	1		0835	104	0.	*	1		1450	179	235.	*	1		2105	254	35.
1		0225	30	0.	*	1		0840	105	0.	*	1		1455	180	228.	*	1		2110	255	35.
1		0230	31	0.	*	1		0845	106	0.	*	1		1500	181	222.	*	1		2115	256	34.
1		0235	32	0.	*	1		0850	107	0.	*	1		1505	182	215.	*	1		2120	257	34.
1		0240	33	0.	*	1		0855	108	0.	*	1		1510	183	207.	*	1		2125	258	34.
1		0245	34	0.	*	1		0900	109	0.	*	1		1515	184	197.	*	1		2130	259	33.
1		0250	35	0.	*	1		0905	110	0.	*	1		1520	185	185.	*	1		2135	260	33.
1		0255	36	0.	*	1		0910	111	0.	*	1		1525	186	172.	*	1		2140	261	33.
1		0300	37	0.	*	1		0915	112	0.	*	1		1530	187	159.	*	1		2145	262	33.
1		0305	38	0.	*	1		0920	113	1.	*	1		1535	188	147.	*	1		2150	263	32.
1		0310	39	0.	*	1		0925	114	1.	*	1		1540	189	135.	*	1		2155	264	32.
1		0315	40	0.	*	1		0930	115	2.	*	1		1545	190	123.	*	1		2200	265	32.
1		0320	41	0.	*	1		0935	116	4.	*	1		1550	191	112.	*	1		2205	266	32.
1		0325	42	0.	*	1		0940	117	5.	*	1		1555	192	101.	*	1		2210	267	31.
1		0330	43	0.	*	1		0945	118	7.	*	1		1600	193	92.	*	1		2215	268	31.
1		0335	44	0.	*	1		0950	119	10.	*	1		1605	194	83.	*	1		2220	269	31.
1		0340	45	0.	*	1		0955	120	12.	*	1		1610	195	77.	*	1		2225	270	31.
1		0345	46	0.	*	1		1000	121	15.	*	1		1615	196	71.	*	1		2230	271	30.
1		0350	47	0.	*	1		1005	122	19.	*	1		1620	197	67.	*	1		2235	272	30.
1		0355	48	0.	*	1		1010	123	22.	*	1		1625	198	63.	*	1		2240	273	30.
1		0400	49	0.	*	1		1015	124	26.	*	1		1630	199	60.	*	1		2245	274	30.
1		0405	50	0.	*	1		1020	125	31.	*	1		1635	200	57.	*	1		2250	275	30.
1		0410	51	0.	*	1		1025	126	35.	*	1		1640	201	55.	*	1		2255	276	29.
1		0415	52	0.	*	1		1030	127	40.	*	1		1645	202	53.	*	1		2300	277	29.
1		0420	53	0.	*	1		1035	128	45.	*	1		1650	203	51.	*	1		2305	278	29.
1		0425	54	0.	*	1		1040	129	50.	*	1		1655	204	49.	*	1		2310	279	29.
1		0430	55	0.	*	1		1045	130	55.	*	1		1700	205	48.	*	1		2315	280	29.
1		0435	56	0.	*	1		1050	131	60.	*	1		1705	206	47.	*	1		2320	281	28.
1		0440	57	0.	*	1		1055	132	65.	*	1		1710	207	46.	*	1		2325	282	28.
1		0445	58	0.	*	1		1100	133	70.	*	1		1715	208	45.	*	1		2330	283	28.
1		0450	59	0.	*	1		1105	134	75.	*	1		1720	209	44.	*	1		2335	284	28.
1		0455	60	0.	*	1		1110	135	80.	*	1		1725	210	43.	*	1		2340	285	28.
1		0500	61	0.	*	1		1115	136	85.	*	1		1730	211	42.	*	1		2345	286	28.
1		0505	62	0.	*	1		1120	137	88.	*	1		1735	212	41.	*	1		2350	287	27.
1		0510	63	0.	*	1		1125	138	92.	*	1		1740	213	41.	*	1		2355	288	27.
1		0515	64	0.	*	1		1130	139	96.	*	1		1745	214	40.	*	2		0000	289	27.
1		0520	65	0.	*	1		1135	140	101.	*	1		1750	215	39.	*	2		0005	290	27.
1		0525	66	0.	*	1		1140	141	109.	*	1		1755	216	39.	*	2		0010	291	26.

1	0530	67	0.	*	1	1145	142	118.	*	1	1800	217	38.	*	2	0015	292	25.
1	0535	68	0.	*	1	1150	143	132.	*	1	1805	218	38.	*	2	0020	293	23.
1	0540	69	0.	*	1	1155	144	153.	*	1	1810	219	37.	*	2	0025	294	21.
1	0545	70	0.	*	1	1200	145	188.	*	1	1815	220	37.	*	2	0030	295	19.
1	0550	71	0.	*	1	1205	146	288.	*	1	1820	221	38.	*	2	0035	296	17.
1	0555	72	0.	*	1	1210	147	527.	*	1	1825	222	38.	*	2	0040	297	15.
1	0600	73	0.	*	1	1215	148	896.	*	1	1830	223	39.	*	2	0045	298	12.
1	0605	74	0.	*	1	1220	149	1258.	*	1	1835	224	39.	*	2	0050	299	10.
1	0610	75	0.	*	1	1225	150	1460.	*	1	1840	225	39.	*	2	0055	300	9.

PEAK FLOW (CFS)	TIME (HR)	(CFS)	6-HR	24-HR	72-HR	24.92-HR
1598.	12.75	(INCHES)	414.	117.	112.	112.
		(AC-FT)	1.683	1.894	1.894	1.894
			206.	231.	231.	231.

CUMULATIVE AREA = 2.29 SQ MI

34 KK

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*****
* ROUTE3 *
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ROUTE OUTLET 3 TO BASIN 4 OUTLET

HYDROGRAPH ROUTING DATA

36 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .13 MUSKINGUM K
X         .30 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE3

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1329.	*	1		1845	226	39.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1470.	*	1		1850	227	40.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1539.	*	1		1855	228	40.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1571.	*	1		1900	229	41.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1587.	*	1		1905	230	41.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1570.	*	1		1910	231	41.	*
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	1511.	*	1		1915	232	41.	*
1		0035	8	0.	*	1		0650	83	0.	*	1		1305	158	1410.	*	1		1920	233	41.	*
1		0040	9	0.	*	1		0655	84	0.	*	1		1310	159	1279.	*	1		1925	234	41.	*
1		0045	10	0.	*	1		0700	85	0.	*	1		1315	160	1125.	*	1		1930	235	41.	*
1		0050	11	0.	*	1		0705	86	0.	*	1		1320	161	968.	*	1		1935	236	41.	*
1		0055	12	0.	*	1		0710	87	0.	*	1		1325	162	830.	*	1		1940	237	41.	*
1		0100	13	0.	*	1		0715	88	0.	*	1		1330	163	716.	*	1		1945	238	40.	*
1		0105	14	0.	*	1		0720	89	0.	*	1		1335	164	625.	*	1		1950	239	40.	*
1		0110	15	0.	*	1		0725	90	0.	*	1		1340	165	550.	*	1		1955	240	40.	*
1		0115	16	0.	*	1		0730	91	0.	*	1		1345	166	488.	*	1		2000	241	39.	*
1		0120	17	0.	*	1		0735	92	0.	*	1		1350	167	439.	*	1		2005	242	39.	*
1		0125	18	0.	*	1		0740	93	0.	*	1		1355	168	400.	*	1		2010	243	39.	*
1		0130	19	0.	*	1		0745	94	0.	*	1		1400	169	370.	*	1		2015	244	38.	*
1		0135	20	0.	*	1		0750	95	0.	*	1		1405	170	347.	*	1		2020	245	38.	*
1		0140	21	0.	*	1		0755	96	0.	*	1		1410	171	327.	*	1		2025	246	38.	*
1		0145	22	0.	*	1		0800	97	0.	*	1		1415	172	311.	*	1		2030	247	37.	*
1		0150	23	0.	*	1		0805	98	0.	*	1		1420	173	298.	*	1		2035	248	37.	*
1		0155	24	0.	*	1		0810	99	0.	*	1		1425	174	286.	*	1		2040	249	37.	*
1		0200	25	0.	*	1		0815	100	0.	*	1		1430	175	276.	*	1		2045	250	36.	*

1	0205	26	0.	*	1	0820	101	0.	*	1	1435	176	267.	*	1	2050	251	36.
1	0210	27	0.	*	1	0825	102	0.	*	1	1440	177	259.	*	1	2055	252	36.
1	0215	28	0.	*	1	0830	103	0.	*	1	1445	178	252.	*	1	2100	253	36.
1	0220	29	0.	*	1	0835	104	0.	*	1	1450	179	245.	*	1	2105	254	35.
1	0225	30	0.	*	1	0840	105	0.	*	1	1455	180	238.	*	1	2110	255	35.
1	0230	31	0.	*	1	0845	106	0.	*	1	1500	181	231.	*	1	2115	256	35.
1	0235	32	0.	*	1	0850	107	0.	*	1	1505	182	225.	*	1	2120	257	34.
1	0240	33	0.	*	1	0855	108	0.	*	1	1510	183	218.	*	1	2125	258	34.
1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	211.	*	1	2130	259	34.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	202.	*	1	2135	260	34.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	190.	*	1	2140	261	33.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	178.	*	1	2145	262	33.
1	0305	38	0.	*	1	0920	113	0.	*	1	1535	188	166.	*	1	2150	263	33.
1	0310	39	0.	*	1	0925	114	1.	*	1	1540	189	153.	*	1	2155	264	32.
1	0315	40	0.	*	1	0930	115	1.	*	1	1545	190	141.	*	1	2200	265	32.
1	0320	41	0.	*	1	0935	116	2.	*	1	1550	191	129.	*	1	2205	266	32.
1	0325	42	0.	*	1	0940	117	3.	*	1	1555	192	117.	*	1	2210	267	32.
1	0330	43	0.	*	1	0945	118	5.	*	1	1600	193	107.	*	1	2215	268	32.
1	0335	44	0.	*	1	0950	119	6.	*	1	1605	194	97.	*	1	2220	269	31.
1	0340	45	0.	*	1	0955	120	9.	*	1	1610	195	88.	*	1	2225	270	31.
1	0345	46	0.	*	1	1000	121	11.	*	1	1615	196	80.	*	1	2230	271	31.
1	0350	47	0.	*	1	1005	122	14.	*	1	1620	197	74.	*	1	2235	272	31.
1	0355	48	0.	*	1	1010	123	17.	*	1	1625	198	69.	*	1	2240	273	30.
1	0400	49	0.	*	1	1015	124	21.	*	1	1630	199	65.	*	1	2245	274	30.
1	0405	50	0.	*	1	1020	125	25.	*	1	1635	200	61.	*	1	2250	275	30.
1	0410	51	0.	*	1	1025	126	29.	*	1	1640	201	58.	*	1	2255	276	30.
1	0415	52	0.	*	1	1030	127	33.	*	1	1645	202	56.	*	1	2300	277	30.
1	0420	53	0.	*	1	1035	128	38.	*	1	1650	203	54.	*	1	2305	278	29.
1	0425	54	0.	*	1	1040	129	43.	*	1	1655	204	52.	*	1	2310	279	29.
1	0430	55	0.	*	1	1045	130	48.	*	1	1700	205	50.	*	1	2315	280	29.
1	0435	56	0.	*	1	1050	131	53.	*	1	1705	206	49.	*	1	2320	281	29.
1	0440	57	0.	*	1	1055	132	58.	*	1	1710	207	47.	*	1	2325	282	29.
1	0445	58	0.	*	1	1100	133	62.	*	1	1715	208	46.	*	1	2330	283	28.
1	0450	59	0.	*	1	1105	134	67.	*	1	1720	209	45.	*	1	2335	284	28.
1	0455	60	0.	*	1	1110	135	73.	*	1	1725	210	44.	*	1	2340	285	28.
1	0500	61	0.	*	1	1115	136	78.	*	1	1730	211	43.	*	1	2345	286	28.
1	0505	62	0.	*	1	1120	137	82.	*	1	1735	212	43.	*	1	2350	287	28.
1	0510	63	0.	*	1	1125	138	86.	*	1	1740	213	42.	*	1	2355	288	27.
1	0515	64	0.	*	1	1130	139	90.	*	1	1745	214	41.	*	2	0000	289	27.
1	0520	65	0.	*	1	1135	140	94.	*	1	1750	215	40.	*	2	0005	290	27.
1	0525	66	0.	*	1	1140	141	99.	*	1	1755	216	40.	*	2	0010	291	27.
1	0530	67	0.	*	1	1145	142	105.	*	1	1800	217	39.	*	2	0015	292	26.
1	0535	68	0.	*	1	1150	143	114.	*	1	1805	218	38.	*	2	0020	293	25.
1	0540	69	0.	*	1	1155	144	127.	*	1	1810	219	38.	*	2	0025	294	24.
1	0545	70	0.	*	1	1200	145	145.	*	1	1815	220	37.	*	2	0030	295	22.
1	0550	71	0.	*	1	1205	146	176.	*	1	1820	221	37.	*	2	0035	296	20.
1	0555	72	0.	*	1	1210	147	256.	*	1	1825	222	38.	*	2	0040	297	18.
1	0600	73	0.	*	1	1215	148	443.	*	1	1830	223	38.	*	2	0045	298	16.
1	0605	74	0.	*	1	1220	149	747.	*	1	1835	224	38.	*	2	0050	299	14.
1	0610	75	0.	*	1	1225	150	1083.	*	1	1840	225	39.	*	2	0055	300	11.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM (CFS)	AVERAGE (INCHES)	6-HR (CFS)	24-HR (INCHES)	72-HR (CFS)	24.92-HR (INCHES)
1587.	12.83			414.	1.683	112.	1.893
				206.	231.	231.	231.

CUMULATIVE AREA = 2.29 SQ MI

37 KK

* AREA 4 *

BASIN NO. 4 RUNOFF

SUBBASIN RUNOFF DATA

39 BA SUBBASIN CHARACTERISTICS
TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	2.00	2.50	2.70	3.00	.00	.00	.00	.00

STORM AREA = .60

40 LS SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CPVNBR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

41 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

121.	392.	739.	856.	780.	604.	381.	254.	174.	116.
78.	52.	34.	23.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 4

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q		DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	1230	151	.03	.00	.03	638.	
1	0005	2	.00	.00	.00	.00	0.	*	1	1235	152	.02	.00	.02	469.	
1	0010	3	.00	.00	.00	.00	0.	*	1	1240	153	.02	.00	.02	354.	
1	0015	4	.00	.00	.00	.00	0.	*	1	1245	154	.02	.00	.02	272.	
1	0020	5	.00	.00	.00	.00	0.	*	1	1250	155	.02	.00	.01	210.	
1	0025	6	.00	.00	.00	.00	0.	*	1	1255	156	.01	.00	.01	165.	
1	0030	7	.00	.00	.00	.00	0.	*	1	1300	157	.01	.00	.01	132.	
1	0035	8	.00	.00	.00	.00	0.	*	1	1305	158	.02	.00	.02	109.	
1	0040	9	.00	.00	.00	.00	0.	*	1	1310	159	.02	.00	.02	94.	
1	0045	10	.00	.00	.00	.00	0.	*	1	1315	160	.02	.00	.01	85.	
1	0050	11	.00	.00	.00	.00	0.	*	1	1320	161	.02	.00	.01	80.	
1	0055	12	.00	.00	.00	.00	0.	*	1	1325	162	.02	.00	.01	77.	
1	0100	13	.00	.00	.00	.00	0.	*	1	1330	163	.01	.00	.01	74.	
1	0105	14	.00	.00	.00	.00	0.	*	1	1335	164	.02	.00	.02	71.	
1	0110	15	.00	.00	.00	.00	0.	*	1	1340	165	.02	.00	.01	68.	
1	0115	16	.00	.00	.00	.00	0.	*	1	1345	166	.02	.00	.01	67.	
1	0120	17	.00	.00	.00	.00	0.	*	1	1350	167	.02	.00	.01	67.	
1	0125	18	.00	.00	.00	.00	0.	*	1	1355	168	.02	.00	.01	67.	
1	0130	19	.00	.00	.00	.00	0.	*	1	1400	169	.02	.00	.01	67.	
1	0135	20	.00	.00	.00	.00	0.	*	1	1405	170	.01	.00	.01	66.	
1	0140	21	.00	.00	.00	.00	0.	*	1	1410	171	.01	.00	.01	65.	
1	0145	22	.00	.00	.00	.00	0.	*	1	1415	172	.01	.00	.01	63.	
1	0150	23	.00	.00	.00	.00	0.	*	1	1420	173	.01	.00	.01	62.	
1	0155	24	.00	.00	.00	.00	0.	*	1	1425	174	.01	.00	.01	60.	
1	0200	25	.00	.00	.00	.00	0.	*	1	1430	175	.01	.00	.01	59.	
1	0205	26	.00	.00	.00	.00	0.	*	1	1435	176	.01	.00	.01	57.	
1	0210	27	.00	.00	.00	.00	0.	*	1	1440	177	.01	.00	.01	56.	
1	0215	28	.00	.00	.00	.00	0.	*	1	1445	178	.01	.00	.01	55.	
1	0220	29	.00	.00	.00	.00	0.	*	1	1450	179	.01	.00	.01	54.	
1	0225	30	.00	.00	.00	.00	0.	*	1	1455	180	.01	.00	.01	52.	
1	0230	31	.00	.00	.00	.00	0.	*	1	1500	181	.01	.00	.01	51.	
1	0235	32	.00	.00	.00	.00	0.	*	1	1505	182	.00	.00	.00	49.	
1	0240	33	.00	.00	.00	.00	0.	*	1	1510	183	.00	.00	.00	46.	
1	0245	34	.00	.00	.00	.00	0.	*	1	1515	184	.00	.00	.00	40.	
1	0250	35	.00	.00	.00	.00	0.	*	1	1520	185	.00	.00	.00	34.	
1	0255	36	.00	.00	.00	.00	0.	*	1	1525	186	.00	.00	.00	28.	
1	0300	37	.00	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	24.	
1	0305	38	.00	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	21.	
1	0310	39	.00	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	19.	

1	0315	40	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	17.
1	0320	41	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	16.
1	0325	42	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	15.
1	0330	43	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	14.
1	0335	44	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	14.
1	0340	45	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	13.
1	0345	46	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	13.
1	0350	47	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	13.
1	0355	48	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	13.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	12.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	12.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.00	.00	.00	12.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.00	.00	.00	12.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.00	.00	.00	11.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.00	.00	.00	11.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.00	.00	.00	11.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.00	.00	.00	11.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.00	.00	.00	11.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.00	.00	.00	11.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.00	.00	.00	10.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.00	.00	.00	10.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.00	.00	.00	10.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.00	.00	.00	10.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.00	.00	.00	10.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.00	.00	.00	10.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.00	.00	.00	10.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.00	.00	.00	9.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.00	.00	.00	9.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	9.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	9.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	10.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	10.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	11.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	11.
1	0605	74	.00	.00	.00	0.	*	1	1835	224	.00	.00	.00	11.
1	0610	75	.00	.00	.00	0.	*	1	1840	225	.00	.00	.00	11.
1	0615	76	.00	.00	.00	0.	*	1	1845	226	.00	.00	.00	11.
1	0620	77	.00	.00	.00	0.	*	1	1850	227	.00	.00	.00	11.
1	0625	78	.00	.00	.00	0.	*	1	1855	228	.00	.00	.00	11.
1	0630	79	.00	.00	.00	0.	*	1	1900	229	.00	.00	.00	11.
1	0635	80	.00	.00	.00	0.	*	1	1905	230	.00	.00	.00	11.
1	0640	81	.00	.00	.00	0.	*	1	1910	231	.00	.00	.00	11.
1	0645	82	.00	.00	.00	0.	*	1	1915	232	.00	.00	.00	11.
1	0650	83	.00	.00	.00	0.	*	1	1920	233	.00	.00	.00	11.
1	0655	84	.00	.00	.00	0.	*	1	1925	234	.00	.00	.00	10.
1	0700	85	.00	.00	.00	0.	*	1	1930	235	.00	.00	.00	10.
1	0705	86	.00	.00	.00	0.	*	1	1935	236	.00	.00	.00	10.
1	0710	87	.00	.00	.00	0.	*	1	1940	237	.00	.00	.00	10.
1	0715	88	.00	.00	.00	0.	*	1	1945	238	.00	.00	.00	10.
1	0720	89	.00	.00	.00	0.	*	1	1950	239	.00	.00	.00	10.
1	0725	90	.00	.00	.00	0.	*	1	1955	240	.00	.00	.00	10.
1	0730	91	.00	.00	.00	0.	*	1	2000	241	.00	.00	.00	10.
1	0735	92	.00	.00	.00	0.	*	1	2005	242	.00	.00	.00	10.
1	0740	93	.00	.00	.00	0.	*	1	2010	243	.00	.00	.00	10.
1	0745	94	.00	.00	.00	0.	*	1	2015	244	.00	.00	.00	10.
1	0750	95	.00	.00	.00	0.	*	1	2020	245	.00	.00	.00	9.
1	0755	96	.00	.00	.00	0.	*	1	2025	246	.00	.00	.00	9.
1	0800	97	.00	.00	.00	0.	*	1	2030	247	.00	.00	.00	9.
1	0805	98	.00	.00	.00	0.	*	1	2035	248	.00	.00	.00	9.
1	0810	99	.00	.00	.00	0.	*	1	2040	249	.00	.00	.00	9.
1	0815	100	.00	.00	.00	0.	*	1	2045	250	.00	.00	.00	9.
1	0820	101	.00	.00	.00	0.	*	1	2050	251	.00	.00	.00	9.
1	0825	102	.00	.00	.00	0.	*	1	2055	252	.00	.00	.00	9.
1	0830	103	.00	.00	.00	0.	*	1	2100	253	.00	.00	.00	9.
1	0835	104	.00	.00	.00	0.	*	1	2105	254	.00	.00	.00	9.
1	0840	105	.00	.00	.00	0.	*	1	2110	255	.00	.00	.00	9.
1	0845	106	.00	.00	.00	0.	*	1	2115	256	.00	.00	.00	9.
1	0850	107	.00	.00	.00	0.	*	1	2120	257	.00	.00	.00	9.
1	0855	108	.00	.00	.00	0.	*	1	2125	258	.00	.00	.00	8.
1	0900	109	.00	.00	.00	0.	*	1	2130	259	.00	.00	.00	8.
1	0905	110	.01	.01	.00	0.	*	1	2135	260	.00	.00	.00	8.
1	0910	111	.01	.01	.00	0.	*	1	2140	261	.00	.00	.00	8.
1	0915	112	.01	.01	.00	0.	*	1	2145	262	.00	.00	.00	8.
1	0920	113	.01	.01	.00	1.	*	1	2150	263	.00	.00	.00	8.
1	0925	114	.01	.01	.00	1.	*	1	2155	264	.00	.00	.00	8.

1	0930	115	.01	.01	.00	2.	*	1	2200	265	.00	.00	.00	8.
1	0935	116	.01	.01	.00	3.	*	1	2205	266	.00	.00	.00	8.
1	0940	117	.01	.01	.00	4.	*	1	2210	267	.00	.00	.00	8.
1	0945	118	.01	.01	.00	5.	*	1	2215	268	.00	.00	.00	8.
1	0950	119	.01	.01	.00	6.	*	1	2220	269	.00	.00	.00	8.
1	0955	120	.01	.01	.00	7.	*	1	2225	270	.00	.00	.00	8.
1	1000	121	.01	.01	.00	8.	*	1	2230	271	.00	.00	.00	8.
1	1005	122	.01	.01	.00	9.	*	1	2235	272	.00	.00	.00	8.
1	1010	123	.02	.01	.00	11.	*	1	2240	273	.00	.00	.00	8.
1	1015	124	.02	.01	.00	12.	*	1	2245	274	.00	.00	.00	8.
1	1020	125	.02	.01	.00	13.	*	1	2250	275	.00	.00	.00	8.
1	1025	126	.02	.01	.00	15.	*	1	2255	276	.00	.00	.00	7.
1	1030	127	.02	.01	.01	17.	*	1	2300	277	.00	.00	.00	7.
1	1035	128	.01	.01	.00	18.	*	1	2305	278	.00	.00	.00	7.
1	1040	129	.02	.01	.01	20.	*	1	2310	279	.00	.00	.00	7.
1	1045	130	.02	.01	.01	21.	*	1	2315	280	.00	.00	.00	7.
1	1050	131	.02	.01	.01	22.	*	1	2320	281	.00	.00	.00	7.
1	1055	132	.02	.01	.01	23.	*	1	2325	282	.00	.00	.00	7.
1	1100	133	.02	.01	.01	24.	*	1	2330	283	.00	.00	.00	7.
1	1105	134	.01	.01	.01	26.	*	1	2335	284	.00	.00	.00	7.
1	1110	135	.01	.01	.01	27.	*	1	2340	285	.00	.00	.00	7.
1	1115	136	.02	.01	.01	27.	*	1	2345	286	.00	.00	.00	7.
1	1120	137	.02	.01	.01	28.	*	1	2350	287	.00	.00	.00	7.
1	1125	138	.02	.01	.01	28.	*	1	2355	288	.00	.00	.00	7.
1	1130	139	.02	.01	.01	30.	*	2	0000	289	.00	.00	.00	7.
1	1135	140	.03	.01	.01	33.	*	2	0005	290	.00	.00	.00	7.
1	1140	141	.03	.02	.02	37.	*	2	0010	291	.00	.00	.00	6.
1	1145	142	.04	.02	.02	44.	*	2	0015	292	.00	.00	.00	5.
1	1150	143	.05	.03	.03	53.	*	2	0020	293	.00	.00	.00	4.
1	1155	144	.08	.03	.04	68.	*	2	0025	294	.00	.00	.00	3.
1	1200	145	.18	.07	.11	97.	*	2	0030	295	.00	.00	.00	2.
1	1205	146	.90	.22	.68	217.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.12	.02	.10	443.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.06	.01	.05	708.	*	2	0045	298	.00	.00	.00	1.
1	1220	149	.04	.01	.04	814.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.03	.01	.03	770.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.10, TOTAL EXCESS = 1.90

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	24.92-HR
814.	12.33	(CFS)	109.	31.	29.	29.
		(INCHES)	1.690	1.898	1.898	1.898
		(AC-FT)	54.	61.	61.	61.

CUMULATIVE AREA = .60 SQ MI

42 KX

* OUTLT4 *

COMBINE ROUTE 3 AND BASIN 4 TO OUTLET 4

44 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT4
SUM OF 2 HYDROGRAPHS

DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW

1	0000	1	0.	*	1	0615	76	0.	*	1	1230	151	1968.	*	1	1845	226	50.
1	0005	2	0.	*	1	0620	77	0.	*	1	1235	152	1939.	*	1	1850	227	51.
1	0010	3	0.	*	1	0625	78	0.	*	1	1240	153	1893.	*	1	1855	228	51.
1	0015	4	0.	*	1	0630	79	0.	*	1	1245	154	1843.	*	1	1900	229	52.
1	0020	5	0.	*	1	0635	80	0.	*	1	1250	155	1797.	*	1	1905	230	52.
1	0025	6	0.	*	1	0640	81	0.	*	1	1255	156	1735.	*	1	1910	231	52.
1	0030	7	0.	*	1	0645	82	0.	*	1	1300	157	1643.	*	1	1915	232	52.
1	0035	8	0.	*	1	0650	83	0.	*	1	1305	158	1519.	*	1	1920	233	52.
1	0040	9	0.	*	1	0655	84	0.	*	1	1310	159	1373.	*	1	1925	234	52.
1	0045	10	0.	*	1	0700	85	0.	*	1	1315	160	1210.	*	1	1930	235	51.
1	0050	11	0.	*	1	0705	86	0.	*	1	1320	161	1048.	*	1	1935	236	51.
1	0055	12	0.	*	1	0710	87	0.	*	1	1325	162	907.	*	1	1940	237	51.
1	0100	13	0.	*	1	0715	88	0.	*	1	1330	163	790.	*	1	1945	238	50.
1	0105	14	0.	*	1	0720	89	0.	*	1	1335	164	695.	*	1	1950	239	50.
1	0110	15	0.	*	1	0725	90	0.	*	1	1340	165	617.	*	1	1955	240	50.
1	0115	16	0.	*	1	0730	91	0.	*	1	1345	166	555.	*	1	2000	241	49.
1	0120	17	0.	*	1	0735	92	0.	*	1	1350	167	506.	*	1	2005	242	49.
1	0125	18	0.	*	1	0740	93	0.	*	1	1355	168	468.	*	1	2010	243	48.
1	0130	19	0.	*	1	0745	94	0.	*	1	1400	169	437.	*	1	2015	244	48.
1	0135	20	0.	*	1	0750	95	0.	*	1	1405	170	412.	*	1	2020	245	48.
1	0140	21	0.	*	1	0755	96	0.	*	1	1410	171	392.	*	1	2025	246	47.
1	0145	22	0.	*	1	0800	97	0.	*	1	1415	172	375.	*	1	2030	247	47.
1	0150	23	0.	*	1	0805	98	0.	*	1	1420	173	360.	*	1	2035	248	46.
1	0155	24	0.	*	1	0810	99	0.	*	1	1425	174	347.	*	1	2040	249	46.
1	0200	25	0.	*	1	0815	100	0.	*	1	1430	175	335.	*	1	2045	250	46.
1	0205	26	0.	*	1	0820	101	0.	*	1	1435	176	325.	*	1	2050	251	45.
1	0210	27	0.	*	1	0825	102	0.	*	1	1440	177	315.	*	1	2055	252	45.
1	0215	28	0.	*	1	0830	103	0.	*	1	1445	178	307.	*	1	2100	253	44.
1	0220	29	0.	*	1	0835	104	0.	*	1	1450	179	298.	*	1	2105	254	44.
1	0225	30	0.	*	1	0840	105	0.	*	1	1455	180	290.	*	1	2110	255	44.
1	0230	31	0.	*	1	0845	106	0.	*	1	1500	181	283.	*	1	2115	256	43.
1	0235	32	0.	*	1	0850	107	0.	*	1	1505	182	274.	*	1	2120	257	43.
1	0240	33	0.	*	1	0855	108	0.	*	1	1510	183	264.	*	1	2125	258	43.
1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	251.	*	1	2130	259	42.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	235.	*	1	2135	260	42.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	219.	*	1	2140	261	42.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	202.	*	1	2145	262	41.
1	0305	38	0.	*	1	0920	113	1.	*	1	1535	188	186.	*	1	2150	263	41.
1	0310	39	0.	*	1	0925	114	2.	*	1	1540	189	172.	*	1	2155	264	41.
1	0315	40	0.	*	1	0930	115	3.	*	1	1545	190	158.	*	1	2200	265	40.
1	0320	41	0.	*	1	0935	116	5.	*	1	1550	191	145.	*	1	2205	266	40.
1	0325	42	0.	*	1	0940	117	7.	*	1	1555	192	132.	*	1	2210	267	40.
1	0330	43	0.	*	1	0945	118	9.	*	1	1600	193	121.	*	1	2215	268	39.
1	0335	44	0.	*	1	0950	119	12.	*	1	1605	194	111.	*	1	2220	269	39.
1	0340	45	0.	*	1	0955	120	16.	*	1	1610	195	101.	*	1	2225	270	39.
1	0345	46	0.	*	1	1000	121	19.	*	1	1615	196	94.	*	1	2230	271	39.
1	0350	47	0.	*	1	1005	122	23.	*	1	1620	197	87.	*	1	2235	272	38.
1	0355	48	0.	*	1	1010	123	28.	*	1	1625	198	82.	*	1	2240	273	38.
1	0400	49	0.	*	1	1015	124	33.	*	1	1630	199	77.	*	1	2245	274	38.
1	0405	50	0.	*	1	1020	125	38.	*	1	1635	200	74.	*	1	2250	275	37.
1	0410	51	0.	*	1	1025	126	44.	*	1	1640	201	70.	*	1	2255	276	37.
1	0415	52	0.	*	1	1030	127	50.	*	1	1645	202	68.	*	1	2300	277	37.
1	0420	53	0.	*	1	1035	128	56.	*	1	1650	203	65.	*	1	2305	278	37.
1	0425	54	0.	*	1	1040	129	62.	*	1	1655	204	63.	*	1	2310	279	36.
1	0430	55	0.	*	1	1045	130	68.	*	1	1700	205	61.	*	1	2315	280	36.
1	0435	56	0.	*	1	1050	131	74.	*	1	1705	206	60.	*	1	2320	281	36.
1	0440	57	0.	*	1	1055	132	80.	*	1	1710	207	58.	*	1	2325	282	36.
1	0445	58	0.	*	1	1100	133	87.	*	1	1715	208	57.	*	1	2330	283	35.
1	0450	59	0.	*	1	1105	134	93.	*	1	1720	209	56.	*	1	2335	284	35.
1	0455	60	0.	*	1	1110	135	100.	*	1	1725	210	54.	*	1	2340	285	35.
1	0500	61	0.	*	1	1115	136	105.	*	1	1730	211	53.	*	1	2345	286	35.
1	0505	62	0.	*	1	1120	137	110.	*	1	1735	212	52.	*	1	2350	287	35.
1	0510	63	0.	*	1	1125	138	115.	*	1	1740	213	52.	*	1	2355	288	34.
1	0515	64	0.	*	1	1130	139	120.	*	1	1745	214	51.	*	2	0000	289	34.
1	0520	65	0.	*	1	1135	140	127.	*	1	1750	215	50.	*	2	0005	290	34.
1	0525	66	0.	*	1	1140	141	136.	*	1	1755	216	49.	*	2	0010	291	33.
1	0530	67	0.	*	1	1145	142	149.	*	1	1800	217	48.	*	2	0015	292	31.
1	0535	68	0.	*	1	1150	143	167.	*	1	1805	218	48.	*	2	0020	293	29.
1	0540	69	0.	*	1	1155	144	195.	*	1	1810	219	47.	*	2	0025	294	26.
1	0545	70	0.	*	1	1200	145	242.	*	1	1815	220	47.	*	2	0030	295	24.
1	0550	71	0.	*	1	1205	146	393.	*	1	1820	221	48.	*	2	0035	296	21.
1	0555	72	0.	*	1	1210	147	699.	*	1	1825	222	48.	*	2	0040	297	19.
1	0600	73	0.	*	1	1215	148	1151.	*	1	1830	223	49.	*	2	0045	298	16.
1	0605	74	0.	*	1	1220	149	1561.	*	1	1835	224	49.	*	2	0050	299	14.

1 0610 75 0. * 1 1225 150 1853. * 1 1840 225 50. * 2 0055 300 12.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	24.92-HR	
1968.	12.50	523.	147.	142.	142.	
		(INCHES)	1.683	1.894	1.894	1.894
		(AC-FT)	259.	292.	292.	292.

CUMULATIVE AREA = 2.89 SQ MI

45 KK

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*                               *
* ROUTE4                         *
*                               *
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ROUTE OUTLET 4 TO BASIN 5 OUTLET

HYDROGRAPH ROUTING DATA

47 RM

MUSKINGUM ROUTING

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NSTPS      2 NUMBER OF SUBREACHES
AMSKK     .36 MUSKINGUM K
X         .20 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE4

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	838.	*	1		1845	226	48.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1127.	*	1		1850	227	49.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1383.	*	1		1855	228	49.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1571.	*	1		1900	229	50.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1692.	*	1		1905	230	50.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1758.	*	1		1910	231	51.	*
1		0230	7	0.	*	1		0645	82	0.	*	1		1300	157	1784.	*	1		1915	232	51.	*
1		0035	8	0.	*	1		0650	83	0.	*	1		1305	158	1780.	*	1		1920	233	51.	*
1		0040	9	0.	*	1		0655	84	0.	*	1		1310	159	1748.	*	1		1925	234	51.	*
1		0045	10	0.	*	1		0700	85	0.	*	1		1315	160	1688.	*	1		1930	235	52.	*
1		0050	11	0.	*	1		0705	86	0.	*	1		1320	161	1602.	*	1		1935	236	52.	*
1		0055	12	0.	*	1		0710	87	0.	*	1		1325	162	1493.	*	1		1940	237	52.	*
1		0100	13	0.	*	1		0715	88	0.	*	1		1330	163	1367.	*	1		1945	238	52.	*
1		0105	14	0.	*	1		0720	89	0.	*	1		1335	164	1233.	*	1		1950	239	51.	*
1		0110	15	0.	*	1		0725	90	0.	*	1		1340	165	1101.	*	1		1955	240	51.	*
1		0115	16	0.	*	1		0730	91	0.	*	1		1345	166	977.	*	1		2000	241	51.	*
1		0120	17	0.	*	1		0735	92	0.	*	1		1350	167	866.	*	1		2005	242	50.	*
1		0125	18	0.	*	1		0740	93	0.	*	1		1355	168	768.	*	1		2010	243	50.	*
1		0130	19	0.	*	1		0745	94	0.	*	1		1400	169	685.	*	1		2015	244	50.	*
1		0135	20	0.	*	1		0750	95	0.	*	1		1405	170	615.	*	1		2020	245	49.	*
1		0140	21	0.	*	1		0755	96	0.	*	1		1410	171	557.	*	1		2025	246	49.	*
1		0145	22	0.	*	1		0800	97	0.	*	1		1415	172	510.	*	1		2030	247	49.	*
1		0150	23	0.	*	1		0805	98	0.	*	1		1420	173	472.	*	1		2035	248	48.	*
1		0155	24	0.	*	1		0810	99	0.	*	1		1425	174	440.	*	1		2040	249	48.	*
1		0200	25	0.	*	1		0815	100	0.	*	1		1430	175	414.	*	1		2045	250	47.	*
1		0205	26	0.	*	1		0820	101	0.	*	1		1435	176	392.	*	1		2050	251	47.	*
1		0210	27	0.	*	1		0825	102	0.	*	1		1440	177	374.	*	1		2055	252	46.	*
1		0215	28	0.	*	1		0830	103	0.	*	1		1445	178	358.	*	1		2100	253	46.	*
1		0220	29	0.	*	1		0835	104	0.	*	1		1450	179	344.	*	1		2105	254	46.	*
1		0225	30	0.	*	1		0840	105	0.	*	1		1455	180	332.	*	1		2110	255	45.	*
1		0230	31	0.	*	1		0845	106	0.	*	1		1500	181	322.	*	1		2115	256	45.	*
1		0235	32	0.	*	1		0850	107	0.	*	1		1505	182	312.	*	1		2120	257	45.	*
1		0240	33	0.	*	1		0855	108	0.	*	1		1510	183	303.	*	1		2125	258	44.	*

1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	294.	*	1	2130	259	44.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	285.	*	1	2135	260	43.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	275.	*	1	2140	261	43.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	264.	*	1	2145	262	43.
1	0305	38	0.	*	1	0920	113	0.	*	1	1535	188	251.	*	1	2150	263	42.
1	0310	39	0.	*	1	0925	114	0.	*	1	1540	189	236.	*	1	2155	264	42.
1	0315	40	0.	*	1	0930	115	0.	*	1	1545	190	222.	*	1	2200	265	42.
1	0320	41	0.	*	1	0935	116	1.	*	1	1550	191	207.	*	1	2205	266	41.
1	0325	42	0.	*	1	0940	117	1.	*	1	1555	192	192.	*	1	2210	267	41.
1	0330	43	0.	*	1	0945	118	2.	*	1	1600	193	178.	*	1	2215	268	41.
1	0335	44	0.	*	1	0950	119	4.	*	1	1605	194	164.	*	1	2220	269	40.
1	0340	45	0.	*	1	0955	120	5.	*	1	1610	195	151.	*	1	2225	270	40.
1	0345	46	0.	*	1	1000	121	7.	*	1	1615	196	139.	*	1	2230	271	40.
1	0350	47	0.	*	1	1005	122	10.	*	1	1620	197	127.	*	1	2235	272	39.
1	0355	48	0.	*	1	1010	123	12.	*	1	1625	198	117.	*	1	2240	273	39.
1	0400	49	0.	*	1	1015	124	16.	*	1	1630	199	108.	*	1	2245	274	39.
1	0405	50	0.	*	1	1020	125	19.	*	1	1635	200	99.	*	1	2250	275	39.
1	0410	51	0.	*	1	1025	126	23.	*	1	1640	201	92.	*	1	2255	276	38.
1	0415	52	0.	*	1	1030	127	27.	*	1	1645	202	86.	*	1	2300	277	38.
1	0420	53	0.	*	1	1035	128	32.	*	1	1650	203	81.	*	1	2305	278	38.
1	0425	54	0.	*	1	1040	129	37.	*	1	1655	204	77.	*	1	2310	279	38.
1	0430	55	0.	*	1	1045	130	43.	*	1	1700	205	73.	*	1	2315	280	37.
1	0435	56	0.	*	1	1050	131	48.	*	1	1705	206	70.	*	1	2320	281	37.
1	0440	57	0.	*	1	1055	132	54.	*	1	1710	207	67.	*	1	2325	282	37.
1	0445	58	0.	*	1	1100	133	60.	*	1	1715	208	65.	*	1	2330	283	37.
1	0450	59	0.	*	1	1105	134	66.	*	1	1720	209	63.	*	1	2335	284	36.
1	0455	60	0.	*	1	1110	135	72.	*	1	1725	210	61.	*	1	2340	285	36.
1	0500	61	0.	*	1	1115	136	79.	*	1	1730	211	59.	*	1	2345	286	36.
1	0505	62	0.	*	1	1120	137	85.	*	1	1735	212	58.	*	1	2350	287	36.
1	0510	63	0.	*	1	1125	138	91.	*	1	1740	213	56.	*	1	2355	288	35.
1	0515	64	0.	*	1	1130	139	97.	*	1	1745	214	55.	*	2	0000	289	35.
1	0520	65	0.	*	1	1135	140	102.	*	1	1750	215	54.	*	2	0005	290	35.
1	0525	66	0.	*	1	1140	141	108.	*	1	1755	216	53.	*	2	0010	291	35.
1	0530	67	0.	*	1	1145	142	113.	*	1	1800	217	52.	*	2	0015	292	34.
1	0535	68	0.	*	1	1150	143	120.	*	1	1805	218	51.	*	2	0020	293	34.
1	0540	69	0.	*	1	1155	144	128.	*	1	1810	219	50.	*	2	0025	294	33.
1	0545	70	0.	*	1	1200	145	139.	*	1	1815	220	49.	*	2	0030	295	32.
1	0550	71	0.	*	1	1205	146	155.	*	1	1820	221	49.	*	2	0035	296	31.
1	0555	72	0.	*	1	1210	147	182.	*	1	1825	222	48.	*	2	0040	297	29.
1	0600	73	0.	*	1	1215	148	241.	*	1	1830	223	48.	*	2	0045	298	26.
1	0605	74	0.	*	1	1220	149	363.	*	1	1835	224	48.	*	2	0050	299	24.
1	0610	75	0.	*	1	1225	150	569.	*	1	1840	225	48.	*	2	0055	300	22.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW
		6-HR 24-HR 72-HR 24.92-HR
1784.	13.00	(CFS) 523. 147. 141. 141.
		(INCHES) 1.682 1.890 1.890 1.890
		(AC-FT) 259. 291. 291. 291.

CUMULATIVE AREA = 2.89 SQ MI

48 KK

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*           *
*   AREA 5   *
*           *
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BASIN NO. 5 RUNOFF

SUBBASIN RUNOFF DATA

50 BA

SUBBASIN CHARACTERISTICS
TAREA .59 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

..... HYDRO-35 TP-40 TP-49

5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 .90 1.20 1.60 1.80 2.00 2.50 2.70 3.00 .00 .00 .00 .00

STORM AREA = .59

51 LS SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNBR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

52 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES
 119. 384. 725. 839. 764. 591. 373. 249. 170. 113.
 76. 51. 34. 23. 15. 10. 7. 5. 3. 1.

HYDROGRAPH AT STATION AREA 5

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.03	.01	.02	529.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.02	.00	.02	391.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.02	.00	.02	297.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.02	.00	.01	230.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.01	179.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.01	.00	.01	141.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.01	.00	.01	114.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	94.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.01	82.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.01	75.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	71.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	68.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	65.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.01	63.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.01	60.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.01	60.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	60.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	60.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	60.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	59.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	58.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	57.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	55.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	54.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	53.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	52.
1		0210	27	.00	.00	.00	0.	*	1		1440	177	.01	.00	.01	50.
1		0215	28	.00	.00	.00	0.	*	1		1445	178	.01	.00	.01	49.
1		0220	29	.00	.00	.00	0.	*	1		1450	179	.01	.00	.01	48.
1		0225	30	.00	.00	.00	0.	*	1		1455	180	.01	.00	.01	47.
1		0230	31	.00	.00	.00	0.	*	1		1500	181	.01	.00	.01	46.
1		0235	32	.00	.00	.00	0.	*	1		1505	182	.00	.00	.00	44.
1		0240	33	.00	.00	.00	0.	*	1		1510	183	.00	.00	.00	41.
1		0245	34	.00	.00	.00	0.	*	1		1515	184	.00	.00	.00	36.
1		0250	35	.00	.00	.00	0.	*	1		1520	185	.00	.00	.00	30.
1		0255	36	.00	.00	.00	0.	*	1		1525	186	.00	.00	.00	25.
1		0300	37	.00	.00	.00	0.	*	1		1530	187	.00	.00	.00	21.
1		0305	38	.00	.00	.00	0.	*	1		1535	188	.00	.00	.00	19.
1		0310	39	.00	.00	.00	0.	*	1		1540	189	.00	.00	.00	17.
1		0315	40	.00	.00	.00	0.	*	1		1545	190	.00	.00	.00	15.
1		0320	41	.00	.00	.00	0.	*	1		1550	191	.00	.00	.00	14.
1		0325	42	.00	.00	.00	0.	*	1		1555	192	.00	.00	.00	14.
1		0330	43	.00	.00	.00	0.	*	1		1600	193	.00	.00	.00	13.
1		0335	44	.00	.00	.00	0.	*	1		1605	194	.00	.00	.00	13.
1		0340	45	.00	.00	.00	0.	*	1		1610	195	.00	.00	.00	12.
1		0345	46	.00	.00	.00	0.	*	1		1615	196	.00	.00	.00	12.
1		0350	47	.00	.00	.00	0.	*	1		1620	197	.00	.00	.00	12.

1	0355	48	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	11.
1	0400	49	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	11.
1	0405	50	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	11.
1	0410	51	.00	.00	.00	0.	*	1	1640	201	.00	.00	.00	11.
1	0415	52	.00	.00	.00	0.	*	1	1645	202	.00	.00	.00	11.
1	0420	53	.00	.00	.00	0.	*	1	1650	203	.00	.00	.00	10.
1	0425	54	.00	.00	.00	0.	*	1	1655	204	.00	.00	.00	10.
1	0430	55	.00	.00	.00	0.	*	1	1700	205	.00	.00	.00	10.
1	0435	56	.00	.00	.00	0.	*	1	1705	206	.00	.00	.00	10.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.00	.00	.00	10.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.00	.00	.00	10.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.00	.00	.00	9.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.00	.00	.00	9.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.00	.00	.00	9.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.00	.00	.00	9.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.00	.00	.00	9.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.00	.00	.00	9.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.00	.00	.00	9.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.00	.00	.00	9.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.00	.00	.00	8.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	8.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	9.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	9.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	9.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	10.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	10.
1	0605	74	.00	.00	.00	0.	*	1	1835	224	.00	.00	.00	10.
1	0610	75	.00	.00	.00	0.	*	1	1840	225	.00	.00	.00	10.
1	0615	76	.00	.00	.00	0.	*	1	1845	226	.00	.00	.00	10.
1	0620	77	.00	.00	.00	0.	*	1	1850	227	.00	.00	.00	10.
1	0625	78	.00	.00	.00	0.	*	1	1855	228	.00	.00	.00	10.
1	0630	79	.00	.00	.00	0.	*	1	1900	229	.00	.00	.00	10.
1	0635	80	.00	.00	.00	0.	*	1	1905	230	.00	.00	.00	10.
1	0640	81	.00	.00	.00	0.	*	1	1910	231	.00	.00	.00	10.
1	0645	82	.00	.00	.00	0.	*	1	1915	232	.00	.00	.00	10.
1	0650	83	.00	.00	.00	0.	*	1	1920	233	.00	.00	.00	10.
1	0655	84	.00	.00	.00	0.	*	1	1925	234	.00	.00	.00	9.
1	0700	85	.00	.00	.00	0.	*	1	1930	235	.00	.00	.00	9.
1	0705	86	.00	.00	.00	0.	*	1	1935	236	.00	.00	.00	9.
1	0710	87	.00	.00	.00	0.	*	1	1940	237	.00	.00	.00	9.
1	0715	88	.00	.00	.00	0.	*	1	1945	238	.00	.00	.00	9.
1	0720	89	.00	.00	.00	0.	*	1	1950	239	.00	.00	.00	9.
1	0725	90	.00	.00	.00	0.	*	1	1955	240	.00	.00	.00	9.
1	0730	91	.00	.00	.00	0.	*	1	2000	241	.00	.00	.00	9.
1	0735	92	.00	.00	.00	0.	*	1	2005	242	.00	.00	.00	9.
1	0740	93	.00	.00	.00	0.	*	1	2010	243	.00	.00	.00	9.
1	0745	94	.00	.00	.00	0.	*	1	2015	244	.00	.00	.00	9.
1	0750	95	.00	.00	.00	0.	*	1	2020	245	.00	.00	.00	9.
1	0755	96	.00	.00	.00	0.	*	1	2025	246	.00	.00	.00	8.
1	0800	97	.00	.00	.00	0.	*	1	2030	247	.00	.00	.00	8.
1	0805	98	.00	.00	.00	0.	*	1	2035	248	.00	.00	.00	8.
1	0810	99	.00	.00	.00	0.	*	1	2040	249	.00	.00	.00	8.
1	0815	100	.00	.00	.00	0.	*	1	2045	250	.00	.00	.00	8.
1	0820	101	.00	.00	.00	0.	*	1	2050	251	.00	.00	.00	8.
1	0825	102	.00	.00	.00	0.	*	1	2055	252	.00	.00	.00	8.
1	0830	103	.00	.00	.00	0.	*	1	2100	253	.00	.00	.00	8.
1	0835	104	.00	.00	.00	0.	*	1	2105	254	.00	.00	.00	8.
1	0840	105	.00	.00	.00	0.	*	1	2110	255	.00	.00	.00	8.
1	0845	106	.00	.00	.00	0.	*	1	2115	256	.00	.00	.00	8.
1	0850	107	.00	.00	.00	0.	*	1	2120	257	.00	.00	.00	8.
1	0855	108	.00	.00	.00	0.	*	1	2125	258	.00	.00	.00	8.
1	0900	109	.00	.00	.00	0.	*	1	2130	259	.00	.00	.00	8.
1	0905	110	.01	.01	.00	0.	*	1	2135	260	.00	.00	.00	9.
1	0910	111	.01	.01	.00	0.	*	1	2140	261	.00	.00	.00	8.
1	0915	112	.01	.01	.00	0.	*	1	2145	262	.00	.00	.00	7.
1	0920	113	.01	.01	.00	0.	*	1	2150	263	.00	.00	.00	7.
1	0925	114	.01	.01	.00	0.	*	1	2155	264	.00	.00	.00	7.
1	0930	115	.01	.01	.00	0.	*	1	2200	265	.00	.00	.00	7.
1	0935	116	.01	.01	.00	0.	*	1	2205	266	.00	.00	.00	7.
1	0940	117	.01	.01	.00	0.	*	1	2210	267	.00	.00	.00	7.
1	0945	118	.01	.01	.00	0.	*	1	2215	268	.00	.00	.00	7.
1	0950	119	.01	.01	.00	0.	*	1	2220	269	.00	.00	.00	7.
1	0955	120	.01	.01	.00	0.	*	1	2225	270	.00	.00	.00	7.
1	1000	121	.01	.01	.00	0.	*	1	2230	271	.00	.00	.00	7.
1	1005	122	.01	.01	.00	1.	*	1	2235	272	.00	.00	.00	7.

1	1010	123	.02	.01	.00	2.	*	1	2240	273	.00	.00	.00	7.
1	1015	124	.02	.01	.00	2.	*	1	2245	274	.00	.00	.00	7.
1	1020	125	.02	.01	.00	3.	*	1	2250	275	.00	.00	.00	7.
1	1025	126	.02	.01	.00	4.	*	1	2255	276	.00	.00	.00	7.
1	1030	127	.02	.01	.00	5.	*	1	2300	277	.00	.00	.00	7.
1	1035	128	.01	.01	.00	7.	*	1	2305	278	.00	.00	.00	7.
1	1040	129	.02	.01	.00	8.	*	1	2310	279	.00	.00	.00	7.
1	1045	130	.02	.01	.00	9.	*	1	2315	280	.00	.00	.00	7.
1	1050	131	.02	.01	.00	10.	*	1	2320	281	.00	.00	.00	7.
1	1055	132	.02	.01	.00	11.	*	1	2325	282	.00	.00	.00	7.
1	1100	133	.02	.01	.00	12.	*	1	2330	283	.00	.00	.00	6.
1	1105	134	.01	.01	.00	13.	*	1	2335	284	.00	.00	.00	6.
1	1110	135	.01	.01	.00	14.	*	1	2340	285	.00	.00	.00	6.
1	1115	136	.02	.01	.00	15.	*	1	2345	286	.00	.00	.00	6.
1	1120	137	.02	.01	.00	15.	*	1	2350	287	.00	.00	.00	6.
1	1125	138	.02	.01	.01	16.	*	1	2355	288	.00	.00	.00	6.
1	1130	139	.02	.01	.01	17.	*	2	0000	289	.00	.00	.00	6.
1	1135	140	.03	.02	.01	19.	*	2	0005	290	.00	.00	.00	6.
1	1140	141	.03	.02	.01	23.	*	2	0010	291	.00	.00	.00	6.
1	1145	142	.04	.03	.01	27.	*	2	0015	292	.00	.00	.00	5.
1	1150	143	.05	.03	.02	34.	*	2	0020	293	.00	.00	.00	3.
1	1155	144	.08	.05	.03	45.	*	2	0025	294	.00	.00	.00	2.
1	1200	145	.18	.09	.08	66.	*	2	0030	295	.00	.00	.00	2.
1	1205	146	.90	.33	.57	163.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.12	.03	.09	349.	*	2	0040	297	.00	.00	.00	1.
1	1215	148	.06	.02	.05	570.	*	2	0045	298	.00	.06	.00	0.
1	1220	149	.04	.01	.03	663.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.03	.01	.03	633.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.41, TOTAL EXCESS = 1.59

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
663.	12.33	89.	1.413	1.586	1.586	1.586
		(INCHES)	44.	50.	50.	50.
		(AC-FT)				

CUMULATIVE AREA = .59 SQ MI

53 KK *****
 * OUTLTS *

 COMBINE ROUTE 4 AND BASIN 5 TO OUTLET 5

55 HC HYDROGRAPH COMBINATION
 1COMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLTS
 SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1367.	*	1		1845	226	59.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1518.	*	1		1850	227	59.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1680.	*	1		1855	228	59.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1801.	*	1		1900	229	60.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1870.	*	1		1905	230	60.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1899.	*	1		1910	231	60.	*
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	1898.	*	1		1915	232	61.	*

1	0035	8	0.	*	1	0650	83	0.	*	1	1305	158	1874.	*	1	1920	233	61.
1	0040	9	0.	*	1	0655	84	0.	*	1	1310	159	1830.	*	1	1925	234	61.
1	0045	10	0.	*	1	0700	85	0.	*	1	1315	160	1763.	*	1	1930	235	61.
1	0050	11	0.	*	1	0705	86	0.	*	1	1320	161	1673.	*	1	1935	236	61.
1	0055	12	0.	*	1	0710	87	0.	*	1	1325	162	1561.	*	1	1940	237	61.
1	0100	13	0.	*	1	0715	88	0.	*	1	1330	163	1432.	*	1	1945	238	61.
1	0105	14	0.	*	1	0720	89	0.	*	1	1335	164	1296.	*	1	1950	239	60.
1	0110	15	0.	*	1	0725	90	0.	*	1	1340	165	1161.	*	1	1955	240	60.
1	0115	16	0.	*	1	0730	91	0.	*	1	1345	166	1037.	*	1	2000	241	60.
1	0120	17	0.	*	1	0735	92	0.	*	1	1350	167	926.	*	1	2005	242	59.
1	0125	18	0.	*	1	0740	93	0.	*	1	1355	168	828.	*	1	2010	243	59.
1	0130	19	0.	*	1	0745	94	0.	*	1	1400	169	744.	*	1	2015	244	58.
1	0135	20	0.	*	1	0750	95	0.	*	1	1405	170	674.	*	1	2020	245	58.
1	0140	21	0.	*	1	0755	96	0.	*	1	1410	171	615.	*	1	2025	246	57.
1	0145	22	0.	*	1	0800	97	0.	*	1	1415	172	567.	*	1	2030	247	57.
1	0150	23	0.	*	1	0805	98	0.	*	1	1420	173	527.	*	1	2035	248	56.
1	0155	24	0.	*	1	0810	99	0.	*	1	1425	174	494.	*	1	2040	249	56.
1	0200	25	0.	*	1	0815	100	0.	*	1	1430	175	467.	*	1	2045	250	55.
1	0205	26	0.	*	1	0820	101	0.	*	1	1435	176	444.	*	1	2050	251	55.
1	0210	27	0.	*	1	0825	102	0.	*	1	1440	177	424.	*	1	2055	252	55.
1	0215	28	0.	*	1	0830	103	0.	*	1	1445	178	407.	*	1	2100	253	54.
1	0220	29	0.	*	1	0835	104	0.	*	1	1450	179	393.	*	1	2105	254	54.
1	0225	30	0.	*	1	0840	105	0.	*	1	1455	180	380.	*	1	2110	255	53.
1	0230	31	0.	*	1	0845	106	0.	*	1	1500	181	368.	*	1	2115	256	53.
1	0235	32	0.	*	1	0850	107	0.	*	1	1505	182	356.	*	1	2120	257	52.
1	0240	33	0.	*	1	0855	108	0.	*	1	1510	183	344.	*	1	2125	258	52.
1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	330.	*	1	2130	259	51.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	315.	*	1	2135	260	51.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	300.	*	1	2140	261	51.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	285.	*	1	2145	262	50.
1	0305	38	0.	*	1	0920	113	0.	*	1	1535	188	269.	*	1	2150	263	50.
1	0310	39	0.	*	1	0925	114	0.	*	1	1540	189	253.	*	1	2155	264	49.
1	0315	40	0.	*	1	0930	115	0.	*	1	1545	190	237.	*	1	2200	265	49.
1	0320	41	0.	*	1	0935	116	1.	*	1	1550	191	221.	*	1	2205	266	49.
1	0325	42	0.	*	1	0940	117	1.	*	1	1555	192	206.	*	1	2210	267	48.
1	0330	43	0.	*	1	0945	118	2.	*	1	1600	193	191.	*	1	2215	268	48.
1	0335	44	0.	*	1	0950	119	4.	*	1	1605	194	177.	*	1	2220	269	48.
1	0340	45	0.	*	1	0955	120	5.	*	1	1610	195	163.	*	1	2225	270	47.
1	0345	46	0.	*	1	1000	121	8.	*	1	1615	196	150.	*	1	2230	271	47.
1	0350	47	0.	*	1	1005	122	10.	*	1	1620	197	139.	*	1	2235	272	46.
1	0355	48	0.	*	1	1010	123	14.	*	1	1625	198	128.	*	1	2240	273	46.
1	0400	49	0.	*	1	1015	124	18.	*	1	1630	199	119.	*	1	2245	274	46.
1	0405	50	0.	*	1	1020	125	22.	*	1	1635	200	110.	*	1	2250	275	45.
1	0410	51	0.	*	1	1025	126	27.	*	1	1640	201	103.	*	1	2255	276	45.
1	0415	52	0.	*	1	1030	127	33.	*	1	1645	202	97.	*	1	2300	277	45.
1	0420	53	0.	*	1	1035	128	39.	*	1	1650	203	92.	*	1	2305	278	44.
1	0425	54	0.	*	1	1040	129	45.	*	1	1655	204	87.	*	1	2310	279	44.
1	0430	55	0.	*	1	1045	130	51.	*	1	1700	205	83.	*	1	2315	280	44.
1	0435	56	0.	*	1	1050	131	58.	*	1	1705	206	80.	*	1	2320	281	44.
1	0440	57	0.	*	1	1055	132	65.	*	1	1710	207	77.	*	1	2325	282	43.
1	0445	58	0.	*	1	1100	133	72.	*	1	1715	208	74.	*	1	2330	283	43.
1	0450	59	0.	*	1	1105	134	80.	*	1	1720	209	72.	*	1	2335	284	43.
1	0455	60	0.	*	1	1110	135	87.	*	1	1725	210	70.	*	1	2340	285	42.
1	0500	61	0.	*	1	1115	136	94.	*	1	1730	211	68.	*	1	2345	286	42.
1	0505	62	0.	*	1	1120	137	100.	*	1	1735	212	67.	*	1	2350	287	42.
1	0510	63	0.	*	1	1125	138	107.	*	1	1740	213	65.	*	1	2355	288	42.
1	0515	64	0.	*	1	1130	139	114.	*	1	1745	214	64.	*	2	0000	289	41.
1	0520	65	0.	*	1	1135	140	122.	*	1	1750	215	63.	*	2	0005	290	41.
1	0525	66	0.	*	1	1140	141	130.	*	1	1755	216	62.	*	2	0010	291	40.
1	0530	67	0.	*	1	1145	142	141.	*	1	1800	217	60.	*	2	0015	292	39.
1	0535	68	0.	*	1	1150	143	154.	*	1	1805	218	59.	*	2	0020	293	37.
1	0540	69	0.	*	1	1155	144	173.	*	1	1810	219	59.	*	2	0025	294	36.
1	0545	70	0.	*	1	1200	145	206.	*	1	1815	220	58.	*	2	0030	295	34.
1	0550	71	0.	*	1	1205	146	318.	*	1	1820	221	58.	*	2	0035	296	32.
1	0555	72	0.	*	1	1210	147	530.	*	1	1825	222	58.	*	2	0040	297	29.
1	0600	73	0.	*	1	1215	148	811.	*	1	1830	223	58.	*	2	0045	298	27.
1	0605	74	0.	*	1	1220	149	1026.	*	1	1835	224	58.	*	2	0050	299	24.
1	0610	75	0.	*	1	1225	150	1202.	*	1	1840	225	58.	*	2	0055	300	22.

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PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		(CFS)	6-HR	24-HR	72-HR	24.92-HR
1899.	12.92		612.	172.	166.	166.
		(INCHES)	1.637	1.839	1.839	1.839

CUMULATIVE AREA = 3.48 SQ MI

56 KK

* ROUTES *

ROUTE OUTLET 5 TO BASIN 6 OUTLET

HYDROGRAPH ROUTING DATA

58 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
AMSKK .11 MUSKINGUM K
X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTES

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1134.	*	1		1845	226	58.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1305.	*	1		1850	227	58.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1465.	*	1		1855	228	59.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1620.	*	1		1900	229	59.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1746.	*	1		1905	230	60.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1830.	*	1		1910	231	60.	*
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	1874.	*	1		1915	232	60.	*
1		0035	8	0.	*	1		0650	83	0.	*	1		1305	158	1886.	*	1		1920	233	60.	*
1		0040	9	0.	*	1		0655	84	0.	*	1		1310	159	1872.	*	1		1925	234	61.	*
1		0045	10	0.	*	1		0700	85	0.	*	1		1315	160	1835.	*	1		1930	235	61.	*
1		0050	11	0.	*	1		0705	86	0.	*	1		1320	161	1775.	*	1		1935	236	61.	*
1		0055	12	0.	*	1		0710	87	0.	*	1		1325	162	1693.	*	1		1940	237	61.	*
1		0100	13	0.	*	1		0715	88	0.	*	1		1330	163	1590.	*	1		1945	238	61.	*
1		0105	14	0.	*	1		0720	89	0.	*	1		1335	164	1469.	*	1		1950	239	61.	*
1		0110	15	0.	*	1		0725	90	0.	*	1		1340	165	1338.	*	1		1955	240	60.	*
1		0115	16	0.	*	1		0730	91	0.	*	1		1345	166	1207.	*	1		2000	241	60.	*
1		0120	17	0.	*	1		0735	92	0.	*	1		1350	167	1082.	*	1		2005	242	60.	*
1		0125	18	0.	*	1		0740	93	0.	*	1		1355	168	967.	*	1		2010	243	59.	*
1		0130	19	0.	*	1		0745	94	0.	*	1		1400	169	866.	*	1		2015	244	59.	*
1		0135	20	0.	*	1		0750	95	0.	*	1		1405	170	778.	*	1		2020	245	59.	*
1		0140	21	0.	*	1		0755	96	0.	*	1		1410	171	703.	*	1		2025	246	58.	*
1		0145	22	0.	*	1		0800	97	0.	*	1		1415	172	639.	*	1		2030	247	58.	*
1		0150	23	0.	*	1		0805	98	0.	*	1		1420	173	587.	*	1		2035	248	57.	*
1		0155	24	0.	*	1		0810	99	0.	*	1		1425	174	544.	*	1		2040	249	57.	*
1		0200	25	0.	*	1		0815	100	0.	*	1		1430	175	508.	*	1		2045	250	56.	*
1		0205	26	0.	*	1		0820	101	0.	*	1		1435	176	478.	*	1		2050	251	56.	*
1		0210	27	0.	*	1		0825	102	0.	*	1		1440	177	453.	*	1		2055	252	55.	*
1		0215	28	0.	*	1		0830	103	0.	*	1		1445	178	432.	*	1		2100	253	55.	*
1		0220	29	0.	*	1		0835	104	0.	*	1		1450	179	414.	*	1		2105	254	54.	*
1		0225	30	0.	*	1		0840	105	0.	*	1		1455	180	398.	*	1		2110	255	54.	*
1		0230	31	0.	*	1		0845	106	0.	*	1		1500	181	385.	*	1		2115	256	53.	*
1		0235	32	0.	*	1		0850	107	0.	*	1		1505	182	372.	*	1		2120	257	53.	*
1		0240	33	0.	*	1		0855	108	0.	*	1		1510	183	360.	*	1		2125	258	52.	*
1		0245	34	0.	*	1		0900	109	0.	*	1		1515	184	348.	*	1		2130	259	52.	*
1		0250	35	0.	*	1		0905	110	0.	*	1		1520	185	334.	*	1		2135	260	52.	*
1		0255	36	0.	*	1		0910	111	0.	*	1		1525	186	320.	*	1		2140	261	51.	*
1		0300	37	0.	*	1		0915	112	0.	*	1		1530	187	305.	*	1		2145	262	51.	*
1		0305	38	0.	*	1		0920	113	0.	*	1		1535	188	290.	*	1		2150	263	50.	*
1		0310	39	0.	*	1		0925	114	0.	*	1		1540	189	274.	*	1		2155	264	50.	*
1		0315	40	0.	*	1		0930	115	0.	*	1		1545	190	258.	*	1		2200	265	50.	*
1		0320	41	0.	*	1		0935	116	0.	*	1		1550	191	242.	*	1		2205	266	49.	*

1	0325	42	0.	*	1	0940	117	1.	*	1	1555	192	226.	*	1	2210	267	49.
1	0330	43	0.	*	1	0945	118	1.	*	1	1600	193	211.	*	1	2215	268	48.
1	0335	44	0.	*	1	0950	119	2.	*	1	1605	194	196.	*	1	2220	269	48.
1	0340	45	0.	*	1	0955	120	3.	*	1	1610	195	182.	*	1	2225	270	48.
1	0345	46	0.	*	1	1000	121	5.	*	1	1615	196	168.	*	1	2230	271	47.
1	0350	47	0.	*	1	1005	122	7.	*	1	1620	197	155.	*	1	2235	272	47.
1	0355	48	0.	*	1	1010	123	10.	*	1	1625	198	143.	*	1	2240	273	47.
1	0400	49	0.	*	1	1015	124	13.	*	1	1630	199	132.	*	1	2245	274	46.
1	0405	50	0.	*	1	1020	125	17.	*	1	1635	200	122.	*	1	2250	275	46.
1	0410	51	0.	*	1	1025	126	21.	*	1	1640	201	114.	*	1	2255	276	46.
1	0415	52	0.	*	1	1030	127	26.	*	1	1645	202	106.	*	1	2300	277	45.
1	0420	53	0.	*	1	1035	128	31.	*	1	1650	203	99.	*	1	2305	278	45.
1	0425	54	0.	*	1	1040	129	37.	*	1	1655	204	94.	*	1	2310	279	45.
1	0430	55	0.	*	1	1045	130	43.	*	1	1700	205	89.	*	1	2315	280	44.
1	0435	56	0.	*	1	1050	131	49.	*	1	1705	206	85.	*	1	2320	281	44.
1	0440	57	0.	*	1	1055	132	56.	*	1	1710	207	81.	*	1	2325	282	44.
1	0445	58	0.	*	1	1100	133	63.	*	1	1715	208	78.	*	1	2330	283	43.
1	0450	59	0.	*	1	1105	134	70.	*	1	1720	209	75.	*	1	2335	284	43.
1	0455	60	0.	*	1	1110	135	77.	*	1	1725	210	73.	*	1	2340	285	43.
1	0500	61	0.	*	1	1115	136	84.	*	1	1730	211	71.	*	1	2345	286	43.
1	0505	62	0.	*	1	1120	137	91.	*	1	1735	212	69.	*	1	2350	287	42.
1	0510	63	0.	*	1	1125	138	98.	*	1	1740	213	67.	*	1	2355	288	42.
1	0515	64	0.	*	1	1130	139	105.	*	1	1745	214	66.	*	2	0000	289	42.
1	0520	65	0.	*	1	1135	140	112.	*	1	1750	215	64.	*	2	0005	290	41.
1	0525	66	0.	*	1	1140	141	119.	*	1	1755	216	63.	*	2	0010	291	41.
1	0530	67	0.	*	1	1145	142	128.	*	1	1800	217	62.	*	2	0015	292	40.
1	0535	68	0.	*	1	1150	143	138.	*	1	1805	218	61.	*	2	0020	293	39.
1	0540	69	0.	*	1	1155	144	151.	*	1	1810	219	60.	*	2	0025	294	38.
1	0545	70	0.	*	1	1200	145	170.	*	1	1815	220	59.	*	2	0030	295	36.
1	0550	71	0.	*	1	1205	146	210.	*	1	1820	221	59.	*	2	0035	296	34.
1	0555	72	0.	*	1	1210	147	311.	*	1	1825	222	58.	*	2	0040	297	32.
1	0600	73	0.	*	1	1215	148	493.	*	1	1830	223	58.	*	2	0045	298	30.
1	0605	74	0.	*	1	1220	149	728.	*	1	1835	224	58.	*	2	0050	299	28.
1	0610	75	0.	*	1	1225	150	945.	*	1	1840	225	58.	*	2	0055	300	25.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM (CFS)	6-HR (INCHES)	24-HR (AC-FT)	AVERAGE FLOW (CFS)	72-HR (INCHES)	24.92-HR (AC-FT)
1886.	13.08	612.	1.636	303.	172.	1.838	341.
		165.			165.		1.838
					341.		341.

CUMULATIVE AREA = 3.48 SQ MI

59 KK

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*           *
*   AREA 6   *
*           *
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BASIN NO. 6 RUNOFF

SUBBASIN RUNOFF DATA

61 BA

SUBBASIN CHARACTERISTICS
TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

8 PH

HYDRO-35		DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM						TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	2.00	2.50	2.70	3.00	.00	.00	.00	.00

STORM AREA = .40

62 LS

SCS LOSS RATE
STRTL .35 INITIAL ABSTRACTION
CRVNR 85.00 CURVE NUMBER

RTIMP .00 PERCENT IMPERVIOUS AREA

63 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

79. 256. 486. 567. 521. 407. 259. 173. 119. 79.
54. 36. 24. 16. 11. 7. 5. 4. 2. 1.

HYDROGRAPH AT STATION AREA 6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		1230	151	.03	.01	.02	363.
1		0005	2	.00	.00	.00	0.	*	1		1235	152	.02	.00	.02	270.
1		0010	3	.00	.00	.00	0.	*	1		1240	153	.02	.00	.02	205.
1		0015	4	.00	.00	.00	0.	*	1		1245	154	.02	.00	.01	159.
1		0020	5	.00	.00	.00	0.	*	1		1250	155	.02	.00	.01	123.
1		0025	6	.00	.00	.00	0.	*	1		1255	156	.01	.00	.01	98.
1		0030	7	.00	.00	.00	0.	*	1		1300	157	.01	.00	.01	79.
1		0035	8	.00	.00	.00	0.	*	1		1305	158	.02	.00	.02	65.
1		0040	9	.00	.00	.00	0.	*	1		1310	159	.02	.00	.01	56.
1		0045	10	.00	.00	.00	0.	*	1		1315	160	.02	.00	.01	51.
1		0050	11	.00	.00	.00	0.	*	1		1320	161	.02	.00	.01	48.
1		0055	12	.00	.00	.00	0.	*	1		1325	162	.02	.00	.01	47.
1		0100	13	.00	.00	.00	0.	*	1		1330	163	.01	.00	.01	45.
1		0105	14	.00	.00	.00	0.	*	1		1335	164	.02	.00	.01	43.
1		0110	15	.00	.00	.00	0.	*	1		1340	165	.02	.00	.01	41.
1		0115	16	.00	.00	.00	0.	*	1		1345	166	.02	.00	.01	41.
1		0120	17	.00	.00	.00	0.	*	1		1350	167	.02	.00	.01	41.
1		0125	18	.00	.00	.00	0.	*	1		1355	168	.02	.00	.01	41.
1		0130	19	.00	.00	.00	0.	*	1		1400	169	.02	.00	.01	41.
1		0135	20	.00	.00	.00	0.	*	1		1405	170	.01	.00	.01	40.
1		0140	21	.00	.00	.00	0.	*	1		1410	171	.01	.00	.01	39.
1		0145	22	.00	.00	.00	0.	*	1		1415	172	.01	.00	.01	39.
1		0150	23	.00	.00	.00	0.	*	1		1420	173	.01	.00	.01	38.
1		0155	24	.00	.00	.00	0.	*	1		1425	174	.01	.00	.01	37.
1		0200	25	.00	.00	.00	0.	*	1		1430	175	.01	.00	.01	36.
1		0205	26	.00	.00	.00	0.	*	1		1435	176	.01	.00	.01	35.
1		0210	27	.00	.00	.00	0.	*	1		1440	177	.01	.00	.01	34.
1		0215	28	.00	.00	.00	0.	*	1		1445	178	.01	.00	.01	34.
1		0220	29	.00	.00	.00	0.	*	1		1450	179	.01	.00	.01	33.
1		0225	30	.00	.00	.00	0.	*	1		1455	180	.01	.00	.01	32.
1		0230	31	.00	.00	.00	0.	*	1		1500	181	.01	.00	.01	31.
1		0235	32	.00	.00	.00	0.	*	1		1505	182	.00	.00	.00	30.
1		0240	33	.00	.00	.00	0.	*	1		1510	183	.00	.00	.00	28.
1		0245	34	.00	.00	.00	0.	*	1		1515	184	.00	.00	.00	25.
1		0250	35	.00	.00	.00	0.	*	1		1520	185	.00	.00	.00	21.
1		0255	36	.00	.00	.00	0.	*	1		1525	186	.00	.00	.00	17.
1		0300	37	.00	.00	.00	0.	*	1		1530	187	.00	.00	.00	15.
1		0305	38	.00	.00	.00	0.	*	1		1535	188	.00	.00	.00	13.
1		0310	39	.00	.00	.00	0.	*	1		1540	189	.00	.00	.00	11.
1		0315	40	.00	.00	.00	0.	*	1		1545	190	.00	.00	.00	11.
1		0320	41	.00	.00	.00	0.	*	1		1550	191	.00	.00	.00	10.
1		0325	42	.00	.00	.00	0.	*	1		1555	192	.00	.00	.00	9.
1		0330	43	.00	.00	.00	0.	*	1		1600	193	.00	.00	.00	9.
1		0335	44	.00	.00	.00	0.	*	1		1605	194	.00	.00	.00	9.
1		0340	45	.00	.00	.00	0.	*	1		1610	195	.00	.00	.00	8.
1		0345	46	.00	.00	.00	0.	*	1		1615	196	.00	.00	.00	8.
1		0350	47	.00	.00	.00	0.	*	1		1620	197	.00	.00	.00	8.
1		0355	48	.00	.00	.00	0.	*	1		1625	198	.00	.00	.00	8.
1		0400	49	.00	.00	.00	0.	*	1		1630	199	.00	.00	.00	8.
1		0405	50	.00	.00	.00	0.	*	1		1635	200	.00	.00	.00	7.
1		0410	51	.00	.00	.00	0.	*	1		1640	201	.00	.00	.00	7.
1		0415	52	.00	.00	.00	0.	*	1		1645	202	.00	.00	.00	7.
1		0420	53	.00	.00	.00	0.	*	1		1650	203	.00	.00	.00	7.
1		0425	54	.00	.00	.00	0.	*	1		1655	204	.00	.00	.00	7.
1		0430	55	.00	.00	.00	0.	*	1		1700	205	.00	.00	.00	7.

1	0435	56	.00	.00	.00	0.	*	1	1705	206	.00	.00	.00	7.
1	0440	57	.00	.00	.00	0.	*	1	1710	207	.00	.00	.00	7.
1	0445	58	.00	.00	.00	0.	*	1	1715	208	.00	.00	.00	7.
1	0450	59	.00	.00	.00	0.	*	1	1720	209	.00	.00	.00	6.
1	0455	60	.00	.00	.00	0.	*	1	1725	210	.00	.00	.00	6.
1	0500	61	.00	.00	.00	0.	*	1	1730	211	.00	.00	.00	6.
1	0505	62	.00	.00	.00	0.	*	1	1735	212	.00	.00	.00	6.
1	0510	63	.00	.00	.00	0.	*	1	1740	213	.00	.00	.00	6.
1	0515	64	.00	.00	.00	0.	*	1	1745	214	.00	.00	.00	6.
1	0520	65	.00	.00	.00	0.	*	1	1750	215	.00	.00	.00	6.
1	0525	66	.00	.00	.00	0.	*	1	1755	216	.00	.00	.00	6.
1	0530	67	.00	.00	.00	0.	*	1	1800	217	.00	.00	.00	6.
1	0535	68	.00	.00	.00	0.	*	1	1805	218	.00	.00	.00	6.
1	0540	69	.00	.00	.00	0.	*	1	1810	219	.00	.00	.00	6.
1	0545	70	.00	.00	.00	0.	*	1	1815	220	.00	.00	.00	6.
1	0550	71	.00	.00	.00	0.	*	1	1820	221	.00	.00	.00	6.
1	0555	72	.00	.00	.00	0.	*	1	1825	222	.00	.00	.00	7.
1	0600	73	.00	.00	.00	0.	*	1	1830	223	.00	.00	.00	7.
1	0605	74	.00	.00	.00	0.	*	1	1835	224	.00	.00	.00	7.
1	0610	75	.00	.00	.00	0.	*	1	1840	225	.00	.00	.00	7.
1	0615	76	.00	.00	.00	0.	*	1	1845	226	.00	.00	.00	7.
1	0620	77	.00	.00	.00	0.	*	1	1850	227	.00	.00	.00	7.
1	0625	78	.00	.00	.00	0.	*	1	1855	228	.00	.00	.00	7.
1	0630	79	.00	.00	.00	0.	*	1	1900	229	.00	.00	.00	7.
1	0635	80	.00	.00	.00	0.	*	1	1905	230	.00	.00	.00	7.
1	0640	81	.00	.00	.00	0.	*	1	1910	231	.00	.00	.00	7.
1	0645	82	.00	.00	.00	0.	*	1	1915	232	.00	.00	.00	7.
1	0650	83	.00	.00	.00	0.	*	1	1920	233	.00	.00	.00	7.
1	0655	84	.00	.00	.00	0.	*	1	1925	234	.00	.00	.00	6.
1	0700	85	.00	.00	.00	0.	*	1	1930	235	.00	.00	.00	6.
1	0705	86	.00	.00	.00	0.	*	1	1935	236	.00	.00	.00	6.
1	0710	87	.00	.00	.00	0.	*	1	1940	237	.00	.00	.00	6.
1	0715	88	.00	.00	.00	0.	*	1	1945	238	.00	.00	.00	6.
1	0720	89	.00	.00	.00	0.	*	1	1950	239	.00	.00	.00	6.
1	0725	90	.00	.00	.00	0.	*	1	1955	240	.00	.00	.00	6.
1	0730	91	.00	.00	.00	0.	*	1	2000	241	.00	.00	.00	6.
1	0735	92	.00	.00	.00	0.	*	1	2005	242	.00	.00	.00	6.
1	0740	93	.00	.00	.00	0.	*	1	2010	243	.00	.00	.00	6.
1	0745	94	.00	.00	.00	0.	*	1	2015	244	.00	.00	.00	6.
1	0750	95	.00	.00	.00	0.	*	1	2020	245	.00	.00	.00	6.
1	0755	96	.00	.00	.00	0.	*	1	2025	246	.00	.00	.00	6.
1	0800	97	.00	.00	.00	0.	*	1	2030	247	.00	.00	.00	6.
1	0805	98	.00	.00	.00	0.	*	1	2035	248	.00	.00	.00	6.
1	0810	99	.00	.00	.00	0.	*	1	2040	249	.00	.00	.00	6.
1	0815	100	.00	.00	.00	0.	*	1	2045	250	.00	.00	.00	6.
1	0820	101	.00	.00	.00	0.	*	1	2050	251	.00	.00	.00	6.
1	0825	102	.00	.00	.00	0.	*	1	2055	252	.00	.00	.00	6.
1	0830	103	.00	.00	.00	0.	*	1	2100	253	.00	.00	.00	5.
1	0835	104	.00	.00	.00	0.	*	1	2105	254	.00	.00	.00	5.
1	0840	105	.00	.00	.00	0.	*	1	2110	255	.00	.00	.00	5.
1	0845	106	.00	.00	.00	0.	*	1	2115	256	.00	.00	.00	5.
1	0850	107	.00	.00	.00	0.	*	1	2120	257	.00	.00	.00	5.
1	0855	108	.00	.00	.00	0.	*	1	2125	258	.00	.00	.00	5.
1	0900	109	.00	.00	.00	0.	*	1	2130	259	.00	.00	.00	5.
1	0905	110	.01	.01	.00	0.	*	1	2135	260	.00	.00	.00	5.
1	0910	111	.01	.01	.00	0.	*	1	2140	261	.00	.00	.00	5.
1	0915	112	.01	.01	.00	0.	*	1	2145	262	.00	.00	.00	5.
1	0920	113	.01	.01	.00	0.	*	1	2150	263	.00	.00	.00	5.
1	0925	114	.01	.01	.00	0.	*	1	2155	264	.00	.00	.00	5.
1	0930	115	.01	.01	.00	0.	*	1	2200	265	.00	.00	.00	5.
1	0935	116	.01	.01	.00	0.	*	1	2205	266	.00	.00	.00	5.
1	0940	117	.01	.01	.00	0.	*	1	2210	267	.00	.00	.00	5.
1	0945	118	.01	.01	.00	0.	*	1	2215	268	.00	.00	.00	5.
1	0950	119	.01	.01	.00	0.	*	1	2220	269	.00	.00	.00	5.
1	0955	120	.01	.01	.00	0.	*	1	2225	270	.00	.00	.00	5.
1	1000	121	.01	.01	.00	0.	*	1	2230	271	.00	.00	.00	5.
1	1005	122	.01	.01	.00	1.	*	1	2235	272	.00	.00	.00	5.
1	1010	123	.02	.01	.00	1.	*	1	2240	273	.00	.00	.00	5.
1	1015	124	.02	.01	.00	2.	*	1	2245	274	.00	.00	.00	5.
1	1020	125	.02	.01	.00	2.	*	1	2250	275	.00	.00	.00	5.
1	1025	126	.02	.01	.00	3.	*	1	2255	276	.00	.00	.00	5.
1	1030	127	.02	.01	.00	4.	*	1	2300	277	.00	.00	.00	5.
1	1035	128	.01	.01	.00	4.	*	1	2305	278	.00	.00	.00	5.
1	1040	129	.02	.01	.00	5.	*	1	2310	279	.00	.00	.00	5.
1	1045	130	.02	.01	.00	6.	*	1	2315	280	.00	.00	.00	5.

1	1050	131	.02	.01	.00	7.	*	1	2320	281	.00	.00	.00	4.
1	1055	132	.02	.01	.00	7.	*	1	2325	282	.00	.00	.00	4.
1	1100	133	.02	.01	.00	8.	*	1	2330	283	.00	.00	.00	4.
1	1105	134	.01	.01	.00	9.	*	1	2335	284	.00	.00	.00	4.
1	1110	135	.01	.01	.00	10.	*	1	2340	285	.00	.00	.00	4.
1	1115	136	.02	.01	.00	10.	*	1	2345	286	.00	.00	.00	4.
1	1120	137	.02	.01	.00	10.	*	1	2350	287	.00	.00	.00	4.
1	1125	138	.02	.01	.01	11.	*	1	2355	288	.00	.00	.00	4.
1	1130	139	.02	.01	.01	12.	*	2	0000	289	.00	.00	.00	4.
1	1135	140	.03	.02	.01	13.	*	2	0005	290	.00	.00	.00	4.
1	1140	141	.03	.02	.01	15.	*	2	0010	291	.00	.00	.00	4.
1	1145	142	.04	.03	.01	18.	*	2	0015	292	.00	.00	.00	3.
1	1150	143	.05	.03	.02	23.	*	2	0020	293	.00	.00	.00	2.
1	1155	144	.08	.05	.03	30.	*	2	0025	294	.00	.00	.00	2.
1	1200	145	.18	.09	.08	45.	*	2	0030	295	.00	.00	.00	1.
1	1205	146	.90	.33	.57	109.	*	2	0035	296	.00	.00	.00	1.
1	1210	147	.12	.03	.09	234.	*	2	0040	297	.00	.00	.00	0.
1	1215	148	.06	.02	.05	384.	*	2	0045	298	.00	.00	.00	0.
1	1220	149	.04	.01	.03	449.	*	2	0050	299	.00	.00	.00	0.
1	1225	150	.03	.01	.03	432.	*	2	0055	300	.00	.00	.00	0.

TOTAL RAINFALL = 3.00, TOTAL LOSS = 1.41, TOTAL EXCESS = 1.59

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
449.	12.33	61.	17.	16.	16.	16.
		(INCHES)	1.414	1.587	1.587	1.587
		(AC-FT)	30.	34.	34.	34.

CUMULATIVE AREA = .40 SQ MI

64 KK

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*****
* OUTLT6 *
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COMBINE ROUTE 5 AND BASIN 6 TO OUTLET 6

66 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT6
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0615	76	0.	*	1		1230	151	1497.	*	1		1845	226	65.	*
1		0005	2	0.	*	1		0620	77	0.	*	1		1235	152	1575.	*	1		1850	227	65.	*
1		0010	3	0.	*	1		0625	78	0.	*	1		1240	153	1671.	*	1		1855	228	66.	*
1		0015	4	0.	*	1		0630	79	0.	*	1		1245	154	1779.	*	1		1900	229	66.	*
1		0020	5	0.	*	1		0635	80	0.	*	1		1250	155	1870.	*	1		1905	230	66.	*
1		0025	6	0.	*	1		0640	81	0.	*	1		1255	156	1928.	*	1		1910	231	67.	*
1		0030	7	0.	*	1		0645	82	0.	*	1		1300	157	1953.	*	1		1915	232	67.	*
1		0035	8	0.	*	1		0650	83	0.	*	1		1305	158	1951.	*	1		1920	233	67.	*
1		0040	9	0.	*	1		0655	84	0.	*	1		1310	159	1928.	*	1		1925	234	67.	*
1		0045	10	0.	*	1		0700	85	0.	*	1		1315	160	1886.	*	1		1930	235	67.	*
1		0050	11	0.	*	1		0705	86	0.	*	1		1320	161	1824.	*	1		1935	236	67.	*
1		0055	12	0.	*	1		0710	87	0.	*	1		1325	162	1740.	*	1		1940	237	67.	*
1		0100	13	0.	*	1		0715	88	0.	*	1		1330	163	1634.	*	1		1945	238	67.	*
1		0105	14	0.	*	1		0720	89	0.	*	1		1335	164	1511.	*	1		1950	239	67.	*
1		0110	15	0.	*	1		0725	90	0.	*	1		1340	165	1379.	*	1		1955	240	67.	*

1	0115	16	0.	*	1	0730	91	0.	*	1	1345	166	1247.	*	1	2000	241	66.
1	0120	17	0.	*	1	0735	92	0.	*	1	1350	167	1123.	*	1	2005	242	66.
1	0125	18	0.	*	1	0740	93	0.	*	1	1355	168	1008.	*	1	2010	243	65.
1	0130	19	0.	*	1	0745	94	0.	*	1	1400	169	907.	*	1	2015	244	65.
1	0135	20	0.	*	1	0750	95	0.	*	1	1405	170	818.	*	1	2020	245	64.
1	0140	21	0.	*	1	0755	96	0.	*	1	1410	171	742.	*	1	2025	246	64.
1	0145	22	0.	*	1	0800	97	0.	*	1	1415	172	678.	*	1	2030	247	63.
1	0150	23	0.	*	1	0805	98	0.	*	1	1420	173	625.	*	1	2035	248	63.
1	0155	24	0.	*	1	0810	99	0.	*	1	1425	174	581.	*	1	2040	249	62.
1	0200	25	0.	*	1	0815	100	0.	*	1	1430	175	544.	*	1	2045	250	62.
1	0205	26	0.	*	1	0820	101	0.	*	1	1435	176	513.	*	1	2050	251	61.
1	0210	27	0.	*	1	0825	102	0.	*	1	1440	177	488.	*	1	2055	252	61.
1	0215	28	0.	*	1	0830	103	0.	*	1	1445	178	466.	*	1	2100	253	60.
1	0220	29	0.	*	1	0835	104	0.	*	1	1450	179	447.	*	1	2105	254	60.
1	0225	30	0.	*	1	0840	105	0.	*	1	1455	180	431.	*	1	2110	255	59.
1	0230	31	0.	*	1	0845	106	0.	*	1	1500	181	416.	*	1	2115	256	59.
1	0235	32	0.	*	1	0850	107	0.	*	1	1505	182	403.	*	1	2120	257	58.
1	0240	33	0.	*	1	0855	108	0.	*	1	1510	183	389.	*	1	2125	258	58.
1	0245	34	0.	*	1	0900	109	0.	*	1	1515	184	373.	*	1	2130	259	57.
1	0250	35	0.	*	1	0905	110	0.	*	1	1520	185	355.	*	1	2135	260	57.
1	0255	36	0.	*	1	0910	111	0.	*	1	1525	186	337.	*	1	2140	261	56.
1	0300	37	0.	*	1	0915	112	0.	*	1	1530	187	320.	*	1	2145	262	56.
1	0305	38	0.	*	1	0920	113	0.	*	1	1535	188	303.	*	1	2150	263	55.
1	0310	39	0.	*	1	0925	114	0.	*	1	1540	189	286.	*	1	2155	264	55.
1	0315	40	0.	*	1	0930	115	0.	*	1	1545	190	269.	*	1	2200	265	54.
1	0320	41	0.	*	1	0935	116	0.	*	1	1550	191	252.	*	1	2205	266	54.
1	0325	42	0.	*	1	0940	117	1.	*	1	1555	192	236.	*	1	2210	267	54.
1	0330	43	0.	*	1	0945	118	1.	*	1	1600	193	220.	*	1	2215	268	53.
1	0335	44	0.	*	1	0950	119	2.	*	1	1605	194	205.	*	1	2220	269	53.
1	0340	45	0.	*	1	0955	120	3.	*	1	1610	195	190.	*	1	2225	270	52.
1	0345	46	0.	*	1	1000	121	5.	*	1	1615	196	176.	*	1	2230	271	52.
1	0350	47	0.	*	1	1005	122	8.	*	1	1620	197	163.	*	1	2235	272	52.
1	0355	48	0.	*	1	1010	123	11.	*	1	1625	198	151.	*	1	2240	273	51.
1	0400	49	0.	*	1	1015	124	14.	*	1	1630	199	140.	*	1	2245	274	51.
1	0405	50	0.	*	1	1020	125	19.	*	1	1635	200	130.	*	1	2250	275	51.
1	0410	51	0.	*	1	1025	126	24.	*	1	1640	201	121.	*	1	2255	276	50.
1	0415	52	0.	*	1	1030	127	29.	*	1	1645	202	113.	*	1	2300	277	50.
1	0420	53	0.	*	1	1035	128	36.	*	1	1650	203	106.	*	1	2305	278	49.
1	0425	54	0.	*	1	1040	129	42.	*	1	1655	204	101.	*	1	2310	279	49.
1	0430	55	0.	*	1	1045	130	49.	*	1	1700	205	96.	*	1	2315	280	49.
1	0435	56	0.	*	1	1050	131	56.	*	1	1705	206	91.	*	1	2320	281	48.
1	0440	57	0.	*	1	1055	132	63.	*	1	1710	207	88.	*	1	2325	282	48.
1	0445	58	0.	*	1	1100	133	71.	*	1	1715	208	85.	*	1	2330	283	48.
1	0450	59	0.	*	1	1105	134	79.	*	1	1720	209	82.	*	1	2335	284	47.
1	0455	60	0.	*	1	1110	135	87.	*	1	1725	210	79.	*	1	2340	285	47.
1	0500	61	0.	*	1	1115	136	94.	*	1	1730	211	77.	*	1	2345	286	47.
1	0505	62	0.	*	1	1120	137	102.	*	1	1735	212	75.	*	1	2350	287	47.
1	0510	63	0.	*	1	1125	138	109.	*	1	1740	213	73.	*	1	2355	288	46.
1	0515	64	0.	*	1	1130	139	117.	*	1	1745	214	72.	*	2	0000	289	46.
1	0520	65	0.	*	1	1135	140	125.	*	1	1750	215	70.	*	2	0005	290	46.
1	0525	66	0.	*	1	1140	141	135.	*	1	1755	216	69.	*	2	0010	291	45.
1	0530	67	0.	*	1	1145	142	146.	*	1	1800	217	68.	*	2	0015	292	43.
1	0535	68	0.	*	1	1150	143	161.	*	1	1805	218	67.	*	2	0020	293	41.
1	0540	69	0.	*	1	1155	144	181.	*	1	1810	219	66.	*	2	0025	294	39.
1	0545	70	0.	*	1	1200	145	215.	*	1	1815	220	65.	*	2	0030	295	37.
1	0550	71	0.	*	1	1205	146	319.	*	1	1820	221	65.	*	2	0035	296	35.
1	0555	72	0.	*	1	1210	147	544.	*	1	1825	222	65.	*	2	0040	297	33.
1	0600	73	0.	*	1	1215	148	877.	*	1	1830	223	65.	*	2	0045	298	30.
1	0605	74	0.	*	1	1220	149	1177.	*	1	1835	224	65.	*	2	0050	299	28.
1	0610	75	0.	*	1	1225	150	1376.	*	1	1840	225	65.	*	2	0055	300	25.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	24.92-HR
1953.	13.00	(INCHES)	673.	189.	182.	182.
		(AC-FT)	1.613	1.812	1.812	1.812
			334.	375.	375.	375.

CUMULATIVE AREA = 3.88 SQ MI

RUNOFF SUMMARY
 FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
				6-HOUR	24-HOUR	72-HOUR			
HYDROGRAPH AT	AREA 1	1238.	12.58	262.	74.	71.	1.45		
ROUTED TO	ROUTE1	1221.	12.83	262.	74.	71.	1.45		
HYDROGRAPH AT	AREA 2	813.	12.33	110.	31.	30.	.60		
2 COMBINED AT	OUTLT2	1485.	12.75	371.	104.	101.	2.05		
ROUTED TO	ROUTE2	1482.	12.75	371.	104.	101.	2.05		
HYDROGRAPH AT	AREA 3	309.	12.33	43.	12.	12.	.24		
2 COMBINED AT	OUTLT3	1598.	12.75	414.	117.	112.	2.29		
ROUTED TO	ROUTE3	1587.	12.83	414.	117.	112.	2.29		
HYDROGRAPH AT	AREA 4	814.	12.33	109.	31.	29.	.60		
2 COMBINED AT	OUTLT4	1968.	12.50	523.	147.	142.	2.89		
ROUTED TO	ROUTE4	1784.	13.00	523.	147.	141.	2.89		
HYDROGRAPH AT	AREA 5	663.	12.33	89.	25.	24.	.59		
2 COMBINED AT	OUTLT5	1899.	12.92	612.	172.	166.	3.48		
ROUTED TO	ROUTE5	1886.	13.08	612.	172.	165.	3.48		
HYDROGRAPH AT	AREA 6	449.	12.33	61.	17.	16.	.60		
2 COMBINED AT	OUTLT6	1953.	13.00	673.	189.	182.	3.88		

*** NORMAL END OF HEC-1 ***

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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1) *
  SEPTEMBER 1990 *
  VERSION 4.0 *
RUN DATE 08/27/1993 TIME 09:09:58 *
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*****
U.S. ARMY CORPS OF ENGINEERS *
HYDROLOGIC ENGINEERING CENTER *
  609 SECOND STREET *
  DAVIS, CALIFORNIA 95616 *
  (916) 756-1104 *
*****

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X   X  XXXXXXX  XXXXX      X
X   X  X      X   X      XX
X   X  X      X           X
XXXXXXX XXXX  X           XXXXX X
X   X  X      X           X
X   X  X      X   X      X
X   X  XXXXXXX  XXXXX      XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	CHURCH ROCK, NEW MEXICO									15608-01
2	ID	25-YEAR, 6-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC=II									
3	ID	FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANINIUM MINE									
4	IT	5	200								
5	IO	0									
6	KK	AREA 1									
7	KM	BASIN NO. 1 RUNOFF									
8	PH	4	0	0.9	1.2	1.6	1.8	2	2.5		
9	BA	1.447									
10	LS	0	89								
11	UD	0.552									
12	KK	ROUTE1									
13	KM	ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET									
14	RM	2	0.19	0.4							
15	KK	AREA 2									
16	KM	BASIN NO. 2 RUNOFF									
17	BA	0.604									
18	LS	0	89								
19	UD	0.3									
20	KK	OUTLET2									
21	KM	COMBINE ROUTE 1 AND BASIN TO OUTLET 2									
22	HC	2									
23	KK	ROUTE2									
24	KM	ROUTE OUTLET 2 TO BASIN 3 OUTLET									
25	RM	1	0.064	0.4							
26	KK	AREA 3									
27	KM	BASIN NO. 3 RUNOFF									
28	BA	0.238									
29	LS	0	89								
30	UD	0.313									
31	KK	OUTLET3									
32	KM	COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3									
33	HC	2									
34	KK	ROUTE3									
35	KM	ROUTE OUTLET 3 TO BASIN 4 OUTLET									
36	RM	1	0.125	0.3							
37	KK	AREA 4									
38	KM	BASIN NO. 4 RUNOFF									
39	BA	0.6									
40	LS	0	89								
41	UD	0.297									

 * FLOOD HYDROGRAPH PACKAGE (HEC-1) *
 * SEPTEMBER 1990 *
 * VERSION 4.0 *
 *
 * RUN DATE 08/27/1993 TIME 09:09:58 *

 * U.S. ARMY CORPS OF ENGINEERS *
 * HYDROLOGIC ENGINEERING CENTER *
 * 609 SECOND STREET *
 * DAVIS, CALIFORNIA 95616 *
 * (916) 756-1104 *

CHURCH ROCK, NEW MEXICO 15608-01
 25-YEAR, 6-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC-II
 FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANIUM MINE

5 IO OUTPUT CONTROL VARIABLES
 IPRNT 0 PRINT CONTROL
 IPLDT 0 PLOT CONTROL
 QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA
 NMIN 5 MINUTES IN COMPUTATION INTERVAL
 IDATE 1 0 STARTING DATE
 ITIME 0000 STARTING TIME
 NQ 200 NUMBER OF HYDROGRAPH ORDINATES
 NDDATE 1 0 ENDING DATE
 NDTIME 1635 ENDING TIME
 ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
 TOTAL TIME BASE 16.58 HOURS

ENGLISH UNITS
 DRAINAGE AREA SQUARE MILES
 PRECIPITATION DEPTH INCHES
 LENGTH, ELEVATION FEET
 FLOW CUBIC FEET PER SECOND
 STORAGE VOLUME ACRE-FEET
 SURFACE AREA ACRES
 TEMPERATURE DEGREES FAHRENHEIT

6 KK *****
 * AREA 1 *

 BASIN NO. 1 RUNOFF

SUBBASIN RUNOFF DATA

9 BA SUBBASIN CHARACTERISTICS
 TAREA 1.45 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM
 HYDRO-35 TP-40 TP-49
 5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 .90 1.20 1.60 1.80 2.00 2.50 .00 .00 .00 .00 .00 .00

STORM AREA = 1.45

10 LS SCS LOSS RATE
 STRL .25 INITIAL ABSTRACTION
 CRVBR 89.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

UNIT HYDROGRAPH

35 END-OF-PERIOD ORDINATES

69.	203.	405.	691.	968.	1125.	1175.	1149.	1043.	914.
738.	560.	442.	350.	284.	227.	178.	143.	114.	90.
72.	57.	45.	36.	29.	23.	18.	15.	12.	10.
8.	6.	4.	3.	1.					

HYDROGRAPH AT STATION AREA 1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0820	101	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1		0825	102	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1		0830	103	.00	.00	.00	0.
1		0015	4	.01	.01	.00	0.	*	1		0835	104	.00	.00	.00	0.
1		0020	5	.01	.01	.00	0.	*	1		0840	105	.00	.00	.00	0.
1		0025	6	.01	.01	.00	0.	*	1		0845	106	.00	.00	.00	0.
1		0030	7	.01	.01	.00	0.	*	1		0850	107	.00	.00	.00	0.
1		0035	8	.01	.01	.00	0.	*	1		0855	108	.00	.00	.00	0.
1		0040	9	.01	.01	.00	0.	*	1		0900	109	.00	.00	.00	0.
1		0045	10	.01	.01	.00	0.	*	1		0905	110	.00	.00	.00	0.
1		0050	11	.01	.01	.00	0.	*	1		0910	111	.00	.00	.00	0.
1		0055	12	.01	.01	.00	0.	*	1		0915	112	.00	.00	.00	0.
1		0100	13	.01	.01	.00	0.	*	1		0920	113	.00	.00	.00	0.
1		0105	14	.01	.01	.00	0.	*	1		0925	114	.00	.00	.00	0.
1		0110	15	.02	.02	.00	0.	*	1		0930	115	.00	.00	.00	0.
1		0115	16	.02	.02	.00	0.	*	1		0935	116	.00	.00	.00	0.
1		0120	17	.02	.02	.00	0.	*	1		0940	117	.00	.00	.00	0.
1		0125	18	.02	.02	.00	0.	*	1		0945	118	.00	.00	.00	0.
1		0130	19	.02	.02	.00	0.	*	1		0950	119	.00	.00	.00	0.
1		0135	20	.01	.01	.00	0.	*	1		0955	120	.00	.00	.00	0.
1		0140	21	.02	.01	.00	0.	*	1		1000	121	.00	.00	.00	0.
1		0145	22	.02	.02	.00	0.	*	1		1005	122	.00	.00	.00	0.
1		0150	23	.02	.02	.00	1.	*	1		1010	123	.00	.00	.00	0.
1		0155	24	.02	.02	.00	1.	*	1		1015	124	.00	.00	.00	0.
1		0200	25	.02	.02	.00	3.	*	1		1020	125	.00	.00	.00	0.
1		0205	26	.01	.01	.00	4.	*	1		1025	126	.00	.00	.00	0.
1		0210	27	.01	.01	.00	6.	*	1		1030	127	.00	.00	.00	0.
1		0215	28	.02	.01	.00	9.	*	1		1035	128	.00	.00	.00	0.
1		0220	29	.02	.01	.00	11.	*	1		1040	129	.00	.00	.00	0.
1		0225	30	.02	.01	.00	14.	*	1		1045	130	.00	.00	.00	0.
1		0230	31	.02	.02	.01	17.	*	1		1050	131	.00	.00	.00	0.
1		0235	32	.03	.02	.01	21.	*	1		1055	132	.00	.00	.00	0.
1		0240	33	.03	.02	.01	25.	*	1		1100	133	.00	.00	.00	0.
1		0245	34	.04	.03	.01	31.	*	1		1105	134	.00	.00	.00	0.
1		0250	35	.05	.03	.02	38.	*	1		1110	135	.00	.00	.00	0.
1		0255	36	.08	.04	.03	50.	*	1		1115	136	.00	.00	.00	0.
1		0300	37	.18	.09	.09	70.	*	1		1120	137	.00	.00	.00	0.
1		0305	38	.89	.27	.62	139.	*	1		1125	138	.00	.00	.00	0.
1		0310	39	.12	.02	.10	261.	*	1		1130	139	.00	.00	.00	0.
1		0315	40	.06	.01	.05	436.	*	1		1135	140	.00	.00	.00	0.
1		0320	41	.04	.01	.04	668.	*	1		1140	141	.00	.00	.00	0.
1		0325	42	.04	.01	.03	893.	*	1		1145	142	.00	.00	.00	0.
1		0330	43	.03	.00	.02	1040.	*	1		1150	143	.00	.00	.00	0.
1		0335	44	.02	.00	.02	1107.	*	1		1155	144	.00	.00	.00	0.
1		0340	45	.02	.00	.02	1109.	*	1		1200	145	.00	.00	.00	0.
1		0345	46	.02	.00	.01	1046.	*	1		1205	146	.00	.00	.00	0.
1		0350	47	.02	.00	.01	953.	*	1		1210	147	.00	.00	.00	0.
1		0355	48	.01	.00	.01	822.	*	1		1215	148	.00	.00	.00	0.
1		0400	49	.01	.00	.01	684.	*	1		1220	149	.00	.00	.00	0.
1		0405	50	.02	.00	.02	580.	*	1		1225	150	.00	.00	.00	0.
1		0410	51	.02	.00	.02	496.	*	1		1230	151	.00	.00	.00	0.
1		0415	52	.02	.00	.01	430.	*	1		1235	152	.00	.00	.00	0.
1		0420	53	.02	.00	.01	375.	*	1		1240	153	.00	.00	.00	0.
1		0425	54	.02	.00	.01	329.	*	1		1245	154	.00	.00	.00	0.
1		0430	55	.01	.00	.01	295.	*	1		1250	155	.00	.00	.00	0.

1	0435	56	.02	.00	.02	267.	*	1	1255	156	.00	.00	.00	0.
1	0440	57	.02	.00	.01	244.	*	1	1300	157	.00	.00	.00	0.
1	0445	58	.02	.00	.01	227.	*	1	1305	158	.00	.00	.00	0.
1	0450	59	.02	.00	.01	213.	*	1	1310	159	.00	.00	.00	0.
1	0455	60	.02	.00	.01	202.	*	1	1315	160	.00	.00	.00	0.
1	0500	61	.02	.00	.01	193.	*	1	1320	161	.00	.00	.00	0.
1	0505	62	.01	.00	.01	185.	*	1	1325	162	.00	.00	.00	0.
1	0510	63	.01	.00	.01	179.	*	1	1330	163	.00	.00	.00	0.
1	0515	64	.01	.00	.01	173.	*	1	1335	164	.00	.00	.00	0.
1	0520	65	.01	.00	.01	168.	*	1	1340	165	.00	.00	.00	0.
1	0525	66	.01	.00	.01	163.	*	1	1345	166	.00	.00	.00	0.
1	0530	67	.01	.00	.01	159.	*	1	1350	167	.00	.00	.00	0.
1	0535	68	.01	.00	.01	154.	*	1	1355	168	.00	.00	.00	0.
1	0540	69	.01	.00	.01	149.	*	1	1400	169	.00	.00	.00	0.
1	0545	70	.01	.00	.01	145.	*	1	1405	170	.00	.00	.00	0.
1	0550	71	.01	.00	.01	141.	*	1	1410	171	.00	.00	.00	0.
1	0555	72	.01	.00	.01	136.	*	1	1415	172	.00	.00	.00	0.
1	0600	73	.01	.00	.01	133.	*	1	1420	173	.00	.00	.00	0.
1	0605	74	.00	.00	.00	129.	*	1	1425	174	.00	.00	.00	0.
1	0610	75	.00	.00	.00	124.	*	1	1430	175	.00	.00	.00	0.
1	0615	76	.00	.00	.00	118.	*	1	1435	176	.00	.00	.00	0.
1	0620	77	.00	.00	.00	109.	*	1	1440	177	.00	.00	.00	0.
1	0625	78	.00	.00	.00	97.	*	1	1445	178	.00	.00	.00	0.
1	0630	79	.00	.00	.00	84.	*	1	1450	179	.00	.00	.00	0.
1	0635	80	.00	.00	.00	71.	*	1	1455	180	.00	.00	.00	0.
1	0640	81	.00	.00	.00	58.	*	1	1500	181	.00	.00	.00	0.
1	0645	82	.00	.00	.00	47.	*	1	1505	182	.00	.00	.00	0.
1	0650	83	.00	.00	.00	37.	*	1	1510	183	.00	.00	.00	0.
1	0655	84	.00	.00	.00	29.	*	1	1515	184	.00	.00	.00	0.
1	0700	85	.00	.00	.00	23.	*	1	1520	185	.00	.00	.00	0.
1	0705	86	.00	.00	.00	19.	*	1	1525	186	.00	.00	.00	0.
1	0710	87	.00	.00	.00	15.	*	1	1530	187	.00	.00	.00	0.
1	0715	88	.00	.00	.00	12.	*	1	1535	188	.00	.00	.00	0.
1	0720	89	.00	.00	.00	9.	*	1	1540	189	.00	.00	.00	0.
1	0725	90	.00	.00	.00	7.	*	1	1545	190	.00	.00	.00	0.
1	0730	91	.00	.00	.00	6.	*	1	1550	191	.00	.00	.00	0.
1	0735	92	.00	.00	.00	5.	*	1	1555	192	.00	.00	.00	0.
1	0740	93	.00	.00	.00	4.	*	1	1600	193	.00	.00	.00	0.
1	0745	94	.00	.00	.00	3.	*	1	1605	194	.00	.00	.00	0.
1	0750	95	.00	.00	.00	2.	*	1	1610	195	.00	.00	.00	0.
1	0755	96	.00	.00	.00	2.	*	1	1615	196	.00	.00	.00	0.
1	0800	97	.00	.00	.00	1.	*	1	1620	197	.00	.00	.00	0.
1	0805	98	.00	.00	.00	1.	*	1	1625	198	.00	.00	.00	0.
1	0810	99	.00	.00	.00	1.	*	1	1630	199	.00	.00	.00	0.
1	0815	100	.00	.00	.00	1.	*	1	1635	200	.00	.00	.00	0.

TOTAL RAINFALL = 2.49, TOTAL LOSS = 1.04, TOTAL EXCESS = 1.45

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (INCHES)	16.58-HR (INCHES)
1109.	3.67	225.	1.446	1.447	1.447
			112.	112.	112.

CUMULATIVE AREA = 1.45 SQ MI

12 KK

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*****
* ROUTE1 *
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ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET

HYDROGRAPH ROUTING DATA

14 RM

MUSKINGUM ROUTING
NSTPS 2 NUMBER OF SUBREACHES

AMSKK .19 MUSKINGUM K
X .40 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE1

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0410	51	724.	*	1		0820	101	1.	*	1		1230	151	0.	*
1		0005	2	0.	*	1		0415	52	613.	*	1		0825	102	1.	*	1		1235	152	0.	*
1		0010	3	0.	*	1		0420	53	522.	*	1		0830	103	1.	*	1		1240	153	0.	*
1		0015	4	0.	*	1		0425	54	451.	*	1		0835	104	0.	*	1		1245	154	0.	*
1		0020	5	0.	*	1		0430	55	393.	*	1		0840	105	0.	*	1		1250	155	0.	*
1		0025	6	0.	*	1		0435	56	344.	*	1		0845	106	0.	*	1		1255	156	0.	*
1		0030	7	0.	*	1		0440	57	306.	*	1		0850	107	0.	*	1		1300	157	0.	*
1		0035	8	0.	*	1		0445	58	276.	*	1		0855	108	0.	*	1		1305	158	0.	*
1		0040	9	0.	*	1		0450	59	252.	*	1		0900	109	0.	*	1		1310	159	0.	*
1		0045	10	0.	*	1		0455	60	232.	*	1		0905	110	0.	*	1		1315	160	0.	*
1		0050	11	0.	*	1		0500	61	217.	*	1		0910	111	0.	*	1		1320	161	0.	*
1		0055	12	0.	*	1		0505	62	205.	*	1		0915	112	0.	*	1		1325	162	0.	*
1		0100	13	0.	*	1		0510	63	195.	*	1		0920	113	0.	*	1		1330	163	0.	*
1		0105	14	0.	*	1		0515	64	187.	*	1		0925	114	0.	*	1		1335	164	0.	*
1		0110	15	0.	*	1		0520	65	181.	*	1		0930	115	0.	*	1		1340	165	0.	*
1		0115	16	0.	*	1		0525	66	175.	*	1		0935	116	0.	*	1		1345	166	0.	*
1		0120	17	0.	*	1		0530	67	169.	*	1		0940	117	0.	*	1		1350	167	0.	*
1		0125	18	0.	*	1		0535	68	165.	*	1		0945	118	0.	*	1		1355	168	0.	*
1		0130	19	0.	*	1		0540	69	160.	*	1		0950	119	0.	*	1		1400	169	0.	*
1		0135	20	0.	*	1		0545	70	155.	*	1		0955	120	0.	*	1		1405	170	0.	*
1		0140	21	0.	*	1		0550	71	151.	*	1		1000	121	0.	*	1		1410	171	0.	*
1		0145	22	0.	*	1		0555	72	146.	*	1		1005	122	0.	*	1		1415	172	0.	*
1		0150	23	0.	*	1		0600	73	142.	*	1		1010	123	0.	*	1		1420	173	0.	*
1		0155	24	0.	*	1		0605	74	138.	*	1		1015	124	0.	*	1		1425	174	0.	*
1		0200	25	1.	*	1		0610	75	134.	*	1		1020	125	0.	*	1		1430	175	0.	*
1		0205	26	1.	*	1		0615	76	130.	*	1		1025	126	0.	*	1		1435	176	0.	*
1		0210	27	2.	*	1		0620	77	125.	*	1		1030	127	0.	*	1		1440	177	0.	*
1		0215	28	4.	*	1		0625	78	119.	*	1		1035	128	0.	*	1		1445	178	0.	*
1		0220	29	6.	*	1		0630	79	111.	*	1		1040	129	0.	*	1		1450	179	0.	*
1		0225	30	8.	*	1		0635	80	100.	*	1		1045	130	0.	*	1		1455	180	0.	*
1		0230	31	11.	*	1		0640	81	87.	*	1		1050	131	0.	*	1		1500	181	0.	*
1		0235	32	13.	*	1		0645	82	75.	*	1		1055	132	0.	*	1		1505	182	0.	*
1		0240	33	16.	*	1		0650	83	62.	*	1		1100	133	0.	*	1		1510	183	0.	*
1		0245	34	20.	*	1		0655	84	50.	*	1		1105	134	0.	*	1		1515	184	0.	*
1		0250	35	24.	*	1		0700	85	40.	*	1		1110	135	0.	*	1		1520	185	0.	*
1		0255	36	29.	*	1		0705	86	32.	*	1		1115	136	0.	*	1		1525	186	0.	*
1		0300	37	37.	*	1		0710	87	25.	*	1		1120	137	0.	*	1		1530	187	0.	*
1		0305	38	48.	*	1		0715	88	20.	*	1		1125	138	0.	*	1		1535	188	0.	*
1		0310	39	68.	*	1		0720	89	16.	*	1		1130	139	0.	*	1		1540	189	0.	*
1		0315	40	127.	*	1		0725	90	13.	*	1		1135	140	0.	*	1		1545	190	0.	*
1		0320	41	235.	*	1		0730	91	10.	*	1		1140	141	0.	*	1		1550	191	0.	*
1		0325	42	396.	*	1		0735	92	8.	*	1		1145	142	0.	*	1		1555	192	0.	*
1		0330	43	608.	*	1		0740	93	6.	*	1		1150	143	0.	*	1		1600	193	0.	*
1		0335	44	826.	*	1		0745	94	5.	*	1		1155	144	0.	*	1		1605	194	0.	*
1		0340	45	988.	*	1		0750	95	4.	*	1		1200	145	0.	*	1		1610	195	0.	*
1		0345	46	1077.	*	1		0755	96	3.	*	1		1205	146	0.	*	1		1615	196	0.	*
1		0350	47	1098.	*	1		0800	97	2.	*	1		1210	147	0.	*	1		1620	197	0.	*
1		0355	48	1056.	*	1		0805	98	2.	*	1		1215	148	0.	*	1		1625	198	0.	*
1		0400	49	973.	*	1		0810	99	1.	*	1		1220	149	0.	*	1		1630	199	0.	*
1		0405	50	855.	*	1		0815	100	1.	*	1		1225	150	0.	*	1		1635	200	0.	*

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
1098.	3.83	6-HR	24-HR	72-HR	16.58-HR
(CFS)		225.	81.	81.	81.
(INCHES)		1.446	1.447	1.447	1.447
(AC-FT)		112.	112.	112.	112.

CUMULATIVE AREA = 1.45 SQ MI


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*
* AREA 2
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15 KK

BASIN NO. 2 RUNOFF

SUBBASIN RUNOFF DATA

17 BA

SUBBASIN CHARACTERISTICS

TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

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..... HYDRO-35 ..... TP-40 ..... TP-49 .....
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
.90 1.20 1.60 1.80 2.00 2.50 .00 .00 .00 .00 .00 .00

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STORM AREA = .60

18 LS

SCS LOSS RATE

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STRFL .25 INITIAL ABSTRACTION
CHVNBR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

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19 UD

SCS DIMENSIONLESS UNITGRAPH

TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

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119. 386. 732. 854. 784. 613. 389. 261. 179. 119.
81. 54. 36. 24. 16. 11. 8. 5. 3. 1.

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HYDROGRAPH AT STATION AREA 2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.06	.00	0.	*	1		0820	101	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1		0825	102	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1		0830	103	.00	.00	.00	0.
1		0015	4	.01	.01	.00	0.	*	1		0835	104	.00	.00	.00	0.
1		0020	5	.01	.01	.00	0.	*	1		0840	105	.00	.00	.00	0.
1		0025	6	.01	.01	.00	0.	*	1		0845	106	.00	.00	.00	0.
1		0030	7	.01	.01	.00	0.	*	1		0850	107	.00	.00	.00	0.
1		0035	8	.01	.01	.00	0.	*	1		0855	108	.00	.00	.00	0.
1		0040	9	.01	.01	.00	0.	*	1		0900	109	.00	.00	.00	0.
1		0045	10	.01	.01	.00	0.	*	1		0905	110	.00	.00	.00	0.
1		0050	11	.01	.01	.00	0.	*	1		0910	111	.00	.00	.00	0.
1		0055	12	.01	.01	.00	0.	*	1		0915	112	.00	.00	.00	0.
1		0100	13	.01	.01	.00	0.	*	1		0920	113	.00	.00	.00	0.
1		0105	14	.01	.01	.00	0.	*	1		0925	114	.00	.00	.00	0.
1		0110	15	.02	.02	.00	0.	*	1		0930	115	.00	.00	.00	0.
1		0115	16	.02	.02	.00	0.	*	1		0935	116	.00	.00	.00	0.
1		0120	17	.02	.02	.00	0.	*	1		0940	117	.00	.00	.00	0.
1		0125	18	.02	.02	.00	0.	*	1		0945	118	.00	.00	.00	0.
1		0130	19	.02	.02	.00	0.	*	1		0950	119	.00	.00	.00	0.
1		0135	20	.01	.01	.00	0.	*	1		0955	120	.00	.00	.00	0.
1		0140	21	.02	.01	.00	0.	*	1		1000	121	.00	.00	.00	0.
1		0145	22	.02	.01	.00	0.	*	1		1005	122	.00	.00	.00	0.
1		0150	23	.02	.02	.00	1.	*	1		1010	123	.00	.00	.00	0.
1		0155	24	.02	.02	.00	2.	*	1		1015	124	.00	.00	.00	0.
1		0200	25	.02	.02	.00	3.	*	1		1020	125	.00	.00	.00	0.
1		0205	26	.01	.01	.00	5.	*	1		1025	126	.00	.00	.00	0.

1	0210	27	.01	.01	.00	6.	*	1	1030	127	.00	.00	.00	0.
1	0215	28	.02	.01	.00	8.	*	1	1035	128	.00	.00	.00	0.
1	0220	29	.02	.01	.00	9.	*	1	1040	129	.00	.00	.00	0.
1	0225	30	.02	.01	.00	10.	*	1	1045	130	.00	.00	.00	0.
1	0230	31	.02	.02	.01	12.	*	1	1050	131	.00	.00	.00	0.
1	0235	32	.03	.02	.01	15.	*	1	1055	132	.00	.00	.00	0.
1	0240	33	.03	.02	.01	18.	*	1	1100	133	.00	.00	.00	0.
1	0245	34	.04	.03	.01	23.	*	1	1105	134	.00	.00	.00	0.
1	0250	35	.05	.03	.02	30.	*	1	1110	135	.00	.00	.00	0.
1	0255	36	.08	.04	.03	42.	*	1	1115	136	.00	.00	.00	0.
1	0300	37	.18	.09	.09	65.	*	1	1120	137	.00	.00	.00	0.
1	0305	38	.90	.27	.62	171.	*	1	1125	138	.00	.00	.00	0.
1	0310	39	.12	.02	.10	376.	*	1	1130	139	.00	.00	.00	0.
1	0315	40	.06	.01	.05	624.	*	1	1135	140	.00	.00	.00	0.
1	0320	41	.04	.01	.04	733.	*	1	1140	141	.00	.00	.00	0.
1	0325	42	.03	.01	.03	706.	*	1	1145	142	.00	.00	.00	0.
1	0330	43	.03	.00	.02	594.	*	1	1150	143	.00	.00	.00	0.
1	0335	44	.02	.00	.02	441.	*	1	1155	144	.00	.00	.00	0.
1	0340	45	.02	.00	.02	335.	*	1	1200	145	.00	.00	.00	0.
1	0345	46	.02	.00	.01	259.	*	1	1205	146	.00	.00	.00	0.
1	0350	47	.02	.00	.01	201.	*	1	1210	147	.00	.00	.00	0.
1	0355	48	.01	.00	.01	160.	*	1	1215	148	.00	.00	.00	0.
1	0400	49	.01	.00	.01	128.	*	1	1220	149	.00	.00	.00	0.
1	0405	50	.02	.00	.02	106.	*	1	1225	150	.00	.00	.00	0.
1	0410	51	.02	.00	.02	92.	*	1	1230	151	.00	.00	.00	0.
1	0415	52	.02	.00	.01	83.	*	1	1235	152	.00	.00	.00	0.
1	0420	53	.02	.00	.01	79.	*	1	1240	153	.00	.00	.00	0.
1	0425	54	.02	.00	.01	75.	*	1	1245	154	.00	.00	.00	0.
1	0430	55	.01	.00	.01	73.	*	1	1250	155	.00	.00	.00	0.
1	0435	56	.02	.00	.02	69.	*	1	1255	156	.00	.00	.00	0.
1	0440	57	.02	.00	.01	67.	*	1	1300	157	.00	.00	.00	0.
1	0445	58	.02	.00	.01	66.	*	1	1305	158	.00	.00	.00	0.
1	0450	59	.02	.00	.01	66.	*	1	1310	159	.00	.00	.00	0.
1	0455	60	.02	.00	.01	66.	*	1	1315	160	.00	.00	.00	0.
1	0500	61	.02	.00	.01	66.	*	1	1320	161	.00	.00	.00	0.
1	0505	62	.01	.00	.01	65.	*	1	1325	162	.00	.00	.00	0.
1	0510	63	.01	.00	.01	64.	*	1	1330	163	.00	.00	.00	0.
1	0515	64	.01	.00	.01	62.	*	1	1335	164	.00	.00	.00	0.
1	0520	65	.01	.00	.01	61.	*	1	1340	165	.00	.00	.00	0.
1	0525	66	.01	.00	.01	59.	*	1	1345	166	.00	.00	.00	0.
1	0530	67	.01	.00	.01	58.	*	1	1350	167	.00	.00	.00	0.
1	0535	68	.01	.00	.01	57.	*	1	1355	168	.00	.00	.00	0.
1	0540	69	.01	.00	.01	55.	*	1	1400	169	.00	.00	.00	0.
1	0545	70	.01	.00	.01	54.	*	1	1405	170	.00	.00	.00	0.
1	0550	71	.01	.00	.01	53.	*	1	1410	171	.00	.00	.00	0.
1	0555	72	.01	.00	.01	52.	*	1	1415	172	.00	.00	.00	0.
1	0600	73	.01	.00	.01	51.	*	1	1420	173	.00	.00	.00	0.
1	0605	74	.00	.00	.00	48.	*	1	1425	174	.00	.00	.00	0.
1	0610	75	.00	.00	.00	44.	*	1	1430	175	.00	.00	.00	0.
1	0615	76	.00	.00	.00	36.	*	1	1435	176	.00	.00	.00	0.
1	0620	77	.00	.00	.00	27.	*	1	1440	177	.00	.00	.00	0.
1	0625	78	.00	.00	.00	19.	*	1	1445	178	.00	.00	.00	0.
1	0630	79	.00	.00	.00	12.	*	1	1450	179	.00	.00	.00	0.
1	0635	80	.00	.00	.00	8.	*	1	1455	180	.00	.00	.00	0.
1	0640	81	.00	.00	.00	6.	*	1	1500	181	.00	.00	.00	0.
1	0645	82	.00	.00	.00	4.	*	1	1505	182	.00	.00	.00	0.
1	0650	83	.00	.00	.00	2.	*	1	1510	183	.00	.00	.00	0.
1	0655	84	.00	.00	.00	2.	*	1	1515	184	.00	.00	.00	0.
1	0700	85	.00	.00	.00	1.	*	1	1520	185	.00	.00	.00	0.
1	0705	86	.00	.00	.00	1.	*	1	1525	186	.00	.00	.00	0.
1	0710	87	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	0.
1	0715	88	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	0.
1	0720	89	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	0.
1	0725	90	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	0.
1	0730	91	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	0.
1	0735	92	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	0.
1	0740	93	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	0.
1	0745	94	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	0.
1	0750	95	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	0.
1	0755	96	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	0.
1	0800	97	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	0.
1	0805	98	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	0.
1	0810	99	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	0.
1	0815	100	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	0.

TOTAL RAINFALL = 2.50, TOTAL LOSS = 1.04, TOTAL EXCESS = 1.45

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR (INCHES)	24-HR (AC-FT)	72-HR (INCHES)	16.58-HR (AC-FT)
733.	3.33	94.	1.451	47.	34.	34.
			1.451	47.	1.451	1.451
			(AC-FT)	47.	47.	47.

CUMULATIVE AREA = .60 SQ MI

20 KK

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*****
*           *
*   OUTLT2 *
*           *
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COMBINE ROUTE 1 AND BASIN TO OUTLET 2

22 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT2
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0410	51	816.	1		0820	101	1.	1		1230	151	0.
1		0005	2	0.	1		0415	52	696.	1		0825	102	1.	1		1235	152	0.
1		0010	3	0.	1		0420	53	601.	1		0830	103	1.	1		1240	153	0.
1		0015	4	0.	1		0425	54	527.	1		0835	104	0.	1		1245	154	0.
1		0020	5	0.	1		0430	55	465.	1		0840	105	0.	1		1250	155	0.
1		0025	6	0.	1		0435	56	413.	1		0845	106	0.	1		1255	156	0.
1		0030	7	0.	1		0440	57	373.	1		0850	107	0.	1		1300	157	0.
1		0035	8	0.	1		0445	58	342.	1		0855	108	0.	1		1305	158	0.
1		0040	9	0.	1		0450	59	318.	1		0900	109	0.	1		1310	159	0.
1		0045	10	0.	1		0455	60	299.	1		0905	110	0.	1		1315	160	0.
1		0050	11	0.	1		0500	61	283.	1		0910	111	0.	1		1320	161	0.
1		0055	12	0.	1		0505	62	270.	1		0915	112	0.	1		1325	162	0.
1		0100	13	0.	1		0510	63	259.	1		0920	113	0.	1		1330	163	0.
1		0105	14	0.	1		0515	64	250.	1		0925	114	0.	1		1335	164	0.
1		0110	15	0.	1		0520	65	241.	1		0930	115	0.	1		1340	165	0.
1		0115	16	0.	1		0525	66	234.	1		0935	116	0.	1		1345	166	0.
1		0120	17	0.	1		0530	67	227.	1		0940	117	0.	1		1350	167	0.
1		0125	18	0.	1		0535	68	221.	1		0945	118	0.	1		1355	168	0.
1		0130	19	0.	1		0540	69	215.	1		0950	119	0.	1		1400	169	0.
1		0135	20	0.	1		0545	70	209.	1		0955	120	0.	1		1405	170	0.
1		0140	21	0.	1		0550	71	204.	1		1000	121	0.	1		1410	171	0.
1		0145	22	0.	1		0555	72	198.	1		1005	122	0.	1		1415	172	0.
1		0150	23	1.	1		0600	73	192.	1		1010	123	0.	1		1420	173	0.
1		0155	24	2.	1		0605	74	186.	1		1015	124	0.	1		1425	174	0.
1		0200	25	4.	1		0610	75	177.	1		1020	125	0.	1		1430	175	0.
1		0205	26	6.	1		0615	76	166.	1		1025	126	0.	1		1435	176	0.
1		0210	27	9.	1		0620	77	152.	1		1030	127	0.	1		1440	177	0.
1		0215	28	12.	1		0625	78	138.	1		1035	128	0.	1		1445	178	0.
1		0220	29	15.	1		0630	79	123.	1		1040	129	0.	1		1450	179	0.
1		0225	30	18.	1		0635	80	108.	1		1045	130	0.	1		1455	180	0.
1		0230	31	23.	1		0640	81	93.	1		1050	131	0.	1		1500	181	0.
1		0235	32	28.	1		0645	82	78.	1		1055	132	0.	1		1505	182	0.
1		0240	33	34.	1		0650	83	64.	1		1100	133	0.	1		1510	183	0.
1		0245	34	43.	1		0655	84	52.	1		1105	134	0.	1		1515	184	0.
1		0250	35	54.	1		0700	85	41.	1		1110	135	0.	1		1520	185	0.
1		0255	36	71.	1		0705	86	33.	1		1115	136	0.	1		1525	186	0.

1	0300	37	102.	*	1	0710	87	26.	*	1	1120	137	0.	*	1	1530	187	0.
1	0305	38	219.	*	1	0715	88	20.	*	1	1125	138	0.	*	1	1535	188	0.
1	0310	39	444.	*	1	0720	87	16.	*	1	1130	139	0.	*	1	1540	189	0.
1	0315	40	751.	*	1	0725	90	13.	*	1	1135	140	0.	*	1	1545	190	0.
1	0320	41	968.	*	1	0730	91	10.	*	1	1140	141	0.	*	1	1550	191	0.
1	0325	42	1102.	*	1	0735	92	8.	*	1	1145	142	0.	*	1	1555	192	0.
1	0330	43	1202.	*	1	0740	93	6.	*	1	1150	143	0.	*	1	1600	193	0.
1	0335	44	1266.	*	1	0745	94	5.	*	1	1155	144	0.	*	1	1605	194	0.
1	0340	45	1323.	*	1	0750	95	4.	*	1	1200	145	0.	*	1	1610	195	0.
1	0345	46	1337.	*	1	0755	96	3.	*	1	1205	146	0.	*	1	1615	196	0.
1	0350	47	1299.	*	1	0800	97	2.	*	1	1210	147	0.	*	1	1620	197	0.
1	0355	48	1215.	*	1	0805	98	2.	*	1	1215	148	0.	*	1	1625	198	0.
1	0400	49	1101.	*	1	0810	99	1.	*	1	1220	149	0.	*	1	1630	199	0.
1	0405	50	961.	*	1	0815	100	1.	*	1	1225	150	0.	*	1	1635	200	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	16.58-HR
1337.	3.75	319.	319.	116.	116.	116.
		(INCHES)	1.447	1.448	1.448	1.448
		(AC-FT)	158.	158.	158.	158.

CUMULATIVE AREA = 2.05 SQ MI

23 KK

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*****
* ROUTE2 *
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ROUTE OUTLET 2 TO BASIN 3 OUTLET

HYDROGRAPH ROUTING DATA

25 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .06 MUSKINGUM K
X         .40 MUSKINGUM X
    
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***** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE2.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE2

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0410	51	927.	*	1		0820	101	1.	*	1		1230	151	0.	*
1		0005	2	0.	*	1		0415	52	787.	*	1		0825	102	1.	*	1		1235	152	0.	*
1		0010	3	0.	*	1		0420	53	673.	*	1		0830	103	1.	*	1		1240	153	0.	*
1		0015	4	0.	*	1		0425	54	583.	*	1		0835	104	0.	*	1		1245	154	0.	*
1		0020	5	0.	*	1		0430	55	512.	*	1		0840	105	0.	*	1		1250	155	0.	*
1		0025	6	0.	*	1		0435	56	453.	*	1		0845	106	0.	*	1		1255	156	0.	*
1		0030	7	0.	*	1		0440	57	404.	*	1		0850	107	0.	*	1		1300	157	0.	*
1		0035	8	0.	*	1		0445	58	366.	*	1		0855	108	0.	*	1		1305	158	0.	*
1		0040	9	0.	*	1		0450	59	336.	*	1		0900	109	0.	*	1		1310	159	0.	*
1		0045	10	0.	*	1		0455	60	313.	*	1		0905	110	0.	*	1		1315	160	0.	*
1		0050	11	0.	*	1		0500	61	295.	*	1		0910	111	0.	*	1		1320	161	0.	*
1		0055	12	0.	*	1		0505	62	280.	*	1		0915	112	0.	*	1		1325	162	0.	*
1		0100	13	0.	*	1		0510	63	267.	*	1		0920	113	0.	*	1		1330	163	0.	*
1		0105	14	0.	*	1		0515	64	257.	*	1		0925	114	0.	*	1		1335	164	0.	*
1		0110	15	0.	*	1		0520	65	248.	*	1		0930	115	0.	*	1		1340	165	0.	*
1		0115	16	0.	*	1		0525	66	240.	*	1		0935	116	0.	*	1		1345	166	0.	*
1		0120	17	0.	*	1		0530	67	232.	*	1		0940	117	0.	*	1		1350	167	0.	*
1		0125	18	0.	*	1		0535	68	226.	*	1		0945	118	0.	*	1		1355	168	0.	*

1	0130	19	0.	*	1	0540	69	220.	*	1	0950	119	0.	*	1	1400	169	0.
1	0135	20	0.	*	1	0545	70	214.	*	1	0955	120	0.	*	1	1405	170	0.
1	0140	21	0.	*	1	0550	71	208.	*	1	1000	121	0.	*	1	1410	171	0.
1	0145	22	0.	*	1	0555	72	202.	*	1	1005	122	0.	*	1	1415	172	0.
1	0150	23	1.	*	1	0600	73	197.	*	1	1010	123	0.	*	1	1420	173	0.
1	0155	24	1.	*	1	0605	74	191.	*	1	1015	124	0.	*	1	1425	174	0.
1	0200	25	3.	*	1	0610	75	184.	*	1	1020	125	0.	*	1	1430	175	0.
1	0205	26	5.	*	1	0615	76	175.	*	1	1025	126	0.	*	1	1435	176	0.
1	0210	27	7.	*	1	0620	77	163.	*	1	1030	127	0.	*	1	1440	177	0.
1	0215	28	9.	*	1	0625	78	149.	*	1	1035	128	0.	*	1	1445	178	0.
1	0220	29	12.	*	1	0630	79	134.	*	1	1040	129	0.	*	1	1450	179	0.
1	0225	30	16.	*	1	0635	80	120.	*	1	1045	130	0.	*	1	1455	180	0.
1	0230	31	19.	*	1	0640	81	105.	*	1	1050	131	0.	*	1	1500	181	0.
1	0235	32	24.	*	1	0645	82	90.	*	1	1055	132	0.	*	1	1505	182	0.
1	0240	33	29.	*	1	0650	83	75.	*	1	1100	133	0.	*	1	1510	183	0.
1	0245	34	36.	*	1	0655	84	62.	*	1	1105	134	0.	*	1	1515	184	0.
1	0250	35	45.	*	1	0700	85	50.	*	1	1110	135	0.	*	1	1520	185	0.
1	0255	36	58.	*	1	0705	86	39.	*	1	1115	136	0.	*	1	1525	186	0.
1	0300	37	78.	*	1	0710	87	31.	*	1	1120	137	0.	*	1	1530	187	0.
1	0305	38	126.	*	1	0715	88	24.	*	1	1125	138	0.	*	1	1535	188	0.
1	0310	39	268.	*	1	0720	89	19.	*	1	1130	139	0.	*	1	1540	189	0.
1	0315	40	513.	*	1	0725	90	15.	*	1	1135	140	0.	*	1	1545	190	0.
1	0320	41	805.	*	1	0730	91	12.	*	1	1140	141	0.	*	1	1550	191	0.
1	0325	42	1002.	*	1	0735	92	10.	*	1	1145	142	0.	*	1	1555	192	0.
1	0330	43	1126.	*	1	0740	93	8.	*	1	1150	143	0.	*	1	1600	193	0.
1	0335	44	1218.	*	1	0745	94	6.	*	1	1155	144	0.	*	1	1605	194	0.
1	0340	45	1280.	*	1	0750	95	5.	*	1	1200	145	0.	*	1	1610	195	0.
1	0345	46	1328.	*	1	0755	96	4.	*	1	1205	146	0.	*	1	1615	196	0.
1	0350	47	1329.	*	1	0800	97	3.	*	1	1210	147	0.	*	1	1620	197	0.
1	0355	48	1281.	*	1	0805	98	2.	*	1	1215	148	0.	*	1	1625	198	0.
1	0400	49	1190.	*	1	0810	99	2.	*	1	1220	149	0.	*	1	1630	199	0.
1	0405	50	1069.	*	1	0815	100	1.	*	1	1225	150	0.	*	1	1635	200	0.

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	16.58-HR
1329.	3.83	(CFS) 319.	116.	116.	116.
		(INCHES) 1.447	1.448	1.448	1.448
		(AC-FT) 158.	158.	158.	158.

CUMULATIVE AREA = 2.05 SQ MI

26 KK

* AREA 3 *

BASIN NO. 3 RUNOFF

SUBBASIN RUNOFF DATA

28 BA

SUBBASIN CHARACTERISTICS
TAREA .24 SUBBASIN AREA

PRECIPITATION DATA

B PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

.....	HYDRO-35	.....	.....	TP-40	.....	TP-49	.....
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR
.90	1.20	1.60	1.80	2.00	2.50	.00	.00
						2-DAY	4-DAY
						.00	.00
						7-DAY	10-DAY
						.00	.00

STORM AREA = .24

29 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

UNIT HYDROGRAPH
21 END-OF-PERIOD ORDINATES

43.	137.	268.	322.	306.	250.	167.	111.	77.	53.
36.	24.	17.	11.	8.	5.	4.	3.	2.	1.
0.									

HYDROGRAPH AT STATION AREA 3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1	0820	101	101	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1	0825	102	102	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1	0830	103	103	.00	.00	.00	0.
1		0015	4	.01	.01	.00	0.	*	1	0835	104	104	.00	.00	.00	0.
1		0020	5	.01	.01	.00	0.	*	1	0840	105	105	.00	.00	.00	0.
1		0025	6	.01	.01	.00	0.	*	1	0845	106	106	.00	.00	.00	0.
1		0030	7	.01	.01	.00	0.	*	1	0850	107	107	.00	.00	.00	0.
1		0035	8	.01	.01	.00	0.	*	1	0855	108	108	.00	.00	.00	0.
1		0040	9	.01	.01	.00	0.	*	1	0900	109	109	.00	.00	.00	0.
1		0045	10	.01	.01	.00	0.	*	1	0905	110	110	.00	.00	.00	0.
1		0050	11	.01	.01	.00	0.	*	1	0910	111	111	.00	.00	.00	0.
1		0055	12	.01	.01	.00	0.	*	1	0915	112	112	.00	.00	.00	0.
1		0100	13	.01	.01	.00	0.	*	1	0920	113	113	.00	.00	.00	0.
1		0105	14	.01	.01	.00	0.	*	1	0925	114	114	.00	.00	.00	0.
1		0110	15	.02	.02	.00	0.	*	1	0930	115	115	.00	.00	.00	0.
1		0115	16	.02	.02	.00	0.	*	1	0935	116	116	.00	.00	.00	0.
1		0120	17	.02	.02	.00	0.	*	1	0940	117	117	.00	.00	.00	0.
1		0125	18	.02	.02	.00	0.	*	1	0945	118	118	.00	.00	.00	0.
1		0130	19	.02	.02	.00	0.	*	1	0950	119	119	.00	.00	.00	0.
1		0135	20	.01	.01	.00	0.	*	1	0955	120	120	.00	.00	.00	0.
1		0140	21	.02	.01	.00	0.	*	1	1000	121	121	.00	.00	.00	0.
1		0145	22	.02	.01	.00	0.	*	1	1005	122	122	.00	.00	.00	0.
1		0150	23	.02	.02	.00	0.	*	1	1010	123	123	.00	.00	.00	0.
1		0155	24	.02	.02	.00	1.	*	1	1015	124	124	.00	.00	.00	0.
1		0200	25	.02	.02	.00	1.	*	1	1020	125	125	.00	.00	.00	0.
1		0205	26	.01	.01	.00	2.	*	1	1025	126	126	.00	.00	.00	0.
1		0210	27	.01	.01	.00	2.	*	1	1030	127	127	.00	.00	.00	0.
1		0215	28	.02	.01	.00	3.	*	1	1035	128	128	.00	.00	.00	0.
1		0220	29	.02	.01	.00	3.	*	1	1040	129	129	.00	.00	.00	0.
1		0225	30	.02	.01	.00	4.	*	1	1045	130	130	.00	.00	.00	0.
1		0230	31	.02	.02	.01	5.	*	1	1050	131	131	.00	.00	.00	0.
1		0235	32	.03	.02	.01	6.	*	1	1055	132	132	.00	.00	.00	0.
1		0240	33	.03	.02	.01	7.	*	1	1100	133	133	.00	.00	.00	0.
1		0245	34	.04	.03	.01	9.	*	1	1105	134	134	.00	.00	.00	0.
1		0250	35	.05	.03	.02	11.	*	1	1110	135	135	.00	.00	.00	0.
1		0255	36	.08	.04	.03	16.	*	1	1115	136	136	.00	.00	.00	0.
1		0300	37	.18	.09	.09	24.	*	1	1120	137	137	.00	.00	.00	0.
1		0305	38	.90	.27	.63	63.	*	1	1125	138	138	.00	.00	.00	0.
1		0310	39	.12	.02	.10	137.	*	1	1130	139	139	.00	.00	.00	0.
1		0315	40	.06	.01	.05	231.	*	1	1135	140	140	.00	.00	.00	0.
1		0320	41	.04	.01	.04	278.	*	1	1140	141	141	.00	.00	.00	0.
1		0325	42	.03	.01	.03	275.	*	1	1145	142	142	.00	.00	.00	0.
1		0330	43	.03	.00	.02	239.	*	1	1150	143	143	.00	.00	.00	0.
1		0335	44	.02	.00	.02	183.	*	1	1155	144	144	.00	.00	.00	0.
1		0340	45	.02	.00	.02	139.	*	1	1200	145	145	.00	.00	.00	0.
1		0345	46	.02	.00	.01	108.	*	1	1205	146	146	.00	.00	.00	0.
1		0350	47	.02	.00	.01	84.	*	1	1210	147	147	.00	.00	.00	0.
1		0355	48	.01	.00	.01	67.	*	1	1215	148	148	.00	.00	.00	0.
1		0400	49	.01	.00	.01	54.	*	1	1220	149	149	.00	.00	.00	0.
1		0405	50	.02	.00	.02	44.	*	1	1225	150	150	.00	.00	.00	0.
1		0410	51	.02	.00	.02	38.	*	1	1230	151	151	.00	.00	.00	0.
1		0415	52	.02	.00	.01	34.	*	1	1235	152	152	.00	.00	.00	0.
1		0420	53	.02	.00	.01	32.	*	1	1240	153	153	.00	.00	.00	0.
1		0425	54	.02	.00	.01	30.	*	1	1245	154	154	.00	.00	.00	0.
1		0430	55	.01	.00	.01	29.	*	1	1250	155	155	.00	.00	.00	0.
1		0435	56	.02	.00	.02	28.	*	1	1255	156	156	.00	.00	.00	0.

1	0440	57	.02	.00	.01	27.	*	1	1300	157	.00	.00	.00	0.
1	0445	58	.02	.00	.01	26.	*	1	1305	158	.00	.00	.00	0.
1	0450	59	.02	.00	.01	26.	*	1	1310	159	.00	.00	.00	0.
1	0455	60	.02	.00	.01	26.	*	1	1315	160	.00	.00	.00	0.
1	0500	61	.02	.00	.01	26.	*	1	1320	161	.00	.00	.00	0.
1	0505	62	.01	.00	.01	26.	*	1	1325	162	.00	.00	.00	0.
1	0510	63	.01	.00	.01	25.	*	1	1330	163	.00	.00	.00	0.
1	0515	64	.01	.00	.01	25.	*	1	1335	164	.00	.00	.00	0.
1	0520	65	.01	.00	.01	24.	*	1	1340	165	.00	.00	.00	0.
1	0525	66	.01	.00	.01	24.	*	1	1345	166	.00	.00	.00	0.
1	0530	67	.01	.00	.01	23.	*	1	1350	167	.00	.00	.00	0.
1	0535	68	.01	.00	.01	22.	*	1	1355	168	.00	.00	.00	0.
1	0540	69	.01	.00	.01	22.	*	1	1400	169	.00	.00	.00	0.
1	0545	70	.01	.00	.01	21.	*	1	1405	170	.00	.00	.00	0.
1	0550	71	.01	.00	.01	21.	*	1	1410	171	.00	.00	.00	0.
1	0555	72	.01	.00	.01	20.	*	1	1415	172	.00	.00	.00	0.
1	0600	73	.01	.00	.01	20.	*	1	1420	173	.00	.00	.00	0.
1	0605	74	.00	.00	.00	19.	*	1	1425	174	.00	.00	.00	0.
1	0610	75	.00	.00	.00	19.	*	1	1430	175	.00	.00	.00	0.
1	0615	76	.00	.00	.00	15.	*	1	1435	176	.00	.00	.00	0.
1	0620	77	.00	.00	.00	11.	*	1	1440	177	.00	.00	.00	0.
1	0625	78	.00	.00	.00	8.	*	1	1445	178	.00	.00	.00	0.
1	0630	79	.00	.00	.00	5.	*	1	1450	179	.00	.00	.00	0.
1	0635	80	.00	.00	.00	4.	*	1	1455	180	.00	.00	.00	0.
1	0640	81	.00	.00	.00	2.	*	1	1500	181	.00	.00	.00	0.
1	0645	82	.00	.00	.00	2.	*	1	1505	182	.00	.00	.00	0.
1	0650	83	.00	.00	.00	1.	*	1	1510	183	.00	.00	.00	0.
1	0655	84	.00	.00	.00	1.	*	1	1515	184	.00	.00	.00	0.
1	0700	85	.00	.00	.00	1.	*	1	1520	185	.00	.00	.00	0.
1	0705	86	.00	.00	.00	0.	*	1	1525	186	.00	.00	.00	0.
1	0710	87	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	0.
1	0715	88	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	0.
1	0720	89	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	0.
1	0725	90	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	0.
1	0730	91	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	0.
1	0735	92	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	0.
1	0740	93	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	0.
1	0745	94	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	0.
1	0750	95	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	0.
1	0755	96	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	0.
1	0800	97	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	0.
1	0805	98	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	0.
1	0810	99	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	0.
1	0815	100	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	0.

 TOTAL RAINFALL = 2.50, TOTAL LOSS = 1.05, TOTAL EXCESS = 1.45

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	16.58-HR (INCHES)
278.	3.33	37.	1.453	1.453	1.453
			18.	18.	18.

CUMULATIVE AREA = .24 SQ MI

31 KK

 * OUTLT3 *

COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3

33 HC

HYDROGRAPH COMBINATION
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT3
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0410	51	965.	*	1		0820	101	1.	*	1		1230	151	0.
1		0005	2	0.	*	1		0415	52	821.	*	1		0825	102	1.	*	1		1235	152	0.
1		0010	3	0.	*	1		0420	53	705.	*	1		0830	103	1.	*	1		1240	153	0.
1		0015	4	0.	*	1		0425	54	613.	*	1		0835	104	0.	*	1		1245	154	0.
1		0020	5	0.	*	1		0430	55	541.	*	1		0840	105	0.	*	1		1250	155	0.
1		0025	6	0.	*	1		0435	56	481.	*	1		0845	106	0.	*	1		1255	156	0.
1		0030	7	0.	*	1		0440	57	431.	*	1		0850	107	0.	*	1		1300	157	0.
1		0035	8	0.	*	1		0445	58	392.	*	1		0855	108	0.	*	1		1305	158	0.
1		0040	9	0.	*	1		0450	59	363.	*	1		0900	109	0.	*	1		1310	159	0.
1		0045	10	0.	*	1		0455	60	339.	*	1		0905	110	0.	*	1		1315	160	0.
1		0050	11	0.	*	1		0500	61	321.	*	1		0910	111	0.	*	1		1320	161	0.
1		0055	12	0.	*	1		0505	62	306.	*	1		0915	112	0.	*	1		1325	162	0.
1		0100	13	0.	*	1		0510	63	293.	*	1		0920	113	0.	*	1		1330	163	0.
1		0105	14	0.	*	1		0515	64	281.	*	1		0925	114	0.	*	1		1335	164	0.
1		0110	15	0.	*	1		0520	65	272.	*	1		0930	115	0.	*	1		1340	165	0.
1		0115	16	0.	*	1		0525	66	263.	*	1		0935	116	0.	*	1		1345	166	0.
1		0120	17	0.	*	1		0530	67	255.	*	1		0940	117	0.	*	1		1350	167	0.
1		0125	18	0.	*	1		0535	68	248.	*	1		0945	118	0.	*	1		1355	168	0.
1		0130	19	0.	*	1		0540	69	242.	*	1		0950	119	0.	*	1		1400	169	0.
1		0135	20	0.	*	1		0545	70	235.	*	1		0955	120	0.	*	1		1405	170	0.
1		0140	21	0.	*	1		0550	71	229.	*	1		1000	121	0.	*	1		1410	171	0.
1		0145	22	0.	*	1		0555	72	223.	*	1		1005	122	0.	*	1		1415	172	0.
1		0150	23	1.	*	1		0600	73	217.	*	1		1010	123	0.	*	1		1420	173	0.
1		0155	24	2.	*	1		0605	74	210.	*	1		1015	124	0.	*	1		1425	174	0.
1		0200	25	4.	*	1		0610	75	202.	*	1		1020	125	0.	*	1		1430	175	0.
1		0205	26	6.	*	1		0615	76	189.	*	1		1025	126	0.	*	1		1435	176	0.
1		0210	27	9.	*	1		0620	77	174.	*	1		1030	127	0.	*	1		1440	177	0.
1		0215	28	12.	*	1		0625	78	157.	*	1		1035	128	0.	*	1		1445	178	0.
1		0220	29	16.	*	1		0630	79	140.	*	1		1040	129	0.	*	1		1450	179	0.
1		0225	30	20.	*	1		0635	80	123.	*	1		1045	130	0.	*	1		1455	180	0.
1		0230	31	24.	*	1		0640	81	107.	*	1		1050	131	0.	*	1		1500	181	0.
1		0235	32	29.	*	1		0645	82	91.	*	1		1055	132	0.	*	1		1505	182	0.
1		0240	33	36.	*	1		0650	83	76.	*	1		1100	133	0.	*	1		1510	183	0.
1		0245	34	45.	*	1		0655	84	62.	*	1		1105	134	0.	*	1		1515	184	0.
1		0250	35	57.	*	1		0700	85	50.	*	1		1110	135	0.	*	1		1520	185	0.
1		0255	36	74.	*	1		0705	86	40.	*	1		1115	136	0.	*	1		1525	186	0.
1		0300	37	102.	*	1		0710	87	31.	*	1		1120	137	0.	*	1		1530	187	0.
1		0305	38	189.	*	1		0715	88	25.	*	1		1125	138	0.	*	1		1535	188	0.
1		0310	39	405.	*	1		0720	89	19.	*	1		1130	139	0.	*	1		1540	189	0.
1		0315	40	744.	*	1		0725	90	15.	*	1		1135	140	0.	*	1		1545	190	0.
1		0320	41	1083.	*	1		0730	91	12.	*	1		1140	141	0.	*	1		1550	191	0.
1		0325	42	1277.	*	1		0735	92	10.	*	1		1145	142	0.	*	1		1555	192	0.
1		0330	43	1365.	*	1		0740	93	8.	*	1		1150	143	0.	*	1		1600	193	0.
1		0335	44	1401.	*	1		0745	94	6.	*	1		1155	144	0.	*	1		1605	194	0.
1		0340	45	1419.	*	1		0750	95	5.	*	1		1200	145	0.	*	1		1610	195	0.
1		0345	46	1436.	*	1		0755	96	4.	*	1		1205	146	0.	*	1		1615	196	0.
1		0350	47	1414.	*	1		0800	97	3.	*	1		1210	147	0.	*	1		1620	197	0.
1		0355	48	1348.	*	1		0805	98	2.	*	1		1215	148	0.	*	1		1625	198	0.
1		0400	49	1243.	*	1		0810	99	2.	*	1		1220	149	0.	*	1		1630	199	0.
1		0405	50	1114.	*	1		0815	100	1.	*	1		1225	150	0.	*	1		1635	200	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	16.58-HR
1436.	3.75	(CFS) 356.	129.	129.	129.
		(INCHES) 1.448	1.449	1.449	1.449
		(AC-FT) 177.	177.	177.	177.

CUMULATIVE AREA = 2.29 SQ MI

34 KK

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* ROUTE3 *
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ROUTE OUTLET 3 TO BASIN 4 OUTLET

HYDROGRAPH ROUTING DATA

36 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .13 MUSKINGUM K
X         .30 MUSKINGUM X
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HYDROGRAPH AT STATION ROUTE3

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0410	51	1169.	*	1		0820	101	2.	*	1		1230	151	0.	*
1		0005	2	0.	*	1		0415	52	1033.	*	1		0825	102	1.	*	1		1235	152	0.	*
1		0010	3	0.	*	1		0420	53	893.	*	1		0830	103	1.	*	1		1240	153	0.	*
1		0015	4	0.	*	1		0425	54	769.	*	1		0835	104	1.	*	1		1245	154	0.	*
1		0020	5	0.	*	1		0430	55	666.	*	1		0840	105	1.	*	1		1250	155	0.	*
1		0025	6	0.	*	1		0435	56	584.	*	1		0845	106	0.	*	1		1255	156	0.	*
1		0030	7	0.	*	1		0440	57	516.	*	1		0850	107	0.	*	1		1300	157	0.	*
1		0035	8	0.	*	1		0445	58	460.	*	1		0855	108	0.	*	1		1305	158	0.	*
1		0040	9	0.	*	1		0450	59	415.	*	1		0900	109	0.	*	1		1310	159	0.	*
1		0045	10	0.	*	1		0455	60	380.	*	1		0905	110	0.	*	1		1315	160	0.	*
1		0050	11	0.	*	1		0500	61	353.	*	1		0910	111	0.	*	1		1320	161	0.	*
1		0055	12	0.	*	1		0505	62	332.	*	1		0915	112	0.	*	1		1325	162	0.	*
1		0100	13	0.	*	1		0510	63	314.	*	1		0920	113	0.	*	1		1330	163	0.	*
1		0105	14	0.	*	1		0515	64	300.	*	1		0925	114	0.	*	1		1335	164	0.	*
1		0110	15	0.	*	1		0520	65	288.	*	1		0930	115	0.	*	1		1340	165	0.	*
1		0115	16	0.	*	1		0525	66	277.	*	1		0935	116	0.	*	1		1345	166	0.	*
1		0120	17	0.	*	1		0530	67	268.	*	1		0940	117	0.	*	1		1350	167	0.	*
1		0125	18	0.	*	1		0535	68	260.	*	1		0945	118	0.	*	1		1355	168	0.	*
1		0130	19	0.	*	1		0540	69	252.	*	1		0950	119	0.	*	1		1400	169	0.	*
1		0135	20	0.	*	1		0545	70	245.	*	1		0955	120	0.	*	1		1405	170	0.	*
1		0140	21	0.	*	1		0550	71	239.	*	1		1000	121	0.	*	1		1410	171	0.	*
1		0145	22	0.	*	1		0555	72	232.	*	1		1005	122	0.	*	1		1415	172	0.	*
1		0150	23	0.	*	1		0600	73	226.	*	1		1010	123	0.	*	1		1420	173	0.	*
1		0155	24	1.	*	1		0605	74	220.	*	1		1015	124	0.	*	1		1425	174	0.	*
1		0200	25	2.	*	1		0610	75	213.	*	1		1020	125	0.	*	1		1430	175	0.	*
1		0205	26	3.	*	1		0615	76	205.	*	1		1025	126	0.	*	1		1435	176	0.	*
1		0210	27	5.	*	1		0620	77	195.	*	1		1030	127	0.	*	1		1440	177	0.	*
1		0215	28	8.	*	1		0625	78	181.	*	1		1035	128	0.	*	1		1445	178	0.	*
1		0220	29	11.	*	1		0630	79	165.	*	1		1040	129	0.	*	1		1450	179	0.	*
1		0225	30	14.	*	1		0635	80	148.	*	1		1045	130	0.	*	1		1455	180	0.	*
1		0230	31	18.	*	1		0640	81	131.	*	1		1050	131	0.	*	1		1500	181	0.	*
1		0235	32	22.	*	1		0645	82	115.	*	1		1055	132	0.	*	1		1505	182	0.	*
1		0240	33	27.	*	1		0650	83	99.	*	1		1100	133	0.	*	1		1510	183	0.	*
1		0245	34	33.	*	1		0655	84	84.	*	1		1105	134	0.	*	1		1515	184	0.	*
1		0250	35	41.	*	1		0700	85	70.	*	1		1110	135	0.	*	1		1520	185	0.	*
1		0255	36	52.	*	1		0705	86	57.	*	1		1115	136	0.	*	1		1525	186	0.	*
1		0300	37	67.	*	1		0710	87	45.	*	1		1120	137	0.	*	1		1530	187	0.	*
1		0305	38	93.	*	1		0715	88	36.	*	1		1125	138	0.	*	1		1535	188	0.	*
1		0310	39	162.	*	1		0720	89	28.	*	1		1130	139	0.	*	1		1540	189	0.	*
1		0315	40	329.	*	1		0725	90	22.	*	1		1135	140	0.	*	1		1545	190	0.	*
1		0320	41	608.	*	1		0730	91	18.	*	1		1140	141	0.	*	1		1550	191	0.	*
1		0325	42	921.	*	1		0735	92	14.	*	1		1145	142	0.	*	1		1555	192	0.	*
1		0330	43	1154.	*	1		0740	93	11.	*	1		1150	143	0.	*	1		1600	193	0.	*
1		0335	44	1291.	*	1		0745	94	9.	*	1		1155	144	0.	*	1		1605	194	0.	*
1		0340	45	1362.	*	1		0750	95	7.	*	1		1200	145	0.	*	1		1610	195	0.	*
1		0345	46	1399.	*	1		0755	96	5.	*	1		1205	146	0.	*	1		1615	196	0.	*
1		0350	47	1422.	*	1		0800	97	4.	*	1		1210	147	0.	*	1		1620	197	0.	*
1		0355	48	1415.	*	1		0805	98	3.	*	1		1215	148	0.	*	1		1625	198	0.	*
1		0400	49	1368.	*	1		0810	99	3.	*	1		1220	149	0.	*	1		1630	199	0.	*
1		0405	50	1283.	*	1		0815	100	2.	*	1		1225	150	0.	*	1		1635	200	0.	*

```

PEAK FLOW      TIME      MAXIMUM AVERAGE FLOW
(CFS)          (HR)
1422.          3.83
              (CFS)
              (INCHES)
              (AC-FT)
    
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CUMULATIVE AREA = 2.29 SQ MI

37 KK

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*****
*           *
*   AREA 4   *
*           *
*****
    
```

BASIN NO. 4 RUNOFF

SUBBASIN RUNOFF DATA

39 BA

SUBBASIN CHARACTERISTICS
TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	2.00	2.50	.00	.00	.00	.00	.00	.00

STORM AREA = .60

40 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNB 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

41 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

121.	392.	739.	856.	780.	604.	381.	254.	174.	116.
78.	52.	34.	23.	16.	11.	8.	5.	3.	1.

HYDROGRAPH AT STATION AREA 4

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0820	101	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1		0825	102	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1		0830	103	.00	.00	.00	0.
1		0015	4	.01	.01	.00	0.	*	1		0835	104	.00	.00	.00	0.
1		0020	5	.01	.01	.00	0.	*	1		0840	105	.00	.00	.00	0.
1		0025	6	.01	.01	.00	0.	*	1		0845	106	.00	.00	.00	0.
1		0030	7	.01	.01	.00	0.	*	1		0850	107	.00	.00	.00	0.
1		0035	8	.01	.01	.00	0.	*	1		0855	108	.00	.00	.00	0.
1		0040	9	.01	.01	.00	0.	*	1		0900	109	.00	.00	.00	0.
1		0045	10	.01	.01	.00	0.	*	1		0905	110	.00	.00	.00	0.
1		0050	11	.01	.01	.00	0.	*	1		0910	111	.00	.00	.00	0.
1		0055	12	.01	.01	.00	0.	*	1		0915	112	.00	.00	.00	0.
1		0100	13	.01	.01	.00	0.	*	1		0920	113	.00	.00	.00	0.
1		0105	14	.01	.01	.00	0.	*	1		0925	114	.00	.00	.00	0.

1	0110	15	.02	.02	.00	0.	*	1	0930	115	.00	.00	.00	0.
1	0115	16	.02	.02	.00	0.	*	1	0935	116	.00	.00	.00	0.
1	0120	17	.02	.02	.00	0.	*	1	0940	117	.00	.00	.00	0.
1	0125	18	.02	.02	.00	0.	*	1	0945	118	.00	.00	.00	0.
1	0130	19	.02	.02	.00	0.	*	1	0950	119	.00	.00	.00	0.
1	0135	20	.01	.01	.00	0.	*	1	0955	120	.00	.00	.00	0.
1	0140	21	.02	.01	.00	0.	*	1	1000	121	.00	.00	.00	0.
1	0145	22	.02	.01	.00	0.	*	1	1005	122	.00	.00	.00	0.
1	0150	23	.02	.02	.00	1.	*	1	1010	123	.00	.00	.00	0.
1	0155	24	.02	.02	.00	2.	*	1	1015	124	.00	.00	.00	0.
1	0200	25	.02	.02	.00	3.	*	1	1020	125	.00	.00	.00	0.
1	0205	26	.01	.01	.00	5.	*	1	1025	126	.00	.00	.00	0.
1	0210	27	.01	.01	.00	6.	*	1	1030	127	.00	.00	.00	0.
1	0215	28	.02	.01	.00	8.	*	1	1035	128	.00	.00	.00	0.
1	0220	29	.02	.01	.00	9.	*	1	1040	129	.00	.00	.00	0.
1	0225	30	.02	.01	.00	10.	*	1	1045	130	.00	.00	.00	0.
1	0230	31	.02	.02	.01	12.	*	1	1050	131	.00	.00	.00	0.
1	0235	32	.03	.02	.01	15.	*	1	1055	132	.00	.00	.00	0.
1	0240	33	.03	.02	.01	18.	*	1	1100	133	.00	.00	.00	0.
1	0245	34	.04	.03	.01	23.	*	1	1105	134	.00	.00	.00	0.
1	0250	35	.05	.03	.02	30.	*	1	1110	135	.00	.00	.00	0.
1	0255	36	.08	.04	.03	42.	*	1	1115	136	.00	.00	.00	0.
1	0300	37	.18	.09	.09	66.	*	1	1120	137	.00	.00	.00	0.
1	0305	38	.90	.27	.62	173.	*	1	1125	138	.00	.00	.00	0.
1	0310	39	.12	.02	.10	381.	*	1	1130	139	.00	.00	.00	0.
1	0315	40	.06	.01	.05	629.	*	1	1135	140	.00	.00	.00	0.
1	0320	41	.04	.01	.04	735.	*	1	1140	141	.00	.00	.00	0.
1	0325	42	.03	.01	.03	702.	*	1	1145	142	.00	.00	.00	0.
1	0330	43	.03	.00	.02	587.	*	1	1150	143	.00	.00	.00	0.
1	0335	44	.02	.00	.02	434.	*	1	1155	144	.00	.00	.00	0.
1	0340	45	.02	.00	.02	329.	*	1	1200	145	.00	.00	.00	0.
1	0345	46	.02	.00	.01	255.	*	1	1205	146	.00	.00	.00	0.
1	0350	47	.02	.00	.01	197.	*	1	1210	147	.00	.00	.00	0.
1	0355	48	.01	.00	.01	156.	*	1	1215	148	.00	.00	.00	0.
1	0400	49	.01	.00	.01	125.	*	1	1220	149	.00	.00	.00	0.
1	0405	50	.02	.00	.02	104.	*	1	1225	150	.00	.00	.00	0.
1	0410	51	.02	.00	.02	90.	*	1	1230	151	.00	.00	.00	0.
1	0415	52	.02	.00	.01	82.	*	1	1235	152	.00	.00	.00	0.
1	0420	53	.02	.00	.01	78.	*	1	1240	153	.00	.00	.00	0.
1	0425	54	.02	.00	.01	75.	*	1	1245	154	.00	.00	.00	0.
1	0430	55	.01	.00	.01	72.	*	1	1250	155	.00	.00	.00	0.
1	0435	56	.02	.00	.02	49.	*	1	1255	156	.00	.00	.00	0.
1	0440	57	.02	.00	.01	0.	*	1	1300	157	.00	.00	.00	0.
1	0445	58	.02	.00	.01	60.	*	1	1305	158	.00	.00	.00	0.
1	0450	59	.02	.00	.01	66.	*	1	1310	159	.00	.00	.00	0.
1	0455	60	.02	.00	.01	66.	*	1	1315	160	.00	.00	.00	0.
1	0500	61	.02	.00	.01	65.	*	1	1320	161	.00	.00	.00	0.
1	0505	62	.01	.00	.01	64.	*	1	1325	162	.00	.00	.00	0.
1	0510	63	.01	.00	.01	63.	*	1	1330	163	.00	.00	.00	0.
1	0515	64	.01	.00	.01	62.	*	1	1335	164	.00	.00	.00	0.
1	0520	65	.01	.00	.01	60.	*	1	1340	165	.00	.00	.00	0.
1	0525	66	.01	.00	.01	59.	*	1	1345	166	.00	.00	.00	0.
1	0530	67	.01	.00	.01	58.	*	1	1350	167	.00	.00	.00	0.
1	0535	68	.01	.00	.01	56.	*	1	1355	168	.00	.00	.00	0.
1	0540	69	.01	.00	.01	55.	*	1	1400	169	.00	.00	.00	0.
1	0545	70	.01	.00	.01	54.	*	1	1405	170	.00	.00	.00	0.
1	0550	71	.01	.00	.01	52.	*	1	1410	171	.00	.00	.00	0.
1	0555	72	.01	.00	.01	51.	*	1	1415	172	.00	.00	.00	0.
1	0600	73	.01	.00	.01	50.	*	1	1420	173	.00	.00	.00	0.
1	0605	74	.00	.00	.00	48.	*	1	1425	174	.00	.00	.00	0.
1	0610	75	.00	.00	.00	43.	*	1	1430	175	.00	.00	.00	0.
1	0615	76	.00	.00	.00	35.	*	1	1435	176	.00	.00	.00	0.
1	0620	77	.00	.00	.00	26.	*	1	1440	177	.00	.00	.00	0.
1	0625	78	.00	.00	.00	18.	*	1	1445	178	.00	.00	.00	0.
1	0630	79	.00	.00	.00	12.	*	1	1450	179	.00	.00	.00	0.
1	0635	80	.00	.00	.00	8.	*	1	1455	180	.00	.00	.00	0.
1	0640	81	.00	.00	.00	5.	*	1	1500	181	.00	.00	.00	0.
1	0645	82	.00	.00	.00	4.	*	1	1505	182	.00	.00	.00	0.
1	0650	83	.00	.00	.00	2.	*	1	1510	183	.00	.00	.00	0.
1	0655	84	.00	.00	.00	2.	*	1	1515	184	.00	.00	.00	0.
1	0700	85	.00	.00	.00	1.	*	1	1520	185	.00	.00	.00	0.
1	0705	86	.00	.00	.00	1.	*	1	1525	186	.00	.00	.00	0.
1	0710	87	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	0.
1	0715	88	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	0.
1	0720	89	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	0.

1	0725	90	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	0.
1	0730	91	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	0.
1	0735	92	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	0.
1	0740	93	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	0.
1	0745	94	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	0.
1	0750	95	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	0.
1	0755	96	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	0.
1	0800	97	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	0.
1	0805	98	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	0.
1	0810	99	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	0.
1	0815	100	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	0.

TOTAL RAINFALL = 2.50, TOTAL LOSS = 1.04, TOTAL EXCESS = 1.45

PEAK FLOW (CFS)	TIME (HR)		6-HR	24-HR	72-HR	16.58-HR
735.	3.33	(CFS)	94.	34.	34.	34.
		(INCHES)	1.451	1.451	1.451	1.451
		(AC-FT)	46.	46.	46.	46.

CUMULATIVE AREA = .60 SQ MI

42 KK

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*****
*           *
*   OUTLT4 *
*           *
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COMBINE ROUTE 3 AND BASIN 4 TO OUTLET 4

44 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT4
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0410	51	1259.	*	1		0820	101	2.	*	1		1230	151	0.	*
1		0005	2	0.	*	1		0415	52	1115.	*	1		0825	102	1.	*	1		1235	152	0.	*
1		0010	3	0.	*	1		0420	53	970.	*	1		0830	103	1.	*	1		1240	153	0.	*
1		0015	4	0.	*	1		0425	54	843.	*	1		0835	104	1.	*	1		1245	154	0.	*
1		0020	5	0.	*	1		0430	55	738.	*	1		0840	105	1.	*	1		1250	155	0.	*
1		0025	6	0.	*	1		0435	56	652.	*	1		0845	106	0.	*	1		1255	156	0.	*
1		0030	7	0.	*	1		0440	57	582.	*	1		0850	107	0.	*	1		1300	157	0.	*
1		0035	8	0.	*	1		0445	58	525.	*	1		0855	108	0.	*	1		1305	158	0.	*
1		0040	9	0.	*	1		0450	59	481.	*	1		0900	109	0.	*	1		1310	159	0.	*
1		0045	10	0.	*	1		0455	60	446.	*	1		0905	110	0.	*	1		1315	160	0.	*
1		0050	11	0.	*	1		0500	61	419.	*	1		0910	111	0.	*	1		1320	161	0.	*
1		0055	12	0.	*	1		0505	62	396.	*	1		0915	112	0.	*	1		1325	162	0.	*
1		0100	13	0.	*	1		0510	63	378.	*	1		0920	113	0.	*	1		1330	163	0.	*
1		0105	14	0.	*	1		0515	64	362.	*	1		0925	114	0.	*	1		1335	164	0.	*
1		0110	15	0.	*	1		0520	65	348.	*	1		0930	115	0.	*	1		1340	165	0.	*
1		0115	16	0.	*	1		0525	66	336.	*	1		0935	116	0.	*	1		1345	166	0.	*
1		0120	17	0.	*	1		0530	67	326.	*	1		0940	117	0.	*	1		1350	167	0.	*
1		0125	18	0.	*	1		0535	68	316.	*	1		0945	118	0.	*	1		1355	168	0.	*
1		0130	19	0.	*	1		0540	69	307.	*	1		0950	119	0.	*	1		1400	169	0.	*
1		0135	20	0.	*	1		0545	70	299.	*	1		0955	120	0.	*	1		1405	170	0.	*
1		0140	21	0.	*	1		0550	71	291.	*	1		1000	121	0.	*	1		1410	171	0.	*
1		0145	22	1.	*	1		0555	72	284.	*	1		1005	122	0.	*	1		1415	172	0.	*
1		0150	23	1.	*	1		0600	73	276.	*	1		1010	123	0.	*	1		1420	173	0.	*
1		0155	24	3.	*	1		0605	74	268.	*	1		1015	124	0.	*	1		1425	174	0.	*

1	0200	25	5.	*	1	0610	75	257.	*	1	1020	125	0.	*	1	1430	175	0.
1	0205	26	8.	*	1	0615	76	241.	*	1	1025	126	0.	*	1	1435	176	0.
1	0210	27	12.	*	1	0620	77	221.	*	1	1030	127	0.	*	1	1440	177	0.
1	0215	28	16.	*	1	0625	78	199.	*	1	1035	128	0.	*	1	1445	178	0.
1	0220	29	20.	*	1	0630	79	177.	*	1	1040	129	0.	*	1	1450	179	0.
1	0225	30	24.	*	1	0635	80	156.	*	1	1045	130	0.	*	1	1455	180	0.
1	0230	31	30.	*	1	0640	81	137.	*	1	1050	131	0.	*	1	1500	181	0.
1	0235	32	36.	*	1	0645	82	119.	*	1	1055	132	0.	*	1	1505	182	0.
1	0240	33	45.	*	1	0650	83	102.	*	1	1100	133	0.	*	1	1510	183	0.
1	0245	34	56.	*	1	0655	84	85.	*	1	1105	134	0.	*	1	1515	184	0.
1	0250	35	71.	*	1	0700	85	71.	*	1	1110	135	0.	*	1	1520	185	0.
1	0255	36	94.	*	1	0705	86	57.	*	1	1115	136	0.	*	1	1525	186	0.
1	0300	37	132.	*	1	0710	87	46.	*	1	1120	137	0.	*	1	1530	187	0.
1	0305	38	266.	*	1	0715	88	36.	*	1	1125	138	0.	*	1	1535	188	0.
1	0310	39	543.	*	1	0720	89	29.	*	1	1130	139	0.	*	1	1540	189	0.
1	0315	40	959.	*	1	0725	90	23.	*	1	1135	140	0.	*	1	1545	190	0.
1	0320	41	1343.	*	1	0730	91	18.	*	1	1140	141	0.	*	1	1550	191	0.
1	0325	42	1623.	*	1	0735	92	14.	*	1	1145	142	0.	*	1	1555	192	0.
1	0330	43	1740.	*	1	0740	93	11.	*	1	1150	143	0.	*	1	1600	193	0.
1	0335	44	1725.	*	1	0745	94	9.	*	1	1155	144	0.	*	1	1605	194	0.
1	0340	45	1691.	*	1	0750	95	7.	*	1	1200	145	0.	*	1	1610	195	0.
1	0345	46	1654.	*	1	0755	96	5.	*	1	1205	146	0.	*	1	1615	196	0.
1	0350	47	1619.	*	1	0800	97	4.	*	1	1210	147	0.	*	1	1620	197	0.
1	0355	48	1571.	*	1	0805	98	3.	*	1	1215	148	0.	*	1	1625	198	0.
1	0400	49	1494.	*	1	0810	99	3.	*	1	1220	149	0.	*	1	1630	199	0.
1	0405	50	1387.	*	1	0815	100	2.	*	1	1225	150	0.	*	1	1635	200	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	16.58-HR
1740.	3.50	450.	1.448	163.	163.	163.
		(AC-FT)	223.	223.	223.	223.

CUMULATIVE AREA = 2.89 SQ MI

45 KK

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*                               *
* ROUTE4                         *
*                               *
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ROUTE OUTLET 4 TO BASIN 5 OUTLET

HYDROGRAPH ROUTING DATA

47 RM

MUSKINGUM ROUTING

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NSTPS      2 NUMBER OF SUBREACHES
AMSKK     .36 MUSKINGUM K
X         .20 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE4

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0410	51	1571.	1		0820	101	6.	1		1230	151	0.
1		0005	2	0.	1		0415	52	1524.	1		0825	102	5.	1		1235	152	0.
1		0010	3	0.	1		0420	53	1453.	1		0830	103	4.	1		1240	153	0.
1		0015	4	0.	1		0425	54	1360.	1		0835	104	3.	1		1245	154	0.
1		0020	5	0.	1		0430	55	1250.	1		0840	105	2.	1		1250	155	0.
1		0025	6	0.	1		0435	56	1132.	1		0845	106	2.	1		1255	156	0.
1		0030	7	0.	1		0440	57	1015.	1		0850	107	1.	1		1300	157	0.
1		0035	8	0.	1		0445	58	904.	1		0855	108	1.	1		1305	158	0.

1	0040	9	0.	*	1	0450	59	805.	*	1	0900	109	1.	*	1	1310	159	0.
1	0045	10	0.	*	1	0455	60	717.	*	1	0905	110	1.	*	1	1315	160	0.
1	0050	11	0.	*	1	0500	61	642.	*	1	0910	111	0.	*	1	1320	161	0.
1	0055	12	0.	*	1	0505	62	579.	*	1	0915	112	0.	*	1	1325	162	0.
1	0100	13	0.	*	1	0510	63	527.	*	1	0920	113	0.	*	1	1330	163	0.
1	0105	14	0.	*	1	0515	64	485.	*	1	0925	114	0.	*	1	1335	164	0.
1	0110	15	0.	*	1	0520	65	450.	*	1	0930	115	0.	*	1	1340	165	0.
1	0115	16	0.	*	1	0525	66	421.	*	1	0935	116	0.	*	1	1345	166	0.
1	0120	17	0.	*	1	0530	67	397.	*	1	0940	117	0.	*	1	1350	167	0.
1	0125	18	0.	*	1	0535	68	378.	*	1	0945	118	0.	*	1	1355	168	0.
1	0130	19	0.	*	1	0540	69	361.	*	1	0950	119	0.	*	1	1400	169	0.
1	0135	20	0.	*	1	0545	70	347.	*	1	0955	120	0.	*	1	1405	170	0.
1	0140	21	0.	*	1	0550	71	334.	*	1	1000	121	0.	*	1	1410	171	0.
1	0145	22	0.	*	1	0555	72	323.	*	1	1005	122	0.	*	1	1415	172	0.
1	0150	23	0.	*	1	0600	73	313.	*	1	1010	123	0.	*	1	1420	173	0.
1	0155	24	0.	*	1	0605	74	304.	*	1	1015	124	0.	*	1	1425	174	0.
1	0200	25	1.	*	1	0610	75	295.	*	1	1020	125	0.	*	1	1430	175	0.
1	0205	26	1.	*	1	0615	76	287.	*	1	1025	126	0.	*	1	1435	176	0.
1	0210	27	2.	*	1	0620	77	278.	*	1	1030	127	0.	*	1	1440	177	0.
1	0215	28	4.	*	1	0625	78	267.	*	1	1035	128	0.	*	1	1445	178	0.
1	0220	29	6.	*	1	0630	79	254.	*	1	1040	129	0.	*	1	1450	179	0.
1	0225	30	9.	*	1	0635	80	238.	*	1	1045	130	0.	*	1	1455	180	0.
1	0230	31	12.	*	1	0640	81	221.	*	1	1050	131	0.	*	1	1500	181	0.
1	0235	32	16.	*	1	0645	82	202.	*	1	1055	132	0.	*	1	1505	182	0.
1	0240	33	20.	*	1	0650	83	182.	*	1	1100	133	0.	*	1	1510	183	0.
1	0245	34	25.	*	1	0655	84	163.	*	1	1105	134	0.	*	1	1515	184	0.
1	0250	35	30.	*	1	0700	85	145.	*	1	1110	135	0.	*	1	1520	185	0.
1	0255	36	38.	*	1	0705	86	127.	*	1	1115	136	0.	*	1	1525	186	0.
1	0300	37	47.	*	1	0710	87	110.	*	1	1120	137	0.	*	1	1530	187	0.
1	0305	38	61.	*	1	0715	88	94.	*	1	1125	138	0.	*	1	1535	188	0.
1	0310	39	83.	*	1	0720	89	79.	*	1	1130	139	0.	*	1	1540	189	0.
1	0315	40	134.	*	1	0725	90	66.	*	1	1135	140	0.	*	1	1545	190	0.
1	0320	41	243.	*	1	0730	91	54.	*	1	1140	141	0.	*	1	1550	191	0.
1	0325	42	430.	*	1	0735	92	44.	*	1	1145	142	0.	*	1	1555	192	0.
1	0330	43	677.	*	1	0740	93	36.	*	1	1150	143	0.	*	1	1600	193	0.
1	0335	44	945.	*	1	0745	94	29.	*	1	1155	144	0.	*	1	1605	194	0.
1	0340	45	1186.	*	1	0750	95	23.	*	1	1200	145	0.	*	1	1610	195	0.
1	0345	46	1367.	*	1	0755	96	18.	*	1	1205	146	0.	*	1	1615	196	0.
1	0350	47	1486.	*	1	0800	97	15.	*	1	1210	147	0.	*	1	1620	197	0.
1	0355	48	1555.	*	1	0805	98	12.	*	1	1215	148	0.	*	1	1625	198	0.
1	0400	49	1588.	*	1	0810	99	9.	*	1	1220	149	0.	*	1	1630	199	0.
1	0405	50	1592.	*	1	0815	100	7.	*	1	1225	150	0.	*	1	1635	200	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		(CFS)	6-HR	24-HR	72-HR	16.58-HR
1592.	4.08	450.	163.	163.	163.	
		(INCHES)	1.448	1.449	1.449	1.449
		(AC-FT)	223.	223.	223.	223.

CUMULATIVE AREA = 2.89 SQ MI

48 KK

* *
* AREA 5 *
* *

BASIN NO. 5 RUNOFF

SUBBASIN RUNOFF DATA

50 BA

SUBBASIN CHARACTERISTICS
TAREA .59 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM
..... HYDRO-35 TP-40 TP-49

5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-H 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
 .90 1.20 1.60 1.80 2.00 2.20 .00 .00 .00 .00 .00 .00

STORM AREA = .59

51 LS SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

52 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH
 20 END-OF-PERIOD ORDINATES

119. 384. 725. 839. 764. 591. 373. 249. 170. 113.
 76. 51. 34. 23. 15. 10. 7. 5. 3. 1.

HYDROGRAPH AT STATION AREA 5

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q
1		0000	1	.00	.00	.00	0.	*		1		0820	101	.00	.00	.00	0.	
1		0005	2	.01	.01	.00	0.	*		1		0825	102	.00	.00	.00	0.	
1		0010	3	.01	.01	.00	0.	*		1		0830	103	.00	.00	.00	0.	
1		0015	4	.01	.01	.00	0.	*		1		0835	104	.00	.00	.00	0.	
1		0020	5	.01	.01	.00	0.	*		1		0840	105	.00	.00	.00	0.	
1		0025	6	.01	.01	.00	0.	*		1		0845	106	.00	.00	.00	0.	
1		0030	7	.01	.01	.00	0.	*		1		0850	107	.00	.00	.00	0.	
1		0035	8	.01	.01	.00	0.	*		1		0855	108	.00	.00	.00	0.	
1		0040	9	.01	.01	.00	0.	*		1		0900	109	.00	.00	.00	0.	
1		0045	10	.01	.01	.00	0.	*		1		0905	110	.00	.00	.00	0.	
1		0050	11	.01	.01	.00	0.	*		1		0910	111	.00	.00	.00	0.	
1		0055	12	.01	.01	.00	0.	*		1		0915	112	.00	.00	.00	0.	
1		0100	13	.01	.01	.00	0.	*		1		0920	113	.00	.00	.00	0.	
1		0105	14	.01	.01	.00	0.	*		1		0925	114	.00	.00	.00	0.	
1		0110	15	.02	.02	.00	0.	*		1		0930	115	.00	.00	.00	0.	
1		0115	16	.02	.02	.00	0.	*		1		0935	116	.00	.00	.00	0.	
1		0120	17	.02	.02	.00	0.	*		1		0940	117	.00	.00	.00	0.	
1		0125	18	.02	.02	.00	0.	*		1		0945	118	.00	.00	.00	0.	
1		0130	19	.02	.02	.00	0.	*		1		0950	119	.00	.00	.00	0.	
1		0135	20	.01	.01	.00	0.	*		1		0955	120	.00	.00	.00	0.	
1		0140	21	.02	.02	.00	0.	*		1		1000	121	.00	.00	.00	0.	
1		0145	22	.02	.02	.00	0.	*		1		1005	122	.00	.00	.00	0.	
1		0150	23	.02	.02	.00	0.	*		1		1010	123	.00	.00	.00	0.	
1		0155	24	.02	.02	.00	0.	*		1		1015	124	.00	.00	.00	0.	
1		0200	25	.02	.02	.00	0.	*		1		1020	125	.00	.00	.00	0.	
1		0205	26	.01	.01	.00	0.	*		1		1025	126	.00	.00	.00	0.	
1		0210	27	.01	.01	.00	0.	*		1		1030	127	.00	.00	.00	0.	
1		0215	28	.02	.01	.00	0.	*		1		1035	128	.00	.00	.00	0.	
1		0220	29	.02	.02	.00	0.	*		1		1040	129	.00	.00	.00	0.	
1		0225	30	.02	.02	.00	1.	*		1		1045	130	.00	.00	.00	0.	
1		0230	31	.02	.02	.00	2.	*		1		1050	131	.00	.00	.00	0.	
1		0235	32	.03	.02	.00	3.	*		1		1055	132	.00	.00	.00	0.	
1		0240	33	.03	.03	.00	5.	*		1		1100	133	.00	.00	.00	0.	
1		0245	34	.04	.03	.01	8.	*		1		1105	134	.00	.00	.00	0.	
1		0250	35	.05	.04	.01	12.	*		1		1110	135	.00	.00	.00	0.	
1		0255	36	.08	.06	.02	19.	*		1		1115	136	.00	.00	.00	0.	
1		0300	37	.18	.12	.06	35.	*		1		1120	137	.00	.00	.00	0.	
1		0305	38	.90	.39	.51	116.	*		1		1125	138	.00	.00	.00	0.	
1		0310	39	.12	.04	.09	280.	*		1		1130	139	.00	.00	.00	0.	
1		0315	40	.06	.02	.05	481.	*		1		1135	140	.00	.00	.00	0.	
1		0320	41	.04	.01	.03	572.	*		1		1140	141	.00	.00	.00	0.	
1		0325	42	.03	.01	.03	554.	*		1		1145	142	.00	.00	.00	0.	
1		0330	43	.03	.01	.02	468.	*		1		1150	143	.00	.00	.00	0.	
1		0335	44	.02	.01	.02	350.	*		1		1155	144	.00	.00	.00	0.	
1		0340	45	.02	.00	.01	267.	*		1		1200	145	.00	.00	.00	0.	
1		0345	46	.02	.00	.01	209.	*		1		1205	146	.00	.00	.00	0.	
1		0350	47	.02	.00	.01	163.	*		1		1210	147	.00	.00	.00	0.	

1	0355	48	.01	.00	.01	130.	*	1	1215	148	.00	.00	.00	0.
1	0400	49	.01	.00	.01	105.	*	1	1220	149	.00	.00	.00	0.
1	0405	50	.02	.00	.01	88.	*	1	1225	150	.00	.00	.00	0.
1	0410	51	.02	.00	.01	77.	*	1	1230	151	.00	.00	.00	0.
1	0415	52	.02	.00	.01	71.	*	1	1235	152	.00	.00	.00	0.
1	0420	53	.02	.00	.01	67.	*	1	1240	153	.00	.00	.00	0.
1	0425	54	.02	.00	.01	65.	*	1	1245	154	.00	.00	.00	0.
1	0430	55	.01	.00	.01	63.	*	1	1250	155	.00	.00	.00	0.
1	0435	56	.02	.00	.01	60.	*	1	1255	156	.00	.00	.00	0.
1	0440	57	.02	.00	.01	58.	*	1	1300	157	.00	.00	.00	0.
1	0445	58	.02	.00	.01	58.	*	1	1305	158	.00	.00	.00	0.
1	0450	59	.02	.00	.01	58.	*	1	1310	159	.00	.00	.00	0.
1	0455	60	.02	.00	.01	58.	*	1	1315	160	.00	.00	.00	0.
1	0500	61	.02	.00	.01	58.	*	1	1320	161	.00	.00	.00	0.
1	0505	62	.01	.00	.01	57.	*	1	1325	162	.00	.00	.00	0.
1	0510	63	.01	.00	.01	56.	*	1	1330	163	.00	.00	.00	0.
1	0515	64	.01	.00	.01	55.	*	1	1335	164	.00	.00	.00	0.
1	0520	65	.01	.00	.01	53.	*	1	1340	165	.00	.00	.00	0.
1	0525	66	.01	.00	.01	52.	*	1	1345	166	.00	.00	.00	0.
1	0530	67	.01	.00	.01	51.	*	1	1350	167	.00	.00	.00	0.
1	0535	68	.01	.00	.01	50.	*	1	1355	168	.00	.00	.00	0.
1	0540	69	.01	.00	.01	49.	*	1	1400	169	.00	.00	.00	0.
1	0545	70	.01	.00	.01	48.	*	1	1405	170	.00	.00	.00	0.
1	0550	71	.01	.00	.01	47.	*	1	1410	171	.00	.00	.00	0.
1	0555	72	.01	.00	.01	46.	*	1	1415	172	.00	.00	.00	0.
1	0600	73	.01	.00	.01	45.	*	1	1420	173	.00	.00	.00	0.
1	0605	74	.00	.00	.00	43.	*	1	1425	174	.00	.00	.00	0.
1	0610	75	.00	.00	.00	39.	*	1	1430	175	.00	.00	.00	0.
1	0615	76	.00	.00	.00	31.	*	1	1435	176	.00	.00	.00	0.
1	0620	77	.00	.00	.00	23.	*	1	1440	177	.00	.00	.00	0.
1	0625	78	.00	.00	.00	16.	*	1	1445	178	.00	.00	.00	0.
1	0630	79	.00	.00	.00	11.	*	1	1450	179	.00	.00	.00	0.
1	0635	80	.00	.00	.00	7.	*	1	1455	180	.00	.00	.00	0.
1	0640	81	.00	.00	.00	5.	*	1	1500	181	.00	.00	.00	0.
1	0645	82	.00	.00	.00	3.	*	1	1505	182	.00	.00	.00	0.
1	0650	83	.00	.00	.00	2.	*	1	1510	183	.00	.00	.00	0.
1	0655	84	.00	.00	.00	1.	*	1	1515	184	.00	.00	.00	0.
1	0700	85	.00	.00	.00	1.	*	1	1520	185	.00	.00	.00	0.
1	0705	86	.00	.00	.00	1.	*	1	1525	186	.00	.00	.00	0.
1	0710	87	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	0.
1	0715	88	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	0.
1	0720	89	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	0.
1	0725	90	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	0.
1	0730	91	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	0.
1	0735	92	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	0.
1	0740	93	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	0.
1	0745	94	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	0.
1	0750	95	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	0.
1	0755	96	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	0.
1	0800	97	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	0.
1	0805	98	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	0.
1	0810	99	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	0.
1	0815	100	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	0.

 TOTAL RAINFALL = 2.50, TOTAL LOSS = 1.32, TOTAL EXCESS = 1.18

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
572.	3.33	6-HR	24-HR	72-HR	16.58-HR
		(CFS)	74.	27.	27.
		(INCHES)	1.175	1.175	1.175
		(AC-FT)	37.	37.	37.

CUMULATIVE AREA = .59 SQ MI

53 KK * OUTLTS *

*

COMBINE ROUTE 4 AND BASIN 5 TO OUTLET 5

55 HC

HYDROGRAPH COMBINATION
ICOMP

2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT5
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0410	51	1648.	*	1		0820	101	6.	*	1		1230	151	0.
1		0005	2	0.	*	1		0415	52	1595.	*	1		0825	102	5.	*	1		1235	152	0.
1		0010	3	0.	*	1		0420	53	1520.	*	1		0830	103	4.	*	1		1240	153	0.
1		0015	4	0.	*	1		0425	54	1424.	*	1		0835	104	3.	*	1		1245	154	0.
1		0020	5	0.	*	1		0430	55	1312.	*	1		0840	105	2.	*	1		1250	155	0.
1		0025	6	0.	*	1		0435	56	1192.	*	1		0845	106	2.	*	1		1255	156	0.
1		0030	7	0.	*	1		0440	57	1073.	*	1		0850	107	1.	*	1		1300	157	0.
1		0035	8	0.	*	1		0445	58	962.	*	1		0855	108	1.	*	1		1305	158	0.
1		0040	9	0.	*	1		0450	59	862.	*	1		0900	109	1.	*	1		1310	159	0.
1		0045	10	0.	*	1		0455	60	775.	*	1		0905	110	1.	*	1		1315	160	0.
1		0050	11	0.	*	1		0500	61	699.	*	1		0910	111	0.	*	1		1320	161	0.
1		0055	12	0.	*	1		0505	62	636.	*	1		0915	112	0.	*	1		1325	162	0.
1		0100	13	0.	*	1		0510	63	583.	*	1		0920	113	0.	*	1		1330	163	0.
1		0105	14	0.	*	1		0515	64	539.	*	1		0925	114	0.	*	1		1335	164	0.
1		0110	15	0.	*	1		0520	65	503.	*	1		0930	115	0.	*	1		1340	165	0.
1		0115	16	0.	*	1		0525	66	473.	*	1		0935	116	0.	*	1		1345	166	0.
1		0120	17	0.	*	1		0530	67	448.	*	1		0940	117	0.	*	1		1350	167	0.
1		0125	18	0.	*	1		0535	68	427.	*	1		0945	118	0.	*	1		1355	168	0.
1		0130	19	0.	*	1		0540	69	410.	*	1		0950	119	0.	*	1		1400	169	0.
1		0135	20	0.	*	1		0545	70	394.	*	1		0955	120	0.	*	1		1405	170	0.
1		0140	21	0.	*	1		0550	71	381.	*	1		1000	121	0.	*	1		1410	171	0.
1		0145	22	0.	*	1		0555	72	369.	*	1		1005	122	0.	*	1		1415	172	0.
1		0150	23	0.	*	1		0600	73	358.	*	1		1010	123	0.	*	1		1420	173	0.
1		0155	24	0.	*	1		0605	74	347.	*	1		1015	124	0.	*	1		1425	174	0.
1		0200	25	1.	*	1		0610	75	334.	*	1		1020	125	0.	*	1		1430	175	0.
1		0205	26	1.	*	1		0615	76	318.	*	1		1025	126	0.	*	1		1435	176	0.
1		0210	27	2.	*	1		0620	77	301.	*	1		1030	127	0.	*	1		1440	177	0.
1		0215	28	4.	*	1		0625	78	283.	*	1		1035	128	0.	*	1		1445	178	0.
1		0220	29	7.	*	1		0630	79	264.	*	1		1040	129	0.	*	1		1450	179	0.
1		0225	30	10.	*	1		0635	80	245.	*	1		1045	130	0.	*	1		1455	180	0.
1		0230	31	14.	*	1		0640	81	225.	*	1		1050	131	0.	*	1		1500	181	0.
1		0235	32	19.	*	1		0645	82	205.	*	1		1055	132	0.	*	1		1505	182	0.
1		0240	33	25.	*	1		0650	83	185.	*	1		1100	133	0.	*	1		1510	183	0.
1		0245	34	32.	*	1		0655	84	165.	*	1		1105	134	0.	*	1		1515	184	0.
1		0250	35	43.	*	1		0700	85	146.	*	1		1110	135	0.	*	1		1520	185	0.
1		0255	36	57.	*	1		0705	86	127.	*	1		1115	136	0.	*	1		1525	186	0.
1		0300	37	82.	*	1		0710	87	110.	*	1		1120	137	0.	*	1		1530	187	0.
1		0305	38	177.	*	1		0715	88	94.	*	1		1125	138	0.	*	1		1535	188	0.
1		0310	39	363.	*	1		0720	89	79.	*	1		1130	139	0.	*	1		1540	189	0.
1		0315	40	615.	*	1		0725	90	66.	*	1		1135	140	0.	*	1		1545	190	0.
1		0320	41	815.	*	1		0730	91	54.	*	1		1140	141	0.	*	1		1550	191	0.
1		0325	42	983.	*	1		0735	92	44.	*	1		1145	142	0.	*	1		1555	192	0.
1		0330	43	1145.	*	1		0740	93	36.	*	1		1150	143	0.	*	1		1600	193	0.
1		0335	44	1295.	*	1		0745	94	29.	*	1		1155	144	0.	*	1		1605	194	0.
1		0340	45	1454.	*	1		0750	95	23.	*	1		1200	145	0.	*	1		1610	195	0.
1		0345	46	1575.	*	1		0755	96	18.	*	1		1205	146	0.	*	1		1615	196	0.
1		0350	47	1649.	*	1		0800	97	15.	*	1		1210	147	0.	*	1		1620	197	0.
1		0355	48	1685.	*	1		0805	98	12.	*	1		1215	148	0.	*	1		1625	198	0.
1		0400	49	1693.	*	1		0810	99	9.	*	1		1220	149	0.	*	1		1630	199	0.
1		0405	50	1680.	*	1		0815	100	7.	*	1		1225	150	0.	*	1		1635	200	0.

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	16.58-HR
1693.	4.00	(CFS) 524.	190.	190.	190.
		(INCHES) 1.402	1.403	1.403	1.403

CUMULATIVE AREA = 3.48 SQ MI

56 KK

* ROUTE5 *

ROUTE OUTLET 5 TO BASIN 6 OUTLET

HYDROGRAPH ROUTING DATA

58 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
AMSKK .11 MUSKINGUM K
X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTES

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0410	51	1675.	*	1		0820	101	8.	*	1		1230	151	0.
1		0005	2	0.	*	1		0415	52	1650.	*	1		0825	102	6.	*	1		1235	152	0.
1		0010	3	0.	*	1		0420	53	1603.	*	1		0830	103	5.	*	1		1240	153	0.
1		0015	4	0.	*	1		0425	54	1536.	*	1		0835	104	4.	*	1		1245	154	0.
1		0020	5	0.	*	1		0430	55	1448.	*	1		0840	105	3.	*	1		1250	155	0.
1		0025	6	0.	*	1		0435	56	1343.	*	1		0845	106	2.	*	1		1255	156	0.
1		0030	7	0.	*	1		0440	57	1229.	*	1		0850	107	2.	*	1		1300	157	0.
1		0035	8	0.	*	1		0445	58	1113.	*	1		0855	108	2.	*	1		1305	158	0.
1		0040	9	0.	*	1		0450	59	1002.	*	1		0900	109	1.	*	1		1310	159	0.
1		0045	10	0.	*	1		0455	60	900.	*	1		0905	110	1.	*	1		1315	160	0.
1		0050	11	0.	*	1		0500	61	809.	*	1		0910	111	1.	*	1		1320	161	0.
1		0055	12	0.	*	1		0505	62	729.	*	1		0915	112	1.	*	1		1325	162	0.
1		0100	13	0.	*	1		0510	63	662.	*	1		0920	113	0.	*	1		1330	163	0.
1		0105	14	0.	*	1		0515	64	605.	*	1		0925	114	0.	*	1		1335	164	0.
1		0110	15	0.	*	1		0520	65	557.	*	1		0930	115	0.	*	1		1340	165	0.
1		0115	16	0.	*	1		0525	66	518.	*	1		0935	116	0.	*	1		1345	166	0.
1		0120	17	0.	*	1		0530	67	486.	*	1		0940	117	0.	*	1		1350	167	0.
1		0125	18	0.	*	1		0535	68	459.	*	1		0945	118	0.	*	1		1355	168	0.
1		0130	19	0.	*	1		0540	69	436.	*	1		0950	119	0.	*	1		1400	169	0.
1		0135	20	0.	*	1		0545	70	417.	*	1		0955	120	0.	*	1		1405	170	0.
1		0140	21	0.	*	1		0550	71	400.	*	1		1000	121	0.	*	1		1410	171	0.
1		0145	22	0.	*	1		0555	72	386.	*	1		1005	122	0.	*	1		1415	172	0.
1		0150	23	0.	*	1		0600	73	373.	*	1		1010	123	0.	*	1		1420	173	0.
1		0155	24	0.	*	1		0605	74	362.	*	1		1015	124	0.	*	1		1425	174	0.
1		0200	25	0.	*	1		0610	75	350.	*	1		1020	125	0.	*	1		1430	175	0.
1		0205	26	1.	*	1		0615	76	337.	*	1		1025	126	0.	*	1		1435	176	0.
1		0210	27	1.	*	1		0620	77	323.	*	1		1030	127	0.	*	1		1440	177	0.
1		0215	28	2.	*	1		0625	78	306.	*	1		1035	128	0.	*	1		1445	178	0.
1		0220	29	4.	*	1		0630	79	289.	*	1		1040	129	0.	*	1		1450	179	0.
1		0225	30	6.	*	1		0635	80	270.	*	1		1045	130	0.	*	1		1455	180	0.
1		0230	31	9.	*	1		0640	81	251.	*	1		1050	131	0.	*	1		1500	181	0.
1		0235	32	13.	*	1		0645	82	232.	*	1		1055	132	0.	*	1		1505	182	0.
1		0240	33	17.	*	1		0650	83	211.	*	1		1100	133	0.	*	1		1510	183	0.
1		0245	34	23.	*	1		0655	84	191.	*	1		1105	134	0.	*	1		1515	184	0.
1		0250	35	31.	*	1		0700	85	171.	*	1		1110	135	0.	*	1		1520	185	0.
1		0255	36	40.	*	1		0705	86	152.	*	1		1115	136	0.	*	1		1525	186	0.
1		0300	37	55.	*	1		0710	87	134.	*	1		1120	137	0.	*	1		1530	187	0.
1		0305	38	86.	*	1		0715	88	116.	*	1		1125	138	0.	*	1		1535	188	0.
1		0310	39	172.	*	1		0720	89	100.	*	1		1130	139	0.	*	1		1540	189	0.
1		0315	40	332.	*	1		0725	90	85.	*	1		1135	140	0.	*	1		1545	190	0.
1		0320	41	543.	*	1		0730	91	71.	*	1		1140	141	0.	*	1		1550	191	0.

1	0325	42	742.	*	1	0735	92	59.	*	1	1145	142	0.	*	1	1555	192	0.
1	0330	43	920.	*	1	0740	93	48.	*	1	1150	143	0.	*	1	1600	193	0.
1	0335	44	1086.	*	1	0745	94	39.	*	1	1155	144	0.	*	1	1605	194	0.
1	0340	45	1243.	*	1	0750	95	32.	*	1	1200	145	0.	*	1	1610	195	0.
1	0345	46	1396.	*	1	0755	96	25.	*	1	1205	146	0.	*	1	1615	196	0.
1	0350	47	1522.	*	1	0800	97	20.	*	1	1210	147	0.	*	1	1620	197	0.
1	0355	48	1608.	*	1	0805	98	16.	*	1	1215	148	0.	*	1	1625	198	0.
1	0400	49	1659.	*	1	0810	99	13.	*	1	1220	149	0.	*	1	1630	199	0.
1	0405	50	1679.	*	1	0815	100	10.	*	1	1225	150	0.	*	1	1635	200	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	16.58-HR
1679.	4.08	(CFS) 524.	190.	190.	190.
		(INCHES) 1.402	1.403	1.403	1.403
		(AC-FT) 260.	260.	260.	260.

CUMULATIVE AREA = 3.48 SQ MI

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*
* AREA 6
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59 KK

BASIN NO. 6 RUNOFF

SUBBASIN RUNOFF DATA

61 BA

SUBBASIN CHARACTERISTICS
TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

8 PH

HYDRO-35		DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM						TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	2.00	2.50	.00	.00	.00	.00	.00	.00

STORM AREA = .40

62 LS

SCS LOSS RATE
STRTL .35 INITIAL ABSTRACTION
CRVNR 85.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

63 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

79.	256.	486.	567.	521.	407.	259.	173.	119.	79.
54.	36.	24.	16.	11.	7.	5.	4.	2.	1.

HYDROGRAPH AT STATION AREA 6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	1		0820	101	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	1		0825	102	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	1		0830	103	.00	.00	.00	0.
1		0015	4	.01	.01	.00	0.	1		0835	104	.00	.00	.00	0.
1		0020	5	.01	.01	.00	0.	1		0840	105	.00	.00	.00	0.

1	0025	6	.01	.01	.00	0.	*	1	0845	106	.00	.00	.00	0.
1	0030	7	.01	.01	.00	0.	*	1	0850	107	.00	.00	.00	0.
1	0035	8	.01	.01	.00	0.	*	1	0855	108	.00	.00	.00	0.
1	0040	9	.01	.01	.00	0.	*	1	0900	109	.00	.00	.00	0.
1	0045	10	.01	.01	.00	0.	*	1	0905	110	.00	.00	.00	0.
1	0050	11	.01	.01	.00	0.	*	1	0910	111	.00	.00	.00	0.
1	0055	12	.01	.01	.00	0.	*	1	0915	112	.00	.00	.00	0.
1	0100	13	.01	.01	.00	0.	*	1	0920	113	.00	.00	.00	0.
1	0105	14	.01	.01	.00	0.	*	1	0925	114	.00	.00	.00	0.
1	0110	15	.02	.02	.00	0.	*	1	0930	115	.00	.00	.00	0.
1	0115	16	.02	.02	.00	0.	*	1	0935	116	.00	.00	.00	0.
1	0120	17	.02	.02	.00	0.	*	1	0940	117	.00	.00	.00	0.
1	0125	18	.02	.02	.00	0.	*	1	0945	118	.00	.00	.00	0.
1	0130	19	.02	.02	.00	0.	*	1	0950	119	.00	.00	.00	0.
1	0135	20	.01	.01	.00	0.	*	1	0955	120	.00	.00	.00	0.
1	0140	21	.02	.02	.00	0.	*	1	1000	121	.00	.00	.00	0.
1	0145	22	.02	.02	.00	0.	*	1	1005	122	.00	.00	.00	0.
1	0150	23	.02	.02	.00	0.	*	1	1010	123	.00	.00	.00	0.
1	0155	24	.02	.02	.00	0.	*	1	1015	124	.00	.00	.00	0.
1	0200	25	.02	.02	.00	0.	*	1	1020	125	.00	.00	.00	0.
1	0205	26	.01	.01	.00	0.	*	1	1025	126	.00	.00	.00	0.
1	0210	27	.01	.01	.00	0.	*	1	1030	127	.00	.00	.00	0.
1	0215	28	.02	.01	.00	0.	*	1	1035	128	.00	.00	.00	0.
1	0220	29	.02	.02	.00	0.	*	1	1040	129	.00	.00	.00	0.
1	0225	30	.02	.02	.00	1.	*	1	1045	130	.00	.00	.00	0.
1	0230	31	.02	.02	.00	1.	*	1	1050	131	.00	.00	.00	0.
1	0235	32	.03	.02	.00	2.	*	1	1055	132	.00	.00	.00	0.
1	0240	33	.03	.03	.00	3.	*	1	1100	133	.00	.00	.00	0.
1	0245	34	.04	.03	.01	5.	*	1	1105	134	.00	.00	.00	0.
1	0250	35	.05	.04	.01	8.	*	1	1110	135	.00	.00	.00	0.
1	0255	36	.08	.06	.02	13.	*	1	1115	136	.00	.00	.00	0.
1	0300	37	.18	.12	.06	23.	*	1	1120	137	.00	.00	.00	0.
1	0305	38	.90	.39	.51	78.	*	1	1125	138	.00	.00	.00	0.
1	0310	39	.12	.04	.09	187.	*	1	1130	139	.00	.00	.00	0.
1	0315	40	.06	.02	.05	324.	*	1	1135	140	.00	.00	.00	0.
1	0320	41	.04	.01	.03	387.	*	1	1140	141	.00	.00	.00	0.
1	0325	42	.03	.01	.03	378.	*	1	1145	142	.00	.00	.00	0.
1	0330	43	.03	.01	.02	321.	*	1	1150	143	.00	.00	.00	0.
1	0335	44	.02	.01	.02	241.	*	1	1155	144	.00	.00	.00	0.
1	0340	45	.02	.00	.01	185.	*	1	1200	145	.00	.00	.00	0.
1	0345	46	.02	.00	.01	144.	*	1	1205	146	.00	.00	.00	0.
1	0350	47	.02	.00	.01	113.	*	1	1210	147	.00	.00	.00	0.
1	0355	48	.01	.00	.01	90.	*	1	1215	148	.00	.00	.00	0.
1	0400	49	.01	.00	.01	73.	*	1	1220	149	.00	.00	.00	0.
1	0405	50	.02	.00	.01	61.	*	1	1225	150	.00	.00	.00	0.
1	0410	51	.02	.00	.01	53.	*	1	1230	151	.00	.00	.00	0.
1	0415	52	.02	.00	.01	49.	*	1	1235	152	.00	.00	.00	0.
1	0420	53	.02	.00	.01	46.	*	1	1240	153	.00	.00	.00	0.
1	0425	54	.02	.00	.01	44.	*	1	1245	154	.00	.00	.00	0.
1	0430	55	.01	.00	.01	43.	*	1	1250	155	.00	.00	.00	0.
1	0435	56	.02	.00	.01	41.	*	1	1255	156	.00	.00	.00	0.
1	0440	57	.02	.00	.01	40.	*	1	1300	157	.00	.00	.00	0.
1	0445	58	.02	.00	.01	39.	*	1	1305	158	.00	.00	.00	0.
1	0450	59	.02	.00	.01	39.	*	1	1310	159	.00	.00	.00	0.
1	0455	60	.02	.00	.01	39.	*	1	1315	160	.00	.00	.00	0.
1	0500	61	.02	.00	.01	39.	*	1	1320	161	.00	.00	.00	0.
1	0505	62	.01	.00	.01	39.	*	1	1325	162	.00	.00	.00	0.
1	0510	63	.01	.00	.01	38.	*	1	1330	163	.00	.00	.00	0.
1	0515	64	.01	.00	.01	37.	*	1	1335	164	.00	.00	.00	0.
1	0520	65	.01	.00	.01	36.	*	1	1340	165	.00	.00	.00	0.
1	0525	66	.01	.00	.01	36.	*	1	1345	166	.00	.00	.00	0.
1	0530	67	.01	.00	.01	35.	*	1	1350	167	.00	.00	.00	0.
1	0535	68	.01	.00	.01	34.	*	1	1355	168	.00	.00	.00	0.
1	0540	69	.01	.00	.01	33.	*	1	1400	169	.00	.00	.00	0.
1	0545	70	.01	.00	.01	33.	*	1	1405	170	.00	.00	.00	0.
1	0550	71	.01	.00	.01	32.	*	1	1410	171	.00	.00	.00	0.
1	0555	72	.01	.00	.01	31.	*	1	1415	172	.00	.00	.00	0.
1	0600	73	.01	.00	.01	31.	*	1	1420	173	.00	.00	.00	0.
1	0605	74	.00	.00	.00	29.	*	1	1425	174	.00	.00	.00	0.
1	0610	75	.00	.00	.00	26.	*	1	1430	175	.00	.00	.00	0.
1	0615	76	.00	.00	.00	22.	*	1	1435	176	.00	.00	.00	0.
1	0620	77	.00	.00	.00	16.	*	1	1440	177	.00	.00	.00	0.
1	0625	78	.00	.00	.00	11.	*	1	1445	178	.00	.00	.00	0.
1	0630	79	.00	.00	.00	7.	*	1	1450	179	.00	.00	.00	0.
1	0635	80	.00	.00	.00	5.	*	1	1455	180	.00	.00	.00	0.

1	0640	81	.00	.00	.00	3.	*	1	1500	181	.00	.00	.00	0.
1	0645	82	.00	.00	.00	2.	*	1	1505	182	.00	.00	.00	0.
1	0650	83	.00	.00	.00	1.	*	1	1510	183	.00	.00	.00	0.
1	0655	84	.00	.00	.00	1.	*	1	1515	184	.00	.00	.00	0.
1	0700	85	.00	.00	.00	1.	*	1	1520	185	.00	.00	.00	0.
1	0705	86	.00	.00	.00	0.	*	1	1525	186	.00	.00	.00	0.
1	0710	87	.00	.00	.00	0.	*	1	1530	187	.00	.00	.00	0.
1	0715	88	.00	.00	.00	0.	*	1	1535	188	.00	.00	.00	0.
1	0720	89	.00	.00	.00	0.	*	1	1540	189	.00	.00	.00	0.
1	0725	90	.00	.00	.00	0.	*	1	1545	190	.00	.00	.00	0.
1	0730	91	.00	.00	.00	0.	*	1	1550	191	.00	.00	.00	0.
1	0735	92	.00	.00	.00	0.	*	1	1555	192	.00	.00	.00	0.
1	0740	93	.00	.00	.00	0.	*	1	1600	193	.00	.00	.00	0.
1	0745	94	.00	.00	.00	0.	*	1	1605	194	.00	.00	.00	0.
1	0750	95	.00	.00	.00	0.	*	1	1610	195	.00	.00	.00	0.
1	0755	96	.00	.00	.00	0.	*	1	1615	196	.00	.00	.00	0.
1	0800	97	.00	.00	.00	0.	*	1	1620	197	.00	.00	.00	0.
1	0805	98	.00	.00	.00	0.	*	1	1625	198	.00	.00	.00	0.
1	0810	99	.00	.00	.00	0.	*	1	1630	199	.00	.00	.00	0.
1	0815	100	.00	.00	.00	0.	*	1	1635	200	.00	.00	.00	0.

TOTAL RAINFALL = 2.50, TOTAL LOSS = 1.32, TOTAL EXCESS = 1.18

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	16.58-HR
387.	3.33	51.	18.	18.	18.	18.
		(INCHES)	1.176	1.176	1.176	1.176
		(AC-FT)	25.	25.	25.	25.

CUMULATIVE AREA = .40 SQ MI

64 KK

* OUTLT6 *

COMBINE ROUTE 5 AND BASIN 6 TO OUTLET 6

66 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT6
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0410	51	1728.	*	1		0820	101	8.	*	1		1230	151	0.	*
1		0005	2	0.	*	1		0415	52	1698.	*	1		0825	102	6.	*	1		1235	152	0.	*
1		0010	3	0.	*	1		0420	53	1649.	*	1		0830	103	5.	*	1		1240	153	0.	*
1		0015	4	0.	*	1		0425	54	1580.	*	1		0835	104	4.	*	1		1245	154	0.	*
1		0020	5	0.	*	1		0430	55	1491.	*	1		0840	105	3.	*	1		1250	155	0.	*
1		0025	6	0.	*	1		0435	56	1384.	*	1		0845	106	2.	*	1		1255	156	0.	*
1		0030	7	0.	*	1		0440	57	1269.	*	1		0850	107	2.	*	1		1300	157	0.	*
1		0035	8	0.	*	1		0445	58	1152.	*	1		0855	108	2.	*	1		1305	158	0.	*
1		0040	9	0.	*	1		0450	59	1041.	*	1		0900	109	1.	*	1		1310	159	0.	*
1		0045	10	0.	*	1		0455	60	939.	*	1		0905	110	1.	*	1		1315	160	0.	*
1		0050	11	0.	*	1		0500	61	848.	*	1		0910	111	1.	*	1		1320	161	0.	*
1		0055	12	0.	*	1		0505	62	768.	*	1		0915	112	1.	*	1		1325	162	0.	*
1		0100	13	0.	*	1		0510	63	700.	*	1		0920	113	0.	*	1		1330	163	0.	*
1		0105	14	0.	*	1		0515	64	642.	*	1		0925	114	0.	*	1		1335	164	0.	*
1		0110	15	0.	*	1		0520	65	594.	*	1		0930	115	0.	*	1		1340	165	0.	*

1	0115	16	0.	*	1	0525	66	554.	*	1	0935	116	0.	*	1	1347	166	0.
1	0120	17	0.	*	1	0530	67	521.	*	1	0940	117	0.	*	1	1350	167	0.
1	0125	18	0.	*	1	0535	68	493.	*	1	0945	118	0.	*	1	1355	168	0.
1	0130	19	0.	*	1	0540	69	469.	*	1	0950	119	0.	*	1	1400	169	0.
1	0135	20	0.	*	1	0545	70	449.	*	1	0955	120	0.	*	1	1405	170	0.
1	0140	21	0.	*	1	0550	71	432.	*	1	1000	121	0.	*	1	1410	171	0.
1	0145	22	0.	*	1	0555	72	417.	*	1	1005	122	0.	*	1	1415	172	0.
1	0150	23	0.	*	1	0600	73	404.	*	1	1010	123	0.	*	1	1420	173	0.
1	0155	24	0.	*	1	0605	74	391.	*	1	1015	124	0.	*	1	1425	174	0.
1	0200	25	0.	*	1	0610	75	377.	*	1	1020	125	0.	*	1	1430	175	0.
1	0205	26	1.	*	1	0615	76	359.	*	1	1025	126	0.	*	1	1435	176	0.
1	0210	27	1.	*	1	0620	77	339.	*	1	1030	127	0.	*	1	1440	177	0.
1	0215	28	2.	*	1	0625	78	317.	*	1	1035	128	0.	*	1	1445	178	0.
1	0220	29	4.	*	1	0630	79	296.	*	1	1040	129	0.	*	1	1450	179	0.
1	0225	30	7.	*	1	0635	80	275.	*	1	1045	130	0.	*	1	1455	180	0.
1	0230	31	10.	*	1	0640	81	255.	*	1	1050	131	0.	*	1	1500	181	0.
1	0235	32	15.	*	1	0645	82	234.	*	1	1055	132	0.	*	1	1505	182	0.
1	0240	33	21.	*	1	0650	83	213.	*	1	1100	133	0.	*	1	1510	183	0.
1	0245	34	28.	*	1	0655	84	192.	*	1	1105	134	0.	*	1	1515	184	0.
1	0250	35	39.	*	1	0700	85	172.	*	1	1110	135	0.	*	1	1520	185	0.
1	0255	36	53.	*	1	0705	86	153.	*	1	1115	136	0.	*	1	1525	186	0.
1	0300	37	78.	*	1	0710	87	134.	*	1	1120	137	0.	*	1	1530	187	0.
1	0305	38	164.	*	1	0715	88	116.	*	1	1125	138	0.	*	1	1535	188	0.
1	0310	39	360.	*	1	0720	89	100.	*	1	1130	139	0.	*	1	1540	189	0.
1	0315	40	655.	*	1	0725	90	85.	*	1	1135	140	0.	*	1	1545	190	0.
1	0320	41	930.	*	1	0730	91	71.	*	1	1140	141	0.	*	1	1550	191	0.
1	0325	42	1119.	*	1	0735	92	59.	*	1	1145	142	0.	*	1	1555	192	0.
1	0330	43	1242.	*	1	0740	93	48.	*	1	1150	143	0.	*	1	1600	193	0.
1	0335	44	1327.	*	1	0745	94	39.	*	1	1155	144	0.	*	1	1605	194	0.
1	0340	45	1428.	*	1	0750	95	32.	*	1	1200	145	0.	*	1	1610	195	0.
1	0345	46	1540.	*	1	0755	96	25.	*	1	1205	146	0.	*	1	1615	196	0.
1	0350	47	1634.	*	1	0800	97	20.	*	1	1210	147	0.	*	1	1620	197	0.
1	0355	48	1698.	*	1	0805	98	16.	*	1	1215	148	0.	*	1	1625	198	0.
1	0400	49	1732.	*	1	0810	99	13.	*	1	1220	149	0.	*	1	1630	199	0.
1	0405	50	1740.	*	1	0815	100	10.	*	1	1225	150	0.	*	1	1635	200	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	16.58-HR
1740.	4.08	(CFS) 575.	208.	208.	208.
		(INCHES) 1.378	1.380	1.380	1.380
		(AC-FT) 285.	285.	285.	285.

CUMULATIVE AREA = 3.88 SQ MI

RUNOFF SUMMARY
 FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW 6-HOUR	MAXIMUM FLOW 24-HOUR	PERIOD 72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	AREA 1	1109.	3.67	225.	81.	81.	1.45		
ROUTED TO	ROUTE1	1098.	3.83	225.	81.	81.	1.45		
HYDROGRAPH AT	AREA 2	733.	3.33	94.	34.	34.	.60		
2 COMBINED AT	OUTLT2	1337.	3.75	319.	116.	116.	2.05		
ROUTED TO	ROUTE2	1329.	3.83	319.	116.	116.	2.05		
HYDROGRAPH AT	AREA 3	278.	3.33	37.	13.	13.	.24		
2 COMBINED AT	OUTLT3	1436.	3.75	356.	129.	129.	2.29		
ROUTED TO	ROUTE3	1422.	3.83	356.	129.	129.	2.29		
HYDROGRAPH AT	AREA 4	735.	3.33	94.	34.	34.	.60		
2 COMBINED AT	OUTLT4	1740.	3.50	450.	163.	163.	2.89		
ROUTED TO	ROUTE4	1592.	4.08	450.	163.	163.	2.89		
HYDROGRAPH AT	AREA 5	572.	3.33	74.	27.	27.	.59		
2 COMBINED AT	OUTLT5	1693.	4.00	524.	190.	190.	3.48		
ROUTED TO	ROUTE5	1679.	4.08	524.	190.	190.	3.48		
HYDROGRAPH AT	AREA 6	387.	3.33	51.	18.	18.	.40		
2 COMBINED AT	OUTLT6	1740.	4.08	575.	208.	208.	3.88		

*** NORMAL END OF HEC-1 ***

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*****
FLOOD HYDROGRAPH PACKAGE (HEC-1) *
  SEPTEMBER 1990 *
  VERSION 4.0 *
RUN DATE 08/27/1993 TIME 09:27:00 *
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*****
U.S. ARMY CORPS OF ENGINEERS *
HYDROLOGIC ENGINEERING CENTER *
  609 SECOND STREET *
  DAVIS, CALIFORNIA 95616 *
  (916) 756-1104 *
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X   X  XXXXXXX  XXXXX      X
X   X  X      X   X      XX
X   X  X      X           X
XXXXXXX XXXX  X           XXXXX X
X   X  X      X           X
X   X  X      X   X      X
X   X  XXXXXXX  XXXXX      XXX

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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
 CINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	CHURCH ROCK, NEW MEXICO									15608-01
2	ID	25-YEAR, 2-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC=11									
3	ID	FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. UFANINIUM MINE									
4	IT	5	100								
5	TD	0									
6	KK	AREA 1									
7	KM	BASIN NO. 1 RUNOFF									
8	PH	4	0	0.9	1.2	1.6	1.8				
9	BA	1.447									
10	LS	0	89								
11	UD	0.552									
12	KK	ROUTE1									
13	KM	ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET									
14	RM	2	0.19	0.4							
15	KK	AREA 2									
16	KM	BASIN NO. 2 RUNOFF									
17	BA	0.604									
18	LS	0	89								
19	UD	0.3									
20	KK	OUTLT2									
21	KM	COMBINE ROUTE 1 AND BASIN TO OUTLET 2									
22	HC	2									
23	KK	ROUTE2									
24	KM	ROUTE OUTLET 2 TO BASIN 3 OUTLET									
25	RM	1	0.064	0.4							
26	KK	AREA 3									
27	KM	BASIN NO. 3 RUNOFF									
28	BA	0.231									
29	LS	0	89								
30	UC	0.313									
31	KK	OUTLT3									
32	KM	COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3									
33	HC	2									
34	KK	ROUTE3									
35	KM	ROUTE OUTLET 3 TO BASIN 4 OUTLET									
36	RM	1	0.125	0.3							
37	KK	AREA 4									
38	KM	BASIN NO. 4 RUNOFF									
39	BA	0.6									
40	LS	0	89								
41	UD	0.297									

FLOOD HYDROGRAPH PACKAGE (HEC-1)
SEPTEMBER 1990
VERSION 4.0

RUN DATE 08/27/1993 TIME 09:27:08

U.S. ARMY CORPS OF ENGINEERS
HYDROLOGIC ENGINEERING CENTER
609 SECOND STREET
DAVIS, CALIFORNIA 95616
(916) 756-1104

CHURCH ROCK, NEW MEXICO 15608-01
25-YEAR, 2-HOUR HYPOTHETICAL STORM BALANCED STORM DISTRIBUTION AMC-II
FOR ARROYO (TRIBUTARY TO PUERCO RIVER) ADJACENT TO HRI, INC. URANINIUM MINE

5 IO OUTPUT CONTROL VARIABLES
IPRNT 0 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA
NMIN 5 MINUTES IN COMPUTATION INTERVAL
IDATE 1 0 STARTING DATE
ITIME 0000 STARTING TIME
NQ 100 NUMBER OF HYDROGRAPH ORDINATES
NDDATE 1 0 ENDING DATE
NDTIME 0815 ENDING TIME
ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 8.25 HOURS

ENGLISH UNITS
DRAINAGE AREA SQUARE MILES
PRECIPITATION DEPTH INCHES
LENGTH, ELEVATION FEET
FLOW CUBIC FEET PER SECOND
STORAGE VOLUME ACRE-Feet
SURFACE AREA ACRES
TEMPERATURE DEGREES FAHRENHEIT

6 KK * AREA 1 *

BASIN NO. 1 RUNOFF

SUBBASIN RUNOFF DATA

9 BA SUBBASIN CHARACTERISTICS
TAREA 1.45 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM
..... HYDRO-35 TP-40 TP-49
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
.90 1.20 1.60 1.80 .00 .00 .00 .00 .00 .00 .00 .00

STORM AREA = 1.45

10 LS SCS LOSS RATE
STRFL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AFEA

UNIT HYDROGRAPH
35 END-OF-PERIOD ORDINATES

69.	203.	405.	691.	968.	1125.	1175.	1149.	1043.	914.
738.	560.	442.	350.	284.	227.	178.	143.	114.	90.
72.	57.	45.	36.	29.	23.	18.	15.	12.	10.
8.	6.	4.	3.	1.					

HYDROGRAPH AT STATION AREA 1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0410	51	.00	.00	.00	1.
1		0005	2	.01	.01	.00	0.	*	1		0415	52	.00	.00	.00	1.
1		0010	3	.01	.01	.00	0.	*	1		0420	53	.00	.00	.00	1.
1		0015	4	.02	.02	.00	0.	*	1		0425	54	.00	.00	.00	0.
1		0020	5	.02	.02	.00	0.	*	1		0430	55	.00	.00	.00	0.
1		0025	6	.02	.02	.00	0.	*	1		0435	56	.00	.00	.00	0.
1		0030	7	.02	.02	.00	0.	*	1		0440	57	.00	.00	.00	0.
1		0035	8	.03	.03	.00	0.	*	1		0445	58	.00	.00	.00	0.
1		0040	9	.03	.03	.00	0.	*	1		0450	59	.00	.00	.00	0.
1		0045	10	.04	.04	.00	0.	*	1		0455	60	.00	.00	.00	0.
1		0050	11	.05	.05	.00	0.	*	1		0500	61	.00	.00	.00	0.
1		0055	12	.08	.07	.00	0.	*	1		0505	62	.00	.00	.00	0.
1		0100	13	.18	.14	.04	4.	*	1		0510	63	.00	.00	.00	0.
1		0105	14	.89	.38	.51	45.	*	1		0515	64	.00	.00	.00	0.
1		0110	15	.12	.03	.09	129.	*	1		0520	65	.00	.00	.00	0.
1		0115	16	.06	.01	.05	259.	*	1		0525	66	.00	.00	.00	0.
1		0120	17	.04	.01	.03	443.	*	1		0530	67	.00	.00	.00	0.
1		0125	18	.04	.01	.03	632.	*	1		0535	68	.00	.00	.00	0.
1		0130	19	.03	.01	.02	764.	*	1		0540	69	.00	.00	.00	0.
1		0135	20	.02	.00	.02	835.	*	1		0545	70	.00	.00	.00	0.
1		0140	21	.02	.00	.02	854.	*	1		0550	71	.00	.00	.00	0.
1		0145	22	.02	.00	.01	821.	*	1		0555	72	.00	.00	.00	0.
1		0150	23	.02	.00	.01	760.	*	1		0600	73	.00	.00	.00	0.
1		0155	24	.01	.00	.01	665.	*	1		0605	74	.00	.00	.00	0.
1		0200	25	.01	.00	.01	560.	*	1		0610	75	.00	.00	.00	0.
1		0205	26	.00	.00	.00	478.	*	1		0615	76	.00	.00	.00	0.
1		0210	27	.00	.00	.00	410.	*	1		0620	77	.00	.00	.00	0.
1		0215	28	.00	.00	.00	353.	*	1		0625	78	.00	.00	.00	0.
1		0220	29	.00	.00	.00	300.	*	1		0630	79	.00	.00	.00	0.
1		0225	30	.00	.00	.00	250.	*	1		0635	80	.00	.00	.00	0.
1		0230	31	.00	.00	.00	207.	*	1		0640	81	.00	.00	.00	0.
1		0235	32	.00	.00	.00	170.	*	1		0645	82	.00	.00	.00	0.
1		0240	33	.00	.00	.00	137.	*	1		0650	83	.00	.00	.00	0.
1		0245	34	.00	.00	.00	110.	*	1		0655	84	.00	.00	.00	0.
1		0250	35	.00	.00	.00	87.	*	1		0700	85	.00	.00	.00	0.
1		0255	36	.00	.00	.00	69.	*	1		0705	86	.00	.00	.00	0.
1		0300	37	.00	.00	.00	55.	*	1		0710	87	.00	.00	.00	0.
1		0305	38	.00	.00	.00	44.	*	1		0715	88	.00	.00	.00	0.
1		0310	39	.00	.00	.00	35.	*	1		0720	89	.00	.00	.00	0.
1		0315	40	.00	.00	.00	28.	*	1		0725	90	.00	.00	.00	0.
1		0320	41	.00	.00	.00	22.	*	1		0730	91	.00	.00	.00	0.
1		0325	42	.00	.00	.00	18.	*	1		0735	92	.00	.00	.00	0.
1		0330	43	.00	.00	.00	14.	*	1		0740	93	.00	.00	.00	0.
1		0335	44	.00	.00	.00	12.	*	1		0745	94	.00	.00	.00	0.
1		0340	45	.00	.00	.00	9.	*	1		0750	95	.00	.00	.00	0.
1		0345	46	.00	.00	.00	7.	*	1		0755	96	.00	.00	.00	0.
1		0350	47	.00	.00	.00	5.	*	1		0800	97	.00	.00	.00	0.
1		0355	48	.00	.00	.00	3.	*	1		0805	98	.00	.00	.00	0.
1		0400	49	.00	.00	.00	2.	*	1		0810	99	.00	.00	.00	0.
1		0405	50	.00	.00	.00	2.	*	1		0815	100	.00	.00	.00	0.

TOTAL RAINFALL = 1.79, TOTAL LOSS = .93, TOTAL EXCESS = .86

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW			
854.	1.67	(CFS)	6-HR	24-HR	72-HR	8.25-HR
		(INCHES)	133.	97.	97.	97.
		(AC-FT)	.857	.857	.857	.857
			66.	66.	66.	66.

CUMULATIVE AREA = 1.45 SQ MI

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*****
*                               *
* ROUTE1                         *
*                               *
*****
    
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12 KK

ROUTE BASIN 1 RUNOFF TO BASIN 2 OUTLET

HYDROGRAPH ROUTING DATA

14 RM MUSKINGUM ROUTING
 NSTPS 1 NUMBER OF SUBREACHES
 AMSKK 200000.10 MUSKINGUM K
 X9000000.00 MUSKINGUM X

**** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE1.
 REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE1

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0205	26	478.	*	1		0410	51	1.	*	1		0615	76	0.
1		0005	2	0.	*	1		0210	27	410.	*	1		0415	52	1.	*	1		0620	77	0.
1		0010	3	0.	*	1		0215	28	353.	*	1		0420	53	1.	*	1		0625	78	0.
1		0015	4	0.	*	1		0220	29	300.	*	1		0425	54	0.	*	1		0630	79	0.
1		0020	5	0.	*	1		0225	30	250.	*	1		0430	55	0.	*	1		0635	80	0.
1		0025	6	0.	*	1		0230	31	207.	*	1		0435	56	0.	*	1		0640	81	0.
1		0030	7	0.	*	1		0235	32	170.	*	1		0440	57	0.	*	1		0645	82	0.
1		0035	8	0.	*	1		0240	33	137.	*	1		0445	58	0.	*	1		0650	83	0.
1		0040	9	0.	*	1		0245	34	110.	*	1		0450	59	0.	*	1		0655	84	0.
1		0045	10	0.	*	1		0250	35	87.	*	1		0455	60	0.	*	1		0700	85	0.
1		0050	11	0.	*	1		0255	36	69.	*	1		0500	61	0.	*	1		0705	86	0.
1		0055	12	0.	*	1		0300	37	55.	*	1		0505	62	0.	*	1		0710	87	0.
1		0100	13	4.	*	1		0305	38	44.	*	1		0510	63	0.	*	1		0715	88	0.
1		0105	14	45.	*	1		0310	39	35.	*	1		0515	64	0.	*	1		0720	89	0.
1		0110	15	129.	*	1		0315	40	28.	*	1		0520	65	0.	*	1		0725	90	0.
1		0115	16	259.	*	1		0320	41	22.	*	1		0525	66	0.	*	1		0730	91	0.
1		0120	17	443.	*	1		0325	42	18.	*	1		0530	67	0.	*	1		0735	92	0.
1		0125	18	632.	*	1		0330	43	14.	*	1		0535	68	0.	*	1		0740	93	0.
1		0130	19	764.	*	1		0335	44	12.	*	1		0540	69	0.	*	1		0745	94	0.
1		0135	20	835.	*	1		0340	45	9.	*	1		0545	70	0.	*	1		0750	95	0.
1		0140	21	854.	*	1		0345	46	7.	*	1		0550	71	0.	*	1		0755	96	0.
1		0145	22	821.	*	1		0350	47	5.	*	1		0555	72	0.	*	1		0800	97	0.
1		0150	23	760.	*	1		0355	48	3.	*	1		0600	73	0.	*	1		0805	98	0.
1		0155	24	665.	*	1		0400	49	2.	*	1		0605	74	0.	*	1		0810	99	0.
1		0200	25	560.	*	1		0405	50	2.	*	1		0610	75	0.	*	1		0815	100	0.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW			
854.	1.67	(CFS)	6-HR	24-HR	72-HR	8.25-HR
		(INCHES)	133.	97.	97.	97.
		(AC-FT)	.857	.857	.857	.857
			66.	66.	66.	66.

CUMULATIVE AREA = 1.45 SQ MI

15 KK

* *
* AREA 2 *
* *

BASIN NO. 2 RUNOFF

SUBBASIN RUNOFF DATA

17 BA

SUBBASIN CHARACTERISTICS
TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

..... HYDRO-35 TP-40 TP-49
5-MIN 15-MIN 60-MIN 2-HR 3-HR 6-HR 12-HR 24-HR 2-DAY 4-DAY 7-DAY 10-DAY
.90 1.20 1.60 1.80 .00 .00 .00 .00 .00 .00 .00 .00

STORM AREA = .60

18 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNB 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

19 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

119. 386. 732. 854. 784. 613. 389. 261. 179. 119.
81. 54. 36. 24. 16. 11. 8. 5. 3. 1.

HYDROGRAPH AT STATION AREA 2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0410	51	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1		0415	52	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1		0420	53	.00	.00	.00	0.
1		0015	4	.02	.02	.00	0.	*	1		0425	54	.00	.00	.00	0.
1		0020	5	.02	.02	.00	0.	*	1		0430	55	.00	.00	.00	0.
1		0025	6	.02	.02	.00	0.	*	1		0435	56	.00	.00	.00	0.
1		0030	7	.02	.02	.00	0.	*	1		0440	57	.00	.00	.00	0.
1		0035	8	.03	.03	.00	0.	*	1		0445	58	.00	.00	.00	0.
1		0040	9	.03	.03	.00	0.	*	1		0450	59	.00	.00	.00	0.
1		0045	10	.04	.04	.00	0.	*	1		0455	60	.00	.00	.00	0.
1		0050	11	.05	.05	.00	0.	*	1		0500	61	.00	.00	.00	0.
1		0055	12	.08	.07	.00	1.	*	1		0505	62	.00	.00	.00	0.
1		0100	13	.18	.14	.04	7.	*	1		0510	63	.00	.00	.00	0.
1		0105	14	.90	.38	.51	80.	*	1		0515	64	.00	.00	.00	0.
1		0110	15	.12	.03	.09	241.	*	1		0520	65	.00	.00	.00	0.
1		0115	16	.06	.02	.05	453.	*	1		0525	66	.00	.00	.00	0.
1		0120	17	.04	.01	.03	560.	*	1		0530	67	.00	.00	.00	0.
1		0125	18	.03	.01	.03	557.	*	1		0535	68	.00	.00	.00	0.
1		0130	19	.03	.01	.02	481.	*	1		0540	69	.00	.00	.00	0.
1		0135	20	.02	.00	.02	364.	*	1		0545	70	.00	.00	.00	0.
1		0140	21	.02	.00	.02	281.	*	1		0550	71	.00	.00	.00	0.
1		0145	22	.02	.00	.01	221.	*	1		0555	72	.00	.00	.00	0.
1		0150	23	.02	.00	.01	174.	*	1		0600	73	.00	.00	.00	0.
1		0155	24	.01	.00	.01	140.	*	1		0605	74	.00	.00	.00	0.

1	0200	25	.01	.00	.01	114.	*	1	0610	75	.00	.00	.00	0.
1	0205	26	.00	.00	.00	94.	*	1	0615	76	.00	.00	.00	0.
1	0210	27	.00	.00	.00	76.	*	1	0620	77	.00	.00	.00	0.
1	0215	28	.00	.00	.00	58.	*	1	0625	78	.00	.00	.00	0.
1	0220	29	.00	.00	.00	42.	*	1	0630	79	.00	.00	.00	0.
1	0225	30	.00	.00	.00	29.	*	1	0635	80	.00	.00	.00	0.
1	0230	31	.00	.00	.00	20.	*	1	0640	81	.00	.00	.00	0.
1	0235	32	.00	.00	.00	13.	*	1	0645	82	.00	.00	.00	0.
1	0240	33	.00	.00	.00	8.	*	1	0650	83	.00	.00	.00	0.
1	0245	34	.00	.00	.00	5.	*	1	0655	84	.00	.00	.00	0.
1	0250	35	.00	.00	.00	3.	*	1	0700	85	.00	.00	.00	0.
1	0255	36	.00	.00	.00	2.	*	1	0705	86	.00	.00	.00	0.
1	0300	37	.00	.00	.00	1.	*	1	0710	87	.00	.00	.00	0.
1	0305	38	.00	.00	.00	1.	*	1	0715	88	.00	.00	.00	0.
1	0310	39	.00	.00	.00	1.	*	1	0720	89	.00	.00	.00	0.
1	0315	40	.00	.00	.00	0.	*	1	0725	90	.00	.00	.00	0.
1	0320	41	.00	.00	.00	0.	*	1	0730	91	.00	.00	.00	0.
1	0325	42	.00	.00	.00	0.	*	1	0735	92	.00	.00	.00	0.
1	0330	43	.00	.00	.00	0.	*	1	0740	93	.00	.00	.00	0.
1	0335	44	.00	.00	.00	0.	*	1	0745	94	.00	.00	.00	0.
1	0340	45	.00	.00	.00	0.	*	1	0750	95	.00	.00	.00	0.
1	0345	46	.00	.00	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0350	47	.00	.00	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0355	48	.00	.00	.00	0.	*	1	0805	98	.00	.00	.00	0.
1	0400	49	.00	.00	.00	0.	*	1	0810	99	.00	.00	.00	0.
1	0405	50	.00	.00	.00	0.	*	1	0815	100	.00	.00	.00	0.

TOTAL RAINFALL = 1.80, TOTAL LOSS = .93, TOTAL EXCESS = .86

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	8.25-HR
560.	1.33	(CFS) 56.	41.	41.	41.
		(INCHES) .861	.861	.861	.861
		(AC-FT) 28.	28.	28.	28.

CUMULATIVE AREA = .60 SQ MI

* OUTLT2 *

COMBINE ROUTE 1 AND BASIN TO OUTLET 2

22 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT2
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0205	26	572.	*	1	0410	51	1.	*	1	0615	76	0.					
1	0005	2	0.	*	1	0210	27	486.	*	1	0415	52	1.	*	1	0620	77	0.					
1	0010	3	0.	*	1	0215	28	411.	*	1	0420	53	1.	*	1	0625	78	0.					
1	0015	4	0.	*	1	0220	29	342.	*	1	0425	54	0.	*	1	0630	79	0.					
1	0020	5	0.	*	1	0225	30	279.	*	1	0430	55	0.	*	1	0635	80	0.					
1	0025	6	0.	*	1	0230	31	227.	*	1	0435	56	0.	*	1	0640	81	0.					
1	0030	7	0.	*	1	0235	32	183.	*	1	0440	57	0.	*	1	0645	82	0.					
1	0035	8	0.	*	1	0240	33	145.	*	1	0445	58	0.	*	1	0650	83	0.					
1	0040	9	0.	*	1	0245	34	115.	*	1	0450	59	0.	*	1	0655	84	0.					

1	0045	10	0.	*	1	0250	35	90.	*	1	0455	60	0.	*	1	0700	85	0.
1	0050	11	0.	*	1	0255	36	71.	*	1	0500	61	0.	*	1	0705	86	0.
1	0055	12	1.	*	1	0300	37	56.	*	1	0505	62	0.	*	1	0710	87	0.
1	0100	13	10.	*	1	0305	38	45.	*	1	0510	63	0.	*	1	0715	88	0.
1	0105	14	125.	*	1	0310	39	35.	*	1	0515	64	0.	*	1	0720	89	0.
1	0110	15	370.	*	1	0315	40	28.	*	1	0520	65	0.	*	1	0725	90	0.
1	0115	16	712.	*	1	0320	41	22.	*	1	0525	66	0.	*	1	0730	91	0.
1	0120	17	1003.	*	1	0325	42	18.	*	1	0530	67	0.	*	1	0735	92	0.
1	0125	18	1189.	*	1	0330	43	14.	*	1	0535	68	0.	*	1	0740	93	0.
1	0130	19	1245.	*	1	0335	44	12.	*	1	0540	69	0.	*	1	0745	94	0.
1	0135	20	1199.	*	1	0340	45	9.	*	1	0545	70	0.	*	1	0750	95	0.
1	0140	21	1136.	*	1	0345	46	7.	*	1	0550	71	0.	*	1	0755	96	0.
1	0145	22	1042.	*	1	0350	47	5.	*	1	0555	72	0.	*	1	0800	97	0.
1	0150	23	934.	*	1	0355	48	3.	*	1	0600	73	0.	*	1	0805	98	0.
1	0155	24	805.	*	1	0400	49	2.	*	1	0605	74	0.	*	1	0810	99	0.
1	0200	25	674.	*	1	0405	50	2.	*	1	0610	75	0.	*	1	0815	100	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR (INCHES)	24-HR (INCHES)	72-HR (INCHES)	8.25-HR (INCHES)
1245.	1.50	189.	.858	.858	.858	.858
		94.	94.	94.	94.	94.

CUMULATIVE AREA = 2.05 SQ MI

23 KK

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*****
* ROUTE2 *
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ROUTE OUTLET 2 TO BASIN 3 OUTLET

HYDROGRAPH ROUTING DATA

25 RM

MUSKINGUM ROUTING

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NSTPS      1 NUMBER OF SUBREACHES
AMSKK      .06 MUSKINGUM K
X          .40 MUSKINGUM X
    
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*** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH ROUTE2.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION ROUTE2

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0205	26	650.	1		0410	51	1.	1		0615	76	0.
1		0005	2	0.	1		0210	27	552.	1		0415	52	1.	1		0620	77	0.
1		0010	3	0.	1		0215	28	468.	1		0420	53	1.	1		0625	78	0.
1		0015	4	0.	1		0220	29	395.	1		0425	54	1.	1		0630	79	0.
1		0020	5	0.	1		0225	30	327.	1		0430	55	0.	1		0635	80	0.
1		0025	6	0.	1		0230	31	267.	1		0435	56	0.	1		0640	81	0.
1		0030	7	0.	1		0235	32	217.	1		0440	57	0.	1		0645	82	0.
1		0035	8	0.	1		0240	33	174.	1		0445	58	0.	1		0650	83	0.
1		0040	9	0.	1		0245	34	138.	1		0450	59	0.	1		0655	84	0.
1		0045	10	0.	1		0250	35	109.	1		0455	60	0.	1		0700	85	0.
1		0050	11	0.	1		0255	36	86.	1		0500	61	0.	1		0705	86	0.
1		0055	12	0.	1		0300	37	67.	1		0505	62	0.	1		0710	87	0.
1		0100	13	3.	1		0305	38	53.	1		0510	63	0.	1		0715	88	0.
1		0105	14	33.	1		0310	39	42.	1		0515	64	0.	1		0720	89	0.
1		0110	15	177.	1		0315	40	34.	1		0520	65	0.	1		0725	90	0.
1		0115	16	446.	1		0320	41	27.	1		0525	66	0.	1		0730	91	0.

1	0120	17	781.	*	1	0325	42	21.	*	1	0530	67	0.	*	1	0735	92	0.
1	0125	18	1049.	*	1	0330	43	17.	*	1	0535	68	0.	*	1	0740	93	0.
1	0130	19	1206.	*	1	0335	44	14.	*	1	0540	69	0.	*	1	0745	94	0.
1	0135	20	1238.	*	1	0340	45	11.	*	1	0545	70	0.	*	1	0750	95	0.
1	0140	21	1185.	*	1	0345	46	9.	*	1	0550	71	0.	*	1	0755	96	0.
1	0145	22	1115.	*	1	0350	47	6.	*	1	0555	72	0.	*	1	0800	97	0.
1	0150	23	1017.	*	1	0355	48	5.	*	1	0600	73	0.	*	1	0805	98	0.
1	0155	24	905.	*	1	0400	49	3.	*	1	0605	74	0.	*	1	0810	99	0.
1	0200	25	775.	*	1	0405	50	2.	*	1	0610	75	0.	*	1	0815	100	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	8.25-HR
1238.	1.58	(CFS)	189.	138.	138.	138.
		(INCHES)	.858	.858	.858	.858
		(AC-FT)	94.	94.	94.	94.

CUMULATIVE AREA = 2.05 SQ MI

26 KK

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*****
* AREA 3 *
*****
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BASIN NO. 3 RUNOFF

SUBBASIN RUNOFF DATA

28 BA

SUBBASIN CHARACTERISTICS
TAREA .24 SUBBASIN AREA

PRECIPITATION DATA

8 PH

HYDRO-35		DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM						TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .24

29 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

30 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .31 LAG

UNIT HYDROGRAPH
21 END-OF-PERIOD ORDINATES

43.	137.	268.	322.	306.	250.	167.	111.	77.	53.
36.	24.	17.	11.	8.	5.	4.	3.	2.	1.
0.									

HYDROGRAPH AT STATION AREA 3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	1		0410	51	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	1		0415	52	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	1		0420	53	.00	.00	.00	0.
1		0015	4	.02	.02	.00	0.	1		0425	54	.00	.00	.00	0.

1	0020	5	.02	.02	.00	0.	*	1	0430	55	.00	.00	.00	0.
1	0025	6	.02	.02	.00	0.	*	1	0435	56	.00	.00	.00	0.
1	0030	7	.02	.02	.00	0.	*	1	0440	57	.00	.00	.00	0.
1	0035	8	.03	.03	.00	0.	*	1	0445	58	.00	.00	.00	0.
1	0040	9	.03	.03	.00	0.	*	1	0450	59	.00	.00	.00	0.
1	0045	10	.04	.04	.00	0.	*	1	0455	60	.00	.00	.00	0.
1	0050	11	.05	.05	.00	0.	*	1	0500	61	.00	.00	.00	0.
1	0055	12	.08	.07	.00	0.	*	1	0505	62	.00	.00	.00	0.
1	0100	13	.18	.14	.04	2.	*	1	0510	63	.00	.00	.00	0.
1	0105	14	.90	.38	.51	29.	*	1	0515	64	.00	.00	.00	0.
1	0110	15	.12	.03	.09	86.	*	1	0520	65	.00	.00	.00	0.
1	0115	16	.06	.02	.05	166.	*	1	0525	66	.00	.00	.00	0.
1	0120	17	.04	.01	.03	211.	*	1	0530	67	.00	.00	.00	0.
1	0125	18	.03	.01	.03	216.	*	1	0535	68	.00	.00	.00	0.
1	0130	19	.03	.01	.02	193.	*	1	0540	69	.00	.00	.00	0.
1	0135	20	.02	.00	.02	150.	*	1	0545	70	.00	.00	.00	0.
1	0140	21	.02	.00	.02	116.	*	1	0550	71	.00	.00	.00	0.
1	0145	22	.02	.00	.01	92.	*	1	0555	72	.00	.00	.00	0.
1	0150	23	.02	.00	.01	73.	*	1	0600	73	.00	.00	.00	0.
1	0155	24	.01	.00	.01	58.	*	1	0605	74	.00	.00	.00	0.
1	0200	25	.01	.00	.01	47.	*	1	0610	75	.00	.00	.00	0.
1	0205	26	.00	.00	.00	39.	*	1	0615	76	.00	.00	.00	0.
1	0210	27	.00	.00	.00	32.	*	1	0620	77	.00	.00	.00	0.
1	0215	28	.00	.00	.00	25.	*	1	0625	78	.00	.00	.00	0.
1	0220	29	.00	.00	.00	18.	*	1	0630	79	.00	.00	.00	0.
1	0225	30	.00	.00	.00	13.	*	1	0635	80	.00	.00	.00	0.
1	0230	31	.00	.00	.00	9.	*	1	0640	81	.00	.00	.00	0.
1	0235	32	.00	.00	.00	6.	*	1	0645	82	.00	.00	.00	0.
1	0240	33	.00	.00	.00	4.	*	1	0650	83	.00	.00	.00	0.
1	0245	34	.00	.00	.00	2.	*	1	0655	84	.00	.00	.00	0.
1	0250	35	.00	.00	.00	2.	*	1	0700	85	.00	.00	.00	0.
1	0255	36	.00	.00	.00	1.	*	1	0705	86	.00	.00	.00	0.
1	0300	37	.00	.00	.00	1.	*	1	0710	87	.00	.00	.00	0.
1	0305	38	.00	.00	.00	0.	*	1	0715	88	.00	.00	.00	0.
1	0310	39	.00	.00	.00	0.	*	1	0720	89	.00	.00	.00	0.
1	0315	40	.00	.00	.00	0.	*	1	0725	90	.00	.00	.00	0.
1	0320	41	.00	.00	.00	0.	*	1	0730	91	.00	.00	.00	0.
1	0325	42	.00	.00	.00	0.	*	1	0735	92	.00	.00	.00	0.
1	0330	43	.00	.00	.00	0.	*	1	0740	93	.00	.00	.00	0.
1	0335	44	.00	.00	.00	0.	*	1	0745	94	.00	.00	.00	0.
1	0340	45	.00	.00	.00	0.	*	1	0750	95	.00	.00	.00	0.
1	0345	46	.00	.00	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0350	47	.00	.00	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0355	48	.00	.00	.00	0.	*	1	0805	98	.00	.00	.00	0.
1	0400	49	.00	.00	.00	0.	*	1	0810	99	.00	.00	.00	0.
1	0405	50	.00	.00	.00	0.	*	1	0815	100	.00	.00	.00	0.

 TOTAL RAINFALL = 1.80, TOTAL LOSS = .94, TOTAL EXCESS = .86

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	8.25-HR	
216.	1.42	22.	16.	16.	16.	
		(INCHES)	.863	.863	.863	.863
		(AC-FT)	11.	11.	11.	11.

CUMULATIVE AREA = .24 SQ MI

31 KK

 * OUTLT3 *

COMBINE ROUTE 2 AND BASIN 3 TO OUTLET 3

33 HC

HYDROGRAPH COMBINATION
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT3
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0205	26	689.	*	1		0410	51	1.	*	1		0615	76	0.
1		0005	2	0.	*	1		0210	27	583.	*	1		0415	52	1.	*	1		0620	77	0.
1		0010	3	0.	*	1		0215	28	493.	*	1		0420	53	1.	*	1		0625	78	0.
1		0015	4	0.	*	1		0220	29	413.	*	1		0425	54	1.	*	1		0630	79	0.
1		0020	5	0.	*	1		0225	30	340.	*	1		0430	55	0.	*	1		0635	80	0.
1		0025	6	0.	*	1		0230	31	275.	*	1		0435	56	0.	*	1		0640	81	0.
1		0030	7	0.	*	1		0235	32	222.	*	1		0440	57	0.	*	1		0645	82	0.
1		0035	8	0.	*	1		0240	33	178.	*	1		0445	58	0.	*	1		0650	83	0.
1		0040	9	0.	*	1		0245	34	140.	*	1		0450	59	0.	*	1		0655	84	0.
1		0045	10	0.	*	1		0250	35	110.	*	1		0455	60	0.	*	1		0700	85	0.
1		0050	11	0.	*	1		0255	36	87.	*	1		0500	61	0.	*	1		0705	86	0.
1		0055	12	0.	*	1		0300	37	68.	*	1		0505	62	0.	*	1		0710	87	0.
1		0100	13	5.	*	1		0305	38	54.	*	1		0510	63	0.	*	1		0715	88	0.
1		0105	14	62.	*	1		0310	39	43.	*	1		0515	64	0.	*	1		0720	89	0.
1		0110	15	264.	*	1		0315	40	34.	*	1		0520	65	0.	*	1		0725	90	0.
1		0115	16	612.	*	1		0320	41	27.	*	1		0525	66	0.	*	1		0730	91	0.
1		0120	17	992.	*	1		0325	42	21.	*	1		0530	67	0.	*	1		0735	92	0.
1		0125	18	1266.	*	1		0330	43	17.	*	1		0535	68	0.	*	1		0740	93	0.
1		0130	19	1399.	*	1		0335	44	14.	*	1		0540	69	0.	*	1		0745	94	0.
1		0135	20	1388.	*	1		0340	45	11.	*	1		0545	70	0.	*	1		0750	95	0.
1		0140	21	1301.	*	1		0345	46	9.	*	1		0550	71	0.	*	1		0755	96	0.
1		0145	22	1206.	*	1		0350	47	6.	*	1		0555	72	0.	*	1		0800	97	0.
1		0150	23	1090.	*	1		0355	48	5.	*	1		0600	73	0.	*	1		0805	98	0.
1		0155	24	963.	*	1		0400	49	3.	*	1		0605	74	0.	*	1		0810	99	0.
1		0200	25	822.	*	1		0405	50	2.	*	1		0610	75	0.	*	1		0815	100	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM FLOW (CFS)	AVERAGE FLOW (INCHES)	6-HR	24-HR	72-HR	8.25-HR
1399.	1.50	211.	.858	105.	105.	105.	105.

CUMULATIVE AREA = 2.29 SQ MI

34 KK

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*****
* ROUTE3 *
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ROUTE OUTLET 3 TO BASIN 4 OUTLET

HYDROGRAPH ROUTING DATA

36 RM

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MUSKINGUM ROUTING
NSTPS      1 NUMBER OF SUBREACHES
AMSKK     .13 MUSKINGUM K
X         .30 MUSKINGUM X
    
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HYDROGRAPH AT STATION ROUTE3

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0205	26	888.	*	1		0410	51	3.	*	1		0615	76	0.	*
1		0005	2	0.	*	1		0210	27	756.	*	1		0415	52	2.	*	1		0620	77	0.	*
1		0010	3	0.	*	1		0215	28	642.	*	1		0420	53	1.	*	1		0625	78	0.	*
1		0015	4	0.	*	1		0220	29	543.	*	1		0425	54	1.	*	1		0630	79	0.	*
1		0020	5	0.	*	1		0225	30	457.	*	1		0430	55	1.	*	1		0635	80	0.	*
1		0025	6	0.	*	1		0230	31	379.	*	1		0435	56	0.	*	1		0640	81	0.	*
1		0030	7	0.	*	1		0235	32	311.	*	1		0440	57	0.	*	1		0645	82	0.	*
1		0035	8	0.	*	1		0240	33	252.	*	1		0445	58	0.	*	1		0650	83	0.	*
1		0040	9	0.	*	1		0245	34	203.	*	1		0450	59	0.	*	1		0655	84	0.	*
1		0045	10	0.	*	1		0250	35	161.	*	1		0455	60	0.	*	1		0700	85	0.	*
1		0050	11	0.	*	1		0255	36	128.	*	1		0500	61	0.	*	1		0705	86	0.	*
1		0055	12	0.	*	1		0300	37	101.	*	1		0505	62	0.	*	1		0710	87	0.	*
1		0100	13	0.	*	1		0305	38	79.	*	1		0510	63	0.	*	1		0715	88	0.	*
1		0105	14	5.	*	1		0310	39	63.	*	1		0515	64	0.	*	1		0720	89	0.	*
1		0110	15	48.	*	1		0315	40	49.	*	1		0520	65	0.	*	1		0725	90	0.	*
1		0115	16	19v.	*	1		0320	41	39.	*	1		0525	66	0.	*	1		0730	91	0.	*
1		0120	17	478.	*	1		0325	42	31.	*	1		0530	67	0.	*	1		0735	92	0.	*
1		0125	18	819.	*	1		0330	43	25.	*	1		0535	68	0.	*	1		0740	93	0.	*
1		0130	19	1111.	*	1		0335	44	20.	*	1		0540	69	0.	*	1		0745	94	0.	*
1		0135	20	1296.	*	1		0340	45	16.	*	1		0545	70	0.	*	1		0750	95	0.	*
1		0140	21	1353.	*	1		0345	46	13.	*	1		0550	71	0.	*	1		0755	96	0.	*
1		0145	22	1316.	*	1		0350	47	10.	*	1		0555	72	0.	*	1		0800	97	0.	*
1		0150	23	1241.	*	1		0355	48	8.	*	1		0600	73	0.	*	1		0805	98	0.	*
1		0155	24	1139.	*	1		0400	49	6.	*	1		0605	74	0.	*	1		0810	99	0.	*
1		0200	25	1021.	*	1		0405	50	4.	*	1		0610	75	0.	*	1		0815	100	0.	*

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR	24-HR	72-HR	8.25-HR
1353.	1.67	211.	.858	.858	.858	.858
		(INCHES)	105.	105.	105.	105.
		(AC-FT)				

CUMULATIVE AREA = 2.29 SQ MI

37 KK

* AREA 4 *

BASIN NO. 4 RUNOFF

SUBBASIN RUNOFF DATA

39 BA

SUBBASIN CHARACTERISTICS
TAREA .60 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .60

40 LS

SCS LOSS RATE
STRTL .25 INITIAL ABSTRACTION
CRVNR 89.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

41 UD

SCS DIMENSIONLESS UNITGRAPH
TLAG .30 LAG

UNIT HYDROGRAPH
20 END-OF-PERIOD ORDINATES

121. 392. 739. 856. 780. 604. 381. 254. 174. 116.
78. 52. 34. 23. 16. 11. 8. 5. 3. 1.

HYDROGRAPH AT STATION AREA 4

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0410	51	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1		0415	52	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1		0420	53	.00	.00	.00	0.
1		0015	4	.02	.02	.00	0.	*	1		0425	54	.00	.00	.00	0.
1		0020	5	.02	.02	.00	0.	*	1		0430	55	.00	.00	.00	0.
1		0025	6	.02	.02	.00	0.	*	1		0435	56	.00	.00	.00	0.
1		0030	7	.02	.02	.00	0.	*	1		0440	57	.00	.00	.00	0.
1		0035	8	.03	.03	.00	0.	*	1		0445	58	.00	.00	.00	0.
1		0040	9	.03	.03	.00	0.	*	1		0450	59	.00	.00	.00	0.
1		0045	10	.04	.04	.00	0.	*	1		0455	60	.00	.00	.00	0.
1		0050	11	.05	.05	.00	0.	*	1		0500	61	.00	.00	.00	0.
1		0055	12	.08	.07	.00	1.	*	1		0505	62	.00	.00	.00	0.
1		0100	13	.18	.14	.04	7.	*	1		0510	63	.00	.00	.00	0.
1		0105	14	.90	.38	.51	81.	*	1		0515	64	.00	.00	.00	0.
1		0110	15	.12	.03	.09	245.	*	1		0520	65	.00	.00	.00	0.
1		0115	16	.06	.02	.05	458.	*	1		0525	66	.00	.00	.00	0.
1		0120	17	.04	.01	.03	563.	*	1		0530	67	.00	.00	.00	0.
1		0125	18	.03	.01	.03	555.	*	1		0535	68	.00	.00	.00	0.
1		0130	19	.03	.01	.02	476.	*	1		0540	69	.00	.00	.00	0.
1		0135	20	.02	.00	.02	359.	*	1		0545	70	.00	.00	.00	0.
1		0140	21	.02	.00	.02	276.	*	1		0550	71	.00	.00	.00	0.
1		0145	22	.02	.00	.01	217.	*	1		0555	72	.00	.00	.00	0.
1		0150	23	.02	.00	.01	171.	*	1		0600	73	.00	.00	.00	0.
1		0155	24	.01	.00	.01	137.	*	1		0605	74	.00	.00	.00	0.
1		0200	25	.01	.00	.01	112.	*	1		0610	75	.00	.00	.00	0.
1		0205	26	.00	.00	.00	92.	*	1		0615	76	.00	.00	.00	0.
1		0210	27	.00	.00	.00	75.	*	1		0620	77	.00	.00	.00	0.
1		0215	28	.00	.00	.00	57.	*	1		0625	78	.00	.00	.00	0.
1		0220	29	.00	.00	.00	41.	*	1		0630	79	.00	.00	.00	0.
1		0225	30	.00	.00	.00	28.	*	1		0635	80	.00	.00	.00	0.
1		0230	31	.00	.00	.00	19.	*	1		0640	81	.00	.00	.00	0.
1		0235	32	.00	.00	.00	12.	*	1		0645	82	.00	.00	.00	0.
1		0240	33	.00	.00	.00	8.	*	1		0650	83	.00	.00	.00	0.
1		0245	34	.00	.00	.00	5.	*	1		0655	84	.00	.00	.00	0.
1		0250	35	.00	.00	.00	3.	*	1		0700	85	.00	.00	.00	0.
1		0255	36	.00	.00	.00	2.	*	1		0705	86	.00	.00	.00	0.
1		0300	37	.00	.00	.00	1.	*	1		0710	87	.00	.00	.00	0.
1		0305	38	.00	.00	.00	1.	*	1		0715	88	.00	.00	.00	0.
1		0310	39	.00	.00	.00	1.	*	1		0720	89	.00	.00	.00	0.
1		0315	40	.00	.00	.00	0.	*	1		0725	90	.00	.00	.00	0.
1		0320	41	.00	.00	.00	0.	*	1		0730	91	.00	.00	.00	0.
1		0325	42	.00	.00	.00	0.	*	1		0735	92	.00	.00	.00	0.
1		0330	43	.00	.00	.00	0.	*	1		0740	93	.00	.00	.00	0.
1		0335	44	.00	.00	.00	0.	*	1		0745	94	.00	.00	.00	0.
1		0340	45	.00	.00	.00	0.	*	1		0750	95	.00	.00	.00	0.
1		0345	46	.00	.00	.00	0.	*	1		0755	96	.00	.00	.00	0.
1		0350	47	.00	.00	.00	0.	*	1		0800	97	.00	.00	.00	0.
1		0355	48	.00	.00	.00	0.	*	1		0805	98	.00	.00	.00	0.
1		0400	49	.00	.00	.00	0.	*	1		0810	99	.00	.00	.00	0.
1		0405	50	.00	.00	.00	0.	*	1		0815	100	.00	.00	.00	0.

TOTAL RAINFALL = 1.80, TOTAL LOSS = .93, TOTAL EXCESS = .86

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	8.25-HR (CFS)
563.	1.33	56.	.861	28.	40.
			.861	28.	.861
				28.	28.

CUMULATIVE AREA = .60 SQ MI

42 KK

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*****
*           *
*  OUTLT4  *
*           *
*****
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COMBINE ROUTE 3 AND BASIN 4 TO OUTLET 4

44 HC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT4
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0205	26	980.	*	1		0410	51	3.	*	1		0615	76	0.
1		0005	2	0.	*	1		0210	27	831.	*	1		0415	52	2.	*	1		0620	77	0.
1		0010	3	0.	*	1		0215	28	699.	*	1		0420	53	1.	*	1		0625	78	0.
1		0015	4	0.	*	1		0220	29	584.	*	1		0425	54	1.	*	1		0630	79	0.
1		0020	5	0.	*	1		0225	30	485.	*	1		0430	55	1.	*	1		0635	80	0.
1		0025	6	0.	*	1		0230	31	398.	*	1		0435	56	0.	*	1		0640	81	0.
1		0030	7	0.	*	1		0235	32	323.	*	1		0440	57	0.	*	1		0645	82	0.
1		0035	8	0.	*	1		0240	33	260.	*	1		0445	58	0.	*	1		0650	83	0.
1		0040	9	0.	*	1		0245	34	208.	*	1		0450	59	0.	*	1		0655	84	0.
1		0045	10	0.	*	1		0250	35	164.	*	1		0455	60	0.	*	1		0700	85	0.
1		0050	11	0.	*	1		0255	36	130.	*	1		0500	61	0.	*	1		0705	86	0.
1		0055	12	1.	*	1		0300	37	102.	*	1		0505	62	0.	*	1		0710	87	0.
1		0100	13	7.	*	1		0305	38	80.	*	1		0510	63	0.	*	1		0715	88	0.
1		0105	14	86.	*	1		0310	39	63.	*	1		0515	64	0.	*	1		0720	89	0.
1		0110	15	293.	*	1		0315	40	50.	*	1		0520	65	0.	*	1		0725	90	0.
1		0115	16	656.	*	1		0320	41	39.	*	1		0525	66	0.	*	1		0730	91	0.
1		0120	17	1040.	*	1		0325	42	31.	*	1		0530	67	0.	*	1		0735	92	0.
1		0125	18	1374.	*	1		0330	43	25.	*	1		0535	68	0.	*	1		0740	93	0.
1		0130	19	1587.	*	1		0335	44	20.	*	1		0540	69	0.	*	1		0745	94	0.
1		0135	20	1655.	*	1		0340	45	16.	*	1		0545	70	0.	*	1		0750	95	0.
1		0140	21	1629.	*	1		0345	46	13.	*	1		0550	71	0.	*	1		0755	96	0.
1		0145	22	1533.	*	1		0350	47	10.	*	1		0555	72	0.	*	1		0800	97	0.
1		0150	23	1412.	*	1		0355	48	8.	*	1		0600	73	0.	*	1		0805	98	0.
1		0155	24	1277.	*	1		0400	49	6.	*	1		0605	74	0.	*	1		0810	99	0.
1		0200	25	1133.	*	1		0405	50	4.	*	1		0610	75	0.	*	1		0815	100	0.

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	8.25-HR
1655.	1.58	(CFS) 267.	194.	194.	194.
		(INCHES) .859	.859	.859	.859
		(AC-F1) 132.	132.	132.	132.

CUMULATIVE AREA = 2.89 SQ MI

45 KK

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*****
*           *
*  ROUTE4  *
*           *
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ROUTE OUTLET 4 TO BASIN 5 OUTLET

HYDROGRAPH ROUTING DATA

47 RM

MUSKINGUM ROUTING

NSTPS 2 NUMBER OF SUBREACHES
 AMSKK .36 MUSKINGUM K
 X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE4

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0205	26	1408.	*	1		0410	51	13.	*	1		0615	76	0.
1		0005	2	0.	*	1		0210	27	1340.	*	1		0415	52	10.	*	1		0620	77	0.
1		0010	3	0.	*	1		0215	28	1243.	*	1		0420	53	8.	*	1		0625	78	0.
1		0015	4	0.	*	1		0220	29	1127.	*	1		0425	54	6.	*	1		0630	79	0.
1		0020	5	0.	*	1		0225	30	1003.	*	1		0430	55	4.	*	1		0635	80	0.
1		0025	6	0.	*	1		0230	31	878.	*	1		0435	56	3.	*	1		0640	81	0.
1		0030	7	0.	*	1		0235	32	759.	*	1		0440	57	2.	*	1		0645	82	0.
1		0035	8	0.	*	1		0240	33	648.	*	1		0445	58	2.	*	1		0650	83	0.
1		0040	9	0.	*	1		0245	34	548.	*	1		0450	59	1.	*	1		0655	84	0.
1		0045	10	0.	*	1		0250	35	458.	*	1		0455	60	1.	*	1		0700	85	0.
1		0050	11	0.	*	1		0255	36	379.	*	1		0500	61	1.	*	1		0705	86	0.
1		0055	12	0.	*	1		0300	37	311.	*	1		0505	62	0.	*	1		0710	87	0.
1		0100	13	0.	*	1		0305	38	253.	*	1		0510	63	0.	*	1		0715	88	0.
1		0105	14	0.	*	1		0310	39	205.	*	1		0515	64	0.	*	1		0720	89	0.
1		0110	15	4.	*	1		0315	40	164.	*	1		0520	65	0.	*	1		0725	90	0.
1		0115	16	27.	*	1		0320	41	131.	*	1		0525	66	0.	*	1		0730	91	0.
1		0120	17	98.	*	1		0325	42	105.	*	1		0530	67	0.	*	1		0735	92	0.
1		0125	18	241.	*	1		0330	43	83.	*	1		0535	68	0.	*	1		0740	93	0.
1		0130	19	454.	*	1		0335	44	66.	*	1		0540	69	0.	*	1		0745	94	0.
1		0135	20	709.	*	1		0340	45	52.	*	1		0545	70	0.	*	1		0750	95	0.
1		0140	21	965.	*	1		0345	46	42.	*	1		0550	71	0.	*	1		0755	96	0.
1		0145	22	1180.	*	1		0350	47	33.	*	1		0555	72	0.	*	1		0800	97	0.
1		0150	23	1333.	*	1		0355	48	26.	*	1		0600	73	0.	*	1		0805	98	0.
1		0155	24	1417.	*	1		0400	49	21.	*	1		0605	74	0.	*	1		0810	99	0.
1		0200	25	1438.	*	1		0405	50	16.	*	1		0610	75	0.	*	1		0815	100	0.

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	8.25-HR (INCHES)
1438.	2.00	267.	.859	132.	.859

CUMULATIVE AREA = 2.89 SQ MI

48 KK

 * AREA 5 *

BASIN NO. 5 RUNOFF

SUBBASIN RUNOFF DATA

50 BA

SUBBASIN CHARACTERISTICS
 TAREA .59 SUBBASIN AREA

PRECIPITATION DATA

8 PH

DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .59

51 LS

SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

52 UD

SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH

20 END-OF-PERIOD ORDINATES

119.	384.	725.	839.	764.	591.	373.	249.	170.	113.
76.	51.	34.	23.	15.	10.	7.	5.	3.	1.

HYDROGRAPH AT STATION AREA 5

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0410	51	.00	.00	.00	0.
1		0005	2	.01	.01	.00	0.	*	1		0415	52	.00	.00	.00	0.
1		0010	3	.01	.01	.00	0.	*	1		0420	53	.00	.00	.00	0.
1		0015	4	.02	.02	.00	0.	*	1		0425	54	.00	.00	.00	0.
1		0020	5	.02	.02	.00	0.	*	1		0430	55	.00	.00	.00	0.
1		0025	6	.02	.02	.00	0.	*	1		0435	56	.00	.00	.00	0.
1		0030	7	.02	.02	.00	0.	*	1		0440	57	.00	.00	.00	0.
1		0035	8	.03	.03	.00	0.	*	1		0445	58	.00	.00	.00	0.
1		0040	9	.03	.03	.00	0.	*	1		0450	59	.00	.00	.00	0.
1		0045	10	.04	.04	.00	0.	*	1		0455	60	.00	.00	.00	0.
1		0050	11	.05	.05	.00	0.	*	1		0500	61	.00	.00	.00	0.
1		0055	12	.08	.08	.00	0.	*	1		0505	62	.00	.00	.00	0.
1		0100	13	.18	.16	.01	1.	*	1		0510	63	.00	.00	.00	0.
1		0105	14	.90	.52	.38	49.	*	1		0515	64	.00	.00	.00	0.
1		0110	15	.12	.05	.08	163.	*	1		0520	65	.00	.00	.00	0.
1		0115	16	.06	.02	.04	318.	*	1		0525	66	.00	.00	.00	0.
1		0120	17	.04	.01	.03	401.	*	1		0530	67	.00	.00	.00	0.
1		0125	18	.03	.01	.02	403.	*	1		0535	68	.00	.00	.00	0.
1		0130	19	.03	.01	.02	352.	*	1		0540	69	.00	.00	.00	0.
1		0135	20	.02	.01	.01	271.	*	1		0545	70	.00	.00	.00	0.
1		0140	21	.02	.01	.01	212.	*	1		0550	71	.00	.00	.00	0.
1		0145	22	.02	.01	.01	168.	*	1		0555	72	.00	.00	.00	0.
1		0150	23	.02	.00	.01	134.	*	1		0600	73	.00	.00	.00	0.
1		0155	24	.01	.00	.01	109.	*	1		0605	74	.00	.00	.00	0.
1		0200	25	.01	.00	.01	90.	*	1		0610	75	.00	.00	.00	0.
1		0205	26	.00	.00	.00	75.	*	1		0615	76	.00	.00	.00	0.
1		0210	27	.00	.00	.00	61.	*	1		0620	77	.00	.00	.00	0.
1		0215	28	.00	.00	.00	47.	*	1		0625	78	.00	.00	.00	0.
1		0220	29	.00	.00	.00	34.	*	1		0630	79	.00	.00	.00	0.
1		0225	30	.00	.00	.00	23.	*	1		0635	80	.00	.00	.00	0.
1		0230	31	.00	.00	.00	16.	*	1		0640	81	.00	.00	.00	0.
1		0235	32	.00	.00	.00	10.	*	1		0645	82	.00	.00	.00	0.
1		0240	33	.00	.00	.00	6.	*	1		0650	83	.00	.00	.00	0.
1		0245	34	.00	.00	.00	4.	*	1		0655	84	.00	.00	.00	0.
1		0250	35	.00	.00	.00	3.	*	1		0700	85	.00	.00	.00	0.
1		0255	36	.00	.00	.00	2.	*	1		0705	86	.00	.00	.00	0.
1		0300	37	.00	.00	.00	1.	*	1		0710	87	.00	.00	.00	0.
1		0305	38	.00	.00	.00	1.	*	1		0715	88	.00	.00	.00	0.
1		0310	39	.00	.00	.00	0.	*	1		0720	89	.00	.00	.00	0.
1		0315	40	.00	.00	.00	0.	*	1		0725	90	.00	.00	.00	0.
1		0320	41	.00	.00	.00	0.	*	1		0730	91	.00	.00	.00	0.
1		0325	42	.00	.00	.00	0.	*	1		0735	92	.00	.00	.00	0.
1		0330	43	.00	.00	.00	0.	*	1		0740	93	.00	.00	.00	0.
1		0335	44	.00	.00	.00	0.	*	1		0745	94	.00	.00	.00	0.
1		0340	45	.00	.00	.00	0.	*	1		0750	95	.00	.00	.00	0.

1	0345	46	.00	70	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0350	47	.00	.0	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0355	48	.00	.00	.00	0.	*	1	0805	98	.00	.00	.00	0.
1	0400	49	.00	.00	.00	0.	*	1	0810	99	.00	.00	.00	0.
1	0405	50	.00	.00	.00	0.	*	1	0815	100	.00	.00	.00	0.

TOTAL RAINFALL = 1.80, TOTAL LOSS = 1.15, TOTAL EXCESS = .65

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	8.25-HR
403.	1.42	(CFS)	41.	30.	30.	30.
		(INCHES)	.649	.649	.649	.649
		(AC-FT)	20.	20.	20.	20.

CUMULATIVE AREA = .59 SQ MI

53 KK

* OUTLT5 *

COMBINE ROUTE 4 AND BASIN 5 TO OUTLET 5

55 KC

HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION OUTLT5
SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0205	26	1483.	*	1	0410	51	13.	*	1	0615	76	0.				
1	0005	2	0.	*	1	0210	27	1401.	*	1	0415	52	10.	*	1	0620	77	0.				
1	0010	3	0.	*	1	0215	28	1290.	*	1	0420	53	8.	*	1	0625	78	0.				
1	0015	4	0.	*	1	0220	29	1161.	*	1	0425	54	6.	*	1	0630	79	0.				
1	0020	5	0.	*	1	0225	30	1026.	*	1	0430	55	4.	*	1	0635	80	0.				
1	0025	6	0.	*	1	0230	31	894.	*	1	0435	56	3.	*	1	0640	81	0.				
1	0030	7	0.	*	1	0235	32	769.	*	1	0440	57	2.	*	1	0645	82	0.				
1	0035	8	0.	*	1	0240	33	655.	*	1	0445	58	2.	*	1	0650	83	0.				
1	0040	9	0.	*	1	0245	34	552.	*	1	0450	59	1.	*	1	0655	84	0.				
1	0045	10	0.	*	1	0250	35	460.	*	1	0455	60	1.	*	1	0700	85	0.				
1	0050	11	0.	*	1	0255	36	381.	*	1	0500	61	1.	*	1	0705	86	0.				
1	0055	12	0.	*	1	0300	37	312.	*	1	0505	62	0.	*	1	0710	87	0.				
1	0100	13	1.	*	1	0305	38	254.	*	1	0510	63	0.	*	1	0715	88	0.				
1	0105	14	50.	*	1	0310	39	205.	*	1	0515	64	0.	*	1	0720	89	0.				
1	0110	15	167.	*	1	0315	40	165.	*	1	0520	65	0.	*	1	0725	90	0.				
1	0115	16	345.	*	1	0320	41	132.	*	1	0525	66	0.	*	1	0730	91	0.				
1	0120	17	498.	*	1	0325	42	105.	*	1	0530	67	0.	*	1	0735	92	0.				
1	0125	18	644.	*	1	0330	43	83.	*	1	0535	68	0.	*	1	0740	93	0.				
1	0130	19	807.	*	1	0335	44	66.	*	1	0540	69	0.	*	1	0745	94	0.				
1	0135	20	980.	*	1	0340	45	52.	*	1	0545	70	0.	*	1	0750	95	0.				
1	0140	21	1176.	*	1	0345	46	42.	*	1	0550	71	0.	*	1	0755	96	0.				
1	0145	22	1349.	*	1	0350	47	33.	*	1	0555	72	0.	*	1	0800	97	0.				
1	0150	23	1468.	*	1	0355	48	26.	*	1	0600	73	0.	*	1	0805	98	0.				
1	0155	24	1526.	*	1	0400	49	21.	*	1	0605	74	0.	*	1	0810	99	0.				
1	0200	25	1528.	*	1	0405	50	16.	*	1	0610	75	0.	*	1	0815	100	0.				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	8.25-HR

(CFS) 1528. (HR) 2.00 (CFS) 308. 224. 224. 224.
 (INCHES) .824 .824 .824 .824
 (AC-FT) 153. 153. 153. 153.

CUMULATIVE AREA = 3.48 SQ MI

56 KK

 * ROUTE5 *

ROUTE OUTLET 5 TO BASIN 6 OUTLET

HYDROGRAPH ROUTING DATA

58 RM

MUSKINGUM ROUTING

NSTPS 1 NUMBER OF SUBREACHES
 AMSKK .11 MUSKINGUM K
 X .20 MUSKINGUM X

HYDROGRAPH AT STATION ROUTE5

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	*	1		0205	26	1505.	*	1		0410	51	18.	*	1		0615	76	0.
1		0005	2	0.	*	1		0210	27	1479.	*	1		0415	52	14.	*	1		0620	77	0.
1		0010	3	0.	*	1		0215	28	1412.	*	1		0420	53	11.	*	1		0625	78	0.
1		0015	4	0.	*	1		0220	29	1315.	*	1		0425	54	9.	*	1		0630	79	0.
1		0020	5	0.	*	1		0225	30	1196.	*	1		0430	55	7.	*	1		0635	80	0.
1		0025	6	0.	*	1		0230	31	1068.	*	1		0435	56	5.	*	1		0640	81	0.
1		0030	7	0.	*	1		0235	32	958.	*	1		0440	57	4.	*	1		0645	82	0.
1		0035	8	0.	*	1		0240	33	813.	*	1		0445	58	3.	*	1		0650	83	0.
1		0040	9	0.	*	1		0245	34	697.	*	1		0450	59	2.	*	1		0655	84	0.
1		0045	10	0.	*	1		0250	35	590.	*	1		0455	60	1.	*	1		0700	85	0.
1		0050	11	0.	*	1		0255	36	496.	*	1		0500	61	1.	*	1		0705	86	0.
1		0055	12	0.	*	1		0300	37	412.	*	1		0505	62	1.	*	1		0710	87	0.
1		0100	13	0.	*	1		0305	38	340.	*	1		0510	63	1.	*	1		0715	88	0.
1		0105	14	8.	*	1		0310	39	278.	*	1		0515	64	0.	*	1		0720	89	0.
1		0110	15	52.	*	1		0315	40	225.	*	1		0520	65	0.	*	1		0725	90	0.
1		0115	16	152.	*	1		0320	41	182.	*	1		0525	66	0.	*	1		0730	91	0.
1		0120	17	298.	*	1		0325	42	146.	*	1		0530	67	0.	*	1		0735	92	0.
1		0125	18	448.	*	1		0330	43	116.	*	1		0535	68	0.	*	1		0740	93	0.
1		0130	19	598.	*	1		0335	44	93.	*	1		0540	69	0.	*	1		0745	94	0.
1		0135	20	757.	*	1		0340	45	74.	*	1		0545	70	0.	*	1		0750	95	0.
1		0140	21	929.	*	1		0345	46	58.	*	1		0550	71	0.	*	1		0755	96	0.
1		0145	22	1113.	*	1		0350	47	46.	*	1		0555	72	0.	*	1		0800	97	0.
1		0150	23	1281.	*	1		0355	48	37.	*	1		0600	73	0.	*	1		0805	98	0.
1		0155	24	1409.	*	1		0400	49	29.	*	1		0605	74	0.	*	1		0810	99	0.
1		0200	25	1484.	*	1		0405	50	23.	*	1		0610	75	0.	*	1		0815	100	0.

PEAK FLOW 1505. TIME 2.08 (CFS) 308. 224. 224. 224.
 (INCHES) .824 .824 .824 .824
 (AC-FT) 153. 153. 153. 153.

CUMULATIVE AREA = 3.48 SQ MI

 * AREA 6 *

BASIN NO. 6 RUNOFF

SUBBASIN RUNOFF DATA

61 BA SUBBASIN CHARACTERISTICS
 TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

8 PH DEPTHS FOR 4-PERCENT HYPOTHETICAL STORM

HYDRO-35			TP-40				TP-49				
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.90	1.20	1.60	1.80	.00	.00	.00	.00	.00	.00	.00	.00

STORM AREA = .40

62 LS SCS LOSS RATE
 STRTL .35 INITIAL ABSTRACTION
 CRVNR 85.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

63 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .30 LAG

UNIT HYDROGRAPH

20 END-OF-PERIOD ORDINATES

79.	256.	486.	567.	521.	407.	259.	173.	119.	79.
54.	36.	24.	16.	11.	7.	5.	4.	2.	1.

HYDROGRAPH AT STATION AREA 6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0410	51	.00	.00	.00	0.		
1	0005	2	.01	.01	.00	0.	*	1	0415	52	.00	.00	.00	0.		
1	0010	3	.01	.01	.00	0.	*	1	0420	53	.00	.00	.00	0.		
1	0015	4	.02	.02	.00	0.	*	1	0425	54	.00	.00	.00	0.		
1	0020	5	.02	.02	.00	0.	*	1	0430	55	.00	.00	.00	0.		
1	0025	6	.02	.02	.00	0.	*	1	0435	56	.00	.00	.00	0.		
1	0030	7	.02	.02	.00	0.	*	1	0440	57	.00	.00	.00	0.		
1	0035	8	.03	.03	.00	0.	*	1	0445	58	.00	.00	.00	0.		
1	0040	9	.03	.03	.00	0.	*	1	0450	59	.00	.00	.00	0.		
1	0045	10	.04	.04	.00	0.	*	1	0455	60	.00	.00	.00	0.		
1	0050	11	.05	.05	.00	0.	*	1	0500	61	.00	.00	.00	0.		
1	0055	12	.08	.08	.00	0.	*	1	0505	62	.00	.00	.00	0.		
1	0100	13	.18	.16	.01	1.	*	1	0510	63	.00	.00	.00	0.		
1	0105	14	.90	.52	.38	33.	*	1	0515	64	.00	.00	.00	0.		
1	0110	15	.12	.05	.08	109.	*	1	0520	65	.00	.00	.00	0.		
1	0115	16	.06	.02	.04	214.	*	1	0525	66	.00	.00	.00	0.		
1	0120	17	.04	.01	.03	271.	*	1	0530	67	.00	.00	.00	0.		
1	0125	18	.03	.01	.02	274.	*	1	0535	68	.00	.00	.00	0.		
1	0130	19	.03	.01	.02	242.	*	1	0540	69	.00	.00	.00	0.		
1	0135	20	.02	.01	.01	186.	*	1	0545	70	.00	.00	.00	0.		
1	0140	21	.02	.01	.01	146.	*	1	0550	71	.00	.00	.00	0.		
1	0145	22	.02	.01	.01	116.	*	1	0555	72	.00	.00	.00	0.		
1	0150	23	.02	.00	.01	93.	*	1	0600	73	.00	.00	.00	0.		
1	0155	24	.01	.00	.01	75.	*	1	0605	74	.00	.00	.00	0.		
1	0200	25	.01	.00	.01	62.	*	1	0610	75	.00	.00	.00	0.		
1	0205	26	.00	.00	.00	52.	*	1	0615	76	.00	.00	.00	0.		
1	0210	27	.00	.00	.00	42.	*	1	0620	77	.00	.00	.00	0.		

1	0215	28	.00	.00	.00	32.	*	1	0625	78	.00	.00	.00	0.
1	0220	29	.00	.00	.00	24.	*	1	0630	79	.00	.00	.00	0.
1	0225	30	.00	.00	.00	16.	*	1	0635	80	.00	.00	.00	0.
1	0230	31	.00	.00	.00	11.	*	1	0640	81	.00	.00	.00	0.
1	0235	32	.00	.00	.00	7.	*	1	0645	82	.00	.00	.00	0.
1	0240	33	.00	.00	.00	5.	*	1	0650	83	.00	.00	.00	0.
1	0245	34	.00	.00	.00	3.	*	1	0655	84	.00	.00	.00	0.
1	0250	35	.00	.00	.00	2.	*	1	0700	85	.00	.00	.00	0.
1	0255	36	.00	.00	.00	1.	*	1	0705	86	.00	.00	.00	0.
1	0300	37	.00	.00	.00	1.	*	1	0710	87	.00	.00	.00	0.
1	0305	38	.00	.00	.00	0.	*	1	0715	88	.00	.00	.00	0.
1	0310	39	.00	.00	.00	0.	*	1	0720	89	.00	.00	.00	0.
1	0315	40	.00	.00	.00	0.	*	1	0725	90	.00	.00	.00	0.
1	0320	41	.00	.00	.00	0.	*	1	0730	91	.00	.00	.00	0.
1	0325	42	.00	.00	.00	0.	*	1	0735	92	.00	.00	.00	0.
1	0330	43	.00	.00	.00	0.	*	1	0740	93	.00	.00	.00	0.
1	0335	44	.00	.00	.00	0.	*	1	0745	94	.00	.00	.00	0.
1	0340	45	.00	.00	.00	0.	*	1	0750	95	.00	.00	.00	0.
1	0345	46	.00	.00	.00	0.	*	1	0755	96	.00	.00	.00	0.
1	0350	47	.00	.00	.00	0.	*	1	0800	97	.00	.00	.00	0.
1	0355	48	.00	.00	.00	0.	*	1	0805	98	.00	.00	.00	0.
1	0400	49	.00	.00	.00	0.	*	1	0810	99	.00	.00	.00	0.
1	0405	50	.00	.00	.00	0.	*	1	0815	100	.00	.00	.00	0.

 TOTAL RAINFALL = 1.80, TOTAL LOSS = 1.15, TOTAL EXCESS = .65

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW
274.	1.42	6-HR 28. (INCHES) .650 (AC-FT) 14.
		24-HR 20. (INCHES) .650 (AC-FT) 14.
		72-HR 20. (INCHES) .650 (AC-FT) 14.
		8.25-HR 20. (INCHES) .650 (AC-FT) 14.

CUMULATIVE AREA = .40 SQ MI

64 KK

 * OUTLT6 *

COMBINE ROUTE 5 AND BASIN 6 TO OUTLET 6

66 HC

HYDROGRAPH COMBINATION
 1COMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

 HYDROGRAPH AT STATION OUTLT6
 SUM OF 2 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0205	26	1557.	*	1		0410	51	18.	*	1		0615	76	0.	*
1		0005	2	0.	*	1		0210	27	1521.	*	1		0415	52	14.	*	1		0620	77	0.	*
1		0010	3	0.	*	1		0215	28	1445.	*	1		0420	53	11.	*	1		0625	78	0.	*
1		0015	4	0.	*	1		0220	29	1338.	*	1		0425	54	9.	*	1		0630	79	0.	*
1		0020	5	0.	*	1		0225	30	1213.	*	1		0430	55	7.	*	1		0635	80	0.	*
1		0025	6	0.	*	1		0230	31	1079.	*	1		0435	56	5.	*	1		0640	81	0.	*
1		0030	7	0.	*	1		0235	32	945.	*	1		0440	57	4.	*	1		0645	82	0.	*
1		0035	8	0.	*	1		0240	33	818.	*	1		0445	58	3.	*	1		0650	83	0.	*
1		0040	9	0.	*	1		0245	34	699.	*	1		0450	59	2.	*	1		0655	84	0.	*
1		0045	10	0.	*	1		0250	35	592.	*	1		0455	60	1.	*	1		0700	85	0.	*
1		0050	11	0.	*	1		0255	36	497.	*	1		0500	61	1.	*	1		0705	86	0.	*
1		0055	12	0.	*	1		0300	37	413.	*	1		0505	62	1.	*	1		0710	87	0.	*

1	0100	13	1.	*	1	0305	38	340.	*	1	0510	63	1.	*	1	0715	88	0.
1	0105	14	41.	*	1	0310	39	278.	*	1	0515	64	0.	*	1	0720	89	0.
1	0110	15	161.	*	1	0315	40	225.	*	1	0520	65	0.	*	1	0725	90	0.
1	0115	16	366.	*	1	0320	41	182.	*	1	0525	66	0.	*	1	0730	91	0.
1	0120	17	569.	*	1	0325	42	146.	*	1	0530	67	0.	*	1	0735	92	0.
1	0125	18	722.	*	1	0330	43	116.	*	1	0535	68	0.	*	1	0740	93	0.
1	0130	19	839.	*	1	0335	44	93.	*	1	0540	69	0.	*	1	0745	94	0.
1	0135	20	943.	*	1	0340	45	74.	*	1	0545	70	0.	*	1	0750	95	0.
1	0140	21	1074.	*	1	0345	46	58.	*	1	0550	71	0.	*	1	0755	96	0.
1	0145	22	1229.	*	1	0350	47	46.	*	1	0555	72	0.	*	1	0800	97	0.
1	0150	23	1374.	*	1	0355	48	37.	*	1	0600	73	0.	*	1	0805	98	0.
1	0155	24	1485.	*	1	0400	49	29.	*	1	0605	74	0.	*	1	0810	99	0.
1	0200	25	1546.	*	1	0405	50	23.	*	1	0610	75	0.	*	1	0815	100	0.

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	8.25-HR
1557.	2.08	(CFS) 336.	244.	244.	244.
		(INCHES) .806	.806	.806	.806
		(AC-FT) 167.	167.	167.	167.

CUMULATIVE AREA = 3.88 SQ MI

RUNOFF SUMMARY
 FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW 6-HOUR	MAXIMUM FLOW 24-HOUR	PERIOD 72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	AREA 1	854.	1.67	133.	97.	97.	1.45		
ROUTED TO	ROUTE1	854.	1.67	133.	97.	97.	1.45		
HYDROGRAPH AT	AREA 2	560.	1.33	56.	41.	41.	.60		
2 COMBINED AT	OUTLT2	1245.	1.50	189.	138.	138.	2.05		
ROUTED TO	ROUTE2	1238.	1.58	189.	138.	138.	2.05		
HYDROGRAPH AT	AREA 3	216.	1.42	22.	16.	16.	.24		
2 COMBINED AT	OUTLT3	1399.	1.50	211.	154.	154.	2.29		
ROUTED TO	ROUTE3	1353.	1.67	211.	154.	154.	2.29		
HYDROGRAPH AT	AREA 4	563.	1.33	56.	40.	40.	.60		
2 COMBINED AT	OUTLT4	1655.	1.58	267.	194.	194.	2.89		
ROUTED TO	ROUTE4	1438.	2.00	267.	194.	194.	2.89		
HYDROGRAPH AT	AREA 5	403.	1.42	41.	30.	30.	.59		
2 COMBINED AT	OUTLT5	1528.	2.00	308.	224.	224.	3.48		
ROUTED TO	ROUTE5	1505.	2.08	308.	224.	224.	3.48		
HYDROGRAPH AT	AREA 6	274.	1.42	28.	20.	20.	.40		
2 COMBINED AT	OUTLT6	1557.	2.08	336.	244.	244.	3.88		

*** NORMAL END OF REC-1 ***

APPENDIX B

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*****
HEC-2 WATER SURFACE PROFILES *
*
Version 4.6.0; February 1991 *
*
RUN DATE 27AUG93 TIME 15:46:04 *
*****

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*****
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET, SUITE D *
* DAVIS, CALIFORNIA 95616-4687 *
* (916) 756-1104 *
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X X XXXXXXX XXXXX XXXXX
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PAGE 1

THIS RUN EXECUTED 27AUG93 15:46:04

HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991

T1 CHURCH ROCK, NEW MEXICO AUGUST, 1993 15068-0
HRI, INC. PROPOSED INSITU URANIUM MINE SITE
CHURCH ROCK TRIB EXISTING CONDITIONS 100-YEAR STORM
4 SECTIONS LOOKING DOWNSTREAM FOR SUBCRITICAL FLOW

ICHECK	INQ	NINW	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
0	2	0	0	0.007	0	1	0	6777	0
NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
1	0	0	0	0	0	-1			

VARIABLE CODES FOR SUMMARY PRINTOUT

DT	2	2767	1953							
0.04	0.04	0.04	0.14	0.1	0.3					
0	16	1205	1300		0	0	0			
GR 6782	100	6780	280	6778	665	6776	1005	6775	1115	
GR 6776	1185	6776.4	1205	6776	1225	6772.7	1240	6772.7	1262	
GR 6774	1271	6775.2	1300	6776	1400	6778	1540	6780	1640	
GR 6782	1720									
X1 150	13	765	930	153	147	150				
GR 6782	100	6780	280	6780	560	6778	710	6777.8	730	
6777.8	765	6776	800	6773.7	810	6773.7	821	6776	837	
6778	930	6780	1080	6782	1235					
X1 300	11	710	813	150	150	150				
6782	100	6780	295	6780	580	6778.5	710	6778	772	
6776.1	792	6776.1	804	6778	813	6780	950	6782	1098	
6784	1248									
X1 400	14	925	1058	100	100	100				
6786	100	6784	230	6782	375	6782	600	6780	840	
6780	925	6778	985	6776.4	990	6776.4	1001	6778	1008	
GR 6780	1058	6782	1188	6784	1333	6786	1415			
500	13	610	655	100	100	100				
6786	100	6784	225	6784	300	6782	525	6780	610	
6778	635	6777	637	6777	647	6780	655	6782	743	
GR 6784	885	6786	975	6788	1115					

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PAGE 2

Y1	600	13	670	734	100	100	100			
R	6788	100	6786	300	6784	540	6782	670	6780	683
R	6777.4	691	6777.4	699	6778	704	6780	711	6782	734
GR	6784	854	6786	970	6788	1110				
Y1	700	13	695	729	103	97	100			
R	6790	100	6788	170	6786	345	6784	650	6782	695
R	6777.8	705	6777.8	715	6780	721	6782	729	6784	769
GR	6786	859	6788	1000	6790	1090				
Y1	800	15	680	753	98	102	100			
R	6790	100	6788	245	6786	335	6786	535	6785.8	595
GR	6784	680	6782	686	6778.5	692	6778.5	703	6782	708
GR	6784	717	6786	734	6786.4	753	6788	868	6790	958
Y1	900	16	780	877	98	102	100			
R	6794	100	6792	142	6790	265	6788	310	6788	405
GR	6787.8	475	6787.5	525	6787	625	6787	745	6787	780
GR	6786	790	6779.3	802	6779.3	812	6786	822	6788	877
R	6790	970								
Y1	0.05	0.04	0.04	0.1	0.3					
X1	1000	15	725	815	100	101	100			
R	6794	100	6792	145	6790	270	6788	405	6788	675
R	6789	725	6788	745	6786	755	6780.1	761	6780.1	776
R	6788	785	6789	815	6790	860	6792	975	6794	1090
Y1	1200	10	426	571	202	198	200			
R	6792	100	6792	370	6792	418	6792.3	426	6792	433
R	6781	447	6781	459	6790	468	6792	476	6794	571
X1	1500	11	715	802	300	300	300			
R	6800	100	6800	350	6796	685	6795	715	6794	735
R	6783.3	750	6783.3	762	6796	777	6797	802	6798	840
R	6802	1080								
Y1	1800	11	470	575	300	300	300			
R	6802	100	6802	400	6801	470	6800	500	6787	520
R	6787	535	6800	553	6801	575	6802	605	6804	705
GR	6806	850								
Y1	2	2659	1886							
R	2000	13	630	715	205	195	200			
R	6810	100	6808	165	6806	280	6805	380	6805	490
GR	6804	600	6803.5	630	6802	640	6789	653	6789	670
GR	6790	680	6804	700	6805	715	6806	750	6808	900
Y1	2200	14	430	533	198	202	200			
R	6810	100	6808	130	6808	360	6808	430	6806	438
GR	6804	460	6792	475	6791	480	6791	493	6792	497
R	6804	513	6806	533	6808	570	6810	710		

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X1	2400	14	605	693	192	208	200			
GR	6812	100	6812	220	6810	290	6808	350	6808	550
GR	6806	605	6800	625	6792.6	635	6792.6	648	6794	652
GR	6806	666	6808	681	6810	693	6812	845		
X1	2600	10	570	655	200	200	200			
GR	6816	100	6814	150	6812	270	6812	570	6795	582
GR	6795	605	6810	628	6812	640	6812.5	655	6814	820
X1	2800	14	400	497	200	200	200			
GR	6820	100	6818	110	6816	195	6814	305	6814	380
GR	6814.8	400	6814	440	6798	460	6798	471	6812	487
GR	6814	497	6816	627	6818	717	6820	765		
X1	3000	16	395	455	200	200	200			
GR	6820	100	6820	195	6818	280	6818	360	6816	380
GR	6816	390	6816.3	395	6816	400	6802	417	6802	429
GR	6810	440	6812	444	6814	448	6816	459	6818	490
GR	6820	580								
X1	3500	9	292	347	485	515	500			
GR	6826	100	6824	220	6822	292	6814	303	6812	311
GR	6812	322	6814	327	6820	347	6825	530		
X1	4000	11	770	850	500	500	500			
GR	6829.8	100	6825	575	6825	765	6826	770	6825	780
GR	6818	792	6818	804	6820	821	6823	850	6825	880
GR	6830	1070								
X1	0.04	0.04	0.04	0.1	0.3					
GR	4500	17	1280	1352	500	500	500			
GR	6850	100	6845	280	6840	395	6837	575	6835	805
GR	6835	845	6835.2	970	6835	1070	6830	1280	6825	1330
GR	6825	1342	6830	1352	6831.2	1470	6835	1680	6840	1760
GR	6845	1865	6850	2000						
X1	5000	13	685	760	455	550	500			
GR	6850	100	6845	190	6842	370	6840	580	6836	685
GR	6835	700	6830	715	6830	728	6835	740	6838	760
GR	6840	840	6845	1200	6850	1400				
X1	5500	11	455	513	500	500	500			
GR	6860	100	6855	220	6850	320	6845	455	6836	470
GR	6836	483	6840	491	6845	513	6847.4	605	6850	725
GR	6855	845								
X1	2	2554	1818							
GR	6000	17	800	860	500	500	500			
GR	6880	100	6875	190	6870	225	6865	395	6860	620
GR	6855	760	6850	800	6845	812	6841	822	6841	833
GR	6845	845	6855	860	6860	910	6865	1110	6870	1220
GR	6875	1270	6880	1330						

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SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VDI	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CEHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
.000	4.10	6776.80	6776.53	6777.00	6777.12	.32	.00	.00	6776.40
2767.0	985.2	1322.7	459.1	299.8	233.6	142.1	.0	.0	6775.20
.00	3.29	5.66	3.23	.040	.040	.040	.000	6772.70	869.28
.007043	0.	0.	0.	0	9	6	.00	586.60	1455.88

*SECNO 150.000

7185 MINIMUM SPECIFIC ENERGY

20 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
150.000	4.85	6778.55	6778.55	.00	6779.34	.80	1.47	.14	6777.80
2767.0	160.1	2585.9	21.0	50.2	350.8	11.2	1.9	1.5	6778.00
.01	3.19	7.37	1.88	.040	.040	.040	.000	6773.70	669.06
.014462	153.	150.	147.	0	11	0	.00	301.88	970.94

*SECNO 300.000

02 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.59

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
300.000	4.27	6780.37	6780.19	.00	6780.68	.31	1.29	.05	6778.50
2767.0	598.3	1515.5	653.2	257.8	279.0	192.8	3.8	3.3	6778.00
.02	2.32	5.40	3.39	.040	.040	.040	.000	6776.10	258.91
.005685	150.	150.	150.	3	10	0	.00	718.48	977.39

*SECNO 400.000

85 MINIMUM SPECIFIC ENERGY

20 CRITICAL DEPTH ASSUMED

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
400.000	4.56	6780.96	6780.96	.00	6781.64	.68	.80	.11	6780.00
2767.0	462.7	2229.3	75.0	137.0	310.9	30.0	5.2	4.6	6780.00
.02	3.38	7.17	2.50	.040	.040	.040	.000	6776.40	724.75
.012063	100.	100.	100.	0	8	0	.00	395.68	1120.43

*SECNO 500.000

85 MINIMUM SPECIFIC ENERGY

20 CRITICAL DEPTH ASSUMED

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SECNO	DEPTH	CWSEL	CRIS	WSELK	EG	HV	HL	GLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

500.000	5.48	6782.48	6782.48	.00	6783.27	.79	1.01	.04	6780.00
2767.0	579.7	1594.1	593.2	138.8	183.6	138.4	6.3	5.4	6780.00
.02	4.18	8.68	4.29	.040	.040	.040	.000	6777.00	471.00
.008592	100.	100.	100.	0	11	0	.00	306.08	777.08

SECNO 600.000

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

600.000	6.40	6783.80	6783.80	.00	6784.67	.86	.83	.02	6782.00
2767.0	327.6	2137.0	302.4	105.7	257.1	97.5	7.4	6.1	6782.00
.03	3.10	8.31	3.10	.040	.040	.040	.000	6777.40	552.79
.007996	100.	100.	100.	0	8	0	.00	289.40	842.19

SECNO 700.000

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

700.000	7.29	6785.09	6785.09	.00	6785.92	.83	.68	.00	6782.00
2767.0	609.7	1718.2	439.2	185.4	194.8	110.7	8.5	6.8	6782.00
.03	3.29	8.82	3.97	.040	.040	.040	.000	6777.80	483.20
.005821	103.	100.	97.	0	8	0	.00	335.02	818.22

SECNO 800.000

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

800.000	7.96	6786.46	6786.46	.00	6787.14	.69	.73	.01	6784.00
2767.0	927.4	1839.6	.0	261.7	237.3	.1	9.6	7.7	6786.40
.04	3.54	7.75	.34	.040	.040	.040	.000	6778.50	314.46
.009496	98.	100.	102.	0	12	0	.00	442.62	757.07

SECNO 900.000

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

900.000	8.67	6787.97	6787.97	.00	6788.60	.63	.97	.01	6787.00
2767.0	793.2	1973.8	.0	242.4	271.5	.0	10.7	8.7	6788.00
.04	3.27	7.27	.00	.040	.040	.000	.000	6779.30	416.44
.010100	98.	100.	102.	0	8	0	.00	459.66	876.10

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CHV= .100 CEHV= .300
 SECNO 1000.000
 1000.000 8.93 6789.03 6788.96 .00 6789.57 .54 .96 .01 6789.00
 2767.0 939.0 1828.0 .0 344.7 262.4 .0 12.0 9.8 6789.00
 .05 2.72 6.97 .04 .050 .040 .040 .000 6780.10 334.73
 .009149 100. 100. 101. 1 9 0 .00 482.11 816.85

SECNO 1200.000

45 INT SEC ADDED BY RAISING SEC 1200.00, -.600 FT AND MULTIPLYING BY 1.228

3301 HV CHANGED MORE THAN HVINS

185 MINIMUM SPECIFIC ENERGY
 720 CRITICAL DEPTH ASSUMED
 1.010 7.75 6788.35 6788.35 .00 6791.17 2.82 .79 .69 6791.70
 2767.0 .0 2767.0 .0 .0 205.3 .0 12.7 10.2 6793.40
 .05 .00 13.48 .00 .000 .040 .000 .000 6780.40 513.53
 .015903 67. 67. 66. 0 15 0 .00 36.91 550.44

45 INT SEC ADDED BY RAISING SEC 1.01, .300 FT AND MULTIPLYING BY .907

1.020 9.15 6789.85 6789.07 .00 6792.13 2.28 .90 .05 6792.00
 2767.0 .0 2767.0 .0 .0 228.5 .0 13.0 10.2 6793.70
 .05 .00 12.11 .00 .000 .040 .000 .000 6780.70 473.50
 .011605 67. 67. 66. 3 8 0 .00 37.07 510.56

45 INT SEC ADDED BY RAISING SEC 1.02, .300 FT AND MULTIPLYING BY .898

1200.000 9.50 6790.50 6789.89 .00 6793.03 2.52 .83 .07 6792.30
 2767.0 .0 2767.0 .0 .0 217.0 .0 13.3 10.3 6794.00
 .05 .00 12.75 .00 .000 .040 .000 .000 6781.00 434.91
 .013260 67. 67. 66. 3 8 0 .00 35.10 470.01

SECNO 1500.000

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SECNO	DEPTH	CWSEL	CR1WS	WSELK	EG	HV	HL	DLOSS	L-BANK ELEV
0	QLOB	QCH	QROB	ALOB	ACH	ARDB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XLN	KNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

645 INT SEC ADDED BY RAISING SEC 1500.00, -1.150 FT AND MULTIPLYING BY .970

1.010	10.85	6793.00	6790.93	.00	6794.58	1.58	1.46	.09	6793.85
2767.0	.0	2767.0	.0	.0	274.1	.0	14.2	10.4	6795.85
.05	.00	10.09	.00	.000	.040	.000	.000	6782.15	713.32
.007461	150.	150.	150.	4	11	0	.00	41.56	754.88

645 INT SEC ADDED BY RAISING SEC 1.01, 1.150 FT AND MULTIPLYING BY 1.030

1500.000	10.92	6794.22	6791.95	.00	6795.68	1.46	1.08	.01	6795.00
2767.0	.0	2767.0	.0	.0	285.3	.0	15.1	10.6	6797.00
.06	.00	9.70	.00	.000	.040	.000	.000	6783.30	730.68
.006976	150.	150.	150.	2	15	0	.00	44.21	774.89

SECNO 1800.000

1800.000	9.30	6796.30	6794.83	.00	6797.98	1.68	2.24	.07	6801.00
2767.0	.0	2767.0	.0	.0	265.9	.0	17.0	10.9	6801.00
.07	.00	10.41	.00	.000	.040	.000	.000	6787.00	505.69
.007991	300.	300.	300.	3	19	0	.00	42.19	547.88

SECNO 2000.000

2000.000	9.18	6798.18	6795.36	.00	6799.17	.99	1.12	.07	6803.50
2659.0	.0	2659.0	.0	.0	333.0	.0	18.4	11.1	6805.00
.07	.00	7.99	.00	.000	.040	.000	.000	6789.00	643.82
.004117	205.	200.	195.	2	14	0	.00	47.87	691.69

SECNO 2200.000

645 INT SEC ADDED BY RAISING SEC 2200.00, -1.000 FT AND MULTIPLYING BY 1.086

1.010	8.36	6798.36	6796.83	.00	6799.86	1.49	.53	.15	6807.00
2659.0	.0	2659.0	.0	.0	271.1	.0	19.1	11.2	6805.00
.08	.00	9.81	.00	.000	.040	.000	.000	6790.00	497.32
.007215	99.	100.	101.	3	15	0	.00	44.56	541.89

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SECNO	DEPTH	CWSEL	CR1WS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

645 INT SEC ADDED BY RAISING SEC 1.01, 1.000 FT AND MULTIPLYING BY .921

2200.000	7.81	6798.81	6798.18	.00	6800.94	2.12	.89	.19	6808.00
2659.0	.0	2659.0	.0	.0	227.4	.0	19.7	11.3	6806.00
.08	.00	11.69	.00	.000	.040	.000	.000	6791.00	466.48
.011245	99.	100.	101.	3	11	0	.00	39.61	506.09

*SECNO 2400.000

2400.000	8.48	6801.08	6800.53	.00	6803.34	2.26	2.36	.04	6806.00
2659.0	.0	2659.0	.0	.0	220.3	.0	20.7	11.4	6810.00
.08	.00	12.07	.00	.000	.040	.000	.000	6792.60	621.40
.012432	192.	200.	208.	3	5	0	.00	38.86	660.26

*SECNO 2600.000

302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.45

2600.000	8.77	6803.77	6801.63	.00	6805.10	1.32	1.66	.09	6812.00
2659.0	.0	2659.0	.0	.0	288.1	.0	21.9	11.6	6812.50
.09	.00	9.23	.00	.000	.040	.000	.000	6795.00	575.81
.005945	200.	200.	200.	2	15	0	.00	42.65	618.46

*SECNO 2670.000

645 INT SEC ADDED BY RAISING SEC 2800.00, -1.500 FT AND MULTIPLYING BY 1.251

3301 HV CHANGED MORE THAN HVINS

85 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

1.010	7.86	6804.36	6804.36	.00	6807.09	2.73	.91	.42	6813.30
2659.0	.0	2659.0	.0	.0	200.6	.0	22.4	11.7	6812.50
.09	.00	13.25	.00	.000	.040	.000	.000	6796.50	538.24
.015858	100.	100.	100.	0	11	0	.00	37.30	575.53

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	GLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

545 INT SEC ADDED BY RAISING SEC 1.01, 1.500 FT AND MULTIPLYING BY .799

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

2800.000	8.86	6806.86	6806.86	.00	6809.86	2.99	1.62	.08	6814.80
2659.0	.0	2659.0	.0	.0	191.5	.0	22.9	11.8	6814.00
.09	.00	13.89	.00	.000	.040	.000	.000	6798.00	448.92
.016543	100.	100.	100.	0	8	0	.00	32.21	481.13

SECNO 3000.000

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3000.000	8.51	6810.51	6810.51	.00	6813.37	2.86	3.26	.01	6816.30
2659.0	.0	2659.0	.0	.0	196.1	.0	23.8	12.0	6814.00
.10	.00	13.56	.00	.000	.040	.000	.000	6802.00	406.66
.016078	200.	200.	200.	0	8	0	.00	34.36	441.03

SECNO 3500.000

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3500.000	7.11	6819.11	6819.11	.00	6821.40	2.28	7.83	.06	6822.00
2659.0	.0	2659.0	.0	.0	219.3	.0	26.2	12.4	6820.00
.11	.00	12.12	.00	.000	.040	.000	.000	6812.00	295.97
.015274	485.	500.	515.	0	12	0	.00	48.08	344.05

SECNO 4000.000

1645 INT SEC ADDED BY RAISING SEC 4000.00, -3.000 FT AND MULTIPLYING BY .825

3065 DIVIDED FLOW

401 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.84

1.010	7.78	6822.78	6822.15	.00	6823.45	.67	1.89	.16	6823.00
2659.0	231.4	2255.1	172.5	147.2	319.0	53.3	28.3	13.5	6820.00
.12	1.57	7.07	3.23	.050	.040	.040	.000	6815.00	428.55
.004496	250.	250.	250.	3	5	0	.00	336.34	767.68

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SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	GLOSS	L-BANK ELEV
D	QLOB	QCH	QROB	ALOB	ACH	AROB	VGL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	KLOBL	XLCH	KLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3045 INT SEC ADDED BY RAISING SEC 1.01, 3.000 FT AND MULTIPLYING BY 1.212

3301 HV CHANGED MORE THAN HVIMS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .56

4000.000	5.91	6823.91	6823.84	.00	6825.58	1.67	1.84	.30	6826.00
2659.0	.0	2643.1	15.9	.0	253.9	6.1	30.5	14.7	6823.00
.13	.00	10.41	2.60	.000	.040	.040	.000	6818.00	781.88
.014092	250.	250.	250.	3	14	0	.00	81.69	863.57

CHV= .100 CEHV= .300

SECNO 4500.000

7185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

4500.000	6.06	6831.06	6831.06	.00	6832.15	1.09	5.51	.06	6830.00
2659.0	53.8	2479.3	125.9	23.5	286.2	55.0	34.1	16.5	6830.00
.14	2.29	8.66	2.29	.040	.040	.040	.000	6825.00	1235.56
.008866	500.	500.	500.	0	5	0	.00	220.47	1456.03

SECNO 5000.000

7185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

5000.000	7.12	6837.12	6837.12	.00	6838.70	1.58	5.42	.15	6836.00
2659.0	48.4	2610.6	.0	16.5	256.6	.0	37.8	18.3	6838.00
.16	2.94	10.17	.00	.040	.040	.000	.000	6830.00	655.58
.013552	455.	500.	550.	0	11	0	.00	98.55	754.14

SECNO 5500.000

5500.000	7.75	6843.75	6843.60	.00	6845.87	2.12	7.00	.16	6845.00
2659.0	.0	2659.0	.0	.0	227.6	.0	40.6	19.2	6845.00
.17	.00	11.68	.00	.000	.040	.000	.000	6836.00	457.09
.014489	500.	500.	500.	2	8	0	.00	50.40	507.49

SECNO 6000.000

6000.000	8.53	6849.53	6848.06	.00	6850.85	1.31	4.90	.08	6850.00
2554.0	.0	2554.0	.0	.0	277.6	.0	43.5	19.8	6855.00
.18	.00	9.20	.00	.000	.040	.000	.000	6841.00	801.13
.006978	500.	500.	500.	2	11	0	.00	50.67	851.80

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T1 CHURCH ROCK, NEW MEXICO AUGUST, 1993 15068-0
 T2 HRI, INC. PROPOSED INSITU URANIUM MINE SITE
 T3 CHURCH ROCK TRIB EXISTING CONDITIONS 25-YEAR STORM
 T4 SECTIONS LOOKING DOWNSTREAM FOR SUBCRITICAL FLOW

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10	3	0	0	0.007	0	1	0	6776	0

MULTIPLE PROFILE RUN WITH INTERPOLATED CROSS SECTIONS

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2	0	0	0	0	0	-1			

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	DLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	DLOSS	L-BANK ELEV
.000	3.81	6776.51	6776.34	6776.00	6776.80	.29	.00	.00	6776.40
1953.0	604.2	1072.4	276.4	209.3	206.0	99.7	.0	.0	6775.20
.00	2.89	5.21	2.77	.040	.040	.040	.000	6772.70	918.75
.007045	0.	0.	0.	0	8	6	.00	516.76	1435.51

*SECNO 150.000

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

150.000	4.40	6778.10	6778.10	.00	6778.84	.74	1.59	.13	6777.80
1953.0	30.1	1922.7	.2	14.9	277.1	.4	1.4	1.3	6778.00
.01	2.02	6.94	.67	.040	.040	.040	.000	6773.70	702.53
.017537	153.	150.	147.	0	11	0	.00	234.94	937.47

*SECNO 300.000

502 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.68

300.000	3.93	6780.03	6779.65	.00	6780.34	.31	1.46	.04	6778.50
1953.0	257.6	1270.6	424.8	112.4	244.5	141.9	2.8	2.8	6778.00
.02	2.29	5.20	2.99	.040	.040	.040	.000	6776.10	291.52
.006201	150.	150.	150.	2	15	0	.00	661.11	952.64

*SECNO 400.000

400.000	4.27	6780.67	6780.60	.00	6781.21	.54	.81	.07	6780.00
1953.0	222.2	1703.0	27.8	84.7	273.0	14.8	3.8	4.0	6780.00
.02	2.62	6.24	1.88	.040	.040	.040	.000	6776.40	759.02
.010870	100.	100.	100.	2	8	0	.00	342.84	1101.86

*SECNO 500.000

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

500.000	5.07	6782.07	6782.07	.00	6782.78	.71	.94	.05	6780.00
1953.0	318.6	1304.5	329.8	90.9	165.0	94.0	4.6	4.7	6780.00
.02	3.51	7.91	3.51	.040	.040	.040	.000	6777.00	517.53
.008216	100.	100.	100.	0	11	0	.00	230.19	747.71

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SECNO 600.000

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

600.000	5.79	6783.19	6783.19	.00	6784.07	.88	.87	.05	6782.00
1953.0	114.7	1732.5	105.8	45.7	217.6	42.2	5.3	5.2	6782.00
.03	2.51	7.96	2.51	.040	.040	.040	.000	6777.40	592.94
.009168	100.	100.	100.	0	8	0	.00	212.19	805.13

SECNO 700.000

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

700.000	6.61	6784.41	6784.41	.00	6785.33	.92	.77	.01	6782.00
1953.0	255.2	1479.2	218.6	76.8	171.7	60.4	6.0	5.6	6782.00
.03	3.32	8.62	3.62	.040	.040	.040	.000	6777.80	586.78
.006570	103.	100.	97.	0	8	0	.00	200.87	787.65

SECNO 800.000

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

800.000	7.73	6786.23	6786.23	.00	6786.77	.53	.65	.04	6784.00
1953.0	492.7	1460.3	.0	181.1	221.6	.0	6.9	6.3	6786.40
.04	2.72	6.59	.00	.040	.040	.000	.000	6778.50	324.52
.006482	98.	100.	102.	0	11	0	.00	420.55	745.07

SECNO 900.000

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

900.000	8.40	6787.70	6787.70	.00	6788.23	.53	.72	.00	6787.00
1953.0	372.1	1580.9	.0	155.8	246.5	.0	7.8	7.2	6788.00
.04	2.39	6.41	.00	.040	.040	.000	.000	6779.30	492.26
.008066	98.	100.	102.	0	9	0	.00	376.38	868.65

CEHV= .100 CEHV= .300

SECNO 1000.000

3265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

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SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	GLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1000.000	8.60	6788.70	6788.70	.00	6789.24	.54	.78	.00	6789.00
1953.0	417.2	1535.8	.0	216.3	27.7	.0	8.8	8.2	6789.00
.05	1.93	6.57	.00	.050	.040	.000	.000	6780.10	358.03
.007546	100.	100.	101.	0	9	0	.00	426.55	805.87

*SECNO 1200.000

1645 INT SEC ADDED BY RAISING SEC 1200.00, -.450 FT AND MULTIPLYING BY 1.124

1.010	8.27	6788.82	6787.44	.00	6790.31	1.49	.79	.29	6791.85
1953.0	.0	1953.0	.0	.0	199.1	.0	9.5	8.7	6793.55
.05	.00	9.81	.00	.000	.040	.000	.000	6780.55	478.34
.008305	101.	100.	99.	2	15	0	.00	34.64	512.98

1645 INT SEC ADDED BY RAISING SEC 1.01, .450 FT AND MULTIPLYING BY .889

1200.000	8.56	6789.56	6788.35	.00	6791.27	1.71	.89	.06	6792.30
1953.0	.0	1953.0	.0	.0	186.1	.0	9.9	8.8	6794.00
.05	.00	10.49	.00	.000	.040	.000	.000	6781.00	436.10
.009579	101.	100.	99.	2	11	0	.00	31.47	467.56

*SECNO 1500.000

1500.000	9.11	6792.41	6790.48	.00	6793.67	1.26	2.36	.04	6795.00
1953.0	.0	1953.0	.0	.0	216.7	.0	11.3	9.0	6797.00
.06	.00	9.01	.00	.000	.040	.000	.000	6783.30	737.22
.006560	300.	300.	300.	2	15	0	.00	35.54	772.77

*SECNO 1800.000

1800.000	7.52	6794.52	6793.47	.00	6796.07	1.55	2.31	.09	6801.00
1953.0	.0	1953.0	.0	.0	195.6	.0	12.7	9.3	6801.00
.07	.00	9.99	.00	.000	.040	.000	.000	6787.00	508.43
.009191	300.	300.	300.	3	19	0	.00	36.99	545.42

*SECNO 2000.000

302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

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SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

2000.000	7.53	6796.53	6794.19	.00	6797.36	.84	1.22	.07	6803.50
1886.0	.0	1886.0	.0	.0	256.8	.0	13.8	9.4	6805.00
.08	.00	7.35	.00	.000	.040	.000	.000	6789.00	645.48
.004302	205.	200.	195.	0	19	0	.00	43.84	689.32

SECNO 2200.000

1645 INT SEC ADDED BY RAISING SEC 2200.00, -1.000 FT AND MULTIPLYING BY 1.094

1.010	6.76	6796.76	6795.59	.00	6798.08	1.32	.57	.14	6807.00
1886.0	.0	1886.0	.0	.0	204.8	.0	14.3	9.5	6805.00
.08	.00	9.21	.00	.000	.040	.000	.000	6790.00	502.44
.007961	99.	100.	101.	3	15	0	.00	40.36	542.81

1645 INT SEC ADDED BY RAISING SEC 1.01, 1.000 FT AND MULTIPLYING BY .914

2200.000	6.36	6797.36	6796.89	.00	6799.21	1.85	.97	.16	6808.00
1886.0	.0	1886.0	.0	.0	173.0	.0	14.7	9.6	6806.00
.08	.00	10.90	.00	.000	.040	.000	.000	6791.00	468.28
.012133	99.	100.	101.	2	11	0	.00	35.68	504.16

SECNO 2400.000

2400.000	7.13	6799.73	6799.12	.00	6801.59	1.87	2.38	.01	6806.00
1886.0	.0	1886.0	.0	.0	172.1	.0	15.5	9.8	6810.00
.09	.00	10.96	.00	.000	.040	.000	.000	6792.60	625.36
.011639	192.	200.	208.	2	5	0	.00	33.33	658.69

SECNO 2600.000

2600.000	7.20	6802.20	6800.39	.00	6803.31	1.10	1.64	.08	6812.00
1886.0	.0	1886.0	.0	.0	223.7	.0	16.4	9.9	6812.50
.10	.00	8.43	.00	.000	.040	.000	.000	6795.00	576.92
.006072	200.	200.	200.	2	15	0	.00	39.12	616.04

*SECNO 2800.000

1645 INT SEC ADDED BY RAISING SEC 2800.00, -1.500 FT AND MULTIPLYING BY 1.266

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SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

1.010	6.49	6802.99	6802.99	.00	6805.32	2.33	.94	.37	6813.30
1886.0	.0	1886.0	.0	.0	154.0	.0	16.9	10.0	6812.50
.10	.00	12.25	.00	.000	.040	.000	.000	6796.50	545.33
.016513	100.	100.	100.	0	11	0	.00	33.56	578.89

1645 INT SEC ADDED BY RAISING SEC 1.01, 1.500 FT AND MULTIPLYING BY .790

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

2800.000	7.39	6805.39	6805.39	.00	6807.96	2.57	1.68	.07	6814.80
1886.0	.0	1886.0	.0	.0	146.6	.0	17.2	10.1	6814.00
.10	.00	12.87	.00	.000	.040	.000	.000	6798.00	450.76
.017126	100.	100.	100.	0	8	0	.00	28.68	479.44

*SECNO 3000.000

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

3000.000	7.07	6809.07	6809.07	.00	6811.54	2.47	3.38	.01	6816.30
1886.0	.0	1886.0	.0	.0	149.6	.0	17.9	10.2	6814.00
.10	.00	12.61	.00	.000	.040	.000	.000	6802.00	408.41
.016700	200.	200.	200.	0	8	0	.00	30.31	438.72

*SECNO 3500.000

185 MINIMUM SPECIFIC ENERGY

720 CRITICAL DEPTH ASSUMED

3500.000	5.95	6817.95	6817.95	.00	6819.94	1.99	8.25	.05	6822.00
1886.0	.0	1886.0	.0	.0	166.5	.0	19.7	10.7	6820.00
.12	.00	11.33	.00	.000	.040	.000	.000	6812.00	297.57
.016294	485.	500.	515.	0	15	0	.00	42.59	340.16

*SECNO 4000.000

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	DLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

45 INT SEC ADDED BY RAISING SEC 4000.00, -3.000 FT AND MULTIPLYING BY 824

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.62

1.010	6.56	6821.56	6820.44	.00	6822.42	.86	2.37	.11	6823.00
1886.0	.0	1849.4	36.6	.0	245.8	14.9	20.9	11.0	6820.00
.13	.00	7.52	2.46	.000	.040	.040	.000	6815.00	661.00
.006181	250.	250.	250.	2	11	0	.00	76.23	737.23

45 INT SEC ADDED BY RAISING SEC 1.01, 3.000 FT AND MULTIPLYING BY 1.213

4000.000	5.41	6823.41	6822.99	.00	6824.54	1.14	2.04	.08	6826.00
1886.0	.0	1884.3	1.7	.0	220.2	1.2	22.3	11.4	6823.00
.13	.00	8.56	1.37	.000	.040	.040	.000	6818.00	782.73
.011285	250.	250.	250.	3	19	0	.00	73.39	856.12

CHV= .100 CEHV= .300

SECNO 4500.000

4500.000	4.90	6829.90	6829.79	.00	6831.25	1.35	6.64	.06	6830.00
1886.0	.0	1886.0	.0	.0	202.5	.0	24.8	12.3	6830.00
.15	.00	9.31	.00	.000	.040	.000	.000	6825.00	1281.05
.015870	500.	500.	500.	2	11	0	.00	70.74	1351.79

SECNO 5000.000

5000.000	6.61	6836.61	6836.09	.00	6837.72	1.11	6.44	.02	6836.00
1886.0	8.2	1877.8	.0	4.4	221.7	.0	27.2	13.1	6838.00
.16	1.72	8.47	.00	.040	.040	.000	.000	6830.00	669.17
.010677	455.	500.	550.	3	8	0	.00	81.52	750.69

*SECNO 5500.000

5500.000	6.48	6842.48	6842.44	.00	6844.42	1.94	6.46	.25	6845.00
1886.0	.0	1886.0	.0	.0	168.5	.0	29.5	13.8	6845.00
.18	.00	11.19	.00	.000	.040	.000	.000	6836.00	459.20
.015937	500.	500.	500.	2	8	0	.00	42.70	501.90

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SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	GLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SECNO 6000.000

302 WAPNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

6000.000	7.38	6848.38	6846.96	.00	6849.42	1.04	4.91	.09	6850.00
1818.0	.0	1818.0	.0	.0	221.7	.0	31.7	14.3	6855.00
.19	.00	8.20	.00	.000	.040	.000	.000	6841.00	803.89
.006562	500.	500.	500.	3	11	0	.00	46.17	850.07

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THIS RUN EXECUTED 27AUG93 15:46:06

HEC-2 WATER SURFACE PROFILESVersion 4.6.0; February 1991

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

CHURCH ROCK TRIB EXISTI

SUMMARY PRINTOUT TABLE 150

SECCO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10*KS	VCH	AREA	.01K
.000	.00	.00	.00	6772.70	2767.00	6776.80	6776.53	6777.12	70.43	5.66	675.61	329.71
.000	.00	.00	.00	6772.70	1953.00	6776.51	6776.34	6776.80	70.45	5.21	515.06	232.68
* 150.000	150.00	.00	.00	6773.70	2767.00	6778.55	6778.55	6779.34	144.62	7.37	412.16	230.09
150.000	150.00	.00	.00	6773.70	1953.00	6778.10	6778.10	6778.84	175.37	6.94	292.37	147.48
* 300.000	150.00	.00	.00	6776.10	2767.00	6780.37	6780.19	6780.68	56.85	5.43	729.52	366.98
300.000	150.00	.00	.00	6776.10	1953.00	6780.03	6779.65	6780.34	62.01	5.20	498.80	248.02
* 400.000	100.00	.00	.00	6776.40	2767.00	6780.96	6780.96	6781.64	120.63	7.17	477.91	251.94
400.000	100.00	.00	.00	6776.40	1953.00	6780.67	6780.60	6781.21	108.70	6.24	372.43	187.32
* 500.000	100.00	.00	.00	6777.00	2767.00	6782.48	6782.48	6783.27	85.92	8.68	460.77	298.52
500.000	100.00	.00	.00	6777.00	1953.00	6782.07	6782.07	6782.70	82.16	7.91	349.88	215.46
* 600.000	100.00	.00	.00	6777.40	2767.00	6783.80	6783.80	6784.67	79.96	8.31	460.33	309.44
600.000	100.00	.00	.00	6777.40	1953.00	6783.19	6783.19	6784.07	91.68	7.96	305.42	203.96
* 700.000	100.00	.00	.00	6777.80	2767.00	6785.09	6785.09	6785.92	58.21	8.82	490.89	362.68
700.000	100.00	.00	.00	6777.80	1953.00	6784.41	6784.41	6785.33	65.70	8.62	308.91	240.95
* 800.000	100.00	.00	.00	6778.50	2767.00	6786.46	6786.46	6787.14	94.96	7.75	499.11	283.95
800.000	100.00	.00	.00	6778.50	1953.00	6786.23	6786.23	6786.77	64.82	6.59	402.70	242.58
* 900.000	100.00	.00	.00	6779.30	2767.00	6787.97	6787.97	6788.60	101.00	7.27	513.98	275.32
900.000	100.00	.00	.00	6779.30	1953.00	6787.70	6787.70	6788.23	80.66	6.41	402.28	217.46
* 1000.000	100.00	.00	.00	6780.10	2767.00	6789.03	6788.96	6789.57	91.49	6.97	607.18	289.29
1000.000	100.00	.00	.00	6780.10	1953.00	6788.70	6788.70	6789.24	75.46	6.57	449.99	224.83
* 1200.000	200.00	.00	.00	6781.00	2767.00	6790.50	6789.89	6793.03	132.60	12.75	217.02	240.29
1200.000	200.00	.00	.00	6781.00	1953.00	6789.56	6788.35	6791.27	95.79	10.49	186.14	157.55

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SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	10*KS	VCH	AREA	.01K
1500.000	300.00	.00	.00	6783.30	2767.00	6794.22	6791.95	6795.68	69.76	9.70	285.32	331.28
1500.000	300.00	.00	.00	6783.30	1953.00	6792.41	6790.48	6793.67	65.60	9.01	216.69	241.12
1800.000	300.00	.00	.00	6787.00	2767.00	6796.30	6794.83	6797.98	79.91	10.41	265.92	309.54
1800.000	300.00	.00	.00	6787.00	1953.00	6794.52	6793.47	6796.07	91.91	9.99	195.56	203.71
2000.000	200.00	.00	.00	6789.00	2659.00	6798.18	6795.36	6799.17	41.17	7.99	332.96	414.38
* 2000.000	200.00	.00	.00	6789.00	1886.00	6796.53	6794.19	6797.36	43.02	7.35	256.77	287.56
2200.000	200.00	.00	.00	6791.00	2659.00	6798.81	6798.18	6800.94	112.45	11.69	227.44	250.75
2200.000	200.00	.00	.00	6791.00	1886.00	6797.36	6796.89	6799.21	121.33	10.90	172.98	171.22
2400.000	200.00	.00	.00	6792.60	2659.00	6801.08	6800.53	6803.34	124.32	12.07	220.35	238.48
2400.000	200.00	.00	.00	6792.60	1886.00	6799.73	6799.12	6801.59	116.39	10.96	172.06	174.82
2600.000	200.00	.00	.00	6795.00	2659.00	6803.77	6801.63	6805.10	59.45	9.23	288.07	344.85
2600.000	200.00	.00	.00	6795.00	1886.00	6802.20	6800.39	6803.31	60.72	8.43	223.67	242.03
2800.000	200.00	.00	.00	6798.00	2659.00	6806.86	6806.86	6809.86	165.43	13.89	191.47	206.73
2800.000	200.00	.00	.00	6798.00	1886.00	6805.39	6805.39	6807.96	171.26	12.87	146.58	144.12
* 3000.000	200.00	.00	.00	6802.00	2659.00	6810.51	6810.51	6813.37	160.78	13.56	196.07	209.70
3000.000	200.00	.00	.00	6802.00	1886.00	6809.07	6809.07	6811.54	167.00	12.61	149.58	145.94
3500.000	500.00	.00	.00	6812.00	2659.00	6819.11	6819.11	6821.40	152.74	12.12	219.34	215.15
* 3500.000	500.00	.00	.00	6812.00	1886.00	6817.95	6817.95	6819.94	162.94	11.33	166.48	147.75
4000.000	500.00	.00	.00	6818.00	2659.00	6823.91	6823.84	6825.58	140.92	10.41	260.00	223.99
4000.000	500.00	.00	.00	6818.00	1886.00	6823.41	6822.99	6824.54	112.85	8.56	221.50	177.54
* 4500.000	500.00	.00	.00	6825.00	2659.00	6831.06	6831.06	6832.15	88.66	8.66	364.73	282.40
4500.000	500.00	.00	.00	6825.00	1886.00	6829.90	6829.79	6831.25	158.70	9.31	202.51	149.71
5000.000	500.00	.00	.00	6830.00	2659.00	6837.12	6837.12	6838.70	135.52	10.17	273.11	228.41
5000.000	500.00	.00	.00	6830.00	1886.00	6836.61	6836.09	6837.72	106.73	8.47	226.50	182.56
5500.000	500.00	.00	.00	6836.00	2659.00	6843.75	6843.60	6845.87	144.89	11.68	227.62	220.90
5500.000	500.00	.00	.00	6836.00	1886.00	6842.48	6842.44	6844.42	159.37	11.19	168.52	149.40
6000.000	500.00	.00	.00	6841.00	2554.00	6849.53	6848.06	6850.85	69.78	9.20	277.57	305.75
6000.000	500.00	.00	.00	6841.00	1818.00	6848.38	6846.96	6849.42	65.62	8.20	221.70	224.43

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CHURCH ROCK TRIB EXISTI

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
.000	2767.00	6776.80	.00	.00	-.20	586.60	.00
.000	1953.00	6776.51	-.29	.00	.51	516.76	.00
* 150.000	2767.00	6778.55	.00	1.75	.00	301.88	150.00
150.000	1953.00	6778.10	-.45	1.59	.00	234.94	150.00
300.000	2767.00	6780.37	.00	1.82	.00	718.48	150.00
300.000	1953.00	6780.03	-.34	1.93	.00	661.11	150.00
400.000	2767.00	6780.96	.00	.59	.00	395.68	100.00
400.000	1953.00	6780.67	-.29	.65	.00	342.84	100.00
* 500.000	2767.00	6782.48	.00	1.52	.00	306.08	100.00
500.000	1953.00	6782.07	-.41	1.39	.00	230.19	100.00
600.000	2767.00	6783.80	.00	1.32	.00	289.40	100.00
* 600.000	1953.00	6783.14	-.62	1.12	.00	212.19	100.00
700.000	2767.00	6785.09	.00	1.29	.00	335.02	100.00
700.000	1953.00	6784.41	-.68	1.23	.00	200.87	100.00
* 800.000	2767.00	6786.46	.00	1.36	.00	442.62	100.00
800.000	1953.00	6786.23	-.22	1.82	.00	420.55	100.00
900.000	2767.00	6787.97	.00	1.51	.00	459.66	100.00
* 900.000	1953.00	6787.70	-.27	1.46	.00	376.38	100.00
1000.000	2767.00	6789.03	.00	1.07	.00	482.11	100.00
1000.000	1953.00	6788.70	-.34	1.00	.00	426.55	100.00
* 1200.000	2767.00	6790.50	.00	.65	.00	35.10	200.00
1200.000	1953.00	6789.56	-.94	.74	.00	31.47	200.00
1500.000	2767.00	6794.22	.00	1.22	.00	44.21	300.00
1500.000	1953.00	6792.41	-1.81	2.85	.00	35.54	300.00
1800.000	2767.00	6796.30	.00	2.08	.00	42.19	300.00
1800.000	1953.00	6794.52	-1.78	2.11	.00	36.99	300.00
2000.000	2659.00	6798.18	.00	1.88	.00	47.87	200.00
2000.000	1886.00	6796.53	-1.66	2.00	.00	43.84	200.00
2200.000	2659.00	6798.81	.00	.45	.00	39.61	200.00
* 2200.000	1886.00	6797.36	-1.45	.60	.00	35.88	200.00
2400.000	2659.00	6801.08	.00	2.27	.00	38.86	200.00
2400.000	1886.00	6799.73	-1.35	2.36	.00	33.33	200.00

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SECD	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
2600.000	2659.00	6803.77	.00	2.69	.00	42.65	200.00
2600.000	1886.00	6802.20	-1.57	2.48	.00	39.12	200.00
* 2800.000	2659.00	6806.86	.00	2.51	.00	32.21	200.00
2800.000	1886.00	6805.39	-1.47	2.40	.00	28.68	200.00
3000.000	2659.00	6810.51	.00	3.65	.00	34.36	200.00
* 3000.000	1886.00	6809.07	-1.44	3.68	.00	30.31	200.00
3500.000	2659.00	6819.11	.00	8.60	.00	48.08	500.00
3500.000	1886.00	6817.95	-1.17	8.88	.00	42.59	500.00
* 4000.000	2659.00	6823.91	.00	1.13	.00	81.69	500.00
4000.000	1886.00	6823.41	-.50	1.85	.00	73.39	500.00
4500.000	2659.00	6831.06	.00	7.15	.00	220.47	500.00
4500.000	1886.00	6829.90	-1.15	6.50	.00	70.74	500.00
5000.000	2659.00	6837.12	.00	6.06	.00	98.55	500.00
5000.000	1886.00	6836.61	-.51	6.70	.00	81.52	500.00
5500.000	2659.00	6843.75	.00	6.63	.00	50.40	500.00
5500.000	1886.00	6842.48	-1.27	5.87	.00	42.70	500.00
6000.000	2554.00	6849.53	.00	5.78	.00	50.67	500.00
* 6000.000	1818.00	6848.38	-1.15	5.90	.00	46.17	500.00

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SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO=	150.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	150.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	150.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	150.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
WARNING SECNO=	300.000	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=	300.000	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=	400.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	400.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	500.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	500.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	500.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	500.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	600.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	600.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	600.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	600.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	700.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	700.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	700.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	700.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	800.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	800.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	800.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	800.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	900.000	PROFILE=	1	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	900.000	PROFILE=	1	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	900.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	900.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	1000.000	PROFILE=	2	CRITICAL DEPTH ASSUMED
CAUTION SECNO=	1000.000	PROFILE=	2	MINIMUM SPECIFIC ENERGY
CAUTION SECNO=	1200.000	PROFILE=	1	INTERPOLATED X-SECTIONS USED
CAUTION SECNO=	1200.000	PROFILE=	2	INTERPOLATED X-SECTIONS USED
CAUTION SECNO=	1500.000	PROFILE=	1	INTERPOLATED X-SECTIONS USED
WARNING SECNO=	2000.000	PROFILE=	2	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=	2200.000	PROFILE=	1	INTERPOLATED X-SECTIONS USED
CAUTION SECNO=	2200.000	PROFILE=	2	INTERPOLATED X-SECTIONS USED
WARNING SECNO=	2600.000	PROFILE=	1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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CAUTION SECNO= 2800.000 PROFILE= 1 INTERPOLATED X-SECTIONS USED
CAUTION SECNO= 2800.000 PROFILE= 2 INTERPOLATED X-SECTIONS USED
CAUTION SECNO= 3000.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3000.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3000.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3000.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3500.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3500.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3500.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3500.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 4000.000 PROFILE= 1 INTERPOLATED X-SECTIONS USED
CAUTION SECNO= 4000.000 PROFILE= 2 INTERPOLATED X-SECTIONS USED
CAUTION SECNO= 4500.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 4500.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 5000.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 5000.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY
WARNING SECNO= 6000.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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