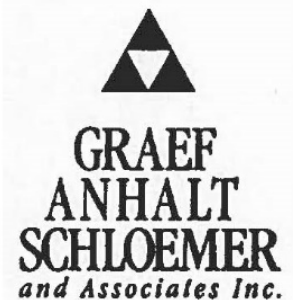


NORTHEAST CANON
DRAINAGE BASIN PLANNING STUDY
TECHNICAL ADDENDUM
FOR
CANON CITY, COLORADO

PREPARED BY:

GRAEF ANHALT SCHLOEMER
AND ASSOCIATION, INC.
102 EAST PIKES PEAK AVENUE
SUITE 305
COLORADO SPRINGS, CO 80903

November, 1993
Job No. 931221



CONSULTING ENGINEERS

TECHNICAL ADDENDUM

The following information was produced in conjunction with Northeast Canon Drainage Basin Planning Study. It contains the complete computer output for the 24-hour, 100-year 50-year and 25 - year flow calculations for the existing conditions and developed conditions with detention.

The following is the order of listing:

Appendix A

TR20 output
24-hour, 100-year existing conditions
24-hour, 50-year existing conditions
24-hour, 25-year existing conditions

Appendix B

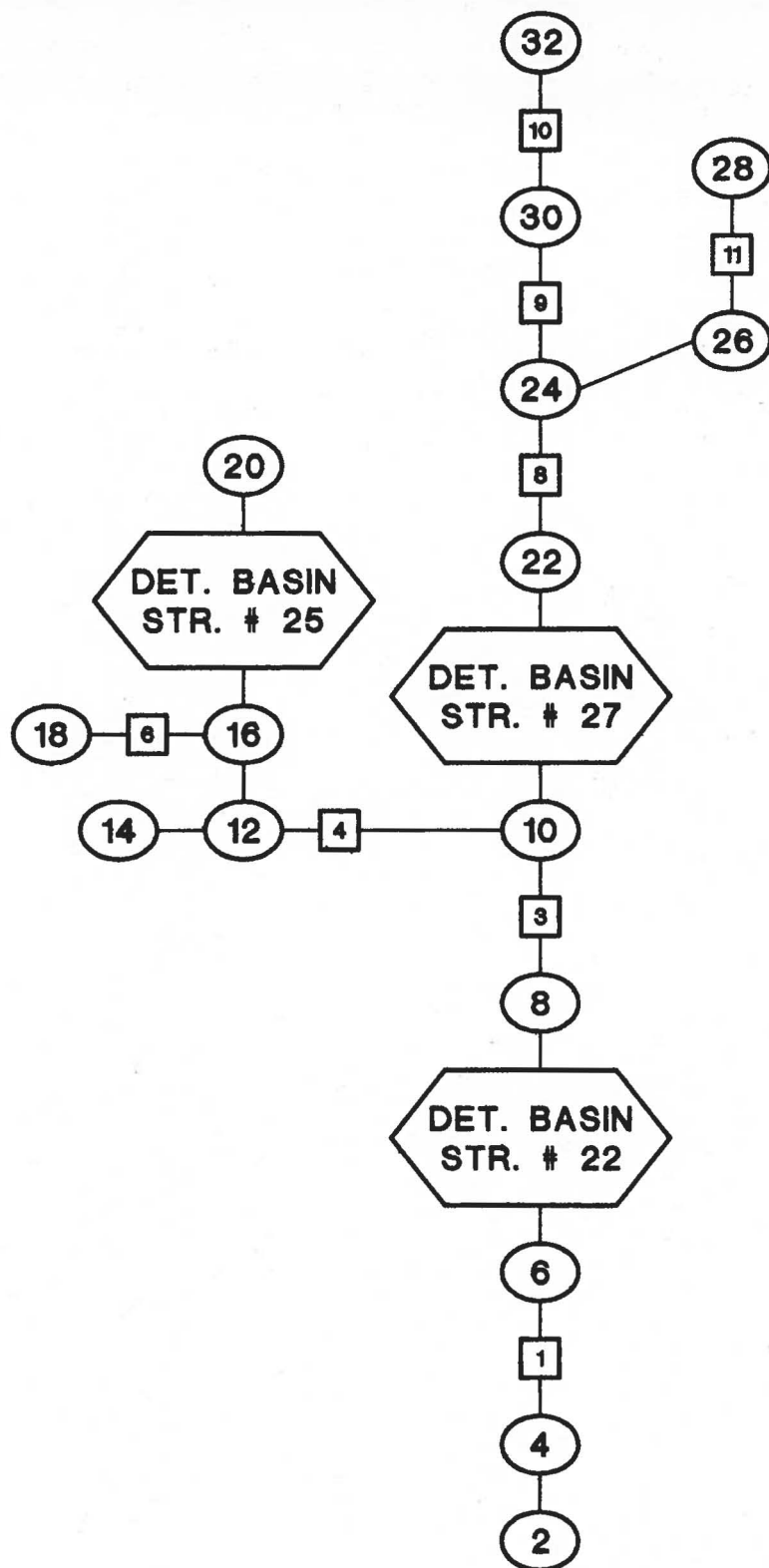
TR20 output
24-hour, 100-year developed conditions with detention
24-hour, 50-year developed conditions with detention
24-hour, 25-year developed conditions with detention

NORTHEAST CANON BASIN
TR20 INPUT

BASIN #	PLANIMETER CALCULATED			MEASURED CALC		ELEV DIFF	BASIN SLOPE	b	Z	n	V	MEASURED CALC		ELEV DIFF	CHAN SLOPE	b	Z	n	BASIN #
	READING	AREA (Ac.)	AREA(SM)	BASIN L	BASIN L							CHAN L	CHAN L						
2	1.4	128.56	0.201	1.6	3200	25	0.78	6	1	0.03	6.8	1.3	2600	12	0.46	6	0	0.015	2
4	2.65	243.34	0.380	3.6	7200	55	0.76	32	50	0.016	5.2	0.8	1600	15	0.94	5	0	0.024	4
6	1.75	160.70	0.251	2.7	6300	56	0.89	10	1	0.03	7.6	1.2	2400	30	1.25	10	1	0.03	6
8	0.62	57.39	0.090	1.7	1800	15	0.83	8	1.5	0.03	4.8	1	2000	20	1.00	6	2	0.035	8
10	0.65	59.69	0.093	0.8	1600	20	1.25	0	10	0.04	4.3	0.9	1800	15	0.83	6	1.5	0.03	10
12	1.58	145.09	0.227	2.4	4800	100	2.08	0	6	0.04	5.9	1.5	3000	40	1.33	4	1	0.03	12
14	0.96	88.15	0.138	1.7	4400	120	2.73	4	4	0.04	7.2	0	0	0	0.00				14
16	0.37	33.98	0.053	1.2	2000	30	1.50	4	4	0.035	6.3	1	2000	35	1.75	4	3	0.03	16
18	1.45	133.15	0.208	2.3	5500	450	8.18	6	4	0.04	10.7	0	0	0	0.00				18
20	9.44	866.85	1.354	6.1	12200	600	4.92	4	4	0.04	8	0	0	0	0.00				20
22	1.1	101.01	0.158	1.7	3400	65	1.91	4	1	0.03	9.6	1.5	3000	45	1.50	10	4	0.03	22
24	2.7	247.93	0.387	2.8	5600	140	2.50	4	4	0.03	8.6	2.8	5600	120	2.14	8	4	0.035	24
26	2.78	255.28	0.399	4.2	8400	450	5.36	4	6	0.035	9.3	3.6	7200	180	2.50	4	4	0.035	26
28	0.95	87.24	0.136	1.4	2800	80	2.86	0	6	0.035	7.4	0	0	0	0.00				28
30	4.15	381.08	0.595	3.3	6600	240	3.64	4	6	0.035	8.1	2.5	5000	120	2.40	10	4	0.035	30
32	6.03	553.72	0.865	4.9	9800	430	4.39	4	1	0.04	7.8	0	0	0	0.00				32

NORTHEAST CANON BASIN
TIME OF CONCENTRATION AND CN CALCULATIONS
PROPOSED CONDITIONS

AREA DESIG.	C10 (10 yr)	L (ft)	Initial Tci		L (f	Travel Time			Tt (min)	TC (min)	TC (hr)	DEV CN	EXIST CN	AREA DESIG.
			Slope (%)	ti (min)		Slope (%)	V (fps)							
2	0.70	300	0.78	14.06	2900	0.78	6.80	7.11	21.17	0.353	90.6	90.6	2	
4	0.60	300	0.76	17.73	6900	0.76	5.20	22.12	39.85	0.664	89	89	4	
6	0.40	300	1.20	21.35	6000	1.20	7.60	13.16	34.51	0.575	89.8	89.8	6	
8	0.40	300	0.44	29.73	1500	0.44	4.80	5.21	34.94	0.582	90.3	74	8	
10	0.40	300	1.25	21.06	1300	1.25	4.30	5.04	26.10	0.435	86	80	10	
12	0.40	300	2.10	17.75	4500	2.10	5.90	12.71	30.46	0.508	83	83	12	
14	0.40	300	2.73	16.28	4100	2.73	7.20	9.49	25.77	0.429	76.2	76.2	14	
16	0.40	300	1.50	19.83	1700	1.50	6.30	4.50	24.33	0.406	86	86	16	
18	0.25	300	8.18	13.76	5200	8.18	10.70	8.10	21.86	0.364	77.6	77.6	18	
20	0.25	300	4.92	16.27	11900	4.92	8.00	24.79	41.06	0.684	74.1	72	20	
22	0.40	300	1.91	18.31	3100	1.91	9.60	5.38	23.69	0.395	81	84	22	
24	0.25	300	2.50	20.35	5300	2.50	8.60	10.27	30.62	0.510	84.3	86	24	
26	0.25	300	5.36	15.82	8100	5.36	9.30	14.52	30.34	0.506	77.3	77.3	26	
28	0.25	300	2.86	19.46	2500	2.86	7.40	5.63	25.09	0.418	81	81	28	
30	0.25	300	3.64	17.97	6300	3.64	8.10	12.96	30.94	0.516	75	75	30	
32	0.25	300	4.40	16.88	9500	4.40	7.80	20.30	37.18	0.620	78.1	78.1	32	



TR-20 FLOW DIAGRAM
DEVELOPED CONDITIONS



PREPARED BY:



**GRAEF
ANHALT
SCHLOEMER**

and ASSOCIATES
ENGINEERS & SCIENTISTS

102 E. Pikes Peak Ave., Suite 305
Colorado Springs, CO. 80903
(719) 634-6902 TEL.
(719) 634-0860 FAX

BASIN MAP

APPENDIX A
TR-20 OUTPUT
EXISTING CONDITIONS



GRAEF
ANHALT
SCHLOEMER
and Associates Inc.

*****80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY*****

JOB TR-20 SUMMARY NOPLOTS
 TITLE 001 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
 TITLE EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

5 RAINFL 7	0.5				
8	0.0000	0.0040	0.0080	0.0100	0.0140
8	0.0190	0.0220	0.0260	0.0300	0.0450
8	0.0600	0.1000	0.7100	0.7500	0.7750
8	0.8000	0.8200	0.8300	0.8400	0.8500
8	0.8600	0.8700	0.8750	0.8850	0.8900
8	0.9000	0.9050	0.9100	0.9200	0.9250
8	0.9300	0.9350	0.9400	0.9450	0.9500
8	0.9550	0.9600	0.9650	0.9700	0.9730
8	0.9750	0.9800	0.9830	0.9870	0.9900
8	0.9930	0.9960	0.9999	1.0000	1.0000

9 ENDTBL				
2 XSECTN 002	1.0			
8	5300.0	0.0	0.0	
8	5302.7	200.0	16.28	
8	5305.5	500.0	33.1	
8	5309.6	1000.0	59.13	
8	5326.6	3000.0	159.56	

9 ENDTBL				
2 XSECTN 004	1.0			
8	5310.0	0.0	0.0	
8	5314.0	200.0	17.27	
8	5316.0	500.0	51.67	
8	5316.6	1000.0	75.31	
8	5317.0	3000.0	250.0	

9 ENDTBL				
2 XSECTN 006	1.0			
8	5324.0	0.0	0.0	
8	5326.2	200.0	26.13	
8	5327.6	500.0	49.71	
8	5329.4	1000.0	82.03	
8	5333.5	3000.0	184.81	

9 ENDTBL				
2 XSECTN 008	1.0			
8	5348.0	0.0	0.0	
8	5350.8	200.0	32.42	
8	5352.3	500.0	63.78	
8	5353.9	1000.0	106.87	
8	5356.9	2500.0	212.05	

9 ENDTBL				
2 XSECTN 010	1.0			
8	5362.5	0.0	0.0	
8	5364.7	200.0	23.41	

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

8	5366.0	500.0	45.86	
8	5367.4	1000.0	76.69	

2	XSECTN	012	1.0		
8			5371.0	0.0	0.0
8			5373.3	100.0	14.22
8			5374.3	200.0	23.73
8			5376.2	500.0	47.06
8			5378.1	1000.0	79.27

9 ENDTBL

2	XSECTN	016	1.0		
8			5420.0	0.0	0.0
8			5422.3	200.0	24.99
8			5423.1	400.0	41.87
8			5423.7	600.0	56.67
8			5425.5	1500.0	112.48

9 ENDTBL

2	XSECTN	020	1.0		
8			5440.0	0.0	0.0
8			5441.4	100.0	13.11
8			5441.9	200.0	21.88
8			5442.8	500.0	43.31
8			5443.8	1000.0	72.71

9 ENDTBL

2	XSECTN	022	1.0		
8			5400.0	0.0	0.0
8			5401.2	100.0	17.77
8			5401.7	200.0	29.14
8			5402.7	500.0	56.74
8			5404.5	1500.0	127.72

9 ENDTBL

2	XSECTN	024	1.0		
8			5440.0	0.0	0.0
8			5441.3	100.0	17.09
8			5441.8	200.0	28.22
8			5442.9	500.0	55.32
8			5443.9	1000.0	92.47

9 ENDTBL

2	XSECTN	026	1.0		
8			5440.0	0.0	0.0
8			5441.1	50.0	9.35
8			5441.5	100.0	15.58
8			5443.1	500.0	51.62
8			5443.6	700.0	66.39

9 ENDTBL

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

2	XSECTN	030	1.0		
8			5560.0	0.0	0.0
8			5560.8	50.0	9.35
8			5561.2	100.0	15.58
8			5561.7	200.0	27.50
8			5562.6	500.0	53.48
8			5563.1	700.0	68.47

9 ENDTBL

2	XSECTN	032	1.0		
8			5660.0	0.0	0.0
8			5661.6	100.0	11.52
8			5662.3	200.0	19.17
8			5663.5	500.0	37.83
8			5664.7	1000.0	63.47

9 ENDTBL

3 STRUCT

8		5328.0	125.0	0.67
8		5330.0	190.0	1.58
8		5331.0	850.0	4.33
9	ENDTBL			
3	STRUCT	02		
8		5348.0	0.0	0.0
8		5350.0	23.0	0.08
8		5352.0	72.0	0.28
8		5354.0	115.0	3.09
8		5355.0	770.0	5.67
9	ENDTBL			
3	STRUCT	03		
8		5362.5	0.0	0.0
8		5365.5	55.0	0.16
8		5367.5	125.0	0.33
8		5369.5	190.0	0.77
8		5371.5	240.0	2.48
8		5372.5	880.0	3.91
9	ENDTBL			
3	STRUCT	04		
8		5371.0	0.0	0.0
8		5373.0	23.0	0.02
8		5375.0	72.0	0.06
8		5377.0	115.0	0.29
8		5379.0	150.0	1.09
8		5380.0	800.0	1.60
9	ENDTBL			
3	STRUCT	05		

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

8		5440.0	0.0	0.0
8		5443.0	55.0	0.28
8		5445.0	125.0	0.68
8		5447.0	190.0	1.37
8		5448.0	210.0	1.84
8		5449.0	880.0	2.76
9	ENDTBL			
3	STRUCT	06		
8		5440.0	0.0	0.0
8		5442.0	19.0	0.10
8		5443.0	35.0	0.20
8		5445.0	60.0	0.62
8		5446.0	710.0	1.30
9	ENDTBL			
3	STRUCT	07		
8		5395.0	0.0	0.0
8		5397.0	23.0	0.11
8		5399.0	72.0	0.43
8		5401.7	125.0	0.85
8		5402.7	780.0	1.54
9	ENDTBL			
3	STRUCT	08		
8		5432.0	0.0	0.0
8		5434.0	19.0	0.02
8		5435.0	35.0	0.11
8		5436.6	58.0	0.52
8		5437.6	705.0	0.92
9	ENDTBL			
3	STRUCT	09		
8		5545.0	0.0	0.0

8		5552.0	190.0	1.17
8		5554.0	240.0	2.20
8		5558.0	300.0	7.80
8		5559.0	950.0	9.40
9	ENDTBL			
3	STRUCT	10		
8		5660.0	0.0	0.0
8		5662.0	23.0	0.01
8		5664.0	72.0	0.03
8		5668.0	150.0	0.72
8		5672.0	200.0	3.00
8		5674.0	215.0	5.06
8		5675.0	880.0	6.36
9	ENDTBL			

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

3	STRUCT	11		
8		5620.0	0.0	0.0
8		5621.0	4.0	6.40
8		5622.0	8.0	12.85
8		5623.0	10.0	19.35
8		5624.0	11.0	25.90
8		5626.0	12.0	38.20
9	ENDTBL			
3	STRUCT	22		
8		5348.0	0.0	0.0
8		5350.0	170.0	2.76
8		5352.0	470.0	8.97
8		5354.0	800.0	15.86
8		5355.0	1040.0	19.00
8		5356.0	1325.0	23.51
8		5357.0	1615.0	28.00
9	ENDTBL			
3	STRUCT	24		
8		5371.0	0.0	0.0
8		5373.0	110.0	2.76
8		5375.0	250.0	8.97
8		5377.0	380.0	15.86
8		5379.0	720.0	23.51
8		5381.0	1450.0	31.50
9	ENDTBL			
3	STRUCT	25		
8		5440.0	0.0	0.0
8		5443.0	110.0	3.67
8		5445.0	250.0	11.94
8		5447.0	380.0	21.14
8		5448.0	420.0	26.14
8		5449.0	460.0	32.20
9	ENDTBL			
3	STRUCT	27		
8		5395.0	0.0	0.0
8		5397.0	220.0	1.84
8		5399.0	500.0	5.97
8		5401.0	720.0	10.57
8		5403.0	840.0	15.67
9	ENDTBL			
3	STRUCT	29		
8		5545.0	0.0	0.0
8		5547.0	55.0	1.84
8		5549.0	125.0	5.97

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

		5555.0	526.0	21.00	
8					
9	ENDTBL				
6	RUNOFF 1 032 7	0.865	78.1	0.620	1
6	RESVOR 2 10 7 4	5660.0			1
6	REACH 3 030 4 6	5000.0			
6	RUNOFF 1 030 5	0.595	75.0	0.516	1
6	ADDHYD 4 030 6 5 7				1
6	RESVOR 2 09 7 4	5545.0			1
6	REACH 3 024 4 6	5600.0			
6	RUNOFF 1 024 5	0.387	86.0	0.510	1
6	ADDHYD 4 024 6 5 7				1
6	RUNOFF 1 028 5	0.136	81.0	0.418	1
6	RESVOR 2 11 5 6	5620.0			1
6	REACH 3 026 6 5	7200.0			
6	RUNOFF 1 026 6	0.399	77.3	0.506	1
6	ADDHYD 4 026 5 6 4				1
6	ADDHYD 4 024 7 4 5				1
6	RESVOR 2 08 5 4	5432.0			1
6	REACH 3 022 4 6	3000.0			
6	RUNOFF 1 022 7	0.158	84.0	0.395	1
6	ADDHYD 4 022 6 7 5				1
6	RESVOR 2 07 5 6	5395.0			1
6	REACH 3 010 6 3	1800.0			
6	RUNOFF 1 020 6	1.354	72.0	0.684	1
6	RESVOR 2 05 6 2	5440.0			1
6	RUNOFF 1 018 7	0.208	77.6	0.364	1
6	RESVOR 2 06 7 5	5440.0			1
6	ADDHYD 4 016 5 2 4				1
6	REACH 3 016 4 7	2000.0			
6	RUNOFF 1 016 5	0.053	86.0	0.406	1
6	ADDHYD 4 016 7 5 6				1
6	RUNOFF 1 014 5	0.138	76.2	0.429	1
6	ADDHYD 4 016 5 6 4				1
6	REACH 3 012 4 7	3000.0			
6	RUNOFF 1 012 5	0.227	83.0	0.508	1
6	ADDHYD 4 012 5 7 4				1
6	RESVOR 2 04 4 2	5371.0			1
6	RUNOFF 1 010 5	0.093	80.0	0.435	1
6	ADDHYD 4 010 5 3 6				1
6	ADDHYD 4 010 6 2 7				1
6	RESVOR 2 03 7 4	5362.5			1
6	REACH 3 008 4 6	2000.0			
6	RUNOFF 1 008 5	0.090	74.0	0.582	1
6	ADDHYD 4 008 6 5 7				1
6	RESVOR 2 02 7 4	5348.0			1
6	REACH 3 006 4 6	2400.0			

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

6	RUNOFF 1 006 5	0.251	89.8	0.575	1
6	ADDHYD 4 006 6 5 7				1
6	RESVOR 2 01 7 4	5324.0			1
6	REACH 3 004 4 6	1600.0			
6	RUNOFF 1 004 5	0.380	89.0	0.664	1
6	ADDHYD 4 004 6 5 7				1

6 ADDHYD 4 002 6 5 7

1

ENDATA

7 INCREM 6 0.10

7 COMPUT 7 032 002 0.0 3.40 1.0 7 2 01 01

ENDCMP 1

7 INCREM 6 0.10

7 COMPUT 7 032 002 0.0 3.05 1.0 7 2 01 02

ENDCMP 1

7 INCREM 6 0.10

7 COMPUT 7 032 002 0.0 2.75 1.0 7 2 01 03

ENDCMP 1

ENDJOB 2

*****END OF 80-80 LIST*****

EXECUTIVE CONTROL OPERATION INCREM

RECORD

ID

MAIN TIME INCREMENT = .10 HOURS

EXECUTIVE CONTROL OPERATION COMPUT

RECORD

ID

FROM XSECTION 32

TO XSECTION 2

STARTING TIME = .00 RAIN DEPTH = 3.40 RAIN DURATION= 1.00 RAIN TABLE NO.= 7 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 1 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	669.90	(RUNOFF)
10.46	26.79	(RUNOFF)
11.65	23.61	(RUNOFF)
12.65	23.72	(RUNOFF)
14.16	23.63	(RUNOFF)
18.90	14.07	(RUNOFF)
20.69	12.10	(RUNOFF)
21.64	10.70	(RUNOFF)
23.56	10.16	(RUNOFF)

*** WARNING - STRUCTURE 10 DELTA T IS TOO LARGE. 0 / 2 > S / DELTA T OCCURED 2 TIMES STARTING WITH POINT257

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	701.16	5674.73
10.46	26.78	5662.15
11.66	23.61	5662.02
12.66	23.72	5662.03
14.17	23.63	5662.03
18.91	14.07	5661.22
20.70	12.10	5661.05
21.65	10.70	5660.93
23.56	10.15	5660.88

*** WARNING - INFLOW EXCEEDED MAX.FLOW IN XSECTN TABLE 30 BY .4 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	435.44	(RUNOFF)
10.43	16.81	(RUNOFF)
11.60	15.40	(RUNOFF)
12.60	15.53	(RUNOFF)
14.11	15.62	(RUNOFF)
18.91	8.95	(RUNOFF)
20.63	8.01	(RUNOFF)
21.60	6.91	(RUNOFF)
23.53	6.63	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.40	893.16	5563.58
10.46	43.54	5560.70
11.70	37.62	5560.60
12.70	37.76	5560.60
14.22	37.56	5560.60
18.95	23.03	5560.37
20.76	19.27	5560.31
21.69	17.32	5560.28
23.59	16.39	5560.26

OPERATION RESVOR STRUCTURE 9

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.43	947.54	5559.00
10.48	43.51	5547.37
11.76	37.29	5547.03
12.76	37.47	5547.04
14.28	37.26	5547.03
18.96	23.01	5546.26
20.82	19.16	5546.04
21.74	17.26	5545.94
23.64	16.22	5545.88

OPERATION RUNOFF CROSS SECTION 24

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.16	509.57	(RUNOFF)
10.38	14.45	(RUNOFF)
11.60	13.16	(RUNOFF)
12.60	13.20	(RUNOFF)
14.10	13.17	(RUNOFF)
18.86	7.41	(RUNOFF)

23.53

5.45

(RUNOFF)

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.21	719.61	5443.34
6.54	976.08	5443.85
10.46	57.89	5440.75
11.80	47.44	5440.62
12.81	47.61	5440.62
14.34	47.03	5440.61
18.95	30.41	5440.40
20.91	24.20	5440.31
21.77	22.41	5440.29
23.63	20.77	5440.27

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	156.76	(RUNOFF)
10.40	4.54	(RUNOFF)
11.56	4.29	(RUNOFF)
12.56	4.32	(RUNOFF)
14.06	4.35	(RUNOFF)
18.93	2.37	(RUNOFF)
23.49	1.79	(RUNOFF)

OPERATION RESVOR STRUCTURE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
8.70	4.71	5621.18

*

* FIRST POINT OF FLAT PEAK

***WARNING - LACK OF LOW FLOW DEFINITION FOR XSECT TABLE 26. MAX.FLOW LESS THAN 2ND TABLE VALUE.

0 *** WARNING - REACH 26 INFLOW HYDROGRAPH VOLUME TRUNCATED ABOVE BASEFLOW AT 2.55 CFS, 54.13 % OF PEAK.

TR20 XEQ 10-13-93 11:12

CANDON CITY NORTHEAST CANDON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

1 PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 3

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	340.04	(RUNOFF)
10.42	12.07	(RUNOFF)
11.60	11.09	(RUNOFF)
12.60	11.16	(RUNOFF)
14.10	11.22	(RUNOFF)
18.88	6.37	(RUNOFF)
20.63	5.71	(RUNOFF)
21.59	4.92	(RUNOFF)
23.52	4.73	(RUNOFF)

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	340.51	5442.46
10.42	16.76	5440.37
11.59	15.75	5440.35
12.60	15.76	5440.35
14.10	15.72	5440.35
20.62	9.60	5440.21
21.58	8.70	5440.19
23.52	8.30	5440.18

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	1058.84	5444.02
6.52	1109.99	5444.12
10.46	74.67	5440.97
11.72	62.21	5440.81
12.73	62.33	5440.81
14.26	61.32	5440.80
18.88	40.84	5440.53
20.84	32.96	5440.43
21.69	30.95	5440.40
23.59	28.97	5440.38

OPERATION RESVOR STRUCTURE 8

1

TR20 XEQ 10-13-93 11:12	CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM	JOB
PASS 1		
REV PC 09/83(.2)	EXISTING CONDITIONS TYPE II STORM INPUT:CAN10	
PAGE 4		

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.21	1036.88	5438.11
6.53	1107.37	5438.22
10.46	74.66	5436.63
11.72	63.71	5436.61
11.86	61.28	5436.60
12.75	62.73	5436.61
14.40	60.67	5436.60
18.96	40.83	5435.41
20.92	32.80	5434.86
21.75	30.88	5434.74

*** WARNING REACH 22 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.10	219.67	(RUNOFF)
10.39	5.66	(RUNOFF)
11.55	5.36	(RUNOFF)
12.55	5.39	(RUNOFF)
14.05	5.44	(RUNOFF)
18.88	2.92	(RUNOFF)
23.49	2.22	(RUNOFF)

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.27	1168.45	5403.90
6.63	1132.87	5403.84
10.48	80.25	5400.96
11.81	67.39	5400.81
12.84	66.35	5400.80
14.50	63.72	5400.76
18.95	43.75	5400.52
21.01	34.67	5400.42
21.79	32.85	5400.39
23.67	30.29	5400.36

OPERATION RESVOR STRUCTURE 7

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

1 PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 5

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.29	1185.68	5403.32
6.67	1130.15	5403.23
10.53	80.20	5399.42
11.91	65.52	5398.74
12.93	65.34	5398.73
14.58	62.24	5398.60
18.97	43.74	5397.85
21.10	34.49	5397.47
21.85	32.81	5397.40
23.74	30.08	5397.29

*** WARNING REACH 10 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	663.36	(RUNOFF)
10.46	34.69	(RUNOFF)
11.68	30.23	(RUNOFF)
12.69	30.49	(RUNOFF)
14.20	30.36	(RUNOFF)
18.90	18.68	(RUNOFF)
20.73	15.77	(RUNOFF)
21.68	14.16	(RUNOFF)
23.58	13.36	(RUNOFF)

OPERATION RESVOR STRUCTURE 5

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.35	654.78	5448.66
10.48	34.65	5441.89
11.74	29.94	5441.63
12.75	30.19	5441.65
14.26	30.05	5441.64
18.95	18.68	5441.02

23.63

13.22

5440.72

OPERATION RUNOFF CROSS SECTION 18

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.10	217.33	(RUNOFF)
7.46	15.17	(RUNOFF)
10.42	6.35	(RUNOFF)
11.53	6.12	(RUNOFF)
12.53	6.15	(RUNOFF)
14.03	6.21	(RUNOFF)
18.88	3.35	(RUNOFF)
20.55	3.18	(RUNOFF)
23.48	2.58	(RUNOFF)

OPERATION RESVOR STRUCTURE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	213.04	5445.24
10.45	6.36	5440.67
11.58	6.05	5440.64
12.58	6.08	5440.64
14.08	6.14	5440.65
18.92	3.34	5440.35
23.52	2.54	5440.27

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	845.65	5424.19
10.47	41.01	5420.47
11.70	35.55	5420.41
12.70	35.81	5420.41
14.22	35.64	5420.41
18.95	22.02	5420.25
20.76	18.42	5420.21
21.69	16.64	5420.19
23.59	15.71	5420.18

*** WARNING REACH 16 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.10	79.17	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 7

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	910.48	5424.32
10.46	43.00	5420.49
11.69	37.25	5420.43
12.69	37.51	5420.43
14.21	37.32	5420.43
18.95	23.03	5420.26
20.75	19.29	5420.22
21.68	17.40	5420.20
23.58	16.47	5420.19

OPERATION RUNOFF CROSS SECTION 14

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.14	121.46	(RUNOFF)
10.42	4.05	(RUNOFF)
11.56	3.83	(RUNOFF)
12.56	3.85	(RUNOFF)
14.06	3.88	(RUNOFF)
18.91	2.14	(RUNOFF)
23.50	1.63	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	1021.87	5424.54
10.46	47.05	5420.54
11.67	40.85	5420.47
12.67	41.12	5420.47
14.19	40.92	5420.47
18.94	25.18	5420.29
20.73	21.12	5420.24
21.66	19.03	5420.22
23.57	18.07	5420.21

0 *** WARNING - INFLOW EXCEEDED MAX.FLOW IN XSECTN TABLE 12 BY 12.9 CFS

*** WARNING REACH 12 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 12

1 PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	257.67	(RUNOFF)
10.45	7.97	(RUNOFF)
11.60	7.25	(RUNOFF)

18.87
23.52

4.11
3.04

(RUNOFF)
(RUNOFF)

OPERATION ADDHYD CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	1273.34	5379.14
10.46	55.02	5372.27
11.66	47.98	5372.10
12.66	48.28	5372.11
14.17	48.05	5372.10
18.92	29.29	5371.67
20.71	24.70	5371.57
21.65	22.17	5371.51
23.56	21.11	5371.49

*** WARNING - STRUCTURE 4 DELTA T IS TOO LARGE. 0 / 2 > S / DELTA T OCCURED 2 TIMES STARTING WITH POINT260

OPERATION RESVOR STRUCTURE 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	1296.73	5380.76
10.46	55.01	5374.31
11.67	47.98	5374.02
12.67	48.28	5374.03
14.18	48.05	5374.02
18.94	29.29	5373.26
20.72	24.70	5373.07
21.66	22.18	5372.93
23.57	21.09	5372.83

OPERATION RUNOFF CROSS SECTION 10

TR20 XEQ 10-13-93 11:12
1 PASS 1
REV PC 09/83(.2)
PAGE 9

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.14	99.85	(RUNOFF)
10.45	3.04	(RUNOFF)
11.57	2.85	(RUNOFF)
12.56	2.86	(RUNOFF)
14.07	2.88	(RUNOFF)
23.50	1.20	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.28	1259.98	5367.87
6.67	1148.79	5367.67
10.49	83.23	5363.42
11.89	67.50	5363.24
12.92	67.28	5363.24
14.58	63.96	5363.20

23.69

31.00

5362.84

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	2536.58	5370.17
10.47	138.23	5364.02
11.73	112.62	5363.74
12.73	112.28	5363.74
14.26	106.13	5363.67
18.95	74.63	5363.32
20.87	57.75	5363.14
21.65	56.11	5363.12
23.60	51.78	5363.07

OPERATION RESVOR STRUCTURE 3

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

1 PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.30	2494.65	5375.02
10.50	138.11	5367.90
11.75	112.68	5367.15
12.75	112.29	5367.14
14.29	106.11	5366.96
18.96	74.62	5366.06
20.91	57.73	5365.58
21.68	56.09	5365.53
23.64	51.59	5365.31

*** WARNING REACH 8 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	56.76	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.29	2549.25	5357.00
10.49	140.57	5349.97
11.74	114.82	5349.61
12.74	114.44	5349.60
14.29	108.20	5349.51
18.96	75.94	5349.06
20.90	58.76	5348.82
21.68	57.09	5348.80
23.63	52.53	5348.74

OPERATION RESVOR STRUCTURE 2

6.34	2456.35	5357.57
10.53	140.52	5354.04
11.89	112.53	5353.89
12.96	110.54	5353.79
14.62	102.03	5353.40
20.95	58.71	5351.46
21.72	57.02	5351.39
23.68	52.41	5351.20

*** WARNING REACH 6 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

TR20 XEQ 10-13-93 11:12 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM JOB
 PASS 1
 REV PC 09/83(.2) EXISTING CONDITIONS TYPE II STORM INPUT:CAN10
 PAGE 11

OPERATION RUNOFF CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.18	367.09	(RUNOFF)
10.45	10.06	(RUNOFF)
11.63	8.92	(RUNOFF)
12.63	8.93	(RUNOFF)
14.13	8.88	(RUNOFF)
18.87	5.10	(RUNOFF)
23.55	3.70	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	2764.46	5333.02
10.49	150.56	5325.66
11.68	120.88	5325.33
12.74	118.35	5325.30
14.38	108.60	5325.19
20.92	62.57	5324.69
21.69	60.87	5324.67
23.66	55.92	5324.62

OPERATION RESVOR STRUCTURE 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.38	2705.91	5333.81
11.75	120.76	5327.88
12.84	118.16	5327.80
14.49	108.46	5327.53
21.03	62.09	5326.20
21.77	60.73	5326.16
23.69	55.50	5326.01

*** WARNING REACH 4 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 4

PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	492.62	(RUNOFF)
10.37	14.99	(RUNOFF)
11.67	13.02	(RUNOFF)
12.67	12.96	(RUNOFF)
14.19	12.81	(RUNOFF)
18.86	7.63	(RUNOFF)
20.72	6.43	(RUNOFF)
21.66	5.75	(RUNOFF)
23.57	5.39	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.36	3137.59	5317.03
11.69	133.71	5312.67
12.73	130.80	5312.62
14.28	120.37	5312.41
21.00	67.73	5311.35
21.73	66.41	5311.33
23.66	60.73	5311.21

*** WARNING - INFLOW EXCEEDED MAX.FLOW IN XSECTN TABLE 2 BY 106.5 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.06	384.67	(RUNOFF)
10.40	8.14	(RUNOFF)
11.52	7.80	(RUNOFF)
12.52	7.81	(RUNOFF)
14.02	7.83	(RUNOFF)
18.86	4.13	(RUNOFF)
20.54	3.92	(RUNOFF)
23.47	3.16	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 2

PASS 1

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.34	3289.44	5329.06
11.59	141.04	5301.90
12.63	137.79	5301.86
14.15	126.98	5301.71

23.61

63.48

5300.86

EXECUTIVE CONTROL OPERATION ENDCMP

RECORD

COMPUTATIONS COMPLETED FOR PASS 1

EXECUTIVE CONTROL OPERATION INCREM

RECORD

MAIN TIME INCREMENT = .10 HOURS

EXECUTIVE CONTROL OPERATION COMPUT

RECORD

FROM XSECTION 32

TO XSECTION 2

STARTING TIME = .00 RAIN DEPTH = 3.05 RAIN DURATION= 1.00 RAIN TABLE NO.= 7 ANT. MOIST. COND= 2
 ALTERNATE NO.= 1 STORM NO.= 2 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	536.41	(RUNOFF)
10.46	22.75	(RUNOFF)
11.65	20.08	(RUNOFF)
12.65	20.20	(RUNOFF)
14.17	20.14	(RUNOFF)
18.91	12.03	(RUNOFF)
20.69	10.35	(RUNOFF)
21.64	9.16	(RUNOFF)
23.56	8.70	(RUNOFF)

*** WARNING - STRUCTURE 10 DELTA T IS TOO LARGE. 0 / 2 > S / DELTA T OCCURED 2 TIMES STARTING WITH POINT257

OPERATION RESVOR STRUCTURE 10

1

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 14

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	586.49	5674.56
10.46	22.74	5661.98
11.66	20.08	5661.75
12.66	20.19	5661.76
14.17	20.14	5661.75
18.92	12.03	5661.05
20.70	10.35	5660.90
21.65	9.16	5660.80
23.56	8.70	5660.76

OPERATION RUNOFF CROSS SECTION 30

6.20	342.47	(RUNOFF)
10.44	14.11	(RUNOFF)
11.60	12.94	(RUNOFF)
12.60	13.07	(RUNOFF)
14.11	13.17	(RUNOFF)
18.92	7.57	(RUNOFF)
20.63	6.78	(RUNOFF)
21.60	5.86	(RUNOFF)
23.53	5.62	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	514.45	5562.64
6.43	675.19	5563.04
10.46	36.80	5560.59
11.70	31.77	5560.51
12.71	31.93	5560.51
14.22	31.79	5560.51
18.95	19.61	5560.31
20.76	16.37	5560.26
21.69	14.76	5560.24
23.59	13.97	5560.22

OPERATION RESVOR STRUCTURE 9

TR20 XEQ 10-13-93 11:12 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM JOB

PASS 2

REV PC 09/83(.2) EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.52	714.57	5558.64
10.48	36.77	5547.01
11.76	31.50	5546.72
12.76	31.69	5546.73
14.28	31.54	5546.72
18.96	19.60	5546.07
20.82	16.28	5545.89
21.75	14.71	5545.80
23.64	13.82	5545.75

OPERATION RUNOFF CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.16	428.54	(RUNOFF)
10.39	12.60	(RUNOFF)
11.60	11.49	(RUNOFF)
12.60	11.53	(RUNOFF)
14.10	11.51	(RUNOFF)
18.87	6.49	(RUNOFF)
20.63	5.81	(RUNOFF)
21.59	4.99	(RUNOFF)
23.53	4.78	(RUNOFF)

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	618.68	5443.14
6.63	696.79	5443.29
10.47	49.30	5440.64
11.80	40.29	5440.52
12.80	40.46	5440.53
14.34	39.96	5440.52
18.95	26.07	5440.34
20.92	20.64	5440.27
21.76	19.21	5440.25
23.63	17.80	5440.23

OPERATION RUNOFF CROSS SECTION 28

TR20 XEQ 10-13-93 11:12 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM JOB
 PASS 2
 REV PC 09/83(.2) EXISTING CONDITIONS TYPE II STORM INPUT:CAN10
 PAGE 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	128.58	(RUNOFF)
10.41	3.90	(RUNOFF)
11.56	3.69	(RUNOFF)
12.56	3.72	(RUNOFF)
14.06	3.75	(RUNOFF)
18.94	2.04	(RUNOFF)
23.49	1.55	(RUNOFF)

OPERATION RESVOR STRUCTURE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
14.10	3.70	5620.92
	*	* FIRST POINT OF FLAT PEAK
10.50	3.87	5620.97

***WARNING - LACK OF LOW FLOW DEFINITION FOR XSECT TABLE 26. MAX.FLOW LESS THAN 2ND TABLE VALUE.

0 *** WARNING - REACH 26 INFLOW HYDROGRAPH VOLUME TRUNCATED ABOVE BASEFLOW AT 2.13 CFS, 55.08 % OF PEAK.

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	272.14	(RUNOFF)
10.43	10.22	(RUNOFF)
11.60	9.40	(RUNOFF)
12.60	9.48	(RUNOFF)
14.10	9.54	(RUNOFF)
18.89	5.43	(RUNOFF)
20.63	4.88	(RUNOFF)
23.52	4.04	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	272.15	5442.19
10.43	14.08	5440.31

14.10	13.28	5440.27
20.62	8.14	5440.18
21.58	7.37	5440.16
23.52	7.04	5440.15

OPERATION ADDHYD CROSS SECTION 24

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.21	888.66	5443.68
6.62	779.61	5443.46
10.46	63.39	5440.82
11.72	52.76	5440.69
12.73	52.91	5440.69
14.26	52.01	5440.68
18.90	34.90	5440.45
20.84	28.05	5440.36
21.68	26.47	5440.34
23.59	24.77	5440.32

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	876.85	5437.87
6.64	761.33	5437.69
10.46	63.39	5436.61
11.86	51.50	5436.15
12.88	51.40	5436.14
14.46	49.88	5436.03
18.95	34.90	5434.99
20.92	27.92	5434.56
21.74	26.41	5434.46
23.65	24.55	5434.35

*** WARNING REACH 22 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	183.41	(RUNOFF)
10.39	4.91	(RUNOFF)
11.55	4.65	(RUNOFF)
12.55	4.68	(RUNOFF)
14.05	4.72	(RUNOFF)
18.88	2.54	(RUNOFF)
23.49	1.94	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.30	973.41	5403.55
6.74	774.97	5403.20
10.48	68.23	5400.82
11.91	54.36	5400.65
12.96	54.22	5400.65
14.55	52.57	5400.63
18.96	37.44	5400.45
21.02	29.54	5400.35
21.77	28.15	5400.34
23.67	25.92	5400.31

OPERATION RESVOR STRUCTURE 7

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	990.95	5403.02
6.76	776.72	5402.70
10.54	68.18	5398.84
11.98	54.27	5398.28
13.02	54.06	5398.27
14.63	52.33	5398.20
18.98	37.43	5397.59
21.11	29.40	5397.26
21.81	28.12	5397.21
23.74	25.75	5397.11

*** WARNING REACH 10 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	506.63	(RUNOFF)
10.46	28.74	(RUNOFF)
11.68	25.09	(RUNOFF)
12.69	25.34	(RUNOFF)
14.20	25.29	(RUNOFF)
18.90	15.63	(RUNOFF)
20.73	13.21	(RUNOFF)
21.68	11.87	(RUNOFF)
23.58	11.20	(RUNOFF)

OPERATION RESVOR STRUCTURE 5

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 2

REV PC 09/83(.2)

PAGE 19

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	509.32	5448.45

12.75	25.09	5441.37
14.26	25.03	5441.37
18.95	15.63	5440.85
20.80	13.08	5440.71
21.73	11.82	5440.64
23.63	11.09	5440.60

OPERATION RUNOFF CROSS SECTION 18

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	175.08	(RUNOFF)
7.46	12.78	(RUNOFF)
10.42	5.39	(RUNOFF)
11.53	5.20	(RUNOFF)
12.53	5.23	(RUNOFF)
14.03	5.28	(RUNOFF)
18.88	2.86	(RUNOFF)
23.48	2.21	(RUNOFF)

OPERATION RESVOR STRUCTURE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	194.67	5445.21
7.45	12.76	5441.34
10.45	5.40	5440.57
11.58	5.14	5440.54
12.58	5.17	5440.54
14.08	5.22	5440.55
18.93	2.86	5440.30
23.52	2.17	5440.23

OPERATION ADDHYD CROSS SECTION 16

TR20 XEQ 10-13-93 11:12 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM JOB

1 PASS 2

REV PC 09/83(.2) EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.29	619.41	5423.74
10.47	34.09	5420.39
11.70	29.61	5420.34
12.70	29.87	5420.34
14.22	29.79	5420.34
18.95	18.49	5420.21
20.76	15.47	5420.18
21.69	13.99	5420.16
23.59	13.22	5420.15

*** WARNING REACH 16 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	66.75	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.27	664.91	5423.83
10.47	35.82	5420.41
11.69	31.10	5420.36
12.69	31.36	5420.36
14.20	31.26	5420.36
18.95	19.38	5420.22
20.74	16.23	5420.19
21.68	14.65	5420.17
23.58	13.88	5420.16

OPERATION RUNOFF CROSS SECTION 14

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.15	96.56	(RUNOFF)
10.43	3.41	(RUNOFF)
11.56	3.23	(RUNOFF)
12.56	3.25	(RUNOFF)
14.06	3.29	(RUNOFF)
18.91	1.82	(RUNOFF)
23.50	1.39	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

1

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 21

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	744.79	5423.99
10.46	39.24	5420.45
11.67	34.14	5420.39
12.67	34.42	5420.40
14.19	34.31	5420.39
18.95	21.20	5420.24
20.73	17.79	5420.20
21.66	16.04	5420.18
23.57	15.25	5420.18

*** WARNING REACH 12 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	213.21	(RUNOFF)
10.45	6.88	(RUNOFF)
11.60	6.27	(RUNOFF)
12.60	6.32	(RUNOFF)
14.10	6.31	(RUNOFF)
18.87	3.57	(RUNOFF)
23.52	2.65	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	913.89	5377.77
10.50	46.04	5372.06
11.74	39.86	5371.92
12.74	40.14	5371.92
14.26	39.98	5371.92
18.97	24.75	5371.57
20.80	20.68	5371.48
21.73	18.68	5371.43
23.64	17.64	5371.41

OPERATION RESVOR STRUCTURE 4

1

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	949.48	5380.23
10.51	46.04	5373.94
11.75	39.85	5373.69
12.75	40.13	5373.70
14.27	39.98	5373.69
18.97	24.75	5373.07
20.81	20.68	5372.80
21.74	18.67	5372.62
23.65	17.70	5372.54

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.14	81.36	(RUNOFF)
10.45	2.60	(RUNOFF)
12.56	2.45	(RUNOFF)
14.07	2.47	(RUNOFF)
23.50	1.03	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.30	1048.64	5367.49
6.76	788.84	5366.81
10.50	70.77	5363.28
12.99	55.59	5363.11
14.62	53.78	5363.09
18.96	38.79	5362.93
21.11	30.28	5362.83
23.69	26.55	5362.79

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	1994.86	5369.19
10.50	116.81	5363.79

14.34	90.94	5363.50
18.97	63.55	5363.20
20.92	49.80	5363.05
21.73	47.77	5363.03
23.66	44.22	5362.99

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

1 PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 23

OPERATION RESVOR STRUCTURE 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.36	1927.61	5374.14
10.53	116.78	5367.27
11.77	95.72	5366.66
12.80	95.09	5366.65
14.37	90.81	5366.52
18.98	63.54	5365.74
20.96	49.71	5365.21
21.77	47.75	5365.10
23.69	44.08	5364.90

*** WARNING REACH 8 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	44.15	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.36	1966.30	5355.83
10.52	118.83	5349.66
11.77	97.47	5349.36
12.79	96.83	5349.36
14.36	92.43	5349.29
18.97	64.65	5348.90
20.95	50.54	5348.71
21.76	48.58	5348.68
23.68	44.84	5348.63

OPERATION RESVOR STRUCTURE 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.40	1928.18	5356.77
10.56	118.85	5354.01
12.92	95.13	5353.08
14.67	86.91	5352.69
19.00	64.64	5351.70
21.01	50.46	5351.12
21.80	48.53	5351.04
23.73	44.63	5350.88

1 PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 24

*** WARNING REACH 6 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	314.48	(RUNOFF)
10.45	8.87	(RUNOFF)
11.63	7.87	(RUNOFF)
12.63	7.88	(RUNOFF)
14.13	7.84	(RUNOFF)
18.87	4.51	(RUNOFF)
23.55	3.27	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.38	2154.72	5331.77
10.51	127.62	5325.40
12.57	102.63	5325.13
14.49	92.28	5325.02
18.97	69.14	5324.76
20.99	53.70	5324.59
21.77	51.84	5324.57
23.69	47.58	5324.52

OPERATION RESVOR STRUCTURE 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.43	2112.12	5332.91
10.56	127.57	5328.08
14.58	92.22	5327.06
19.02	69.12	5326.40
21.01	53.71	5325.95
21.79	51.83	5325.88
23.71	47.51	5325.73

*** WARNING REACH 4 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 4

1 PASS 2

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 25

11.67	11.46	(RUNOFF)
12.67	11.41	(RUNOFF)
14.19	11.29	(RUNOFF)
18.86	6.73	(RUNOFF)
20.72	5.68	(RUNOFF)
23.57	4.76	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.40	2451.85	5316.89
10.46	140.71	5312.81
12.66	114.07	5312.28
14.24	102.70	5312.05
18.97	75.85	5311.52
20.98	58.75	5311.18
21.75	56.83	5311.14
23.68	52.05	5311.04

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.07	332.43	(RUNOFF)
10.40	7.20	(RUNOFF)
11.52	6.89	(RUNOFF)
12.52	6.91	(RUNOFF)
14.02	6.93	(RUNOFF)
18.86	3.66	(RUNOFF)
20.54	3.48	(RUNOFF)
23.47	2.80	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.38	2545.90	5322.74
10.45	147.94	5302.00
12.58	120.74	5301.63
14.12	108.92	5301.47
18.96	79.51	5301.07
20.96	61.11	5300.83
21.69	59.44	5300.80
23.63	54.20	5300.73

TR20 XEQ 10-13-93 11:12 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
 PASS 2
 REV PC 09/83(.2) EXISTING CONDITIONS TYPE II STORM INPUT:CAN10
 PAGE 26

JOB

EXECUTIVE CONTROL OPERATION ENDCMP
 ID

RECORD

COMPUTATIONS COMPLETED FOR PASS 2

EXECUTIVE CONTROL OPERATION INCHM

MAIN TIME INCREMENT = .10 HOURS

EXECUTIVE CONTROL OPERATION COMPUT

RECORD

FROM XSECTION 32

TO XSECTION 2

STARTING TIME = .00 RAIN DEPTH = 2.75 RAIN DURATION= 1.00 RAIN TABLE NO.= 7 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 3 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	425.19	(RUNOFF)
10.46	19.34	(RUNOFF)
11.65	17.10	(RUNOFF)
12.65	17.21	(RUNOFF)
14.17	17.19	(RUNOFF)
18.92	10.30	(RUNOFF)
20.69	8.87	(RUNOFF)
21.64	7.85	(RUNOFF)
23.56	7.47	(RUNOFF)

*** WARNING - STRUCTURE 10 DELTA T IS TOO LARGE. 0 /2 > S /DELTA T OCCURED 2 TIMES STARTING WITH POINT257

OPERATION RESVOR STRUCTURE 10

1

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 3

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.41	422.63	5674.31
7.60	57.44	5663.41
7.80	50.59	5663.13
7.99	44.67	5662.88
8.18	39.79	5662.69
8.35	32.78	5662.40
8.77	22.23	5661.93
8.98	20.54	5661.79
10.43	19.32	5661.68
14.17	17.19	5661.49

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.21	268.14	(RUNOFF)
10.45	11.84	(RUNOFF)
11.60	10.88	(RUNOFF)
12.60	11.00	(RUNOFF)
14.11	11.11	(RUNOFF)
18.93	6.41	(RUNOFF)
20.63	5.75	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.27	418.81	5562.36
6.51	464.27	5562.49
7.85	75.42	5561.00
8.05	67.65	5560.94
10.47	31.13	5560.50
11.71	26.81	5560.43
12.71	26.97	5560.43
14.22	26.88	5560.43
18.96	16.72	5560.27
20.77	13.90	5560.22

OPERATION RESVOR STRUCTURE 9

TR20 XEQ 10-13-93 11:12
 PASS 3
 REV PC 09/83(.2)
 PAGE 28

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
 EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.71	347.26	5558.07
10.49	31.09	5546.70
11.76	26.59	5546.45
12.77	26.77	5546.46
14.28	26.67	5546.45
18.97	16.71	5545.91
20.83	13.83	5545.75
21.75	12.54	5545.68
23.64	11.78	5545.64

OPERATION RUNOFF CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	360.96	(RUNOFF)
10.39	11.02	(RUNOFF)
11.60	10.05	(RUNOFF)
12.60	10.09	(RUNOFF)
14.10	10.09	(RUNOFF)
18.87	5.70	(RUNOFF)
20.63	5.11	(RUNOFF)
23.53	4.20	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	513.51	5442.93
6.79	380.11	5442.46
10.47	42.04	5440.55
11.79	34.09	5440.44
12.80	34.24	5440.44
14.35	33.70	5440.44
18.95	22.39	5440.29
20.94	17.48	5440.27

23.62

15.23

5440.20

OPERATION RUNOFF CROSS SECTION 28

R20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 3

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	105.44	(RUNOFF)
10.41	3.35	(RUNOFF)
11.56	3.17	(RUNOFF)
12.56	3.20	(RUNOFF)
14.06	3.23	(RUNOFF)
23.49	1.34	(RUNOFF)

OPERATION RESVOR STRUCTURE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
14.16	3.06	5620.77
10.60	3.18	5620.80

***WARNING - LACK OF LOW FLOW DEFINITION FOR XSECT TABLE 26. MAX.FLOW LESS THAN 2ND TABLE VALUE.

*** WARNING - REACH 26 INFLOW HYDROGRAPH VOLUME TRUNCATED ABOVE BASEFLOW AT 1.78 CFS, 55.97 % OF PEAK.

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	217.23	(RUNOFF)
10.43	8.66	(RUNOFF)
11.60	7.98	(RUNOFF)
12.60	8.05	(RUNOFF)
14.10	8.12	(RUNOFF)
18.89	4.64	(RUNOFF)
20.63	4.17	(RUNOFF)
23.53	3.45	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	217.24	5441.97
10.45	11.82	5440.26
11.60	11.15	5440.25
12.60	11.20	5440.25
14.10	11.21	5440.25
20.62	6.89	5440.15
23.52	5.97	5440.13

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	727.14	5443.35
6.76	426.46	5442.63
10.46	53.88	5440.70
11.71	44.67	5440.58
12.71	44.79	5440.58
14.26	43.86	5440.57
18.91	29.85	5440.39
20.85	23.72	5440.31
21.66	22.66	5440.29
23.58	21.15	5440.27

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	734.14	5437.65
6.76	425.77	5437.17
10.49	53.80	5436.31
11.84	43.76	5435.61
12.87	43.61	5435.60
14.45	42.23	5435.50
18.95	29.85	5434.68
20.93	23.62	5434.29
21.71	22.62	5434.23
23.64	20.97	5434.12

*** WARNING REACH 22 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	153.26	(RUNOFF)
10.40	4.26	(RUNOFF)
11.55	4.04	(RUNOFF)
12.55	4.07	(RUNOFF)
14.05	4.11	(RUNOFF)
18.88	2.22	(RUNOFF)
23.49	1.69	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 22

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 3

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 31

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	805.87	5403.25
10.45	58.04	5400.70
11.86	46.34	5400.56
12.94	46.07	5400.55
22.55	22.55	5400.54

21.70
23.67

24.17
22.18

5400.29
5400.27

OPERATION RESVOR STRUCTURE 7

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	808.59	5402.74
11.88	46.31	5397.95
13.00	45.98	5397.94
14.63	44.39	5397.87
18.99	32.05	5397.37
21.12	24.94	5397.08
23.71	22.09	5396.92

*** WARNING REACH 10 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	383.66	(RUNOFF)
10.46	23.78	(RUNOFF)
11.68	20.81	(RUNOFF)
12.69	21.05	(RUNOFF)
14.20	21.05	(RUNOFF)
18.91	13.07	(RUNOFF)
20.73	11.06	(RUNOFF)
21.68	9.94	(RUNOFF)
23.58	9.40	(RUNOFF)

OPERATION RESVOR STRUCTURE 5

1

TR20 XEQ 10-13-93 11:12
PASS 3
REV PC 09/83(.2)
PAGE 32

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	440.56	5448.34
10.48	23.74	5441.29
11.74	20.61	5441.12
12.75	20.85	5441.14
14.26	20.83	5441.14
18.95	13.07	5440.71
20.80	10.95	5440.60
21.73	9.90	5440.54
23.63	9.30	5440.51

OPERATION RUNOFF CROSS SECTION 18

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	140.71	(RUNOFF)
7.46	10.76	(RUNOFF)
10.43	4.57	(RUNOFF)
11.54	4.42	(RUNOFF)
12.53	4.45	(RUNOFF)

OPERATION RESVOR STRUCTURE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	155.44	5445.15
7.46	10.75	5441.13
10.45	4.58	5440.48
11.58	4.37	5440.46
12.58	4.40	5440.46
14.08	4.45	5440.47
18.94	2.44	5440.26
23.52	1.86	5440.20

OPERATION ADDHYD CROSS SECTION 16

1

TR20 XEQ 10-13-93 11:12
 PASS 3
 REV PC 09/83(.2)
 PAGE 33

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
 EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	526.37	5423.48
10.47	28.32	5420.33
11.70	24.66	5420.28
12.70	24.91	5420.29
14.22	24.89	5420.29
18.95	15.52	5420.18
20.76	13.00	5420.15
21.69	11.76	5420.14
23.59	11.13	5420.13

*** WARNING REACH 16 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	56.37	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	560.86	5423.58
10.47	29.83	5420.34
11.69	25.96	5420.30
12.69	26.21	5420.30
14.20	26.18	5420.30
18.95	16.30	5420.19
20.74	13.67	5420.16
21.68	12.34	5420.14
23.58	11.71	5420.13

OPERATION RUNOFF CROSS SECTION 14

PEAK TIME(HRS)

PEAK DISCHARGE(CFS)

PEAK ELEVATION(FEET)

7.45	6.76	(RUNOFF)
10.44	2.88	(RUNOFF)
11.56	2.73	(RUNOFF)
12.56	2.75	(RUNOFF)
14.06	2.79	(RUNOFF)
23.50	1.18	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 3

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.30	617.31	5423.73
10.46	32.72	5420.38
11.67	28.53	5420.33
12.67	28.81	5420.33
14.18	28.77	5420.33
18.95	17.85	5420.21
20.73	15.00	5420.17
21.66	13.53	5420.16
23.57	12.87	5420.15

*** WARNING REACH 12 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.18	176.53	(RUNOFF)
10.45	5.96	(RUNOFF)
11.60	5.43	(RUNOFF)
12.60	5.48	(RUNOFF)
14.10	5.48	(RUNOFF)
18.88	3.11	(RUNOFF)
23.52	2.31	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.39	723.28	5377.05
10.50	38.60	5371.89
11.74	33.47	5371.77
12.74	33.75	5371.78
14.26	33.67	5371.77
18.97	20.94	5371.48
20.80	17.50	5371.40
21.73	15.82	5371.36
23.64	14.95	5371.34

OPERATION RESVOR STRUCTURE 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.39	700.40	5379.85
10.51	38.59	5373.64
11.75	33.46	5373.43
12.75	33.75	5373.44
14.27	33.67	5373.44
18.98	20.94	5372.82
20.81	17.50	5372.52
21.74	15.82	5372.38
23.65	14.94	5372.30

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET) (RUNOFF)
6.15	66.23	

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	854.12	5366.99
12.96	47.32	5363.02
14.61	45.64	5363.00
18.97	33.23	5362.87
21.13	25.70	5362.78
23.68	22.81	5362.75

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.36	1513.07	5368.32
10.48	98.85	5363.59
11.73	81.56	5363.40
12.76	80.82	5363.39
14.33	77.30	5363.35
18.97	54.17	5363.10
20.91	42.28	5362.97
21.72	40.84	5362.95
23.66	37.80	5362.92

OPERATION RESVOR STRUCTURE 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.38	1499.13	5373.47
10.49	98.83	5366.75
11.74	81.54	5366.26

14.38	77.10	5365.45
18.99	54.16	5364.81
20.94	42.26	5364.73
21.76	40.82	5364.56
23.69	37.69	

*** WARNING REACH 8 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET) (RUNOFF)
6.25	34.16	

OPERATION ADDHYD CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.38	1528.40	5354.96
10.48	100.55	5349.41
11.75	82.98	5349.16
12.79	82.21	5349.15
14.35	78.62	5349.10
18.98	55.09	5348.77
20.93	42.97	5348.60
21.75	41.53	5348.58
23.68	38.34	5348.54

OPERATION RESVOR STRUCTURE 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.42	1498.30	5356.11
12.88	81.24	5352.43
14.64	74.36	5352.11
19.02	55.08	5351.31
20.99	42.87	5350.81
21.80	41.48	5350.75
23.72	38.15	5350.62

*** WARNING REACH 6 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

TR20 XEQ 10-13-93 11:12	CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM	JOB
PASS 3		
REV PC 09/83(.2)	EXISTING CONDITIONS TYPE II STORM INPUT:CAN10	
PAGE 37		

OPERATION RUNOFF CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET) (RUNOFF)
6.19	270.02	(RUNOFF)
10.45	7.84	(RUNOFF)
11.63	6.97	(RUNOFF)
12.63	6.98	(RUNOFF)
14.13	6.94	(RUNOFF)
18.87	4.00	(RUNOFF)
23.55	2.90	(RUNOFF)

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.38	1691.49	5330.82
14.38	79.40	5324.87
18.98	59.08	5324.65
20.96	45.79	5324.50
21.76	44.42	5324.49
23.69	40.78	5324.45

OPERATION RESVOR STRUCTURE 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.44	1681.77	5332.26
14.52	79.29	5326.69
19.03	59.06	5326.12
20.99	45.79	5325.67
21.78	44.41	5325.62
23.71	40.73	5325.48

*** WARNING REACH 4 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	357.94	(RUNOFF)
10.38	11.64	(RUNOFF)
11.67	10.12	(RUNOFF)
12.68	10.08	(RUNOFF)
14.19	9.98	(RUNOFF)
18.86	5.96	(RUNOFF)
23.57	4.22	(RUNOFF)

1

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

PASS 3

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 38

OPERATION ADDHYD CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.41	1969.60	5316.79
12.65	98.21	5311.96
14.33	88.39	5311.77
18.97	65.01	5311.30
20.95	50.37	5311.01
21.75	48.85	5310.98
23.68	44.76	5310.90

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.07	288.01	(RUNOFF)
10.41	6.38	(RUNOFF)

18.86
20.54
23.47

3.25
3.09
2.49

```
(RUNOFF)
(RUNOFF)
(RUNOFF)
```

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME (HRS)

PEAK DISCHARGE (CFS)

PEAK ELEVATION (FEET)

6.39
12.57
13.82
14.25
18.96
20.93
21.69
23.63

2048.31
104.22
91.09
92.97
68.27
52.49
51.17
46.69

5318.51
5301.41
5301.23
5301.26
5300.92
5300.71
5300.69
5300.63

EXECUTIVE CONTROL OPERATION ENDCMP
ID

RECORD

COMPUTATIONS COMPLETED FOR PASS 3

EXECUTIVE CONTROL OPERATION ENDJOB
ID

RECORD

TR20 XEQ 10-13-93 11:12

CANYON CITY NORTHEAST CANYON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

SUMMARY

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 39

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

[illegible]

ALTERNATE 1 STORM 1

[illegible]

649.0													
SECTION 24	REACH	1.46	7	2	.10	.0	3.40	24.00	1.35	5443.48	6.60	788.74	
540.2													
XSECTION 24	RUNOFF	.39	7	2	.10	.0	3.40	24.00	2.01	---	6.16	509.57	
1316.7													
SECTION 24	ADDHYD	1.85	7	2	.10	.0	3.40	24.00	1.49	5443.85	6.54	976.08	
528.5													
XSECTION 28	RUNOFF	.14	7	2	.10	.0	3.40	24.00	1.63	---	6.12	156.76	
1152.7													
STRUCTURE 11	RESVOR	.14	7	2	.10	.0	3.40	24.00	1.06	5621.18	8.70*	4.71	
34.7													
SECTION 26	REACH	.14	7	2	.10	.0	3.40	24.00	1.05	5440.10	10.10*	4.70	
* 34.5													
XSECTION 26	RUNOFF	.40	7	2	.10	.0	3.40	24.00	1.37	---	6.19	340.04	
852.2													
XSECTION 26	ADDHYD	.53	7	2	.10	.0	3.40	24.00	1.29	5442.46	6.19	340.51	
636.5													
SECTION 24	ADDHYD	2.38	7	2	.10	.0	3.40	24.00	1.44	5444.12	6.52	1109.99	
466.0													
STRUCTURE 8	RESVOR	2.38	7	2	.10	.0	3.40	24.00	1.45	5438.22	6.53	1107.37	
464.9													
XSECTION 22	REACH	2.38	7	2	.10	.0	3.40	24.00	1.44	5403.78	6.64	1098.67	
461.2													
SECTION 22	RUNOFF	.16	7	2	.10	.0	3.40	24.00	1.85	---	6.10	219.67	
1390.3													
XSECTION 22	ADDHYD	2.54	7	2	.10	.0	3.40	24.00	1.46	5403.90	6.27	1168.45	
460.0													
STRUCTURE 7	RESVOR	2.54	7	2	.10	.0	3.40	24.00	1.46	5403.32	6.29	1185.68	
466.8													
SECTION 10	REACH	2.54	7	2	.10	.0	3.40	24.00	1.46	5367.73	6.29	1185.68	
466.8													
XSECTION 20	RUNOFF	1.35	7	2	.10	.0	3.40	24.00	1.06	---	6.31	663.36	
489.9													
STRUCTURE 5	RESVOR	1.35	7	2	.10	.0	3.40	24.00	1.05	5448.66	6.35	654.78	
483.6													
SECTION 18	RUNOFF	.21	7	2	.10	.0	3.40	24.00	1.39	---	6.10	217.33	
1044.8													
STRUCTURE 6	RESVOR	.21	7	2	.10	.0	3.40	24.00	1.38	5445.24	6.12	213.04	
1024.3													
XSECTION 16	ADDHYD	1.56	7	2	.10	.0	3.40	24.00	1.10	5424.19	6.23	845.65	
541.4													
XSECTION 16	REACH	1.56	7	2	.10	.0	3.40	24.00	1.10	5424.19	6.23	845.65	
541.4													
XSECTION 16	RUNOFF	.05	7	2	.10	.0	3.40	24.00	2.01	---	6.10	79.17	
1493.9													
XSECTION 16	ADDHYD	1.62	7	2	.10	.0	3.40	24.00	1.13	5424.32	6.23	910.48	
563.8													
XSECTION 14	RUNOFF	.14	7	2	.10	.0	3.40	24.00	1.30	---	6.14	121.46	
880.1													
XSECTION 16	ADDHYD	1.75	7	2	.10	.0	3.40	24.00	1.14	5424.54	6.22	1021.87	
582.9													
XSECTION 12	REACH	1.75	7	2	.10	.0	3.40	24.00	1.14	5378.18	6.22	1021.87	
582.9													

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
 (A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
 A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION			RUNOFF	PEAK DISCHARGE		
ID	OPERATION	AREA	#	COND	INCREM	BEGIN	AMOUNT	DURATION	AMOUNT	ELEVATION	TIME	RATE
RATE		(SQ MI)			(HR)	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)
(CSM)												
ALTERNATE	1	STORM	1									
XSECTION 12 1135.1	RUNOFF	.23	7	2	.10	.0	3.40	24.00	1.77	---	6.17	257.67
XSECTION 12 643.1	ADDHYD	1.98	7	2	.10	.0	3.40	24.00	1.21	5379.14	6.22	1273.34
STRUCTURE 4 654.9	RESVOR	1.98	7	2	.10	.0	3.40	24.00	1.21	5380.76	6.22	1296.73
XSECTION 10 1073.7	RUNOFF	.09	7	2	.10	.0	3.40	24.00	1.56	---	6.14	99.85
XSECTION 10 478.5	ADDHYD	2.63	7	2	.10	.0	3.40	24.00	1.47	5367.87	6.28	1259.98
XSECTION 10 549.9	ADDHYD	4.61	7	2	.10	.0	3.40	24.00	1.36	5370.17	6.24	2536.58
STRUCTURE 3 540.8	RESVOR	4.61	7	2	.10	.0	3.40	24.00	1.36	5375.02	6.30	2494.65
XSECTION 8 540.8	REACH	4.61	7	2	.10	.0	3.40	24.00	1.36	5356.89	6.30	2494.65
XSECTION 8 630.7	RUNOFF	.09	7	2	.10	.0	3.40	24.00	1.17	---	6.24	56.76
XSECTION 8 542.0	ADDHYD	4.70	7	2	.10	.0	3.40	24.00	1.36	5357.00	6.29	2549.25
STRUCTURE 2 522.3	RESVOR	4.70	7	2	.10	.0	3.40	24.00	1.36	5357.57	6.34	2456.35
XSECTION 6 522.3	REACH	4.70	7	2	.10	.0	3.40	24.00	1.36	5332.39	6.34	2456.35
XSECTION 6 1462.5	RUNOFF	.25	7	2	.10	.0	3.40	24.00	2.33	---	6.18	367.09
XSECTION 6 558.0	ADDHYD	4.95	7	2	.10	.0	3.40	24.00	1.41	5333.02	6.32	2764.46
STRUCTURE 1 546.2	RESVOR	4.95	7	2	.10	.0	3.40	24.00	1.41	5333.81	6.38	2705.91
XSECTION 4 546.2	REACH	4.95	7	2	.10	.0	3.40	24.00	1.41	5316.94	6.38	2705.91
XSECTION 4 1296.4	RUNOFF	.38	7	2	.10	.0	3.40	24.00	2.27	---	6.23	492.62
XSECTION 4 588.2	ADDHYD	5.33	7	2	.10	.0	3.40	24.00	1.47	5317.03	6.36	3137.59
XSECTION 2 588.2	REACH	5.33	7	2	.10	.0	3.40	24.00	1.47	5327.77	6.36	3137.59
XSECTION 2 1913.8	RUNOFF	.20	7	2	.10	.0	3.40	24.00	2.40	---	6.06	384.67
XSECTION 2 594.3	ADDHYD	5.54	7	2	.10	.0	3.40	24.00	1.50	5329.06	6.34	3289.44

SECTION 32	RUNOFF	.87	7	2	.10	.0	3.05	24.00	1.17	---	6.25	536.41
620.1												
STRUCTURE 10	RESVOR	.87	7	2	.10	.0	3.05	24.00	1.18	5674.56	6.33	586.49
678.0												
SECTION 30	REACH	.87	7	2	.10	.0	3.05	24.00	1.16	5562.45	6.47	450.10
520.4												
SECTION 30	RUNOFF	.60	7	2	.10	.0	3.05	24.00	.99	---	6.20	342.47
575.6												
SECTION 30	ADDHYD	1.46	7	2	.10	.0	3.05	24.00	1.09	5563.04	6.43	675.19
462.5												
STRUCTURE 9	RESVOR	1.46	7	2	.10	.0	3.05	24.00	1.11	5558.64	6.52	714.57
489.4												
SECTION 24	REACH	1.46	7	2	.10	.0	3.05	24.00	1.10	5443.06	6.64	582.59
399.0												
SECTION 24	RUNOFF	.39	7	2	.10	.0	3.05	24.00	1.70	---	6.16	428.54
1107.3												
SECTION 24	ADDHYD	1.85	7	2	.10	.0	3.05	24.00	1.22	5443.29	6.63	696.79
377.3												
SECTION 28	RUNOFF	.14	7	2	.10	.0	3.05	24.00	1.35	---	6.13	128.58
945.5												
STRUCTURE 11	RESVOR	.14	7	2	.10	.0	3.05	24.00	.88	5620.97	10.50	3.87
28.4												
SECTION 26	REACH	.14	7	2	.10	.0	3.05	24.00	.86	5440.08	11.00*	3.86
28.4												
SECTION 26	RUNOFF	.40	7	2	.10	.0	3.05	24.00	1.12	---	6.19	272.14
682.1												
SECTION 26	ADDHYD	.53	7	2	.10	.0	3.05	24.00	1.05	5442.19	6.19	272.15
508.7												

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

SUMMARY

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 41

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED

(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH

A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION			RUNOFF	PEAK DISCHARGE		
----- ID RATE (CSM)	OPERATION	AREA (SQ MI)	#	COND	INCREM (HR)	BEGIN (HR)	AMOUNT (IN)	DURATION (HR)	AMOUNT (IN)	ELEVATION (FT)	TIME (HR)	RATE (CFS)
ALTERNATE	1	STORM	2									
XSECTION 24 373.1	ADDHYD	2.38	7	2	.10	.0	3.05	24.00	1.18	5443.68	6.21	888.66
STRUCTURE 8 368.1	RESVOR	2.38	7	2	.10	.0	3.05	24.00	1.19	5437.87	6.22	876.85
XSECTION 22 365.4	REACH	2.38	7	2	.10	.0	3.05	24.00	1.18	5403.37	6.33	870.42
XSECTION 22	RUNOFF	.16	7	2	.10	.0	3.05	24.00	1.56	---	6.11	183.41

STRUCTURE 7 390.1	RESVOR	2.54	7	2	.10	.0	3.05	24.00	1.21	5403.02	6.31	990.95
XSECTION 10 390.1	REACH	2.54	7	2	.10	.0	3.05	24.00	1.21	5367.37	6.31	990.95
XSECTION 20 374.2	RUNOFF	1.35	7	2	.10	.0	3.05	24.00	.84	---	6.31	506.63
STRUCTURE 5 376.2	RESVOR	1.35	7	2	.10	.0	3.05	24.00	.84	5448.45	6.33	509.32
XSECTION 18 841.7	RUNOFF	.21	7	2	.10	.0	3.05	24.00	1.14	---	6.11	175.08
STRUCTURE 6 935.9	RESVOR	.21	7	2	.10	.0	3.05	24.00	1.15	5445.21	6.12	194.67
XSECTION 16 396.5	ADDHYD	1.56	7	2	.10	.0	3.05	24.00	.88	5423.74	6.29	619.41
XSECTION 16 396.5	REACH	1.56	7	2	.10	.0	3.05	24.00	.88	5423.74	6.29	619.41
XSECTION 16 1259.5	RUNOFF	.05	7	2	.10	.0	3.05	24.00	1.70	---	6.11	66.75
XSECTION 16 411.7	ADDHYD	1.62	7	2	.10	.0	3.05	24.00	.91	5423.83	6.27	664.91
XSECTION 14 699.7	RUNOFF	.14	7	2	.10	.0	3.05	24.00	1.06	---	6.15	96.56
XSECTION 16 424.9	ADDHYD	1.75	7	2	.10	.0	3.05	24.00	.92	5423.99	6.25	744.79
XSECTION 12 423.3	REACH	1.75	7	2	.10	.0	3.05	24.00	.92	5377.12	6.36	742.11
XSECTION 12 939.3	RUNOFF	.23	7	2	.10	.0	3.05	24.00	1.49	---	6.17	213.21
XSECTION 12 461.6	ADDHYD	1.98	7	2	.10	.0	3.05	24.00	.98	5377.77	6.33	913.89
STRUCTURE 4 479.5	RESVOR	1.98	7	2	.10	.0	3.05	24.00	.99	5380.23	6.33	949.48
XSECTION 10 874.8	RUNOFF	.09	7	2	.10	.0	3.05	24.00	1.29	---	6.14	81.36
XSECTION 10 398.3	ADDHYD	2.63	7	2	.10	.0	3.05	24.00	1.21	5367.49	6.30	1048.64
XSECTION 10 432.4	ADDHYD	4.61	7	2	.10	.0	3.05	24.00	1.12	5369.19	6.32	1994.86
STRUCTURE 3 417.9	RESVOR	4.61	7	2	.10	.0	3.05	24.00	1.12	5374.14	6.36	1927.61
XSECTION 8 417.9	REACH	4.61	7	2	.10	.0	3.05	24.00	1.12	5355.75	6.36	1927.61
XSECTION 8 490.6	RUNOFF	.09	7	2	.10	.0	3.05	24.00	.94	---	6.24	44.15
XSECTION 8 418.1	ADDHYD	4.70	7	2	.10	.0	3.05	24.00	1.11	5355.83	6.36	1966.30
STRUCTURE 2 410.0	RESVOR	4.70	7	2	.10	.0	3.05	24.00	1.11	5356.77	6.40	1928.18
XSECTION 6 410.0	REACH	4.70	7	2	.10	.0	3.05	24.00	1.11	5331.30	6.40	1928.18
XSECTION 6 1252.9	RUNOFF	.25	7	2	.10	.0	3.05	24.00	2.01	---	6.19	314.48
XSECTION 6 434.9	ADDHYD	4.95	7	2	.10	.0	3.05	24.00	1.16	5331.77	6.38	2154.72
STRUCTURE 1 426.3	RESVOR	4.95	7	2	.10	.0	3.05	24.00	1.16	5332.91	6.43	2112.12
XSECTION 4	REACH	4.95	7	2	.10	.0	3.05	24.00	1.16	5316.82	6.43	2112.12

1103.9

XSECTION 4 ADDHYD 5.33 7 2 .10 .0 3.05 24.00 1.21 5316.89 6.40 2451.85
459.7

TR20 XEQ 10-13-93 11:12

CANDON CITY NORTHEAST CANDON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

SUMMARY

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 42

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED

(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH

A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION				RUNOFF	PEAK DISCHARGE		
ID	OPERATION	AREA	#	COND	INCREM	BEGIN	AMOUNT	DURATION	AMOUNT	ELEVATION	TIME	RATE	
RATE		(SQ MI)			(HR)	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)	
(CSM)													
ALTERNATE	1	STORM	2										
XSECTION 2	REACH	5.33	7	2	.10	.0	3.05	24.00	1.21	5321.94	6.40	2451.85	
459.7													
XSECTION 2	RUNOFF	.20	7	2	.10	.0	3.05	24.00	2.08	---	6.07	332.43	
1653.9													
XSECTION 2	ADDHYD	5.54	7	2	.10	.0	3.05	24.00	1.24	5322.74	6.38	2545.90	
460.0													
ALTERNATE	1	STORM	3										
XSECTION 32	RUNOFF	.87	7	2	.10	.0	2.75	24.00	.96	---	6.25	425.19	
491.5													
STRUCTURE 10	RESVOR	.87	7	2	.10	.0	2.75	24.00	.95	5674.31	6.41	422.63	
488.6													
XSECTION 30	REACH	.87	7	2	.10	.0	2.75	24.00	.97	5562.12	6.54	341.05	
394.3													
XSECTION 30	RUNOFF	.60	7	2	.10	.0	2.75	24.00	.80	---	6.21	268.14	
450.7													
XSECTION 30	ADDHYD	1.46	7	2	.10	.0	2.75	24.00	.90	5562.49	6.51	464.27	
318.0													
STRUCTURE 9	RESVOR	1.46	7	2	.10	.0	2.75	24.00	.90	5558.07	6.71	347.26	
237.9													
XSECTION 24	REACH	1.46	7	2	.10	.0	2.75	24.00	.89	5442.24	6.84	320.25	
219.4													
XSECTION 24	RUNOFF	.39	7	2	.10	.0	2.75	24.00	1.45	---	6.17	360.96	
932.7													
XSECTION 24	ADDHYD	1.85	7	2	.10	.0	2.75	24.00	1.01	5442.93	6.24	513.51	
278.0													
XSECTION 28	RUNOFF	.14	7	2	.10	.0	2.75	24.00	1.12	---	6.13	105.44	
775.3													
STRUCTURE 11	RESVOR	.14	7	2	.10	.0	2.75	24.00	.73	5620.80	10.60	3.18	
23.4													
XSECTION 26	REACH	.14	7	2	.10	.0	2.75	24.00	.71	5440.07	11.20*	3.18	

544.4												
SECTION 26	ADDHYD	.53	7	2	.10	.0	2.75	24.00	.86	5441.97	6.20	217.24
406.1												
XSECTION 24	ADDHYD	2.38	7	2	.10	.0	2.75	24.00	.98	5443.35	6.23	727.14
305.3												
STRUCTURE 8	RESVOR	2.38	7	2	.10	.0	2.75	24.00	.98	5437.65	6.23	734.14
308.2												
SECTION 22	REACH	2.38	7	2	.10	.0	2.75	24.00	.98	5403.10	6.34	722.15
303.2												
XSECTION 22	RUNOFF	.16	7	2	.10	.0	2.75	24.00	1.31	---	6.11	153.26
970.0												
XSECTION 22	ADDHYD	2.54	7	2	.10	.0	2.75	24.00	1.00	5403.25	6.31	805.87
317.3												
STRUCTURE 7	RESVOR	2.54	7	2	.10	.0	2.75	24.00	1.00	5402.74	6.33	808.59
318.3												
XSECTION 10	REACH	2.54	7	2	.10	.0	2.75	24.00	1.00	5366.86	6.33	808.59
318.3												
XSECTION 20	RUNOFF	1.35	7	2	.10	.0	2.75	24.00	.66	---	6.32	383.66
283.4												
STRUCTURE 5	RESVOR	1.35	7	2	.10	.0	2.75	24.00	.67	5448.34	6.32	440.56
325.4												
XSECTION 18	RUNOFF	.21	7	2	.10	.0	2.75	24.00	.93	---	6.11	140.71
676.5												
STRUCTURE 6	RESVOR	.21	7	2	.10	.0	2.75	24.00	.95	5445.15	6.13	155.44
747.3												
XSECTION 16	ADDHYD	1.56	7	2	.10	.0	2.75	24.00	.71	5423.48	6.31	526.37
337.0												
XSECTION 16	REACH	1.56	7	2	.10	.0	2.75	24.00	.71	5423.48	6.31	526.37
337.0												
XSECTION 16	RUNOFF	.05	7	2	.10	.0	2.75	24.00	1.45	---	6.11	56.37
1063.5												
XSECTION 16	ADDHYD	1.62	7	2	.10	.0	2.75	24.00	.73	5423.58	6.31	560.86
347.3												
XSECTION 14	RUNOFF	.14	7	2	.10	.0	2.75	24.00	.86	---	6.15	76.07
551.3												
XSECTION 16	ADDHYD	1.75	7	2	.10	.0	2.75	24.00	.74	5423.73	6.30	617.31
352.1												
XSECTION 12	REACH	1.75	7	2	.10	.0	2.75	24.00	.73	5376.61	6.40	609.08
347.4												

1

TR20 XEQ 10-13-93 11:12 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM JOB
SUMMARY
REV PC 09/83(.2) EXISTING CONDITIONS TYPE II STORM INPUT:CAN10
PAGE 43

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION			RUNOFF	PEAK DISCHARGE		
ID	OPERATION	AREA	#	COND	INCREM	BEGIN	AMOUNT	DURATION	AMOUNT	ELEVATION	TIME	RATE
RATE		(SQ MI)			(HR)	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)

ALTERNATE 1 STORM 3

XSECTION 12	RUNOFF	.23	7	2	.10	.0	2.75	24.00	1.25	---	6.18	176.53
777.7												
XSECTION 12	ADDHYD	1.98	7	2	.10	.0	2.75	24.00	.79	5377.05	6.39	723.28
365.3												
STRUCTURE 4	RESVOR	1.98	7	2	.10	.0	2.75	24.00	.79	5379.85	6.39	700.40
353.7												
XSECTION 10	RUNOFF	.09	7	2	.10	.0	2.75	24.00	1.06	---	6.15	66.23
712.2												
XSECTION 10	ADDHYD	2.63	7	2	.10	.0	2.75	24.00	1.00	5366.99	6.32	854.12
324.4												
XSECTION 10	ADDHYD	4.61	7	2	.10	.0	2.75	24.00	.91	5368.32	6.36	1513.07
328.0												
STRUCTURE 3	RESVOR	4.61	7	2	.10	.0	2.75	24.00	.91	5373.47	6.38	1499.13
325.0												
XSECTION 8	REACH	4.61	7	2	.10	.0	2.75	24.00	.91	5354.90	6.38	1499.13
325.0												
XSECTION 8	RUNOFF	.09	7	2	.10	.0	2.75	24.00	.75	---	6.25	34.16
379.5												
XSECTION 8	ADDHYD	4.70	7	2	.10	.0	2.75	24.00	.91	5354.96	6.38	1528.40
325.0												
STRUCTURE 2	RESVOR	4.70	7	2	.10	.0	2.75	24.00	.91	5356.11	6.42	1498.30
318.6												
XSECTION 6	REACH	4.70	7	2	.10	.0	2.75	24.00	.91	5330.42	6.42	1498.30
318.6												
XSECTION 6	RUNOFF	.25	7	2	.10	.0	2.75	24.00	1.74	---	6.19	270.02
1075.8												
XSECTION 6	ADDHYD	4.95	7	2	.10	.0	2.75	24.00	.95	5330.82	6.38	1691.49
341.4												
STRUCTURE 1	RESVOR	4.95	7	2	.10	.0	2.75	24.00	.95	5332.26	6.44	1681.77
339.5												
XSECTION 4	REACH	4.95	7	2	.10	.0	2.75	24.00	.95	5316.74	6.44	1681.77
339.5												
XSECTION 4	RUNOFF	.38	7	2	.10	.0	2.75	24.00	1.68	---	6.24	357.94
941.9												
XSECTION 4	ADDHYD	5.33	7	2	.10	.0	2.75	24.00	1.00	5316.79	6.41	1969.60
369.3												
XSECTION 2	REACH	5.33	7	2	.10	.0	2.75	24.00	1.00	5317.84	6.41	1969.60
369.3												
XSECTION 2	RUNOFF	.20	7	2	.10	.0	2.75	24.00	1.80	---	6.07	288.01
1432.9												
XSECTION 2	ADDHYD	5.54	7	2	.10	.0	2.75	24.00	1.03	5318.51	6.39	2048.31
370.1												

TR20 XEQ 10-13-93 11:12

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM

JOB

1 SUMMARY

REV PC 09/83(.2)

EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

PAGE 44

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS

(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 1

% OF PEAK

A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARN

[illegible]

303

ALTERNATE		1	STORM	2											
30	5000	571	6.3	448	6.5	0	1.18	.10	1	2.38	1.34	.060	.786	384	.64
.20 .11						668	6.4								
24	5600	708	6.5	559	6.6	0	1.11	.10	1	2.09	1.36	.047	.789	415	.61
.10 .12						687	6.6								
26	7200	4	10.5	4	11.0	0	.88*	.10	1	2.40	1.36	.011	.998	1946	.17
.20 .54						272	6.2								
22	3000	873	6.2	863	6.3	0	1.19	.10	1	1.92	1.37	.012	.988	214	.91?
.10 .06						973	6.3								
10	1800	989	6.3	989	6.3	0	1.21	.10	0	2.79	1.36	.005	1.000	102	1.00?
.00 .00						---	---								
16	2000	618	6.3	618	6.3	0	.88	.10	0	2.66	1.34	.012	1.000	140	1.00?
.00 .00						660	6.3								
12	3000	731	6.3	731	6.4	0	.92	.10	1	2.86	1.34	.018	1.000	192	.97?
.10 .05						906	6.3								
8	2000	1903	6.4	1903	6.4	0	1.12	.10	0	1.87	1.34	.009	1.000	135	1.00?
.00 .00						1939	6.4								
6	2400	1928	6.4	1928	6.4	0	1.11	.10	0	2.21	1.38	.007	1.000	120	1.00?
.00 .00						2150	6.4								
4	1600	2101	6.4	2101	6.4	0	1.16	.10	0	6.03	1.14	.012	1.000	113	1.00?
.00 .00						2452	6.4								
2	2600	2452	6.4	2452	6.4	0	1.21	.10	0	8.10	1.17	.012	1.000	121	1.00?
.00 .00						2543	6.4								
ALTERNATE		1	STORM	3											
30	5000	420	6.4	331	6.5	0	.95	.10	1	2.48	1.33	.062	.788	421	.60
.10 .12						464	6.5								
24	5600	347	6.7	317	6.8	0	.90	.10	1	2.02	1.37	.030	.915	497	.53
.10 .14						505	6.2								
26	7200	3	10.6	3	11.2	0	.73*	.10	1	2.40	1.36	.012	.997	2048	.16
.30 .57						217	6.2								
22	3000	727	6.2	711	6.3	0	.95	.10	1	1.90	1.39	.012	.977	224	.89?

```

TR20 XEQ 10-13-93 11:12      CANON CITY NORTHEAST CANON BASIN  TR20 RUN  24 HR. 100 YR. STORM      JOB
SUMMARY
REV PC 09/83(.2)             EXISTING CONDITIONS  TYPE II STORM  INPUT:CAN10
PAGE 45

```

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 1
0% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARN
INGS)

PEAK	HYDROGRAPH INFORMATION		ROUTING PARAMETERS	
	DATE	TIME	ROUTING	ROUTING
1	10/10/68	10:00	100	100
2	10/10/68	11:00	100	100
3	10/10/68	12:00	100	100
4	10/10/68	13:00	100	100
5	10/10/68	14:00	100	100
6	10/10/68	15:00	100	100
7	10/10/68	16:00	100	100
8	10/10/68	17:00	100	100
9	10/10/68	18:00	100	100
10	10/10/68	19:00	100	100
11	10/10/68	20:00	100	100
12	10/10/68	21:00	100	100
13	10/10/68	22:00	100	100
14	10/10/68	23:00	100	100
15	10/10/68	00:00	100	100
16	10/10/68	01:00	100	100
17	10/10/68	02:00	100	100
18	10/10/68	03:00	100	100
19	10/10/68	04:00	100	100
20	10/10/68	05:00	100	100
21	10/10/68	06:00	100	100
22	10/10/68	07:00	100	100
23	10/10/68	08:00	100	100
24	10/10/68	09:00	100	100
25	10/10/68	10:00	100	100
26	10/10/68	11:00	100	100
27	10/10/68	12:00	100	100
28	10/10/68	13:00	100	100
29	10/10/68	14:00	100	100
30	10/10/68	15:00	100	100
31	10/10/68	16:00	100	100
32	10/10/68	17:00	100	100
33	10/10/68	18:00	100	100
34	10/10/68	19:00	100	100
35	10/10/68	20:00	100	100
36	10/10/68	21:00	100	100
37	10/10/68	22:00	100	100
38	10/10/68	23:00	100	100
39	10/10/68	00:00	100	100
40	10/10/68	01:00	100	100
41	10/10/68	02:00	100	100
42	10/10/68	03:00	100	100
43	10/10/68	04:00	100	100
44	10/10/68	05:00	100	100
45	10/10/68	06:00	100	100
46	10/10/68	07:00	100	100
47	10/10/68	08:00	100	100
48	10/10/68	09:00	100	100
49	10/10/68	10:00	100	100
50	10/10/68	11:00	100	100
51	10/10/68	12:00	100	100
52	10/10/68	13:00	100	100
53	10/10/68	14:00	100	100
54	10/10/68	15:00	100	100
55	10/10/68	16:00	100	100
56	10/10/68	17:00	100	100
57	10/10/68	18:00	100	100
58	10/10/68	19:00	100	100
59	10/10/68	20:00	100	100
60	10/10/68	21:00	100	100
61	10/10/68	22:00	100	100
62	10/10/68	23:00	100	100
63	10/10/68	00:00	100	100
64	10/10/68	01:00	100	100
65	10/10/68	02:00	100	100
66	10/10/68	03:00	100	100
67	10/10/68	04:00	100	100
68	10/10/68	05:00	100	100
69	10/10/68	06:00	100	100
7				

[illegible]

ALTERNATE		1	STORM	3												
+	8	2000	1495	6.4	1495	6.4	0	.91	.10	0	1.86	1.35	.009	1.000	144	1.00?
		.00	.00													
					1524	6.4										
+	6	2400	1496	6.4	1496	6.4	0	.91	.10	0	2.15	1.39	.006	1.000	127	1.00?
		.00	.00													
+					1689	6.4										
+	4	1600	1666	6.4	1666	6.4	0	.95	.10	0	4.80	1.20	.009	1.000	105	1.00?
		.00	.00													
+					1768	6.4										
+	2	2600	1968	6.4	1968	6.4	0	1.00	.10	0	7.54	1.19	.011	1.000	121	1.00?

TR20 XEQ 10-13-93 11:12
SUMMARY
REV PC 09/83(1.2)
PAGE 46

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 YR. STORM
EXISTING CONDITIONS TYPE II STORM INPUT:CAN10

JOB

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

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS.....		
		1	2	3
0 STRUCTURE 11	.14			
ALTERNATE 1		4.71	3.87	3.18
0 STRUCTURE 10	.87			
ALTERNATE 1		701.16	586.49	422.63
0 STRUCTURE 9	1.46			
ALTERNATE 1		947.54	714.57	347.26
0 STRUCTURE 8	2.38			
ALTERNATE 1		1107.37	876.85	734.14
0 STRUCTURE 7	2.54			
ALTERNATE 1		1185.68	990.95	808.59
0 STRUCTURE 6	.21			
ALTERNATE 1		213.04	194.67	155.44
0 STRUCTURE 5	1.35			
ALTERNATE 1		654.78	509.32	440.56
0 STRUCTURE 4	1.98			
ALTERNATE 1		1296.73	949.48	700.40
0 STRUCTURE 3	4.61			
ALTERNATE 1		2494.65	1927.61	1499.13
0 STRUCTURE 2	4.70			
ALTERNATE 1		2456.35	1928.18	1498.30
0 STRUCTURE 1	4.95			
ALTERNATE 1		2705.91	2112.12	1681.77
0 XSECTION 2	5.54			
ALTERNATE 1		3289.44	2545.90	2048.31
0 XSECTION 4	5.33			
ALTERNATE 1		3137.59	2451.85	1969.60
0 XSECTION 6	4.95			
ALTERNATE 1		2764.46	2154.72	1691.49

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

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS.....		
		1	2	3
0 XSECTION 8	4.70			
ALTERNATE 1		2549.25	1966.30	1528.40
0 XSECTION 10	4.61			
ALTERNATE 1		2536.58	1994.86	1513.07
0 XSECTION 12	1.98			
ALTERNATE 1		1273.34	913.89	723.28
0 XSECTION 14	.14			
ALTERNATE 1		121.46	96.56	76.07
0 XSECTION 16	1.75			
ALTERNATE 1		1021.87	744.79	617.31
0 XSECTION 18	.21			
ALTERNATE 1		217.33	175.08	140.71
0 XSECTION 20	1.35			
ALTERNATE 1		663.36	506.63	383.66
0 XSECTION 22	2.54			
ALTERNATE 1		1168.45	973.41	805.87
0 XSECTION 24	2.38			
ALTERNATE 1		1109.99	888.66	727.14
0 XSECTION 26	.53			
ALTERNATE 1		340.51	272.15	217.24
0 XSECTION 28	.14			
ALTERNATE 1		156.76	128.58	105.44
0 XSECTION 30	1.46			
ALTERNATE 1		893.16	675.19	464.27
0 XSECTION 32	.87			
ALTERNATE 1		669.90	536.41	425.19
END OF 1 JOBS IN THIS RUN				

APPENDIX B
TR-20 OUTPUT
DEVELOPED CONDITIONS
WITH DETENTION



GRAEF
ANHALT
SCHLOEMER
and Associates Inc.

*****80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY*****

JOB TR-20 SUMMARY NO PLOTS
 TITLE 001 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
 TITLE DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

5 RAINFL 7	0.5				
8	0.0000	0.0040	0.0080	0.0100	0.0140
8	0.0190	0.0220	0.0260	0.0300	0.0450
8	0.0600	0.1000	0.7100	0.7500	0.7750
8	0.8000	0.8200	0.8300	0.8400	0.8500
8	0.8600	0.8700	0.8750	0.8850	0.8900
8	0.9000	0.9050	0.9100	0.9200	0.9250
8	0.9300	0.9350	0.9400	0.9450	0.9500
8	0.9550	0.9600	0.9650	0.9700	0.9730
8	0.9750	0.9800	0.9830	0.9870	0.9900
8	0.9930	0.9960	0.9999	1.0000	1.0000

9 ENDTBL	2 XSECTN 002	1.0			
8		5300.0	0.0	0.0	
8		5302.7	200.0	16.28	
8		5305.5	500.0	33.1	
8		5309.6	1000.0	59.13	
8		5326.6	3000.0	159.56	

9 ENDTBL	2 XSECTN 004	1.0			
8		5310.0	0.0	0.0	
8		5314.0	200.0	17.27	
8		5316.0	500.0	51.67	
8		5316.6	1000.0	75.31	
8		5317.0	3000.0	250.0	

9 ENDTBL	2 XSECTN 006	1.0			
8		5324.0	0.0	0.0	
8		5326.2	200.0	26.13	
8		5327.6	500.0	49.71	
8		5329.4	1000.0	82.03	
8		5333.5	3000.0	184.81	

9 ENDTBL	2 XSECTN 008	1.0			
8		5348.0	0.0	0.0	
8		5350.8	200.0	32.42	
8		5352.3	500.0	63.78	
8		5353.9	1000.0	106.87	
8		5356.9	2500.0	212.05	

9 ENDTBL	2 XSECTN 010	1.0			
8		5362.5	0.0	0.0	
8		5364.7	200.0	23.41	

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

8	5366.0	500.0	45.86	
8	5367.4	1000.0	76.69	

2 XSECTN 012		1.0		
8		5371.0	0.0	0.0
8		5373.3	100.0	14.22
8		5374.3	200.0	23.73
8		5376.2	500.0	47.06
8		5378.1	1000.0	79.27
9	ENDTBL			
2	XSECTN 016	1.0		
8		5420.0	0.0	0.0
8		5422.3	200.0	24.99
8		5423.1	400.0	41.87
8		5423.7	600.0	56.67
8		5425.5	1500.0	112.48
9	ENDTBL			
2	XSECTN 020	1.0		
8		5440.0	0.0	0.0
8		5441.4	100.0	13.11
8		5441.9	200.0	21.88
8		5442.8	500.0	43.31
8		5443.8	1000.0	72.71
9	ENDTBL			
2	XSECTN 022	1.0		
8		5400.0	0.0	0.0
8		5401.2	100.0	17.77
8		5401.7	200.0	29.14
8		5402.7	500.0	56.74
8		5404.5	1500.0	127.72
9	ENDTBL			
2	XSECTN 024	1.0		
8		5440.0	0.0	0.0
8		5441.3	100.0	17.09
8		5441.8	200.0	28.22
8		5442.9	500.0	55.32
8		5443.9	1000.0	92.47
9	ENDTBL			
2	XSECTN 026	1.0		
8		5440.0	0.0	0.0
8		5441.1	50.0	9.35
8		5441.5	100.0	15.58
8		5443.1	500.0	51.62
8		5443.6	700.0	66.39
9	ENDTBL			

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

2	XSECTN 030	1.0		
8		5560.0	0.0	0.0
8		5560.8	50.0	9.35
8		5561.2	100.0	15.58
8		5561.7	200.0	27.50
8		5562.6	500.0	53.48
8		5563.1	700.0	68.47
9	ENDTBL			
2	XSECTN 032	1.0		
8		5660.0	0.0	0.0
8		5661.6	100.0	11.52
8		5662.3	200.0	19.17
8		5663.5	500.0	37.83
8		5664.7	1000.0	63.47
9	ENDTBL			
3	STRUCT			

8		5328.0	125.0	0.67
8		5330.0	190.0	1.58
8		5331.0	850.0	4.33
9	ENDTBL			
3	STRUCT	02		
8		5348.0	0.0	0.0
8		5350.0	23.0	0.08
8		5352.0	72.0	0.28
8		5354.0	115.0	3.09
8		5355.0	770.0	5.67
9	ENDTBL			
3	STRUCT	03		
8		5362.5	0.0	0.0
8		5365.5	55.0	0.16
8		5367.5	125.0	0.33
8		5369.5	190.0	0.77
8		5371.5	240.0	2.48
8		5372.5	880.0	3.91
9	ENDTBL			
3	STRUCT	04		
8		5371.0	0.0	0.0
8		5373.0	23.0	0.02
8		5375.0	72.0	0.06
8		5377.0	115.0	0.29
8		5379.0	150.0	1.09
8		5380.0	800.0	1.60
9	ENDTBL			
3	STRUCT	05		

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

8		5440.0	0.0	0.0
8		5443.0	55.0	0.28
8		5445.0	125.0	0.68
8		5447.0	190.0	1.37
8		5448.0	210.0	1.84
8		5449.0	880.0	2.76
9	ENDTBL			
3	STRUCT	06		
8		5440.0	0.0	0.0
8		5442.0	19.0	0.10
8		5443.0	35.0	0.20
8		5445.0	60.0	0.62
8		5446.0	710.0	1.30
9	ENDTBL			
3	STRUCT	07		
8		5395.0	0.0	0.0
8		5397.0	23.0	0.11
8		5399.0	72.0	0.43
8		5401.7	125.0	0.85
8		5402.7	780.0	1.54
9	ENDTBL			
3	STRUCT	08		
8		5432.0	0.0	0.0
8		5434.0	19.0	0.02
8		5435.0	35.0	0.11
8		5436.6	58.0	0.52
8		5437.6	705.0	0.92
9	ENDTBL			
3	STRUCT	09		
E		5545.0	0.0	0.0

8		5552.0	470.0	4.44
8		5554.0	240.0	2.20
8		5558.0	300.0	7.80
8		5559.0	950.0	9.40
9	ENDTBL			
3	STRUCT	10		
8		5660.0	0.0	0.0
8		5662.0	23.0	0.01
8		5664.0	72.0	0.03
8		5668.0	150.0	0.72
8		5672.0	200.0	3.00
8		5674.0	215.0	5.06
8		5675.0	880.0	6.36
9	ENDTBL			

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

3	STRUCT	11		
8		5620.0	0.0	0.0
8		5621.0	4.0	6.40
8		5622.0	8.0	12.85
8		5623.0	10.0	19.35
8		5624.0	11.0	25.90
8		5626.0	12.0	38.20
9	ENDTBL			
3	STRUCT	22		
8		5348.0	0.0	0.0
8		5350.0	85.0	4.59
8		5352.0	235.0	14.21
8		5354.0	480.0	24.31
8		5355.0	706.0	29.49
8		5356.0	965.0	34.79
8		5357.0	1240.0	40.23
9	ENDTBL			
3	STRUCT	24		
8		5371.0	0.0	0.0
8		5373.0	110.0	2.76
8		5375.0	250.0	8.97
8		5377.0	380.0	15.86
8		5379.0	720.0	23.51
8		5381.0	1450.0	31.50
9	ENDTBL			
3	STRUCT	25		
8		5440.0	0.0	0.0
8		5443.0	110.0	3.67
8		5445.0	250.0	11.94
8		5447.0	380.0	21.14
8		5448.0	420.0	26.14
8		5449.0	460.0	32.20
9	ENDTBL			
3	STRUCT	27		
8		5395.0	0.0	0.0
8		5397.0	85.0	6.88
8		5399.0	188.0	21.31
8		5401.0	371.0	36.46
8		5403.0	432.0	52.18
8		5404.0	576.0	60.39
9	ENDTBL			
3	STRUCT	29		
8		5545.0	0.0	0.0
8		5547.0	55.0	1.84
8		5548.0	105.0	3.37

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

8			5553.0	240.0	15.67	
8			5555.0	526.0	21.00	
9	ENDTBL					
6	RUNOFF	1 032	7	0.865	78.1	0.620 1
6	RESVOR	2 10 7	4	5660.0		1
6	REACH	3 030	4 6	5000.0		
6	RUNOFF	1 030	5	0.595	75.0	0.516 1
6	ADDHYD	4 030	6 5 7			1
6	RESVOR	2 09 7	4	5545.0		1
6	REACH	3 024	4 6	5600.0		
6	RUNOFF	1 024	5	0.387	84.3	0.510 1
6	ADDHYD	4 024	6 5 7			1
6	RUNOFF	1 028	5	0.136	81.0	0.418 1
6	RESVOR	2 11 5	6	5620.0		1
6	REACH	3 026	6 5	7200.0		
6	RUNOFF	1 026	6	0.399	77.3	0.506 1
6	ADDHYD	4 026	5 6 4			1
6	ADDHYD	4 024	7 4 5			1
6	RESVOR	2 08 5	4	5432.0		1
6	REACH	3 022	4 6	3000.0		
6	RUNOFF	1 022	7	0.158	81.0	0.395 1
6	ADDHYD	4 022	6 7 5			1
6	RESVOR	2 27 5	6	5395.0		1
6	REACH	3 010	6 3	1800.0		
6	RUNOFF	1 020	6	1.354	74.1	0.684 1
6	RESVOR	2 25 6	2	5440.0		1
6	RUNOFF	1 018	7	0.208	77.6	0.364 1
6	RESVOR	2 06 7	5	5440.0		1
6	ADDHYD	4 016	5 2 4			1
6	REACH	3 016	4 7	2000.0		
6	RUNOFF	1 016	5	0.053	86.0	0.406 1
6	ADDHYD	4 016	7 5 6			1
6	RUNOFF	1 014	5	0.138	76.2	0.429 1
6	ADDHYD	4 016	5 6 4			1
6	REACH	3 012	4 7	3000.0		
6	RUNOFF	1 012	5	0.227	83.0	0.508 1
6	ADDHYD	4 012	5 7 4			1
6	RESVOR	2 04 4	2	5371.0		1
6	RUNOFF	1 010	5	0.093	86.0	0.435 1
6	ADDHYD	4 010	5 3 6			1
6	ADDHYD	4 010	6 2 7			1
6	RESVOR	2 03 7	4	5362.5		1
6	REACH	3 008	4 6	2000.0		
6	RUNOFF	1 008	5	0.090	90.3	0.582 1
6	ADDHYD	4 008	6 5 7			1
6	RESVOR	2 22 7	4	5348.0		1

*****80-80 LIST OF INPUT DATA (CONTINUED)*****

6	REACH	3 006	4 6	2400.0		
6	RUNOFF	1 006	5	0.251	89.8	0.575 1
6	ADDHYD	4 006	6 5 7			1
6	RESVOR	2 01 7	4	5324.0		1
6	REACH	3 004	4 6	1600.0		
6	RUNOFF	1 004	5	0.380	89.0	0.664 1


```

6 RUNOFF 1 002 0.201 70.0 0.000 1
6 ADDHYD 4 002 6 5 7 1
  ENDDATA
7 INCREM 6 0.10
7 COMPUT 7 032 002 0.0 3.40 1.0 7 2 01 01
  ENDCMP 1
7 INCREM 6 0.10
7 COMPUT 7 032 002 0.0 3.05 1.0 7 2 01 02
  ENDCMP 1
7 INCREM 6 0.10
7 COMPUT 7 032 002 0.0 2.75 1.0 7 2 01 03
  ENDCMP 1
  ENDJOB 2
*****END OF 80-80 LIST*****

```

```

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

```

```

EXECUTIVE CONTROL OPERATION COMPUT RECORD
ID
+ FROM XSECTION 32
+ TO XSECTION 2
STARTING TIME = .00 RAIN DEPTH = 3.40 RAIN DURATION= 1.00 RAIN TABLE NO.= 7 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 1 MAIN TIME INCREMENT = .10 HOURS

```

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	669.90	(RUNOFF)
10.46	26.79	(RUNOFF)
11.65	23.61	(RUNOFF)
12.65	23.72	(RUNOFF)
14.16	23.63	(RUNOFF)
18.90	14.07	(RUNOFF)
20.69	12.10	(RUNOFF)
21.64	10.70	(RUNOFF)
23.56	10.16	(RUNOFF)

*** WARNING - STRUCTURE 10 DELTA T IS TOO LARGE. 0 /2 > S /DELTA T OCCURED 2 TIMES STARTING WITH POINT257

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	701.16	5674.73
10.46	26.78	5662.15
11.66	23.61	5662.02
12.66	23.72	5662.03
14.17	23.63	5662.03
18.91	14.07	5661.22
20.70	12.10	5661.05
21.65	10.70	5660.93
23.56	10.15	5660.88

0 *** WARNING - INFLOW EXCEEDED MAX.FLOW IN XSECTN TABLE 30 BY .4 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	435.44	(RUNOFF)
10.43	16.81	(RUNOFF)
11.60	15.40	(RUNOFF)
12.60	15.53	(RUNOFF)
14.11	15.62	(RUNOFF)
18.91	8.95	(RUNOFF)
20.63	8.01	(RUNOFF)
21.60	6.91	(RUNOFF)
23.53	6.63	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.40	893.16	5563.58
10.46	43.54	5560.70
11.70	37.62	5560.60
12.70	37.76	5560.60
14.22	37.56	5560.60
18.95	23.03	5560.37
20.76	19.27	5560.31
21.69	17.32	5560.28
23.59	16.39	5560.26

OPERATION RESVOR STRUCTURE 9

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.43	947.54	5559.00
10.48	43.51	5547.37
11.76	37.29	5547.03
12.76	37.47	5547.04
14.28	37.26	5547.03
18.96	23.01	5546.26
20.82	19.16	5546.04
21.74	17.26	5545.94
23.64	16.22	5545.88

OPERATION RUNOFF CROSS SECTION 24

1
TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	469.94	(RUNOFF)
10.39	13.95	(RUNOFF)
11.60	12.71	(RUNOFF)
12.60	12.76	(RUNOFF)
14.10	12.75	(RUNOFF)

21.59
23.53

5.53
5.29

(RUNOFF)
(RUNOFF)

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	683.24	5443.27
6.55	965.01	5443.83
10.46	57.38	5440.75
11.80	47.06	5440.61
12.81	47.23	5440.61
14.34	46.68	5440.61
18.95	30.19	5440.39
20.92	24.03	5440.31
21.77	22.25	5440.29
23.63	20.62	5440.27

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	156.76	(RUNOFF)
10.40	4.54	(RUNOFF)
11.56	4.29	(RUNOFF)
12.56	4.32	(RUNOFF)
14.06	4.35	(RUNOFF)
18.93	2.37	(RUNOFF)
23.49	1.79	(RUNOFF)

OPERATION RESVDR STRUCTURE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
8.70	4.71	5621.18

*

* FIRST POINT OF FLAT PEAK

***WARNING - LACK OF LOW FLOW DEFINITION FOR XSECT TABLE 26. MAX.FLOW LESS THAN 2ND TABLE VALUE.

*** WARNING - REACH 26 INFLOW HYDROGRAPH VOLUME TRUNCATED ABOVE BASEFLOW AT 2.55 CFS, 54.13 % OF PEAK.

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 3

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	340.04	(RUNOFF)
10.42	12.07	(RUNOFF)
11.60	11.09	(RUNOFF)
12.60	11.16	(RUNOFF)
14.10	11.22	(RUNOFF)
18.88	6.37	(RUNOFF)
20.63	5.71	(RUNOFF)
21.59	4.92	(RUNOFF)
23.52	4.73	(RUNOFF)

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	340.51	5442.46
10.42	16.76	5440.37
11.59	15.75	5440.35
12.60	15.76	5440.35
14.10	15.72	5440.35
20.62	9.60	5440.21
21.58	8.70	5440.19
23.52	8.30	5440.18

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	1021.67	5443.94
6.53	1098.02	5444.10
10.46	74.17	5440.96
11.73	61.78	5440.80
12.73	61.92	5440.80
14.27	60.93	5440.79
18.88	40.61	5440.53
20.84	32.79	5440.43
21.69	30.78	5440.40
23.59	28.82	5440.37

OPERATION RESVOR STRUCTURE 8

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

1 PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	997.50	5438.05
6.54	1096.26	5438.20
10.46	74.16	5436.63
11.74	62.17	5436.61
12.79	62.67	5436.61
14.42	58.99	5436.60
18.96	40.61	5435.39
20.92	32.62	5434.85
21.75	30.72	5434.73
23.65	28.62	5434.60

*** WARNING REACH 22 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	190.06	(RUNOFF)
10.40	5.28	(RUNOFF)
11.55	5.01	(RUNOFF)
12.55	5.04	(RUNOFF)
14.05	5.09	(RUNOFF)
18.88	2.75	(RUNOFF)
23.49	2.10	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.28	1109.83	5403.80
6.63	1117.66	5403.81
10.48	79.37	5400.95
11.83	65.56	5400.79
12.89	65.86	5400.79
14.51	61.89	5400.74
18.96	43.35	5400.52
21.02	34.38	5400.41
21.79	32.57	5400.39
23.68	30.03	5400.36

OPERATION RESVOR STRUCTURE 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.12	523.79	5403.64
21.17	33.82	5395.80
23.76	29.64	5395.70

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 5

*** WARNING REACH 10 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.30	763.13	(RUNOFF)
10.46	37.18	(RUNOFF)
11.68	32.34	(RUNOFF)
12.69	32.57	(RUNOFF)
14.20	32.39	(RUNOFF)
18.89	19.85	(RUNOFF)
20.73	16.74	(RUNOFF)
21.68	15.03	(RUNOFF)
23.58	14.16	(RUNOFF)

OPERATION RESVOR STRUCTURE 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.69	379.13	5446.99
11.84	30.42	5440.83
12.88	29.97	5440.82
14.44	28.71	5440.78
18.99	19.81	5440.54
21.82	14.66	5440.40
23.71	13.28	5440.36

OPERATION RUNOFF CROSS SECTION 18

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
----------------	---------------------	----------------------

10.42
11.53
12.53
14.03
18.88
20.55
23.48

6.33
6.12
6.15
6.21
3.35
3.18
2.58

(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)

OPERATION RESVOR STRUCTURE 6

1

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25-YR. STOR

JOB

PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	213.04	5445.24
10.45	6.36	5440.67
11.58	6.05	5440.64
12.58	6.08	5440.64
14.08	6.14	5440.65
18.92	3.34	5440.35
23.52	2.54	5440.27

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.63	426.82	5423.18
11.69	35.72	5420.41
12.73	34.97	5420.40
14.31	33.21	5420.38
18.96	23.16	5420.27
21.68	17.15	5420.20
23.61	15.62	5420.18

*** WARNING REACH 16 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.10	79.17	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.21	465.78	5423.30
6.60	440.40	5423.22
11.66	37.46	5420.43
12.70	36.64	5420.42
14.27	34.70	5420.40
18.96	24.18	5420.28
21.65	17.92	5420.21
23.59	16.36	5420.19

OPERATION RUNOFF CROSS SECTION 16

PASS 1

REV PC 09/83(.2)

PAGE 7

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.14	121.46	(RUNOFF)
10.42	4.05	(RUNOFF)
11.56	3.83	(RUNOFF)
12.56	3.85	(RUNOFF)
14.06	3.88	(RUNOFF)
18.91	2.14	(RUNOFF)
23.50	1.63	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	581.48	5423.64
11.63	41.15	5420.47
12.66	40.26	5420.46
14.21	38.17	5420.44
18.96	26.33	5420.30
21.62	19.57	5420.23
23.57	17.96	5420.21

*** WARNING REACH 12 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	257.67	(RUNOFF)
10.45	7.97	(RUNOFF)
11.60	7.25	(RUNOFF)
12.60	7.30	(RUNOFF)
14.10	7.29	(RUNOFF)
18.87	4.11	(RUNOFF)
23.52	3.04	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	807.57	5377.37
11.68	48.08	5372.11
12.71	47.04	5372.08
14.25	44.62	5372.03
18.96	30.42	5371.70
20.80	23.03	5371.53
21.67	22.67	5371.52
23.62	20.77	5371.48

PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

OPERATION RESVOR STRUCTURE 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.29	829.42	5380.05
11.69	48.07	5374.02
12.72	47.03	5373.98
14.27	44.63	5373.88
18.97	30.42	5373.30
20.81	23.04	5373.00
21.68	22.67	5372.97
23.63	20.75	5372.80

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	133.88	(RUNOFF)
10.45	3.48	(RUNOFF)
11.57	3.26	(RUNOFF)
12.56	3.26	(RUNOFF)
14.07	3.27	(RUNOFF)
23.50	1.34	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.11	533.43	5366.09
21.31	35.04	5362.89

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	1126.72	5367.63
6.67	967.50	5367.31
6.93	969.45	5367.31
12.47	139.52	5364.03
14.19	110.08	5363.71
20.74	58.26	5363.14
21.61	57.43	5363.13
23.60	51.63	5363.07

OPERATION RESVOR STRUCTURE 3

TR20 XEQ 09-23-93 11:04
PASS 1
REV PC 09/83(.2)
PAGE 9

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.36	1091.36	5372.83
6.98	967.57	5372.64
14.21	110.01	5367.07
20.77	58.24	5365.59

*** WARNING REACH 8 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

PERATION RUNOFF CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	133.66	(RUNOFF)
10.37	3.63	(RUNOFF)
12.63	3.22	(RUNOFF)
14.14	3.20	(RUNOFF)
23.55	1.33	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.29	1195.45	5354.29
6.97	985.94	5353.85
14.20	113.17	5349.58
20.75	59.80	5348.84
21.64	58.81	5348.82
23.62	52.85	5348.74

OPERATION RESVOR STRUCTURE 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.09	966.22	5356.00

*** WARNING REACH 6 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 6

TR20 XEQ 09-23-93 11:04
PASS 1
REV PC 09/83(.2)
PAGE 10

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.18	367.09	(RUNOFF)
10.45	10.06	(RUNOFF)
11.63	8.92	(RUNOFF)
12.63	8.93	(RUNOFF)
14.13	8.88	(RUNOFF)
18.87	5.10	(RUNOFF)
23.55	3.70	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.78	1014.63	5329.43

OPERATION RESVOR STRUCTURE 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
----------------	---------------------	----------------------

*** WARNING REACH 4 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	492.62	(RUNOFF)
10.37	14.99	(RUNOFF)
11.67	13.02	(RUNOFF)
12.67	12.96	(RUNOFF)
14.19	12.81	(RUNOFF)
18.86	7.63	(RUNOFF)
20.72	6.43	(RUNOFF)
21.66	5.75	(RUNOFF)
23.57	5.39	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.53	1229.23	5316.65
23.52	62.33	5311.25

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 2

1

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 1

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.06	384.67	(RUNOFF)
10.40	8.14	(RUNOFF)
11.52	7.80	(RUNOFF)
12.52	7.81	(RUNOFF)
14.02	7.83	(RUNOFF)
18.86	4.13	(RUNOFF)
20.54	3.92	(RUNOFF)
23.47	3.16	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	1334.37	5312.44
20.47	79.48	5301.07
21.47	72.88	5300.98
23.49	65.49	5300.88

EXECUTIVE CONTROL OPERATION ENDCMP
ID

RECORD

COMPUTATIONS COMPLETED FOR PASS 1

TD
MAIN TIME INCREMENT = .10 HOURS

EXECUTIVE CONTROL OPERATION COMPUT

RECORD

FROM XSECTION 32

TO XSECTION 2

STARTING TIME = .00 RAIN DEPTH = 3.05 RAIN DURATION= 1.00 RAIN TABLE NO.= 7 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 2 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	536.41	(RUNOFF)
10.46	22.75	(RUNOFF)
11.65	20.08	(RUNOFF)
12.65	20.20	(RUNOFF)
14.17	20.14	(RUNOFF)
18.91	12.03	(RUNOFF)
20.69	10.35	(RUNOFF)
21.64	9.16	(RUNOFF)
23.56	8.70	(RUNOFF)

*** WARNING - STRUCTURE 10 DELTA T IS TOO LARGE. 0 /2 > S /DELTA T OCCURED 2 TIMES STARTING WITH POINT257

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 12

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	586.49	5674.56
10.46	22.74	5661.98
11.66	20.08	5661.75
12.66	20.19	5661.76
14.17	20.14	5661.75
18.92	12.03	5661.05
20.70	10.35	5660.90
21.65	9.16	5660.80
23.56	8.70	5660.76

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	342.47	(RUNOFF)
10.44	14.11	(RUNOFF)
11.60	12.94	(RUNOFF)
12.60	13.07	(RUNOFF)
14.11	13.17	(RUNOFF)
18.92	7.57	(RUNOFF)
20.63	6.78	(RUNOFF)
21.60	5.86	(RUNOFF)
23.53	5.62	(RUNOFF)

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	514.45	5562.64
6.43	675.19	5563.04
10.46	36.80	5560.59
11.70	31.77	5560.51
12.71	31.93	5560.51
14.22	31.79	5560.51
18.95	19.61	5560.31
20.76	16.37	5560.26
21.69	14.76	5560.24
23.59	13.97	5560.22

OPERATION RESVOR STRUCTURE 9

TR20 XEQ 09-23-93 11:04

CANDN CITY NORTHEAST CANDN BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.52	714.57	5558.64
10.48	36.77	5547.01
11.76	31.50	5546.72
12.76	31.69	5546.73
14.28	31.54	5546.72
18.96	19.60	5546.07
20.82	16.28	5545.89
21.75	14.71	5545.80
23.64	13.82	5545.75

OPERATION RUNOFF CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	391.74	(RUNOFF)
10.39	12.10	(RUNOFF)
11.60	11.04	(RUNOFF)
12.60	11.09	(RUNOFF)
14.10	11.09	(RUNOFF)
18.87	6.27	(RUNOFF)
20.63	5.62	(RUNOFF)
21.59	4.82	(RUNOFF)
23.53	4.62	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	585.45	5443.07
6.63	689.10	5443.28
10.47	48.80	5440.63
11.80	39.91	5440.52
12.81	40.08	5440.52
14.34	39.60	5440.51
18.95	25.85	5440.34
20.92	20.47	5440.27
21.77	18.05	5440.25

OPERATION RUNOFF CROSS SECTION 28

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 14

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	128.58	(RUNOFF)
10.41	3.90	(RUNOFF)
11.56	3.69	(RUNOFF)
12.56	3.72	(RUNOFF)
14.06	3.75	(RUNOFF)
18.94	2.04	(RUNOFF)
23.49	1.55	(RUNOFF)

OPERATION RESVOR STRUCTURE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
14.10	3.70	5620.92
	*	* FIRST POINT OF FLAT PEAK
10.50	3.87	5620.97

***WARNING - LACK OF LOW FLOW DEFINITION FOR XSECT TABLE 26. MAX.FLOW LESS THAN 2ND TABLE VALUE.

*** WARNING - REACH 26 INFLOW HYDROGRAPH VOLUME TRUNCATED ABOVE BASEFLOW AT 2.13 CFS, 55.08 % OF PEAK.

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	272.14	(RUNOFF)
10.43	10.22	(RUNOFF)
11.60	9.40	(RUNOFF)
12.60	9.48	(RUNOFF)
14.10	9.54	(RUNOFF)
18.89	5.43	(RUNOFF)
20.63	4.88	(RUNOFF)
23.52	4.04	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	272.15	5442.19
10.43	14.08	5440.31
11.60	13.26	5440.29
12.60	13.29	5440.29
14.10	13.28	5440.29
20.62	8.14	5440.18
21.58	7.37	5440.16
23.52	7.04	5440.15

OPERATION ADDHYD CROSS SECTION 24

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	854.51	5443.61
6.62	771.60	5443.44
10.46	62.89	5440.82
11.72	52.34	5440.68
12.73	52.49	5440.68
14.27	51.63	5440.67
18.90	34.68	5440.45
20.85	27.88	5440.36
21.68	26.30	5440.34
23.59	24.61	5440.32

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.22	853.67	5437.83
6.64	756.49	5437.68
10.46	62.89	5436.61
11.86	51.10	5436.12
12.89	51.01	5436.11
14.46	49.51	5436.01
18.95	34.68	5434.98
20.92	27.75	5434.55
21.74	26.24	5434.45
23.65	24.40	5434.34

*** WARNING REACH 22 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	156.08	(RUNOFF)
10.41	4.53	(RUNOFF)
11.55	4.30	(RUNOFF)
12.55	4.33	(RUNOFF)
14.05	4.39	(RUNOFF)
18.89	2.37	(RUNOFF)
23.49	1.81	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 22

TR20 XEQ 09-23-93 11:04

CANYON CITY NORTHEAST CANYON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	932.76	5403.48
6.74	766.61	5403.18
10.49	67.35	5400.81

12.96	33.61	5400.62
14.55	52.00	5400.62
18.96	37.04	5400.44
21.02	29.25	5400.35
21.77	27.86	5400.33
23.68	25.66	5400.31

OPERATION RESVOR STRUCTURE 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.24	397.08	5401.85
14.66	51.47	5396.21
21.20	28.74	5395.68
23.76	25.35	5395.60

*** WARNING REACH 10 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	593.48	(RUNOFF)
10.46	31.08	(RUNOFF)
11.68	27.08	(RUNOFF)
12.69	27.32	(RUNOFF)
14.20	27.21	(RUNOFF)
18.90	16.74	(RUNOFF)
20.73	14.13	(RUNOFF)
21.68	12.69	(RUNOFF)
23.58	11.97	(RUNOFF)

OPERATION RESVOR STRUCTURE 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.69	304.04	5445.83
11.84	25.46	5440.69
12.88	25.12	5440.69
14.44	24.11	5440.66
18.99	16.70	5440.46
21.82	12.38	5440.34
23.71	11.23	5440.31

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 17

OPERATION RUNOFF CROSS SECTION 18

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	175.08	(RUNOFF)
7.46	12.78	(RUNOFF)
10.42	5.39	(RUNOFF)
11.53	5.20	(RUNOFF)
12.53	5.23	(RUNOFF)
14.03	5.28	(RUNOFF)

OPERATION RESVOR STRUCTURE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	194.67	5445.21
7.45	12.76	5441.34
10.45	5.40	5440.57
11.58	5.14	5440.54
12.58	5.17	5440.54
14.08	5.22	5440.55
18.93	2.86	5440.30
23.52	2.17	5440.23

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.33	325.75	5422.80
6.60	348.28	5422.89
11.69	29.96	5420.34
12.73	29.38	5420.34
14.31	27.95	5420.32
18.96	19.56	5420.23
21.68	14.51	5420.17
23.61	13.23	5420.15

*** WARNING REACH 16 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	66.75	(RUNOFF)

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 18

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.15	388.32	5423.05
6.26	368.38	5422.97
6.57	361.09	5422.94
11.66	31.48	5420.36
12.70	30.83	5420.35
14.26	29.25	5420.34
18.96	20.45	5420.24
21.65	15.18	5420.17
23.59	13.88	5420.16

OPERATION RUNOFF CROSS SECTION 14

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.15	96.56	(RUNOFF)

12.36	3.23	(RUNOFF)
14.06	3.29	(RUNOFF)
18.91	1.82	(RUNOFF)
23.50	1.39	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.15	484.88	5423.35
6.45	391.24	5423.06
11.63	34.60	5420.40
12.66	33.90	5420.39
14.21	32.20	5420.37
18.96	22.28	5420.26
21.62	16.59	5420.19
23.57	15.24	5420.18

*** WARNING REACH 12 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 12

TR20 XEQ 09-23-93 11:04 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR JOB
 1 PASS 2
 REV PC 09/83(.2) DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9
 PAGE 19

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.17	213.21	(RUNOFF)
10.45	6.88	(RUNOFF)
11.60	6.27	(RUNOFF)
12.60	6.32	(RUNOFF)
14.10	6.31	(RUNOFF)
18.87	3.57	(RUNOFF)
23.52	2.65	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	675.72	5376.87
11.68	40.58	5371.93
12.71	39.75	5371.91
14.25	37.77	5371.87
18.97	25.83	5371.59
21.67	19.28	5371.44
23.62	17.67	5371.41

OPERATION RESVOR STRUCTURE 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.29	679.62	5379.81
6.65	451.05	5379.46
11.69	40.56	5373.72
12.72	39.74	5373.68
14.27	37.78	5373.60
18.97	25.83	5373.12

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	112.76	(RUNOFF)
10.45	3.04	(RUNOFF)
11.57	2.84	(RUNOFF)
12.56	2.85	(RUNOFF)
14.07	2.86	(RUNOFF)
23.50	1.17	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 10

TR20 XEQ 09-23-93 11:04 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR JOB
 PASS 2
 REV PC 09/83(.2) DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9
 PAGE 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.20	404.90	5365.59
21.36	29.83	5362.83

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.30	918.85	5367.17
6.71	814.71	5366.88
14.20	92.02	5363.51
20.74	49.52	5363.04
21.62	48.92	5363.04
23.60	44.09	5362.98

OPERATION RESVOR STRUCTURE 3

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.

COMPUTED PEAK(949.09) AT STRUCTURE 3 EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 6 %.

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	949.09	5372.61
6.35	878.56	5372.50
6.78	807.19	5372.39
14.23	91.96	5366.56
20.78	49.50	5365.20
21.66	48.92	5365.17
23.64	44.03	5364.90

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .10 HOURS DRAINAGE AREA = 4.61 SQ. MI.

5.00	DISCHG	.00	.00	.00	.00	.00	.01	1.62	13.75	58.09	138.75
6.00	DISCHG	193.92	338.96	887.26	868.56	871.28	805.26	797.91	797.43	806.55	784.86
7.00	DISCHG	764.29	739.46	721.52	700.65	681.51	661.20	643.58	626.24	609.85	593.51
8.00	DISCHG	578.16	563.31	547.87	531.13	510.91	484.60	455.23	425.74	394.94	356.98
9.00	DISCHG	325.12	304.04	281.37	264.48	250.86	240.12	238.77	236.11	232.51	228.28
10.00	DISCHG	223.68	218.88	214.03	209.20	204.47	199.89	195.46	191.10	178.27	168.15

13.00	DISCH6	104.64	101.85	99.33	96.90	94.49	92.12	89.93	88.34	87.90	88.63
14.00	DISCH6	89.94	91.20	91.92	91.74	90.69	89.29	88.02	86.90	85.75	84.50
15.00	DISCH6	83.18	81.81	80.43	79.05	77.71	76.44	75.24	74.13	73.11	72.18
16.00	DISCH6	71.34	70.56	69.86	69.24	68.69	68.20	67.76	67.38	67.04	66.74
17.00	DISCH6	66.47	66.23	66.02	65.84	65.67	65.53	65.40	65.29	65.19	65.10
18.00	DISCH6	65.02	64.96	64.90	64.85	64.81	64.77	64.74	64.72	64.70	64.68
19.00	DISCH6	64.66	64.60	64.32	63.60	62.44	61.06	59.65	58.17	56.44	54.51
20.00	DISCH6	52.56	50.61	49.07	48.24	48.17	48.56	49.05	49.41	49.50	49.29
21.00	DISCH6	48.93	48.61	48.42	48.41	48.55	48.74	48.88	48.90	48.72	48.34

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 21

22.00	DISCH6	47.87	47.41	46.96	46.51	46.04	45.56	45.08	44.62	44.19	43.79
23.00	DISCH6	43.42	43.11	42.92	42.97	43.24	43.65	44.00	43.96	43.12	41.43
24.00	DISCH6	39.30	37.14	34.93	32.58	30.14	27.72	25.36	23.13	21.04	19.14
25.00	DISCH6	17.40	15.84	14.44	13.19	12.07	11.08	10.20	9.42	8.72	8.09
26.00	DISCH6	7.54	7.04	6.60	6.21	5.85	5.53	5.25	4.99	4.76	4.55
27.00	DISCH6	4.35	4.18	4.03	3.88	3.75	3.63	3.52	3.43	3.34	3.26
28.00	DISCH6	3.18	3.11	3.05	2.99	2.94	2.89	2.84	2.80	2.76	2.72
29.00	DISCH6	2.68	2.65	2.62	2.59	2.57	2.54	2.52	2.49	2.47	2.45

*** WARNING REACH 8 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.

COMPUTED PEAK(949.09) AT XSECTION 8 EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 6 %.

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .10 HOURS DRAINAGE AREA = 4.61 SQ.

5.00	DISCH6	.00	.00	.00	.00	.00	.01	1.62	13.75	58.09	138.75
6.00	DISCH6	193.92	338.96	887.26	868.56	871.28	805.26	797.91	797.43	806.55	784.86
7.00	DISCH6	764.29	739.46	721.52	700.65	681.51	661.20	643.58	626.24	609.85	593.51
8.00	DISCH6	578.16	563.31	547.87	531.13	510.91	484.60	455.23	425.74	394.94	356.98
9.00	DISCH6	325.12	304.04	281.37	264.48	250.86	240.12	238.77	236.11	232.51	228.28
10.00	DISCH6	223.68	218.88	214.03	209.20	204.47	199.89	195.46	191.10	178.27	168.15
11.00	DISCH6	161.20	155.27	150.22	146.29	143.55	141.63	140.00	138.13	135.62	132.33
12.00	DISCH6	128.59	124.85	118.99	116.80	115.26	114.50	113.71	112.50	110.46	107.67
13.00	DISCH6	104.64	101.85	99.33	96.90	94.49	92.12	89.93	88.34	87.90	88.63
14.00	DISCH6	89.94	91.20	91.92	91.74	90.69	89.29	88.02	86.90	85.75	84.50
15.00	DISCH6	83.18	81.81	80.43	79.05	77.71	76.44	75.24	74.13	73.11	72.18
16.00	DISCH6	71.34	70.56	69.86	69.24	68.69	68.20	67.76	67.38	67.04	66.74
17.00	DISCH6	66.47	66.23	66.02	65.84	65.67	65.53	65.40	65.29	65.19	65.10
18.00	DISCH6	65.02	64.96	64.90	64.85	64.81	64.77	64.74	64.72	64.70	64.68
19.00	DISCH6	64.66	64.60	64.32	63.60	62.44	61.06	59.65	58.17	56.44	54.51
20.00	DISCH6	52.56	50.61	49.07	48.24	48.17	48.56	49.05	49.41	49.50	49.29
21.00	DISCH6	48.93	48.61	48.42	48.41	48.55	48.74	48.88	48.90	48.72	48.34
22.00	DISCH6	47.87	47.41	46.96	46.51	46.04	45.56	45.08	44.62	44.19	43.79
23.00	DISCH6	43.42	43.11	42.92	42.97	43.24	43.65	44.00	43.96	43.12	41.43
24.00	DISCH6	39.30	37.14	34.93	32.58	30.14	27.72	25.36	23.13	21.04	19.14
25.00	DISCH6	17.40	15.84	14.44	13.19	12.07	11.08	10.20	9.42	8.72	8.09
26.00	DISCH6	7.54	7.04	6.60	6.21	5.85	5.53	5.25	4.99	4.76	4.55
27.00	DISCH6	4.35	4.18	4.03	3.88	3.75	3.63	3.52	3.43	3.34	3.26
28.00	DISCH6	3.18	3.11	3.05	2.99	2.94	2.89	2.84	2.80	2.76	2.72
29.00	DISCH6	2.68	2.65	2.62	2.59	2.57	2.54	2.52	2.49	2.47	2.45

OPERATION RUNOFF CROSS SECTION 8

1 PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	114.78	(RUNOFF)
10.37	3.20	(RUNOFF)
12.63	2.84	(RUNOFF)
14.14	2.82	(RUNOFF)
23.55	1.18	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 8

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.

COMPUTED PEAK(1060.81) AT XSECTION 8 EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 5 %.

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	1060.81	5354.02
6.75	834.18	5353.37
14.22	94.73	5349.33
20.76	50.88	5348.71
21.65	50.15	5348.70
23.62	45.18	5348.63

TIME(HRS) FIRST HYDROGRAPH POINT = .00 HOURS TIME INCREMENT = .10 HOURS DRAINAGE AREA = 4.70 SQ.

I.

5.00	DISCHG	.00	.00	.00	.03	.13	.38	4.26	24.93	87.24	194.08
6.00	DISCHG	278.42	446.15	1001.93	971.59	953.34	865.68	841.28	829.87	831.25	803.97
7.00	DISCHG	779.61	752.24	732.61	710.63	690.77	669.94	651.92	634.19	617.40	600.71
8.00	DISCHG	585.07	569.93	554.07	536.74	515.86	488.99	459.19	429.43	398.45	360.38
9.00	DISCHG	328.44	307.32	284.61	267.71	254.07	243.32	241.97	239.30	235.71	231.48
10.00	DISCHG	226.88	222.08	217.23	212.40	207.67	203.09	198.61	194.12	181.03	170.60
11.00	DISCHG	163.39	157.30	152.27	148.51	146.02	144.33	142.83	140.93	138.24	134.70
12.00	DISCHG	130.72	126.85	121.02	119.01	117.72	117.20	116.55	115.30	113.09	110.04
13.00	DISCHG	106.77	103.80	101.16	98.66	96.20	93.80	91.63	90.18	89.99	91.02
14.00	DISCHG	92.60	94.01	94.72	94.36	93.06	91.42	89.97	88.74	87.51	86.21
15.00	DISCHG	84.86	83.47	82.07	80.69	79.35	78.07	76.87	75.76	74.74	73.81
16.00	DISCHG	72.96	72.18	71.48	70.86	70.31	69.82	69.39	69.00	68.66	68.36
17.00	DISCHG	68.10	67.86	67.65	67.46	67.30	67.15	67.03	66.91	66.81	66.73
18.00	DISCHG	66.65	66.58	66.53	66.48	66.44	66.40	66.37	66.34	66.33	66.31
19.00	DISCHG	66.29	66.21	65.87	65.05	63.76	62.27	60.78	59.20	57.39	55.38
20.00	DISCHG	53.36	51.38	49.90	49.21	49.31	49.85	50.44	50.82	50.85	50.55
21.00	DISCHG	50.10	49.73	49.53	49.53	49.71	49.95	50.12	50.13	49.91	49.48
22.00	DISCHG	48.96	48.46	47.99	47.52	47.04	46.55	46.07	45.61	45.17	44.77
23.00	DISCHG	44.40	44.10	43.94	44.03	44.36	44.82	45.17	45.03	44.01	42.10
24.00	DISCHG	39.77	37.45	35.14	32.72	30.24	27.78	25.40	23.15	21.06	19.15
25.00	DISCHG	17.41	15.84	14.44	13.19	12.07	11.08	10.20	9.42	8.72	8.09
26.00	DISCHG	7.54	7.04	6.60	6.21	5.85	5.53	5.25	4.99	4.76	4.55
27.00	DISCHG	4.35	4.18	4.03	3.88	3.75	3.63	3.52	3.43	3.34	3.26
28.00	DISCHG	3.18	3.11	3.05	2.99	2.94	2.89	2.84	2.80	2.76	2.72
29.00	DISCHG	2.68	2.65	2.62	2.59	2.57	2.54	2.52	2.49	2.47	2.45

PASS 2

OPERATION RESVOR STRUCTURE 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.03	772.67	5355.26

*** WARNING REACH 6 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	314.48	(RUNOFF)
10.45	8.87	(RUNOFF)
11.63	7.87	(RUNOFF)
12.63	7.88	(RUNOFF)
14.13	7.84	(RUNOFF)
18.87	4.51	(RUNOFF)
23.55	3.27	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.95	814.37	5328.73

OPERATION RESVOR STRUCTURE 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.01	813.29	5330.94

*** WARNING REACH 4 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	419.48	(RUNOFF)
10.38	13.19	(RUNOFF)
11.67	11.46	(RUNOFF)
12.67	11.41	(RUNOFF)
14.19	11.29	(RUNOFF)
18.86	6.73	(RUNOFF)
20.72	5.68	(RUNOFF)
23.57	4.76	(RUNOFF)

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

1 PASS 2

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 24

OPERATION ADDHYD CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

PERATION RUNOFF CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.07	332.43	(RUNOFF)
10.40	7.20	(RUNOFF)
11.52	6.89	(RUNOFF)
12.52	6.91	(RUNOFF)
14.02	6.93	(RUNOFF)
18.86	3.66	(RUNOFF)
20.54	3.48	(RUNOFF)
23.47	2.80	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	1120.14	5310.62
13.98	129.01	5301.74
20.49	67.97	5300.92
21.54	62.32	5300.84
23.50	56.23	5300.76

EXECUTIVE CONTROL OPERATION ENDCMP
ID

RECORD

COMPUTATIONS COMPLETED FOR PASS 2

EXECUTIVE CONTROL OPERATION INCREM
ID

RECORD

MAIN TIME INCREMENT = .10 HOURS

EXECUTIVE CONTROL OPERATION COMPUT
ID

RECORD

FROM XSECTION 32

TO XSECTION 2

STARTING TIME = .00 RAIN DEPTH = 2.75 RAIN DURATION= 1.00 RAIN TABLE NO.= 7 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 3 MAIN TIME INCREMENT = .10 HOURS

OPERATION RUNOFF CROSS SECTION 32

TR20 XEQ 09-23-93 11:04
PASS 3
REV PC 09/83(.2)
PAGE 25

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	425.19	(RUNOFF)
10.46	19.34	(RUNOFF)
11.65	17.10	(RUNOFF)
12.65	17.21	(RUNOFF)

20.69
21.64
23.56

8.87
7.85
7.47

(RUNOFF)
(RUNOFF)
(RUNOFF)

*** WARNING - STRUCTURE 10 DELTA T IS TOO LARGE. D /2 > S /DELTA T OCCURED 2 TIMES STARTING WITH POINT257

OPERATION RESVOR STRUCTURE 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.41	422.63	5674.31
7.60	57.44	5663.41
7.80	50.59	5663.13
7.99	44.67	5662.88
8.18	39.79	5662.69
8.35	32.78	5662.40
8.77	22.23	5661.93
8.98	20.54	5661.79
10.43	19.32	5661.68
14.17	17.19	5661.49

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.21	268.14	(RUNOFF)
10.45	11.84	(RUNOFF)
11.60	10.88	(RUNOFF)
12.60	11.00	(RUNOFF)
14.11	11.11	(RUNOFF)
18.93	6.41	(RUNOFF)
20.63	5.75	(RUNOFF)
21.60	4.96	(RUNOFF)
23.53	4.77	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 30

1
TR20 XEQ 09-23-93 11:04
PASS 3
REV PC 09/83(.2)
PAGE 26

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.27	418.81	5562.36
6.51	464.27	5562.49
7.85	75.42	5561.00
8.05	67.65	5560.94
10.47	31.13	5560.50
11.71	26.81	5560.43
12.71	26.97	5560.43
14.22	26.88	5560.43
18.96	16.72	5560.27
20.77	13.90	5560.22

OPERATION RESVOR STRUCTURE 9

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
----------------	---------------------	----------------------

11.76	26.59	5546.45
12.77	26.77	5546.46
14.28	26.67	5546.45
18.97	16.71	5545.91
20.83	13.83	5545.75
21.75	12.54	5545.68
23.64	11.78	5545.64

OPERATION RUNOFF CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.18	326.91	(RUNOFF)
10.40	10.52	(RUNOFF)
11.60	9.61	(RUNOFF)
12.60	9.66	(RUNOFF)
14.10	9.66	(RUNOFF)
18.87	5.48	(RUNOFF)
20.63	4.91	(RUNOFF)
23.53	4.04	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 24

1

TR20 XEQ 09-23-93 11:04 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
 PASS 3
 REV PC 09/83(.2) DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9
 PAGE 27

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.26	479.44	5442.82
6.80	375.83	5442.44
10.47	41.54	5440.54
11.80	33.71	5440.44
12.81	33.86	5440.44
14.35	33.34	5440.43
18.96	22.16	5440.29
20.94	17.33	5440.23
21.74	16.32	5440.21
23.62	15.08	5440.20

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	105.44	(RUNOFF)
10.41	3.35	(RUNOFF)
11.56	3.17	(RUNOFF)
12.56	3.20	(RUNOFF)
14.06	3.23	(RUNOFF)
23.49	1.34	(RUNOFF)

OPERATION RESVOR STRUCTURE 11

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
14.16	3.06	5620.77
10.60	3.18	5620.80

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	217.23	(RUNOFF)
10.43	8.66	(RUNOFF)
11.60	7.98	(RUNOFF)
12.60	8.05	(RUNOFF)
14.10	8.12	(RUNOFF)
18.89	4.64	(RUNOFF)
20.63	4.17	(RUNOFF)
23.53	3.45	(RUNOFF)

TR20 XEQ 09-23-93 11:04
PASS 3
REV PC 09/83(.2)
PAGE 28

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR
DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

JOB

OPERATION ADDHYD CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.20	217.24	5441.97
10.45	11.82	5440.26
11.60	11.15	5440.25
12.60	11.20	5440.25
14.10	11.21	5440.25
20.62	6.89	5440.15
23.52	5.97	5440.13

OPERATION ADDHYD CROSS SECTION 24

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	696.06	5443.29
6.76	421.65	5442.61
10.46	53.38	5440.69
11.71	44.24	5440.58
12.72	44.37	5440.58
14.26	43.47	5440.56
18.91	29.63	5440.39
20.85	23.53	5440.31
21.66	22.49	5440.29
23.58	20.99	5440.27

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	710.85	5437.61
6.77	421.84	5437.16
10.49	53.30	5436.27
11.84	43.35	5435.58
12.88	43.22	5435.57
14.46	41.88	5435.48
18.95	29.63	5434.66
20.93	23.45	5434.28
21.71	22.45	5434.22

*** WARNING REACH 22 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 22

R20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

1 PASS 3

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.12	128.14	(RUNOFF)
10.41	3.89	(RUNOFF)
11.55	3.70	(RUNOFF)
12.55	3.73	(RUNOFF)
14.05	3.78	(RUNOFF)
18.89	2.05	(RUNOFF)
23.49	1.57	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	767.19	5403.18
10.45	57.17	5400.69
11.87	45.69	5400.55
12.95	45.46	5400.55
14.55	44.02	5400.53
18.96	31.67	5400.38
21.71	23.88	5400.29
23.67	21.92	5400.26

OPERATION RESVOR STRUCTURE 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.64	332.58	5400.58
14.68	43.47	5396.02
21.15	24.57	5395.58
23.74	21.71	5395.51

*** WARNING REACH 10 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 20

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.31	459.09	(RUNOFF)
10.46	25.97	(RUNOFF)
11.68	22.68	(RUNOFF)
12.69	22.91	(RUNOFF)
14.20	22.86	(RUNOFF)
18.90	14.12	(RUNOFF)
20.73	11.94	(RUNOFF)
21.68	10.72	(RUNOFF)
23.58	10.12	(RUNOFF)

OPERATION RESVOR STRUCTURE 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.68	246.12	5444.94
11.84	21.31	5440.58
12.88	21.06	5440.57
14.44	20.25	5440.55
19.00	14.09	5440.38
21.82	10.46	5440.29
23.71	9.49	5440.26

OPERATION RUNOFF CROSS SECTION 18

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	140.71	(RUNOFF)
7.46	10.76	(RUNOFF)
10.43	4.57	(RUNOFF)
11.54	4.42	(RUNOFF)
12.53	4.45	(RUNOFF)
14.03	4.50	(RUNOFF)
18.89	2.44	(RUNOFF)
23.48	1.89	(RUNOFF)

OPERATION RESVOR STRUCTURE 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	155.44	5445.15
7.46	10.75	5441.13
10.45	4.58	5440.48
11.58	4.37	5440.46
12.58	4.40	5440.46
14.08	4.45	5440.47
18.94	2.44	5440.26
23.52	1.86	5440.20

OPERATION ADDHYD CROSS SECTION 16

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.59	285.83	5422.64
11.69	25.13	5420.29
12.73	24.68	5420.28
14.31	23.52	5420.27
18.97	16.53	5420.19
21.68	12.28	5420.14

*** WARNING REACH 16 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.11	56.37	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	298.97	5422.70
6.55	297.39	5422.69
11.66	26.46	5420.30
12.70	25.96	5420.30
14.26	24.67	5420.28
18.96	17.31	5420.20
21.65	12.87	5420.15
23.59	11.78	5420.14

OPERATION RUNOFF CROSS SECTION 14

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.15	76.07	(RUNOFF)
7.45	6.76	(RUNOFF)
10.44	2.88	(RUNOFF)
11.56	2.73	(RUNOFF)
12.56	2.75	(RUNOFF)
14.06	2.79	(RUNOFF)
23.50	1.18	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 16

R20 XEQ 09-23-93 11:04 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR JOB
1 PASS 3
REV PC 09/83(.2) DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9
PAGE 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	373.00	5422.99
11.63	29.10	5420.33
12.66	28.56	5420.33
14.21	27.18	5420.31
18.96	18.87	5420.22
21.62	14.07	5420.16
23.57	12.94	5420.15

*** WARNING REACH 12 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.18	176.53	(RUNOFF)
10.45	5.96	(RUNOFF)
11.60	5.43	(RUNOFF)

18.88
23.52

3.11
2.31

(RUNOFF)
(RUNOFF)

OPERATION ADDHYD CROSS SECTION 12

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.26	526.21	5376.30
11.68	34.27	5371.79
12.71	33.62	5371.77
14.25	32.00	5371.74
18.97	21.95	5371.50
21.67	16.41	5371.38
23.62	15.05	5371.35

OPERATION RESVDR STRUCTURE 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.24	553.02	5379.62
11.69	34.25	5373.46
12.72	33.61	5373.43
14.27	32.00	5373.37
18.98	21.95	5372.91
21.68	16.41	5372.43
23.63	15.05	5372.31

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 3

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 33

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.13	95.11	(RUNOFF)
10.45	2.66	(RUNOFF)
12.56	2.49	(RUNOFF)
14.07	2.51	(RUNOFF)
23.50	1.03	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.62	338.92	5365.30
21.37	25.53	5362.78

OPERATION ADDHYD CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.25	748.91	5366.70
6.61	641.75	5366.40
14.21	77.75	5363.36
20.73	42.42	5362.97
21.63	41.80	5362.96
23.60	37.72	5362.92

OPERATION RESVOR STRUCTURE 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	757.62	5372.31
6.70	641.74	5372.13
14.24	77.71	5366.15
20.77	42.40	5364.81
21.66	41.80	5364.78
23.64	37.67	5364.55

*** WARNING REACH 8 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 8

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

1 PASS 3

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	98.80	(RUNOFF)
10.38	2.84	(RUNOFF)
12.63	2.52	(RUNOFF)
14.14	2.51	(RUNOFF)
23.55	1.05	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.32	844.04	5353.40
14.22	80.16	5349.12
20.75	43.63	5348.61
21.66	42.89	5348.60
23.62	38.69	5348.54

OPERATION RESVOR STRUCTURE 22

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
7.17	595.49	5354.51

*** WARNING REACH 6 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 6

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.19	270.02	(RUNOFF)
10.45	7.84	(RUNOFF)
11.63	6.97	(RUNOFF)
12.63	6.98	(RUNOFF)
14.13	6.94	(RUNOFF)
18.87	4.00	(RUNOFF)
23.55	2.90	(RUNOFF)

OPERATION ADDHYD CROSS SECTION 6

7.08

624.71

5328.05

OPERATION RESVOR STRUCTURE 1

PEAK TIME(HRS)
7.14PEAK DISCHARGE(CFS)
624.33PEAK ELEVATION(FEET)
5330.66

R20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

PASS 3

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 35

*** WARNING REACH 4 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 4

PEAK TIME(HRS)
6.24
10.38
11.67
12.68
14.19
18.86
23.57PEAK DISCHARGE(CFS)
357.94
11.64
10.12
10.08
9.98
5.96
4.22PEAK ELEVATION(FEET)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)

OPERATION ADDHYD CROSS SECTION 4

PEAK TIME(HRS)
6.35
6.93
14.03
20.56
21.57
23.55PEAK DISCHARGE(CFS)
777.08
687.66
102.75
55.06
51.13
46.05PEAK ELEVATION(FEET)
5316.33
5316.23
5312.06
5311.10
5311.02
5310.92

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION RUNOFF CROSS SECTION 2

PEAK TIME(HRS)
6.07
10.41
11.52
12.52
14.02
18.86
20.54
23.47PEAK DISCHARGE(CFS)
288.01
6.38
6.11
6.13
6.15
3.25
3.09
2.49PEAK ELEVATION(FEET)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)
(RUNOFF)

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
6.23	949.79	5309.19
6.89	706.11	5307.19
14.02	108.90	5301.47
20.55	58.16	5300.79
21.55	53.68	5300.72
23.50	48.48	5300.65

EXECUTIVE CONTROL OPERATION ENDCMP

RECORD

ID

COMPUTATIONS COMPLETED FOR PASS 3

EXECUTIVE CONTROL OPERATION ENDJOB

RECORD

ID

1

TR20 XEQ 09-23-93 11:04

CANYON CITY NORTHEAST CANYON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

SUMMARY

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 37

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED

(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH

A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION			RUNOFF	PEAK DISCHARGE		
ID	OPERATION	AREA	#	COND	INCREM	BEGIN	AMOUNT	DURATION	AMOUNT	ELEVATION	TIME	RATE
(CSM)		(SQ MI)			(HR)	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)
ALTERNATE	1	STORM	1									
XSECTION 774.4	32 RUNOFF	.87	7	2	.10	.0	3.40	24.00	1.43	---	6.24	669.90
STRUCTURE 810.6	10 RESVOR	.87	7	2	.10	.0	3.40	24.00	1.43	5674.73	6.31	701.16
XSECTION 715.2	30 REACH	.87	7	2	.10	.0	3.40	24.00	1.43	5562.90	6.44	618.65
XSECTION 731.8	30 RUNOFF	.60	7	2	.10	.0	3.40	24.00	1.23	---	6.20	435.44
XSECTION 611.8	30 ADDHYD	1.46	7	2	.10	.0	3.40	24.00	1.35	5563.58	6.40	893.16
STRUCTURE 649.0	9 RESVOR	1.46	7	2	.10	.0	3.40	24.00	1.34	5559.00	6.43	947.54
XSECTION 540.2	24 REACH	1.46	7	2	.10	.0	3.40	24.00	1.35	5443.48	6.60	788.74

SECTION 24	ADDHYD	1.85	7	2	.10	.0	3.40	24.00	1.46	5443.83	6.55	965.01
522.5												
SECTION 28	RUNOFF	.14	7	2	.10	.0	3.40	24.00	1.63	---	6.12	156.76
1152.7												
STRUCTURE 11	RESVDR	.14	7	2	.10	.0	3.40	24.00	1.06	5621.18	8.70*	4.71
* 34.7												
SECTION 26	REACH	.14	7	2	.10	.0	3.40	24.00	1.05	5440.10	10.10*	4.70
34.5												
SECTION 26	RUNOFF	.40	7	2	.10	.0	3.40	24.00	1.37	---	6.19	340.04
852.2												
SECTION 26	ADDHYD	.53	7	2	.10	.0	3.40	24.00	1.29	5442.46	6.19	340.51
636.5												
SECTION 24	ADDHYD	2.38	7	2	.10	.0	3.40	24.00	1.42	5444.10	6.53	1098.02
461.0												
STRUCTURE 8	RESVDR	2.38	7	2	.10	.0	3.40	24.00	1.43	5438.20	6.54	1096.26
460.2												
SECTION 22	REACH	2.38	7	2	.10	.0	3.40	24.00	1.41	5403.76	6.64	1087.01
456.3												
SECTION 22	RUNOFF	.16	7	2	.10	.0	3.40	24.00	1.63	---	6.11	190.06
1202.9												
SECTION 22	ADDHYD	2.54	7	2	.10	.0	3.40	24.00	1.43	5403.81	6.63	1117.66
440.0												
STRUCTURE 27	RESVDR	2.54	7	2	.10	.0	3.40	24.00	1.43	5403.64	7.12	523.79
206.2												
SECTION 10	REACH	2.54	7	2	.10	.0	3.40	24.00	1.43	5366.07	7.12	523.79
206.2												
SECTION 20	RUNOFF	1.35	7	2	.10	.0	3.40	24.00	1.18	---	6.30	763.13
563.6												
STRUCTURE 25	RESVDR	1.35	7	2	.10	.0	3.40	24.00	1.18	5446.99	6.69	379.13
280.0												
SECTION 18	RUNOFF	.21	7	2	.10	.0	3.40	24.00	1.39	---	6.10	217.33
1044.8												
STRUCTURE 6	RESVDR	.21	7	2	.10	.0	3.40	24.00	1.38	5445.24	6.12	213.04
1024.3												
SECTION 16	ADDHYD	1.56	7	2	.10	.0	3.40	24.00	1.21	5423.18	6.63	426.82
273.3												
SECTION 16	REACH	1.56	7	2	.10	.0	3.40	24.00	1.21	5423.18	6.63	426.82
273.3												
SECTION 16	RUNOFF	.05	7	2	.10	.0	3.40	24.00	2.01	---	6.10	79.17
1493.9												
SECTION 16	ADDHYD	1.62	7	2	.10	.0	3.40	24.00	1.23	5423.30	6.21	465.78
288.4												
SECTION 14	RUNOFF	.14	7	2	.10	.0	3.40	24.00	1.30	---	6.14	121.46
880.1												
SECTION 16	ADDHYD	1.75	7	2	.10	.0	3.40	24.00	1.24	5423.64	6.19	581.48
331.7												
SECTION 12	REACH	1.75	7	2	.10	.0	3.40	24.00	1.24	5376.50	6.30	578.61
330.1												

1

A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION -----			RUNOFF	PEAK DISCHARGE -----		
ID	OPERATION	AREA	#	COND	INCREM	BEGIN	AMOUNT	DURATION	AMOUNT	ELEVATION	TIME	RATE
RATE		(SQ MI)			(HR)	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)
(CSM)												
ALTERNATE	1	STORM	1									
XSECTION 12 1135.1	RUNOFF	.23	7	2	.10	.0	3.40	24.00	1.77	---	6.17	257.67
XSECTION 12 407.9	ADDHYD	1.98	7	2	.10	.0	3.40	24.00	1.30	5377.37	6.25	807.57
STRUCTURE 4 418.9	RESVOR	1.98	7	2	.10	.0	3.40	24.00	1.31	5380.05	6.29	829.42
XSECTION 10 1439.6	RUNOFF	.09	7	2	.10	.0	3.40	24.00	2.01	---	6.12	133.88
XSECTION 10 202.6	ADDHYD	2.63	7	2	.10	.0	3.40	24.00	1.45	5366.09	7.11	533.43
XSECTION 10 244.2	ADDHYD	4.61	7	2	.10	.0	3.40	24.00	1.39	5367.63	6.31	1126.72
STRUCTURE 3 236.6	RESVOR	4.61	7	2	.10	.0	3.40	24.00	1.39	5372.83	6.36	1091.36
XSECTION 8 236.6	REACH	4.61	7	2	.10	.0	3.40	24.00	1.39	5354.08	6.36	1091.36
XSECTION 8 1485.1	RUNOFF	.09	7	2	.10	.0	3.40	24.00	2.38	---	6.19	133.66
XSECTION 8 254.2	ADDHYD	4.70	7	2	.10	.0	3.40	24.00	1.41	5354.29	6.29	1195.45
STRUCTURE 22 205.4	RESVOR	4.70	7	2	.10	.0	3.40	24.00	1.41	5356.00	7.09	966.22
XSECTION 6 205.4	REACH	4.70	7	2	.10	.0	3.40	24.00	1.41	5329.28	7.09	966.22
XSECTION 6 1462.5	RUNOFF	.25	7	2	.10	.0	3.40	24.00	2.33	---	6.18	367.09
XSECTION 6 204.8	ADDHYD	4.95	7	2	.10	.0	3.40	24.00	1.45	5329.43	6.78	1014.63
STRUCTURE 1 204.8	RESVOR	4.95	7	2	.10	.0	3.40	24.00	1.45	5331.25	6.84	1014.64
XSECTION 4 204.8	REACH	4.95	7	2	.10	.0	3.40	24.00	1.45	5316.60	6.84	1014.64
XSECTION 4 1296.4	RUNOFF	.38	7	2	.10	.0	3.40	24.00	2.27	---	6.23	492.62
XSECTION 4 230.5	ADDHYD	5.33	7	2	.10	.0	3.40	24.00	1.51	5316.65	6.53	1229.23
XSECTION 2 230.5	REACH	5.33	7	2	.10	.0	3.40	24.00	1.51	5311.55	6.53	1229.23
XSECTION 2 1913.8	RUNOFF	.20	7	2	.10	.0	3.40	24.00	2.40	---	6.06	384.67
XSECTION 2 241.1	ADDHYD	5.54	7	2	.10	.0	3.40	24.00	1.54	5312.44	6.25	1334.37
ALTERNATE	1	STORM	2									
XSECTION 32 620.1	RUNOFF	.87	7	2	.10	.0	3.05	24.00	1.17	---	6.25	536.41

XSECTION 30	REACH	.87	7	2	.10	.0	3.05	24.00	1.16	5562.45	6.47	450.10
520.4												
XSECTION 30	RUNOFF	.60	7	2	.10	.0	3.05	24.00	.99	---	6.20	342.47
575.6												
SECTION 30	ADDHYD	1.46	7	2	.10	.0	3.05	24.00	1.09	5563.04	6.43	675.19
462.5												
STRUCTURE 9	RESVOR	1.46	7	2	.10	.0	3.05	24.00	1.11	5558.64	6.52	714.57
489.4												
XSECTION 24	REACH	1.46	7	2	.10	.0	3.05	24.00	1.10	5443.06	6.64	582.59
399.0												
XSECTION 24	RUNOFF	.39	7	2	.10	.0	3.05	24.00	1.58	---	6.17	391.74
1012.2												
XSECTION 24	ADDHYD	1.85	7	2	.10	.0	3.05	24.00	1.20	5443.28	6.63	689.10
373.1												
XSECTION 28	RUNOFF	.14	7	2	.10	.0	3.05	24.00	1.35	---	6.13	128.58
945.5												
STRUCTURE 11	RESVOR	.14	7	2	.10	.0	3.05	24.00	.88	5620.97	10.50	3.87
28.4												
XSECTION 26	REACH	.14	7	2	.10	.0	3.05	24.00	.86	5440.08	11.00*	3.86
28.4												
XSECTION 26	RUNOFF	.40	7	2	.10	.0	3.05	24.00	1.12	---	6.19	272.14
682.1												
XSECTION 26	ADDHYD	.53	7	2	.10	.0	3.05	24.00	1.05	5442.19	6.19	272.15
508.7												

1

TR20 XEQ 09-23-93 11:04

CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR

JOB

SUMMARY

REV PC 09/83(.2)

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 39

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED

(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH

A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION			RUNOFF	PEAK DISCHARGE		
						BEGIN	AMOUNT	DURATION		AMOUNT	ELEVATION	TIME
ID	OPERATION	AREA	#	COND	INCREM	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)
RATE		(SQ MI)										
(CSM)												
ALTERNATE	1	STORM	2									
XSECTION 24	ADDHYD	2.38	7	2	.10	.0	3.05	24.00	1.16	5443.61	6.22	854.51
358.7												
STRUCTURE 8	RESVOR	2.38	7	2	.10	.0	3.05	24.00	1.17	5437.83	6.22	853.67
358.4												
XSECTION 22	REACH	2.38	7	2	.10	.0	3.05	24.00	1.17	5403.32	6.33	844.28
354.4												
XSECTION 22	RUNOFF	.16	7	2	.10	.0	3.05	24.00	1.35	---	6.11	156.08
987.8												
XSECTION 22	ADDHYD	2.54	7	2	.10	.0	3.05	24.00	1.18	5403.48	6.31	932.76
367.2												
STRUCTURE 27	RESVOR	2.54	7	2	.10	.0	3.05	24.00	1.18	5401.85	7.24	397.08

156.3												
XSECTION 20	RUNOFF	1.35	7	2	.10	.0	3.05	24.00	.95	---	6.31	593.48
438.3												
STRUCTURE 25	RESVOR	1.35	7	2	.10	.0	3.05	24.00	.95	5445.83	6.69	304.04
224.5												
XSECTION 18	RUNOFF	.21	7	2	.10	.0	3.05	24.00	1.14	---	6.11	175.08
841.7												
STRUCTURE 6	RESVOR	.21	7	2	.10	.0	3.05	24.00	1.15	5445.21	6.12	194.67
935.9												
XSECTION 16	ADDHYD	1.56	7	2	.10	.0	3.05	24.00	.97	5422.89	6.60	348.28
223.0												
XSECTION 16	REACH	1.56	7	2	.10	.0	3.05	24.00	.97	5422.89	6.60	348.28
223.0												
XSECTION 16	RUNOFF	.05	7	2	.10	.0	3.05	24.00	1.70	---	6.11	66.75
1259.5												
XSECTION 16	ADDHYD	1.62	7	2	.10	.0	3.05	24.00	1.00	5423.05	6.15	388.32
240.4												
XSECTION 14	RUNOFF	.14	7	2	.10	.0	3.05	24.00	1.06	---	6.15	96.56
699.7												
XSECTION 16	ADDHYD	1.75	7	2	.10	.0	3.05	24.00	1.00	5423.35	6.15	484.88
276.6												
XSECTION 12	REACH	1.75	7	2	.10	.0	3.05	24.00	1.00	5375.92	6.28	455.57
259.9												
XSECTION 12	RUNOFF	.23	7	2	.10	.0	3.05	24.00	1.49	---	6.17	213.21
939.3												
XSECTION 12	ADDHYD	1.98	7	2	.10	.0	3.05	24.00	1.06	5376.87	6.24	675.72
341.3												
STRUCTURE 4	RESVOR	1.98	7	2	.10	.0	3.05	24.00	1.06	5379.81	6.29	679.62
343.2												
XSECTION 10	RUNOFF	.09	7	2	.10	.0	3.05	24.00	1.70	---	6.12	112.76
1212.4												
XSECTION 10	ADDHYD	2.63	7	2	.10	.0	3.05	24.00	1.19	5365.59	7.20	404.90
153.8												
XSECTION 10	ADDHYD	4.61	7	2	.10	.0	3.05	24.00	1.14	5367.17	6.30	918.85
199.2												
STRUCTURE 3	RESVOR	4.61	7	2	.10	.0	3.05	24.00	1.13	5372.61	6.25	949.09
205.7												
XSECTION 8	REACH	4.61	7	2	.10	.0	3.05	24.00	1.13	5353.74	6.25	949.09
205.7												
XSECTION 8	RUNOFF	.09	7	2	.10	.0	3.05	24.00	2.05	---	6.19	114.78
1275.3												
XSECTION 8	ADDHYD	4.70	7	2	.10	.0	3.05	24.00	1.15	5354.02	6.24	1060.81
225.6												
STRUCTURE 22	RESVOR	4.70	7	2	.10	.0	3.05	24.00	1.15	5355.26	7.03	772.66
164.3												
XSECTION 6	REACH	4.70	7	2	.10	.0	3.05	24.00	1.15	5328.58	7.03	772.66
164.3												
XSECTION 6	RUNOFF	.25	7	2	.10	.0	3.05	24.00	2.01	---	6.19	314.48
1252.9												
XSECTION 6	ADDHYD	4.95	7	2	.10	.0	3.05	24.00	1.20	5328.73	6.95	814.37
164.4												
STRUCTURE 1	RESVOR	4.95	7	2	.10	.0	3.05	24.00	1.20	5330.94	7.01	813.29
164.2												
XSECTION 4	REACH	4.95	7	2	.10	.0	3.05	24.00	1.20	5316.38	7.01	813.29
164.2												
XSECTION 4	RUNOFF	.38	7	2	.10	.0	3.05	24.00	1.95	---	6.23	419.48
1103.9												
XSECTION 4	ADDHYD	5.33	7	2	.10	.0	3.05	24.00	1.25	5316.55	6.41	955.30

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED

(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH

A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

[illegible]

STRUCTURE 8 298.4	RESVOR	2.38	7	2	.10	.0	2.75	24.00	.96	5437.61	6.23	710.85
XSECTION 22 292.1	REACH	2.38	7	2	.10	.0	2.75	24.00	.96	5403.05	6.34	695.83
XSECTION 22 811.0	RUNOFF	.16	7	2	.10	.0	2.75	24.00	1.12	---	6.12	128.14
XSECTION 22 302.0	ADDHYD	2.54	7	2	.10	.0	2.75	24.00	.97	5403.18	6.32	767.19
STRUCTURE 27 130.9	RESVOR	2.54	7	2	.10	.0	2.75	24.00	.97	5400.58	7.64	332.58
XSECTION 10 130.9	REACH	2.54	7	2	.10	.0	2.75	24.00	.97	5365.27	7.64	332.58
XSECTION 20 339.1	RUNOFF	1.35	7	2	.10	.0	2.75	24.00	.76	---	6.31	459.09
STRUCTURE 25 181.8	RESVOR	1.35	7	2	.10	.0	2.75	24.00	.76	5444.94	6.68	246.12
XSECTION 18 676.5	RUNOFF	.21	7	2	.10	.0	2.75	24.00	.93	---	6.11	140.71
STRUCTURE 6 747.3	RESVOR	.21	7	2	.10	.0	2.75	24.00	.95	5445.15	6.13	155.44
XSECTION 16 183.0	ADDHYD	1.56	7	2	.10	.0	2.75	24.00	.78	5422.64	6.59	285.83
XSECTION 16 183.0	REACH	1.56	7	2	.10	.0	2.75	24.00	.78	5422.64	6.59	285.83
XSECTION 16 1063.5	RUNOFF	.05	7	2	.10	.0	2.75	24.00	1.45	---	6.11	56.37
XSECTION 16 185.1	ADDHYD	1.62	7	2	.10	.0	2.75	24.00	.81	5422.70	6.23	298.97
XSECTION 14 551.3	RUNOFF	.14	7	2	.10	.0	2.75	24.00	.86	---	6.15	76.07
XSECTION 16 212.8	ADDHYD	1.75	7	2	.10	.0	2.75	24.00	.81	5422.99	6.19	373.00
XSECTION 12 210.8	REACH	1.75	7	2	.10	.0	2.75	24.00	.81	5375.37	6.32	369.60

TR20 XEQ 09-23-93 11:04 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR JOB
1 SUMMARY
REV PC 09/83(.2) DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN7
PAGE 41

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE	STANDARD CONTROL	DRAINAGE	RAIN TABLE	ANTEC MOIST	MAIN TIME	PRECIPITATION			RUNOFF	PEAK DISCHARGE		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
ID	OPERATION	AREA	#	COND	INCREM	BEGIN	AMOUNT	DURATION	AMOUNT	ELEVATION	TIME	RATE
RATE		(SQ MI)			(HR)	(HR)	(IN)	(HR)	(IN)	(FT)	(HR)	(CFS)
(CSM)												

ALTERNATE 1 STORM 3

XSECTION 12 265.8	ADDHYD	1.98	7	2	.10	.0	2.75	24.00	.86	5376.30	6.26	526.21
STRUCTURE 4 279.3	RESVOR	1.98	7	2	.10	.0	2.75	24.00	.86	5379.62	6.24	553.02
XSECTION 10 1022.7	RUNOFF	.09	7	2	.10	.0	2.75	24.00	1.45	---	6.13	95.11
XSECTION 10 128.7	ADDHYD	2.63	7	2	.10	.0	2.75	24.00	.98	5365.30	7.62	338.92
XSECTION 10 162.3	ADDHYD	4.61	7	2	.10	.0	2.75	24.00	.93	5366.70	6.25	748.91
STRUCTURE 3 164.2	RESVOR	4.61	7	2	.10	.0	2.75	24.00	.93	5372.31	6.32	757.62
XSECTION 8 164.2	REACH	4.61	7	2	.10	.0	2.75	24.00	.93	5353.12	6.32	757.62
XSECTION 8 1097.8	RUNOFF	.09	7	2	.10	.0	2.75	24.00	1.78	---	6.19	98.80
XSECTION 8 179.5	ADDHYD	4.70	7	2	.10	.0	2.75	24.00	.95	5353.40	6.32	844.04
STRUCTURE 22 126.6	RESVOR	4.70	7	2	.10	.0	2.75	24.00	.95	5354.51	7.17	595.49
XSECTION 6 126.6	REACH	4.70	7	2	.10	.0	2.75	24.00	.95	5327.94	7.17	595.49
XSECTION 6 1075.8	RUNOFF	.25	7	2	.10	.0	2.75	24.00	1.74	---	6.19	270.02
XSECTION 6 126.1	ADDHYD	4.95	7	2	.10	.0	2.75	24.00	.99	5328.05	7.08	624.71
STRUCTURE 1 126.0	RESVOR	4.95	7	2	.10	.0	2.75	24.00	.99	5330.66	7.14	624.33
XSECTION 4 126.0	REACH	4.95	7	2	.10	.0	2.75	24.00	.99	5316.15	7.14	624.33
XSECTION 4 941.9	RUNOFF	.38	7	2	.10	.0	2.75	24.00	1.68	---	6.24	357.94
XSECTION 4 145.7	ADDHYD	5.33	7	2	.10	.0	2.75	24.00	1.04	5316.33	6.35	777.08
XSECTION 2 145.7	REACH	5.33	7	2	.10	.0	2.75	24.00	1.04	5307.77	6.35	777.08
XSECTION 2 1432.9	RUNOFF	.20	7	2	.10	.0	2.75	24.00	1.80	---	6.07	288.01
XSECTION 2 171.6	ADDHYD	5.54	7	2	.10	.0	2.75	24.00	1.06	5309.19	6.23	949.79

TR20 XEQ 09-23-93 11:04 CANON CITY NORTHEAST CANON BASIN TR20 RUN 24 HR. 100 ,50 &25 YR. STOR JOB
SUMMARY
REV PC 09/83(.2) DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9
PAGE 42

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 1
% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARN
NGS)

HYDROGRAPH INFORMATION ROUTING PARAMETERS
PEAK

TRAVEL TIME

XSEC REACH TOR- KINE-		INFLOW		OUTFLOW		INTERV.AREA		BASE-	ABOVE	TIME	ATION	EQUATION		LENGTH	RATIO	@PEAK	KIN
ID	LENGTH	PEAK	TIME	PEAK	TIME	PEAK	TIME	FLOW	BASE	INCR	#	COEFF	POWER	FACTOR	O/I	(K)	COEFF
AGE	MATIC	(CFS)	(HR)	(CFS)	(HR)	(CFS)	(HR)	(CFS)	(IN)	(HR)		(X)	(M)	(K*)	(Q*)	(SEC)	(C)
(HR)	(HR)																
ALTERNATE		1	STORM	1													
30	5000	700	6.3	602	6.4			0	1.43	.10	1	2.35	1.35	.057	.859	363	.66
.10	.10					893	6.4										
24	5600	925	6.4	789	6.6			0	1.34	.10	1	2.12	1.36	.048	.852	388	.63
.20	.11					939	6.5										
26	7200	5	8.7	5	10.1			0	1.06*	.10	1	2.40	1.36	.011	.996	1847	.18
1.40	.51					340	6.2										
22	3000	1083	6.5	1073	6.6			0	1.43	.10	1	1.95	1.37	.011	.990	203	.94?
.10	.06					1107	6.3										
10	1800	524	7.1	524	7.1			0	1.43	.10	0	2.73	1.36	.002	1.000	120	1.00?
.00	.00					---	---										
16	2000	426	6.6	426	6.6			0	1.21	.10	0	2.65	1.34	.005	1.000	153	1.00?
.00	.00					465	6.2										
12	3000	581	6.2	579	6.3			0	1.24	.10	1	2.83	1.34	.010	.996	203	.94?
.10	.06					796	6.3										
8	2000	1085	6.4	1085	6.4			0	1.39	.10	0	1.84	1.35	.004	1.000	155	1.00?
.00	.00					1195	6.3										
6	2400	966	7.1	966	7.1			0	1.41	.10	0	2.04	1.41	.002	1.000	141	1.00?
.00	.00					1015	6.8										
4	1600	1014	6.8	1014	6.8			0	1.45	.10	0	3.11	1.33	.001	1.000	90	1.00?
.00	.00					1228	6.5										
2	2600	1228	6.5	1228	6.5			0	1.51	.10	0	6.59	1.23	.003	1.000	123	1.00?
.00	.00					1322	6.2										

ALTERNATE 1 STORM 2

						668	6.4					2.09							
+	24	5600	708	6.5	559	6.6		0	1.11	.10	1		1.36	.047	.789	415	.61		
		.10 .12																	
							679	6.6				2.40							
+	26	7200	4	10.5	4	11.0		0	.88*	.10	1		1.36	.011	.998	1946	.17		
		.20 .54																	
							272	6.2				1.92							
+	22	3000	849	6.2	835	6.3		0	1.17	.10	1		1.38	.012	.984	216	.91?		
		.10 .06																	
							932	6.3				2.72							
	10	1800	397	7.2	397	7.2		0	1.18	.10	0		1.36	.002	1.000	129	1.00?		
		.00 .00																	
+							---	---											
												2.65							
+	16	2000	348	6.6	348	6.6		0	.97	.10	0		1.34	.006	1.000	161	1.00?		
		.00 .00																	
							371	6.1				2.81							
+	12	3000	465	6.1	455	6.3		0	1.00	.10	1		1.35	.010	.980	214	.91?		
		.20 .06																	
							659	6.2				1.83							
	8	2000	887	6.2	887	6.2		0	1.13	.10	0		1.35	.004	1.000	163	1.00?		
		.00 .00																	
+							1002	6.2				1.99							
	6	2400	772	7.0	772	7.0		0	1.15	.10	0		1.41	.002	1.000	150	1.00?		
		.00 .00																	
+							813	7.0				6.09							
	4	1600	813	7.0	813	7.0		0	1.20	.10	0		1.16	.004	1.000	114	1.00?		
		.00 .00																	
+							955	6.4				6.21							
+	2	2600	955	6.4	955	6.4		0	1.25	.10	0		1.25	.003	1.000	124	1.00?		
		.00 .00																	
							1113	6.2											
												2.48							
+	30	5000	420	6.4	331	6.5		0	.95	.10	1		1.33	.062	.788	421	.60		
		.10 .12																	
							464	6.5				2.02							
	24	5600	347	6.7	317	6.8		0	.90	.10	1		1.37	.030	.915	497	.53		
		.10 .14																	
+							476	6.3											
												2.40							
	26	7200	3	10.6	3	11.2		0	.73*	.10	1		1.36	.012	.997	2048	.16		
		.30 .57																	
+							217	6.2				1.89							
	22	3000	703	6.2	683	6.3		0	.96	.10	1		1.38	.012	.972	226	.89?		
		.10 .06																	
							764	6.3				2.72							
+	10	1800	333	7.6	333	7.6		0	.97	.10	0		1.36	.002	1.000	135	1.00?		

ALTERNATE 1 STORM 3

JOB

DEVELOPED CONDITIONS W/ DETENTION & TYPE II STORM INPUT:CAN9

PAGE 43

[illegible]

(VGS)

ROUTING PARAMETERS

TRAVEL TIME

INFLOW	OUTFLOW	INTERV.	AREA	BASE-	ABOVE	TIME	ATION	EQUATION	LENGTH	RATIO	@PEAK	KIN
--------	---------	---------	------	-------	-------	------	-------	----------	--------	-------	-------	-----

[illegible]

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

(SECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS.....		
		1	2	3
STRUCTURE 27	2.54			
+				
ALTERNATE 1		523.79	397.08	332.58
STRUCTURE 25	1.35			
+				
ALTERNATE 1		379.13	304.04	246.12
STRUCTURE 22	4.70			
+				
ALTERNATE 1		966.22	772.66	595.49
STRUCTURE 11	.14			
+				
ALTERNATE 1		4.71	3.87	3.18
STRUCTURE 10	.87			
+				
ALTERNATE 1		701.16	586.49	422.63
STRUCTURE 9	1.46			
+				
ALTERNATE 1		947.54	714.57	347.26
STRUCTURE 8	2.38			
+				
ALTERNATE 1		1096.26	853.67	710.85
STRUCTURE 6	.21			
+				
ALTERNATE 1		213.04	194.67	155.44
STRUCTURE 4	1.98			
+				
ALTERNATE 1		829.42	679.62	553.02
STRUCTURE 3	4.61			
+				
ALTERNATE 1		1091.36	949.09	757.62
STRUCTURE 1	4.95			
+				
ALTERNATE 1		1014.64	813.29	624.33
XSECTION 2	5.54			
+				
ALTERNATE 1		1334.37	1120.14	949.79
XSECTION 4	5.33			
+				
ALTERNATE 1		1229.23	955.30	777.08
XSECTION 6	4.95			
+				
ALTERNATE 1		1014.63	814.37	624.71

SECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS.....		
		1	2	3
XSECTION 8	4.70			
+				
ALTERNATE 1		1195.45	1060.81	844.04
XSECTION 10	4.61			
+				
ALTERNATE 1		1126.72	918.85	748.91
XSECTION 12	1.98			
+				
ALTERNATE 1		807.57	675.72	526.21
XSECTION 14	.14			
+				
ALTERNATE 1		121.46	96.56	76.07
XSECTION 16	1.75			
+				
ALTERNATE 1		581.48	484.88	373.00
XSECTION 18	.21			
+				
ALTERNATE 1		217.33	175.08	140.71
XSECTION 20	1.35			
+				
ALTERNATE 1		763.13	593.48	459.09
XSECTION 22	2.54			
+				
ALTERNATE 1		1117.66	932.76	767.19
XSECTION 24	2.38			
+				
ALTERNATE 1		1098.02	854.51	696.06
XSECTION 26	.53			
+				
ALTERNATE 1		340.51	272.15	217.24
XSECTION 28	.14			
+				
ALTERNATE 1		156.76	128.58	105.44
XSECTION 30	1.46			
+				
ALTERNATE 1		893.16	675.19	464.27
XSECTION 32	.87			
+				
ALTERNATE 1		669.90	536.41	425.19

END OF 1 JOBS IN THIS RUN