TECHNICAL MEMORANDUM

CH2M HILL

FLOOD CONTROL DISTRICT
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JAN 10 1995

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REMARKS

PREPARED FOR: Michael Lopez/FCDMC

PREPARED BY: Steve Walker/PHX

DATE: January 10, 1995

SUBJECT: Casandro Wash Dam Break Analysis

PROJECT: SWW35441.HY.20

Introduction

This memorandum summarizes the results of the dam failure analysis performed in support of the dam safety permit application for the Arizona Department of Water Resources (ADWR). The principal objective of this analysis is to delineate the area downstream of the proposed Casandro Wash Dam that would be inundated following a catastrophic failure of the earthen dam. The dam failure scenario selected is the "worst-case" scenario, and may not represent actual failure characteristics of Casandro Wash Dam.

Methodology

Failure of Casandro Wash Dam was modeled using the HEC-1 dambreak subroutine since the downstream channel geometry is not extremely complex, and the travel distance of the flood wave is relatively short. Use of HEC-1 is noted in the task Scope of Work and was conceptually approved by ADWR. The geometry and civil design of the proposed dam on Casandro Wash is described in detail in the Preliminary Design Report, and will not be summarized in detail in this memorandum. Calculation sheets for the dam failure analysis are provided as an appendix.

The dam failure analysis was performed using the following assumptions:

- The inflow design flood is the 1/2 PMF
- The US 60 and the ATSF railroad grades are stable during the design flood
- The concrete spillway is not removed during the breach
- The breach depth extends to the bottom elevation of the reservoir
- The entire embankment right of the spillway is removed by the breach
- The breach develops almost instantaneously (15 minutes)
- The breach develops when ponding reaches the spillway crest elevation
- Overtopping of the dam does not occur

Initial modeling trials indicated that unless the breach occurred concurrent with the spillway overflow, the dam break flood peak was less than the proposed spillway discharge for the 1/2 PMF. Therefore, the breach was assumed to completely form within 15 minutes of the ponding elevation in the reservoir reaching the spillway crest elevation. It is noted that removal of the volume of embankment material required to form the design breach corresponds to a sediment discharge of about 135 cfs, and an average sediment concentration of about 20,000 ppm (the lower limit of debris flows). These assumptions are conservative, resulting in the maximum likely flood inundation area. Observation of photographs of the Cataract Dam failure displayed at the ADWR Dam Safety Division indicate that a breach with vertical sideslopes would be more likely, given the compacted fine material used to construct the dam.

Input to the HEC-1 model was obtained from field observations, FCDMC topographic mapping (1992, 1" = 40', 2 ft. contour interval), USGS topographic mapping (1" = 2000', 10 ft. contour interval), and 50% design plans for the dam embankment. Three routing reaches downstream of the dam were defined based on FCDMC topography and channel characteristics. In addition, breach hydrographs were routed through the ATSF railroad culvert backwater area using a stage-discharge curve developed from an HY-8 analysis. The breach hydrographs were routed from the Casandro Dam alignment to the confluence with Sols Wash.

Overtopping was not considered as part of the breach, since the dam was sized to pass the required inflow design flood (1/2 PMF) with more than 3 feet of freeboard. Given the small size of the watershed, and lack of large debris that could block the uncontrolled 80-foot-wide spillway, overtopping is unlikely.

Dam Breach Scenarios

Four failure scenarios were modeled using the multiplan option of HEC-1. Plan 1 consisted of removal of the entire embankment right of the spillway using a breach duration (TFAIL) of 15 minutes, a breach bottom width of 40 feet (the width of natural ground under this portion of the embankment), breach side slopes of 0:1 (adjacent to the spillway) and 4:1 (follows the natural ground slope; an average side slope of 2:1 was entered into the HEC-1 model). Failure was assumed to occur when ponding reached the spillway crest elevation.

Plans 2 to 4 were modeled to illustrate relative differences in the dam breach hydrographs resulting from changing breach characteristics. Plan 2 assumed a breach with vertical side slopes, and other characteristics identical to Plan 1. Plan 3 assumed a breach failure time of 1 hour, and other characteristics identical to Plan 1. Plan 4 assumed failure of the entire embankment and spillway instantaneously at the onset of flow into the reservoir. Plan 4 simulates passage of the 1/2 PMF without an embankment in place, and is used for comparison to existing conditions for a 1/2 PMF flood wave.

Results

HEC-1 dam break modeling results are shown in Table 1. Flood inundation limits based on Plan 1 are drawn on the 1" = 40' scale topographic mapping provided by the District. Ponding at the ATSF railroad causes the flood limits to extend outside of the mapping area, but can be plotted on USGS topography, and can be shown to flow immediately into the Sols Wash geologic floodplain. It may be noted that a more likely failure time of 1 hour (Plan 3, compare to 15 minute failure in Plan 1) results in a dam break peak discharge only slightly higher than the natural 1/2 PMF discharge (Plan 4).

Table 1
HEC-1 Dam Break Modeling Results
Casandro Wash Dam

	Plan 1	Plan 2	Plan 3	Plan 4
Qmax (cfs)	16,400	12,200	5,500	5,400
Q - RCH 1	14,200	10,600	5,500	5,300
Q - RCH 2	11,900	9,500	5,400	5,200
Q - ATSF	9,300	8,000	5,300	5,000
Q - RCH 4	9,100	7,900	5,300	5,000
WSEL - RCH 1	2112.04	2111.34	2110.03	2109.99
WSEL - RCH 2	2078.90	2078.29	2076.99	2076.90
WSEL - ATSF	2071.88	2071.61	2071.03	2070.97
WSEL - RCH 4	2061.56	2061.34	2060.77	2060.70
Avg. Change in WSEL (Compared to No Failure Scenario)	0	2.1	1.6	0.6

CARANDO WASH 9/26/94

DAMBREAK ANALYSIS SWW35441.SS

JBF / BCS

Objective

Perform dam failure analysis in support of ADWR dam safety permit. Failure analysis is used to estimate worst case flood inundation downstream of dam

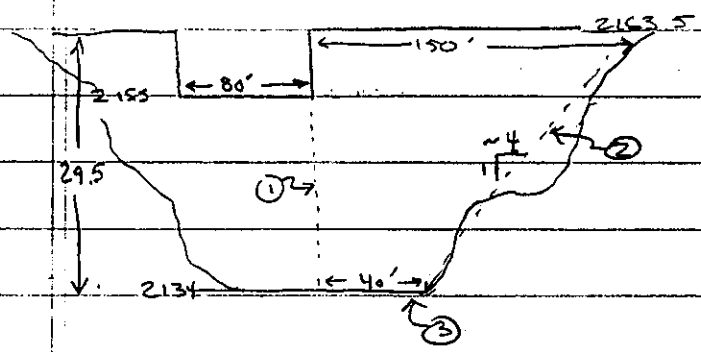
Methodology

Per Bill Jenkins / ADWR & scope of work from FCDMC, HEC-1 dambreak routine will used since downstream channel is not complex

Assumptions

1) Overtopping is not the worst-case failure scenario, since spillway passes the inflow design flood (½ PMF) with three feet of freeboard.
2) Spillway remains intact & in place
3) Breach depth = elevation of reservoir bottom
4) Breach unit progresses laterally past spillway edge or through existing (pre-construction) ground elevation
5) ATSF railroad remains in place during ½ PMF
6) ½ PMF is design flood
7) US 60 Remains in place during ½ PMF

A. BREACH CHARACTERISTICS



APPROX. DAM SECTION (NTS)
(SEE PLAN SHEET 5 50% PLANS)

NOTES

① ASSUME VERTICAL SIDES TO BREACH ADJACENT TO SPILLWAY

② ASSUME 4:1 SIDE ALONG RT. ABUTMENT
This removes most of embankment to right of spillway - a worst case scenario if...

③ ASSUME BREACH DEPTH = BOTTOM OF RESERVOIR

→ GIVEN FINE GRAINED MATERIAL & COMPACTION OF EMBANKMENT VERTICAL (0:1) SLOPES ON BREACH ARE LIKELY - SEE ADWR PHOTOS OF CATARACT DAM BREACH - USE AVERAGE SIDE SLOPE OF 2:1 $\left(\frac{4:1+0:1}{2}\right)$ IN HEC-1

→ BY TRIAL W/ HEC-1 WORST CASE BREACH (HIGHEST Q) OCCURS WHEN BREACH IS FAST (15 MINUTES) & OCCURS CONCURRENT WITH SPILLWAY OVERFLOW
THEREFORE USE "TFAIL" = 0.25 HR &
FAILEL = 2155, THE ELEVATION OF THE SPILLWAY CREST

NOTE: TFAIL = 0.25 HR CORRESPONDS TO "INSTANTANEOUS" FAILURE PER "ADVANCED DAM ENGINEERING" p. 298

CASANDRO DAM BREAK
JBF 9/94

(BREACH CHARACTERISTICS) REF. AS PLAN 5

BASELINE - NO FAILURE, ROUTE ½ PMF THRU SPILLWAY TO SOLS WASH

→ USE MULTIPLAN OPTION OF HEC-1

A) PLAN 1 : 40' BOTTOM WIDTH, 15 MIN FAIL TIME, 2:1 SIDESLOPE
2155 FAIL ELEVATION, 2163.5 OVERTOPPING

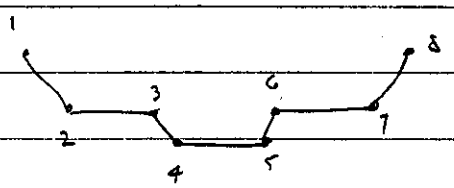
B) PLAN 2 USE 0:1 SIDESLOPE TO ILLUSTRATE THAT
2:1 IS CONSERVATIVE

C) PLAN 3 USE 1 HOUR FAIL TIME TO ILLUSTRATE
THAT TFAIL = 0.25 HR IS CONSERVATIVE

D) PLAN 4 USE FAIL EL = 2134, 250' BOTTOM WIDTH
TFAIL = 15 MIN (I.E. NO DAM) TO ILLUSTRATE
FLOOD WSEL FOR ½ PMF W/O DAM - FAILEL OF
2134 MEANS DAM IS REMOVED AS SOON AS FLOW BEGINS

B) ROUTE BREACH HYDROGRAPH DOWNSTREAM

→ USE 8-PT CROSS SECTIONS TYPICAL OF EACH REACH
→ DEFINE REACHES FROM 1:40' FCDMC TOPO
→ ROUTE FROM DAM TO SOLS WASH
→ ASSUME ATSF REMAINS IN PLACE
→ USE HYD RATING OF ATSF RR CULVERT



CASANORO DAM BREAK
JEF 9/94

(ROUTE D/S)

REACH 1 - DAM TO 330' D/S CUCURACHA ST

ELEV	2130	2112	2108	2104.5	2104.5	2108.8	2108	2130
STN	100	150	183	191	215	250	435	614
N		.045		.035		0.045		

$S = \frac{13.8}{1000} = .0138$

L = 1500

REACH 2 - REACH 1 TO ATSF RR

ELEV	2074.5	2074	2074	2072	2072	2077	2078	2090
STN	100	160	210	226	246	283	391	498
N		.08			.025		.02	

$S = \frac{2093.2 - 2061.5}{2350} = .013$

L = 2350'

REACH 4 - ATSF RR TO SOLE WASH

ELEV	2062.3	2060	2058	2058	2058	2058.5	2062	2070
STN	0	191	273	310	321	387	728	735
N		.05		.03		.05		

$S = \frac{2060.8 - 2050.3}{700} = .015$

L = 700'

CASANDRO DAM BREAK
JBF 9/94

(ROUTE D/S)

REACH 3 - ATSF CULVERT & PONDING AREA

ATSF PROFILE - MATCH FCDMC TOPO W/ USGS QUAD SHEET TO GET RR GRADE TO WEST OF FCDMC COVERAGE

STN	0	119	235	350	510	670	2500
ELEV	2075	2074	2073	2072	2071	2070	2080

← FCDMC TOPO → ← USGS TOPO

USE AS ROAD PROFILE IN HY8. HY8 USED TO GET STAGE-DISCHARGE RATING CURVE FOR HEC-1

CULVERT CHARACTERISTICS

8×6 RCBC - FROM FIELD NOTES & FCDMC TOPO

LENGTH = 54' W/ 1:1 WINGWALLS & 1:1 CONVENTIONAL INLET (NO BEVEL)

INVERT @ INLET : 2061.5

@ OUTLET : 2060.8

PONDING AREA

ELEV	Q	AC	
2064	5307	0.12	(FCDMC TOPO)
2066		3.1	(FCDMC TOPO)
2068		9.2	INTERPOLATED
2070	660000	15.2	(USGS TOPO)
2075	1610000	40.0	(USGS TOPO)

TAILWATER CURVE - USE REACH 4 CROSS SECTION

CASANDRO DAM BREAK
JBF 9/94

(ROUTE DIS)

HYR RATING OF ATSF ("CAS - ATSF . INP"
"CAS - ATSF . TW")

RESULTS (HY8)

ELEV	$Q_{CULVERT}$	Q_{TOTAL}	
2064	10	10	
2066	200	200	
2068	340	340	
2070	430	430	← BEGIN OVERTOPPING
2075	714	24000	

ENTER ON SQ RECORDS IN HEC1 - DAMBRK.HC1

CURRENT DATE: 09-27-1994 FILE DATE: 09-26-1994
CURRENT TIME: 09:41:53 FILE NAME: CAS-ATSF

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 3.2 **********
****

CULV #	SITE DATA: INLET ELEV. (FT)	OUTLET ELEV. (FT)	CULVERT LENGTH (FT)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (FT)	RISE (FT)	MANNING n	INLET TYPE
1	2061.50	2060.80	54.00	1 RCB	8.00	6.00	.012	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (CFS) FILE: CAS-ATSF DATE: 09-26-1994

ELEV (FT)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
2061.50	0	0	0	0	0	0	0	0	1
2064.76	100	100	0	0	0	0	0	0	1
2066.02	200	200	0	0	0	0	0	0	1
2067.44	300	300	0	0	0	0	0	0	1
2068.88	400	400	0	0	0	0	0	0	1
2070.25	500	485	0	0	0	0	0	11	9
2070.57	600	504	0	0	0	0	0	91	6
2070.75	700	514	0	0	0	0	0	182	6
2070.88	800	521	0	0	0	0	0	273	5
2070.99	900	527	0	0	0	0	0	368	5
2071.08	1000	532	0	0	0	0	0	459	4
2070.00	471	471	0	0	0	0	0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: CAS-ATSF DATE: 09-26-1994

HEAD ELEV(FT)	HEAD ERROR(FT)	TOTAL FLOW(CFS)	FLOW ERROR(CFS)	% FLOW ERROR
2061.50	0.00	0	0	0.00
2064.76	0.00	100	0	0.00
2066.02	0.00	200	0	0.00
2067.44	0.00	300	0	0.00
2068.88	0.00	400	0	0.00
2070.25	-0.01	500	4	0.80
2070.57	-0.01	600	6	0.99
2070.75	-0.01	700	4	0.55
2070.88	-0.01	800	6	0.71
2070.99	-0.01	900	5	0.53
2071.08	-0.00	1000	9	0.91

****

<1> TOLERANCE (FT) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 09-27-1994 FILE DATE: 09-26-1994
CURRENT TIME: 09:41:53 FILE NAME: CAS-ATSF

****
********** CULVERT # 1 **********
****

PERFORMANCE CURVE FOR 1 BARREL(S)

Q (cfs)	HWE (ft)	TWE (ft)	ICH (ft)	OCH (ft)	FLOW TYPE	CCE (ft)	FCE (ft)	TCE (ft)	VO (fps)
0	2061.50	2058.00	0.00	-0.70	0-NF	0.00	2061.50	0.00	0.00
100	2064.76	2058.45	2.87	3.26	6-FF	0.00	0.00	0.00	7.37
200	2066.02	2058.64	4.52	4.08	6-FF	0.00	0.00	0.00	12.53
300	2067.44	2058.79	5.94	5.04	6-FF	0.00	0.00	0.00	13.86
400	2068.88	2058.91	7.38	6.17	6-FF	0.00	0.00	0.00	14.91
485	2070.25	2059.01	8.75	7.29	6-FF	0.00	0.00	0.00	15.67
504	2070.57	2059.11	9.07	7.54	6-FF	0.00	0.00	0.00	15.82
514	2070.75	2059.20	9.25	7.69	6-FF	0.00	0.00	0.00	15.90
521	2070.88	2059.28	9.38	7.79	6-FF	0.00	0.00	0.00	15.95
527	2070.99	2059.35	9.49	7.88	6-FF	0.00	0.00	0.00	16.00
532	2071.08	2059.42	9.58	7.95	6-FF	0.00	0.00	0.00	16.04

El. inlet face invert 2061.50 ft El. outlet invert 2060.80 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

****

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION (FT)	100.00
INLET ELEVATION (FT)	2061.50
OUTLET STATION (FT)	154.00
OUTLET ELEVATION (FT)	2060.80
NUMBER OF BARRELS	1.00
SLOPE (V-FT/H-FT)	0.0130
CULVERT LENGTH ALONG SLOPE (FT)	54.00

**** CULVERT DATA SUMMARY **********

BARREL SHAPE	BOX
BARREL SPAN	8.00 FT
BARREL RISE	6.00 FT
BARREL MATERIAL	CONCRETE
BARREL MANNING'S N	0.012
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE (90-45 DEG.)
INLET DEPRESSION	NONE

****

CURRENT DATE: 09-27-1994 FILE DATE: 09-26-1994
CURRENT TIME: 09:41:53 FILE NAME: CAS-ATSF

****
********** TAILWATER **********
****

***** USER DEFINED CHANNEL CROSS-SECTION FILE NAME: CAS-ATSF
MAIN CHANNEL AND LT & RT OVER BANKS FILE DATE: 09-26-1994
LEFT CHANNEL BOUNDARY 4
RIGHT CHANNEL BOUNDARY 5
MANNING N LEFT OVER BANK 0.050
MANNING N MAIN CHANNEL 0.030
MANNING N RIGHT OVER BAN 0.050
SLOPE OF CHANNEL (FT/FT) 0.0150

CROSS-SECTION COORD. NO.	X (FT)	Y (FT)
1	0.00	2070.00
2	0.01	2063.50
3	191.00	2060.00
4	273.00	2058.00
5	321.00	2058.00
6	387.00	2058.50
7	728.00	2062.00
8	735.00	2070.00

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (CFS)	W.S.E. (FT)	FROUDE NUMBER	VEL. (FPS)	SHEAR (PSF)
0.00	2058.00	0.000	0.00	0.00
100.00	2058.45	0.937	3.57	0.42
200.00	2058.64	0.993	4.52	0.60
300.00	2058.79	1.027	5.17	0.74
400.00	2058.91	1.052	5.69	0.85
500.00	2059.01	1.072	6.12	0.95
600.00	2059.11	1.088	6.50	1.04
700.00	2059.20	1.101	6.84	1.12
800.00	2059.28	1.113	7.14	1.19
900.00	2059.35	1.124	7.41	1.26
1000.00	2059.42	1.133	7.66	1.33

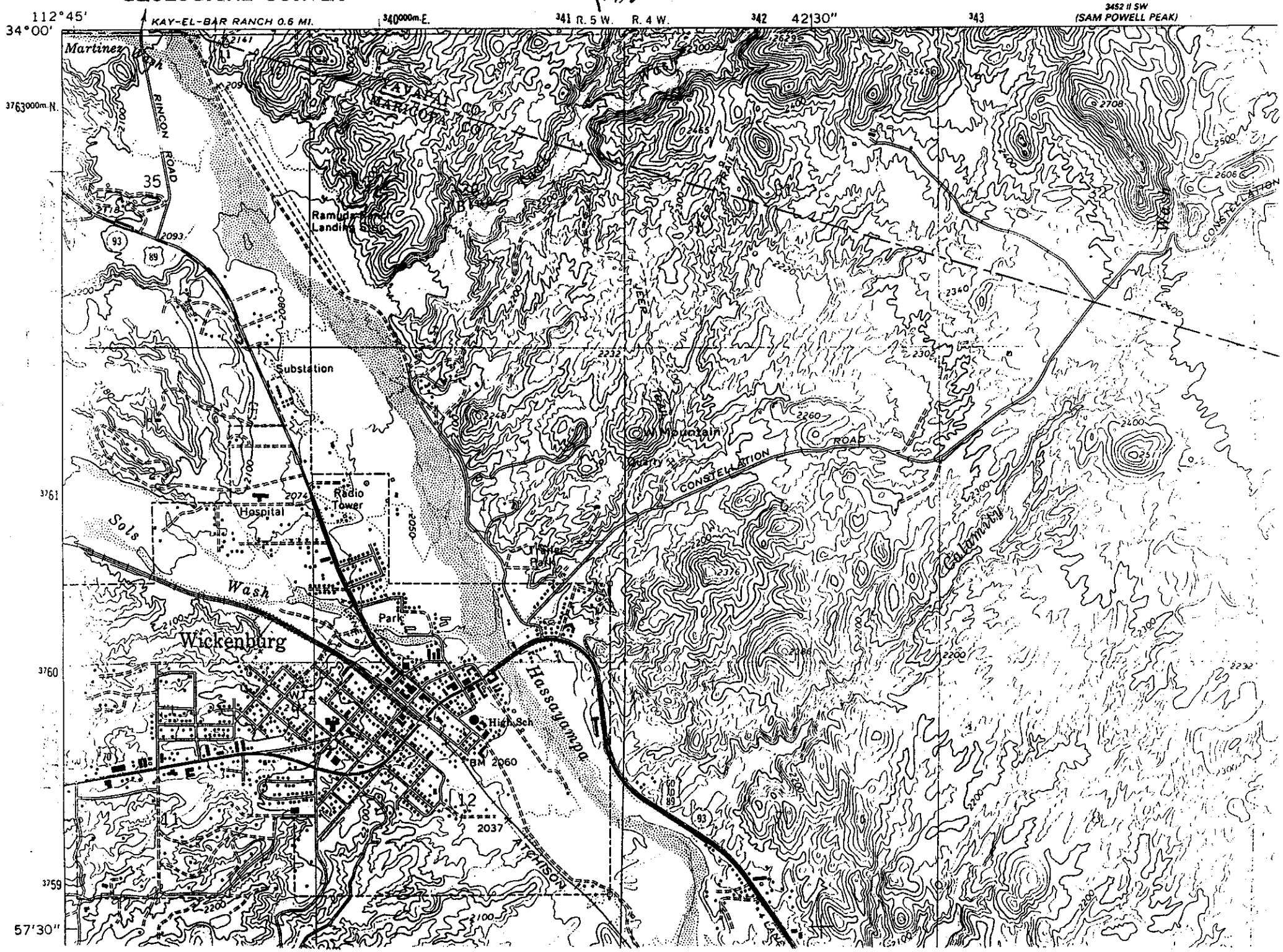
****
********** ROADWAY OVERTOPPING DATA **********
****

ROADWAY SURFACE GRAVEL
EMBANKMENT TOP WIDTH (FT) 40.00
***** USER DEFINED ROADWAY PROFILE

CROSS-SECTION COORD. NO.	X (FT)	Y (FT)
1	0.00	2075.00
2	119.00	2074.00
3	235.00	2073.00
4	350.00	2072.00
5	510.00	2071.00
6	670.00	2070.00
7	2500.00	2080.00

****

GEOLOGICAL SURVEY



CASANDRO WASH - DAMBREAK (HEC-1)

REQUESTED MODIFICATIONS:

(1) ADD BASELINE RUN - NO FAILURE, ROUTE ½ PMF TO SOLS WASH - USE AS BASIS OF COMPARISON TO OTHER FAILURE SCENARIOS (PLAN #5)

"DAMBRK-5.HCJ"

RESULTS - PLAN 5	Q	WSEL	Δ PLAN 1 (FT)	Δ PLAN 3 (FT)	Δ PLAN 4 (FT)
CASANDRO DAM - INFLOW	5411	-			
CASANDRO DAM - OUTFLOW	3621	2160.15	NA	NA	NA
RCH 1	3559	2109.28	2.76	0.75	0.71
RCH 2	3454	2076.10	2.80	0.89	0.80
ATSF RR	3203	2070.59	1.29	0.44	0.38
RCH 4	3185	2060.19	1.40	0.58	0.51
		AVERAGE Δ	2.06	0.67	0.65

(BREACH SCENARIOS & NO DAM PRESENT RESULT IN HIGHER PEAK Q'S & WSELS)

* REVISED REPORT / MEMO TO REFLECT ↗

CASANDRA DAM BREAK
JBF 9/94

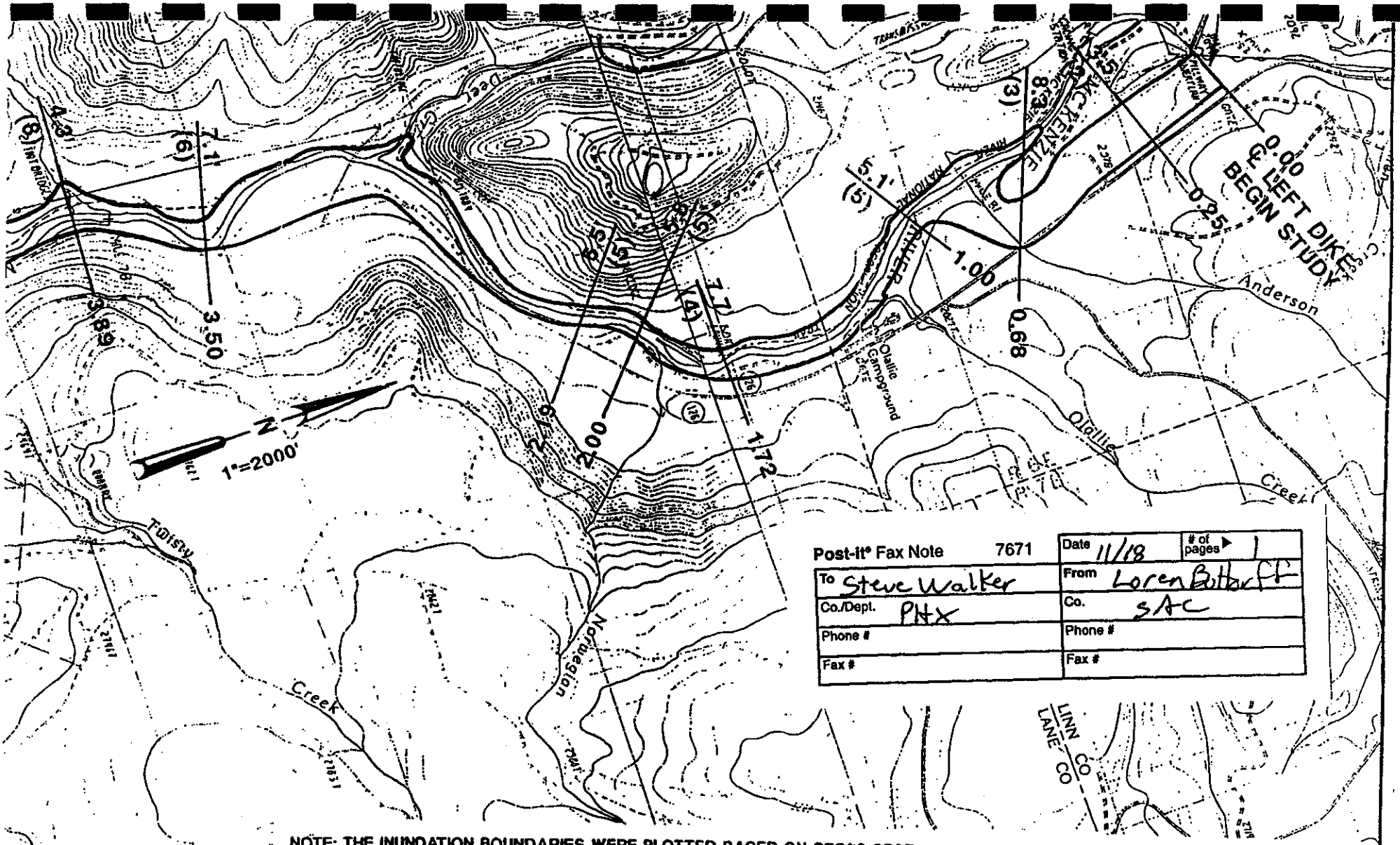
HEC-1 RESULTS

	PLAN 1	PLAN 2	PLAN 3	PLAN 4
Q_{peak} @ DAM	16423	12217	5545	5389
RCH 1 WSEL	2112.04	2111.34	2110.03	2109.99
RCH 2 WSEL	2078.90	2078.29	2076.99	2076.90
ATSF WSEL	2071.88	2071.61	2071.03	2070.97
RCH 4 WSEL	2061.56	2061.34	2060.77	2060.70
RCH 1 Q	14176	10645	5502	5334
RCH 2 Q	11864	9485	5433	5206
ATSF Q	9290	8036	5287	4980
RCH 4 Q	9131	7940	5264	4959

PLOT ON MAP (PLAN 1 ONLY) - INTERPOLATE BY MULTIPLYING DISTANCE. X $\frac{\Delta WSEL}{\Sigma DISTANCE_T}$

SEE "DAMBRK.OUT"

NOTE BREACH OF PLAN 2 CHARACTERISTICS REVEALS AVERAGE SEDIMENT DISCHARGE OF 135 CFS OR ~ 40000 ppm (20000 ppm is lower limit of debris flow)



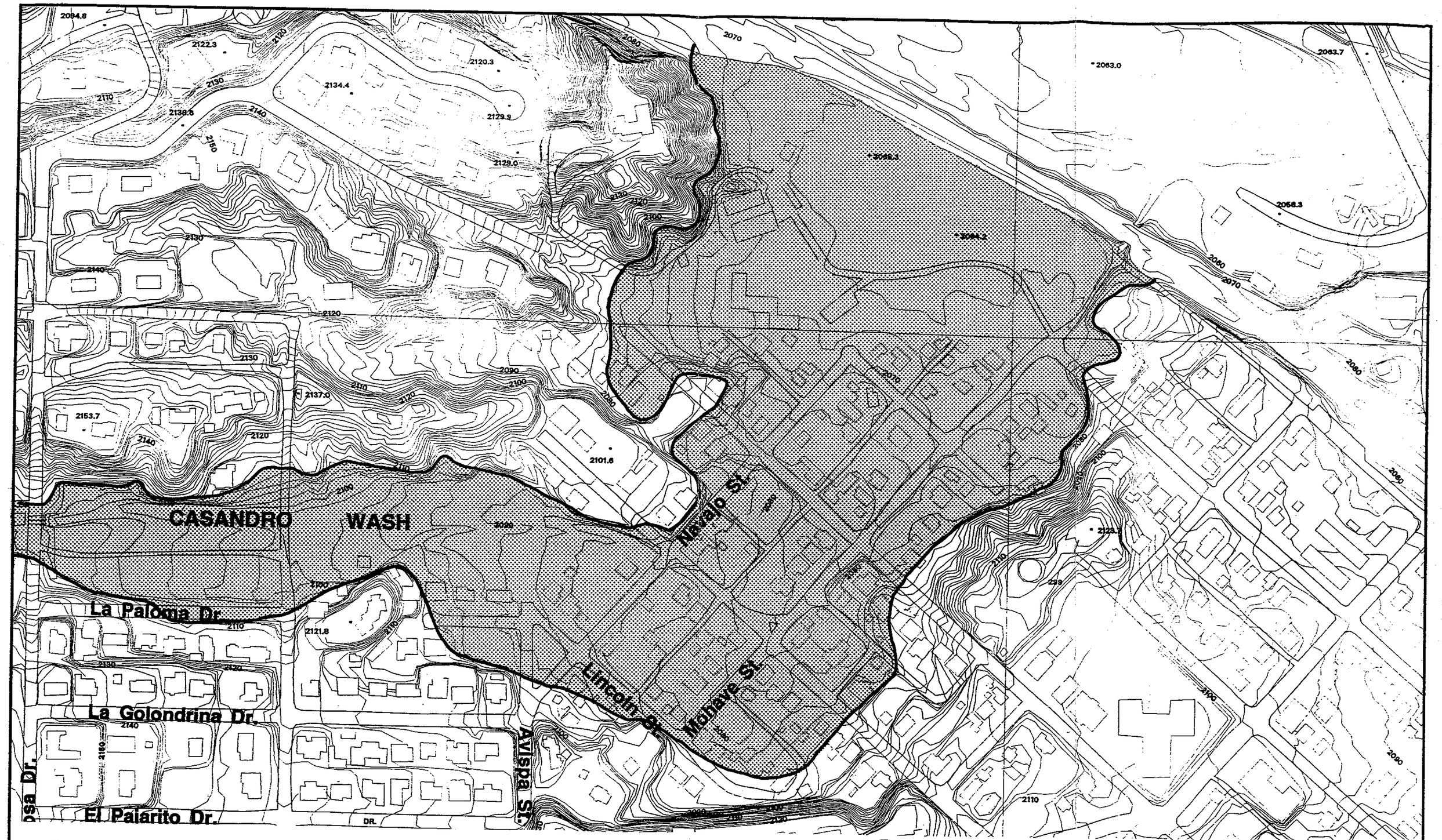
Post-it® Fax Note 7671	Date 11/18	# of pages ▶ 1
To Steve Walker	From Loren Butterff	
Co./Dept. PHX	Co. SAC	
Phone #	Phone #	
Fax #	Fax #	

NOTE: THE INUNDATION BOUNDARIES WERE PLOTTED BASED ON CROSS SECTIONS ESTIMATED FROM USGS TOPOGRAPHY MAPS AND FLOOD ELEVATIONS FROM THE HYPOTHETICAL DAM BREAK ESTIMATED BY COMPUTER PROGRAM. BECAUSE THE INUNDATION MAP WAS PRODUCED FROM COMPUTATIONS WITH AN ASSUMED FAILURE AND CHANNEL ROUTING CONDITIONS, THE LIMITS OF THE FLOODING ARE APPROXIMATE AND SHOULD BE USED SOLEY AS A GUIDELINE FOR FACILITATING EVACUATION PLANNING. THEREFORE THE ACTUAL EVACUATION AREAS SHOULD , IN ALL CASES, BE GREATER THAN THE AREA SHOWN ON THE MAP. THE AREA TO BE EVACUATED SHOULD BE ESTABLISHED BY THE LOCAL LAW ENFORCEMENT OFFICALS BASED ON THEIR JUDGEMENT AND KNOWLEDGE OF LOCAL CONDITIONS.

FIGURE 1A

INUNDATION AREA FOR FAILURE OF TRAIL BRIDGE LEFT DIKE

CH2M HILL



Note:
The inundation boundaries were plotted based on flood elevations from the hypothetical dam break estimated by computer program. Because the inundation map was produced from computations with an assumed failure and channel routing conditions. The limits of the flooding are approximate and should be used soley as a guideline for facilatating evacuation planning. Therefore the actual evacuation areas should, in all cases, be greater than the area shown on the map. The area to be evacuated should be established by the local law enforcement officals based on their judgement and knowledge of local conditions.

N

0 100 200 300 400 500 Feet
(Scale approximate)

CASANDRO WASH
DAM FAILURE ANALYSIS
INUNDATION LIMITS

CH2M HILL

59 KO OUTPUT CONTROL VARIABLES
IPRNT 1 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

60 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC 0.00 INITIAL CONDITION
X 0.00 WORKING R AND D COEFFICIENT

61 SA AREA 1.9 2.3 5.8 6.8 9.1 10.2 11.0 11.3 11.6 11.9
12.1 12.3 12.8 13.3 13.8

63 SE ELEVATION 2134.00 2136.00 2140.00 2144.00 2150.00 2153.00 2155.00 2156.00 2157.00 2158.00
2159.00 2160.00 2161.00 2162.00 2163.00

65 SQ DISCHARGE 0. 10. 14. 19. 23. 29. 31. 295. 823. 1539.
2423. 3450. 4577. 5773. 7015.

67 ST TOP OF DAM
TOPEL 2163.50 ELEVATION AT TOP OF DAM
DAMWID 300.00 DAM WIDTH
COQD 3.08 WEIR COEFFICIENT
EXPD 1.50 EXPONENT OF HEAD

68 SB BREACH DATA
ELBM 2134.00 ELEVATION AT BOTTOM OF BREACH
BRWID 40.00 WIDTH OF BREACH BOTTOM
Z 2.00 BREACH SIDE SLOPE
TFAIL 0.25 TIME FOR BREACH TO DEVELOP
FAILEL 2155.00 W.S. ELEVATION TO TRIGGER FAILURE

***

COMPUTED STORAGE-ELEVATION DATA

STORAGE	0.00	4.21	19.93	45.05	92.37	121.24	142.40	153.55	165.02	176.77
ELEVATION	2134.00	2136.00	2140.00	2144.00	2150.00	2153.00	2155.00	2156.00	2157.00	2158.00

STORAGE	188.75	200.95	213.51	226.57	240.13
ELEVATION	2159.00	2160.00	2161.00	2162.00	2163.00

BEGIN DAM FAILURE AT 3.53 HOURS

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HYDROGRAPH AT STATION DAMOUT
PLAN 1, RATIO = 0.50

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/DA MON/HRMN/ORD/OUTFLOW/STORAGE/ STAGE/* DA MON/HRMN/ORD/ OUTFLOW /STORAGE /STAGE * DA MON/HRMN/ ORD /OUTFLOW/ STORAGE /STAGE

DA MON HRMN ORD OUTFLOW STORAGE STAGE

1	0000	1	0.	0.0	2134.0 *	1	1000	301	1.	0.0	2134.0 *	1	2000	601	1.	0.0	2134.0
1	0002	2	0.	0.0	2134.0 *	1	1002	302	1.	0.0	2134.0 *	1	2002	602	1.	0.0	2134.0
1	0004	3	0.	0.0	2134.0 *	1	1004	303	1.	0.0	2134.0 *	1	2004	603	1.	0.0	2134.0
1	0006	4	0.	0.0	2134.0 *	1	1006	304	1.	0.0	2134.0 *	1	2006	604	1.	0.0	2134.0
1	0008	5	0.	0.0	2134.0 *	1	1008	305	1.	0.0	2134.0 *	1	2008	605	1.	0.0	2134.0
1	0010	6	0.	0.0	2134.0 *	1	1010	306	1.	0.0	2134.0 *	1	2010	606	1.	0.0	2134.0

1	0012	7	0.	0.0	2134.0	*	1	1012	307	1.	0.0	2134.0	*	1	2012	607	1.	0.0	2134.0
1	0014	8	0.	0.0	2134.0	*	1	1014	308	1.	0.0	2134.0	*	1	2014	608	1.	0.0	2134.0
1	0016	9	0.	0.0	2134.0	*	1	1016	309	1.	0.0	2134.0	*	1	2016	609	1.	0.0	2134.0
1	0018	10	0.	0.0	2134.0	*	1	1018	310	1.	0.0	2134.0	*	1	2018	610	1.	0.0	2134.0
1	0020	11	0.	0.0	2134.0	*	1	1020	311	1.	0.0	2134.0	*	1	2020	611	1.	0.0	2134.0
1	0022	12	0.	0.1	2134.0	*	1	1022	312	1.	0.0	2134.0	*	1	2022	612	1.	0.0	2134.0
1	0024	13	0.	0.1	2134.0	*	1	1024	313	1.	0.0	2134.0	*	1	2024	613	1.	0.0	2134.0
1	0026	14	0.	0.1	2134.0	*	1	1026	314	1.	0.0	2134.0	*	1	2026	614	1.	0.0	2134.0
1	0028	15	0.	0.1	2134.1	*	1	1028	315	1.	0.0	2134.0	*	1	2028	615	1.	0.0	2134.0
1	0030	16	0.	0.1	2134.1	*	1	1030	316	1.	0.0	2134.0	*	1	2030	616	1.	0.0	2134.0
1	0032	17	0.	0.2	2134.1	*	1	1032	317	1.	0.0	2134.0	*	1	2032	617	1.	0.0	2134.0
1	0034	18	0.	0.2	2134.1	*	1	1034	318	1.	0.0	2134.0	*	1	2034	618	1.	0.0	2134.0
1	0036	19	1.	0.2	2134.1	*	1	1036	319	1.	0.0	2134.0	*	1	2036	619	1.	0.0	2134.0
1	0038	20	1.	0.3	2134.1	*	1	1038	320	1.	0.0	2134.0	*	1	2038	620	1.	0.0	2134.0
1	0040	21	1.	0.3	2134.2	*	1	1040	321	1.	0.0	2134.0	*	1	2040	621	1.	0.0	2134.0
1	0042	22	1.	0.3	2134.2	*	1	1042	322	1.	0.0	2134.0	*	1	2042	622	1.	0.0	2134.0
1	0044	23	1.	0.4	2134.2	*	1	1044	323	1.	0.0	2134.0	*	1	2044	623	1.	0.0	2134.0
1	0046	24	1.	0.4	2134.2	*	1	1046	324	1.	0.0	2134.0	*	1	2046	624	1.	0.0	2134.0
1	0048	25	1.	0.5	2134.3	*	1	1048	325	1.	0.0	2134.0	*	1	2048	625	1.	0.0	2134.0
1	0050	26	1.	0.5	2134.3	*	1	1050	326	1.	0.0	2134.0	*	1	2050	626	1.	0.0	2134.0
1	0052	27	1.	0.6	2134.3	*	1	1052	327	1.	0.0	2134.0	*	1	2052	627	1.	0.0	2134.0
1	0054	28	2.	0.7	2134.3	*	1	1054	328	1.	0.0	2134.0	*	1	2054	628	1.	0.0	2134.0
1	0056	29	2.	0.7	2134.4	*	1	1056	329	1.	0.0	2134.0	*	1	2056	629	1.	0.0	2134.0
1	0058	30	2.	0.8	2134.4	*	1	1058	330	1.	0.0	2134.0	*	1	2058	630	1.	0.0	2134.0
1	0100	31	2.	0.8	2134.4	*	1	1100	331	1.	0.0	2134.0	*	1	2100	631	1.	0.0	2134.0
1	0102	32	2.	0.9	2134.5	*	1	1102	332	1.	0.0	2134.0	*	1	2102	632	1.	0.0	2134.0
1	0104	33	2.	1.0	2134.5	*	1	1104	333	1.	0.0	2134.0	*	1	2104	633	1.	0.0	2134.0
1	0106	34	3.	1.1	2134.5	*	1	1106	334	1.	0.0	2134.0	*	1	2106	634	1.	0.0	2134.0
1	0108	35	3.	1.1	2134.6	*	1	1108	335	1.	0.0	2134.0	*	1	2108	635	1.	0.0	2134.0
1	0110	36	3.	1.2	2134.6	*	1	1110	336	1.	0.0	2134.0	*	1	2110	636	1.	0.0	2134.0
1	0112	37	3.	1.3	2134.7	*	1	1112	337	1.	0.0	2134.0	*	1	2112	637	1.	0.0	2134.0
1	0114	38	3.	1.4	2134.7	*	1	1114	338	1.	0.0	2134.0	*	1	2114	638	1.	0.0	2134.0
1	0116	39	3.	1.4	2134.7	*	1	1116	339	1.	0.0	2134.0	*	1	2116	639	1.	0.0	2134.0
1	0118	40	4.	1.5	2134.8	*	1	1118	340	1.	0.0	2134.0	*	1	2118	640	1.	0.0	2134.0
1	0120	41	4.	1.6	2134.8	*	1	1120	341	1.	0.0	2134.0	*	1	2120	641	1.	0.0	2134.0
1	0122	42	4.	1.7	2134.9	*	1	1122	342	1.	0.0	2134.0	*	1	2122	642	1.	0.0	2134.0
1	0124	43	4.	1.8	2134.9	*	1	1124	343	1.	0.0	2134.0	*	1	2124	643	1.	0.0	2134.0
1	0126	44	5.	1.9	2135.0	*	1	1126	344	1.	0.0	2134.0	*	1	2126	644	1.	0.0	2134.0
1	0128	45	5.	2.0	2135.0	*	1	1128	345	1.	0.0	2134.0	*	1	2128	645	1.	0.0	2134.0
1	0130	46	5.	2.2	2135.1	*	1	1130	346	1.	0.0	2134.0	*	1	2130	646	1.	0.0	2134.0
1	0132	47	5.	2.3	2135.1	*	1	1132	347	1.	0.0	2134.0	*	1	2132	647	1.	0.0	2134.0
1	0134	48	6.	2.4	2135.2	*	1	1134	348	1.	0.0	2134.0	*	1	2134	648	1.	0.0	2134.0
1	0136	49	6.	2.5	2135.2	*	1	1136	349	1.	0.0	2134.0	*	1	2136	649	1.	0.0	2134.0
1	0138	50	6.	2.6	2135.3	*	1	1138	350	1.	0.0	2134.0	*	1	2138	650	1.	0.0	2134.0
1	0140	51	6.	2.8	2135.4	*	1	1140	351	1.	0.0	2134.0	*	1	2140	651	1.	0.0	2134.0
1	0142	52	7.	2.9	2135.4	*	1	1142	352	1.	0.0	2134.0	*	1	2142	652	1.	0.0	2134.0
1	0144	53	7.	3.0	2135.5	*	1	1144	353	1.	0.0	2134.0	*	1	2144	653	1.	0.0	2134.0
1	0146	54	7.	3.2	2135.5	*	1	1146	354	1.	0.0	2134.0	*	1	2146	654	1.	0.0	2134.0
1	0148	55	8.	3.3	2135.6	*	1	1148	355	1.	0.0	2134.0	*	1	2148	655	1.	0.0	2134.0
1	0150	56	8.	3.4	2135.7	*	1	1150	356	1.	0.0	2134.0	*	1	2150	656	1.	0.0	2134.0
1	0152	57	8.	3.6	2135.7	*	1	1152	357	1.	0.0	2134.0	*	1	2152	657	1.	0.0	2134.0
1	0154	58	8.	3.7	2135.8	*	1	1154	358	1.	0.0	2134.0	*	1	2154	658	1.	0.0	2134.0
1	0156	59	9.	3.8	2135.8	*	1	1156	359	1.	0.0	2134.0	*	1	2156	659	1.	0.0	2134.0
1	0158	60	9.	4.0	2135.9	*	1	1158	360	1.	0.0	2134.0	*	1	2158	660	1.	0.0	2134.0
1	0200	61	9.	4.1	2136.0	*	1	1200	361	1.	0.0	2134.0	*	1	2200	661	1.	0.0	2134.0
1	0202	62	10.	4.3	2136.0	*	1	1202	362	1.	0.0	2134.0	*	1	2202	662	1.	0.0	2134.0
1	0204	63	10.	4.4	2136.1	*	1	1204	363	1.	0.0	2134.0	*	1	2204	663	1.	0.0	2134.0
1	0206	64	10.	4.6	2136.2	*	1	1206	364	1.	0.0	2134.0	*	1	2206	664	1.	0.0	2134.0
1	0208	65	10.	4.8	2136.2	*	1	1208	365	1.	0.0	2134.0	*	1	2208	665	1.	0.0	2134.0
1	0210	66	10.	4.9	2136.3	*	1	1210	366	1.	0.0	2134.0	*	1	2210	666	1.	0.0	2134.0
1	0212	67	10.	5.2	2136.4	*	1	1212	367	1.	0.0	2134.0	*	1	2212	667	1.	0.0	2134.0
1	0214	68	10.	5.4	2136.5	*	1	1214	368	1.	0.0	2134.0	*	1	2214	668	1.	0.0	2134.0
1	0216	69	10.	5.7	2136.6	*	1	1216	369	1.	0.0	2134.0	*	1	2216	669	1.	0.0	2134.0
1	0218	70	10.	6.0	2136.7	*	1	1218	370	1.	0.0	2134.0	*	1	2218	670	1.	0.0	2134.0
1	0220	71	10.	6.4	2136.8	*	1	1220	371	1.	0.0	2134.0	*	1	2220	671	1.	0.0	2134.0

1	0222	72	10.	6.8	2137.0	*	1	1222 372	1.	0.0	2134.0	*	1	2222 672	1.	0.0 2134.0
1	0224	73	11.	7.2	2137.1	*	1	1224 373	1.	0.0	2134.0	*	1	2224 673	1.	0.0 2134.0
1	0226	74	11.	7.8	2137.3	*	1	1226 374	1.	0.0	2134.0	*	1	2226 674	1.	0.0 2134.0
1	0228	75	11.	8.3	2137.4	*	1	1228 375	1.	0.0	2134.0	*	1	2228 675	1.	0.0 2134.0
1	0230	76	11.	9.0	2137.6	*	1	1230 376	1.	0.0	2134.0	*	1	2230 676	1.	0.0 2134.0
1	0232	77	11.	9.6	2137.8	*	1	1232 377	1.	0.0	2134.0	*	1	2232 677	1.	0.0 2134.0
1	0234	78	12.	10.4	2138.0	*	1	1234 378	1.	0.0	2134.0	*	1	2234 678	1.	0.0 2134.0
1	0236	79	12.	11.2	2138.2	*	1	1236 379	1.	0.0	2134.0	*	1	2236 679	1.	0.0 2134.0
1	0238	80	12.	12.0	2138.4	*	1	1238 380	1.	0.0	2134.0	*	1	2238 680	1.	0.0 2134.0
1	0240	81	12.	12.9	2138.6	*	1	1240 381	1.	0.0	2134.0	*	1	2240 681	1.	0.0 2134.0
1	0242	82	12.	13.8	2138.8	*	1	1242 382	1.	0.0	2134.0	*	1	2242 682	1.	0.0 2134.0
1	0244	83	13.	14.7	2139.0	*	1	1244 383	1.	0.0	2134.0	*	1	2244 683	1.	0.0 2134.0
1	0246	84	13.	15.7	2139.2	*	1	1246 384	1.	0.0	2134.0	*	1	2246 684	1.	0.0 2134.0
1	0248	85	13.	16.7	2139.4	*	1	1248 385	1.	0.0	2134.0	*	1	2248 685	1.	0.0 2134.0
1	0250	86	13.	17.8	2139.6	*	1	1250 386	1.	0.0	2134.0	*	1	2250 686	1.	0.0 2134.0
1	0252	87	13.	18.8	2139.8	*	1	1252 387	1.	0.0	2134.0	*	1	2252 687	1.	0.0 2134.0
1	0254	88	14.	19.9	2140.0	*	1	1254 388	1.	0.0	2134.0	*	1	2254 688	1.	0.0 2134.0
1	0256	89	14.	21.1	2140.2	*	1	1256 389	1.	0.0	2134.0	*	1	2256 689	1.	0.0 2134.0
1	0258	90	14.	22.2	2140.4	*	1	1258 390	1.	0.0	2134.0	*	1	2258 690	1.	0.0 2134.0
1	0300	91	14.	23.4	2140.6	*	1	1300 391	1.	0.0	2134.0	*	1	2300 691	1.	0.0 2134.0
1	0302	92	15.	24.6	2140.8	*	1	1302 392	1.	0.0	2134.0	*	1	2302 692	1.	0.0 2134.0
1	0304	93	15.	25.9	2141.0	*	1	1304 393	1.	0.0	2134.0	*	1	2304 693	1.	0.0 2134.0
1	0306	94	15.	27.4	2141.3	*	1	1306 394	1.	0.0	2134.0	*	1	2306 694	1.	0.0 2134.0
1	0308	95	16.	29.4	2141.6	*	1	1308 395	1.	0.0	2134.0	*	1	2308 695	1.	0.0 2134.0
1	0310	96	16.	32.0	2142.0	*	1	1310 396	1.	0.0	2134.0	*	1	2310 696	1.	0.0 2134.0
1	0312	97	17.	35.5	2142.6	*	1	1312 397	1.	0.0	2134.0	*	1	2312 697	1.	0.0 2134.0
1	0314	98	18.	40.2	2143.3	*	1	1314 398	1.	0.0	2134.0	*	1	2314 698	1.	0.0 2134.0
1	0316	99	19.	46.4	2144.2	*	1	1316 399	1.	0.0	2134.0	*	1	2316 699	1.	0.0 2134.0
1	0318	100	20.	54.2	2145.3	*	1	1318 400	1.	0.0	2134.0	*	1	2318 700	1.	0.0 2134.0
1	0320	101	21.	63.8	2146.6	*	1	1320 401	1.	0.0	2134.0	*	1	2320 701	1.	0.0 2134.0
1	0322	102	22.	75.1	2148.0	*	1	1322 402	1.	0.0	2134.0	*	1	2322 702	1.	0.0 2134.0
1	0324	103	23.	87.7	2149.5	*	1	1324 403	1.	0.0	2134.0	*	1	2324 703	1.	0.0 2134.0
1	0326	104	25.	101.5	2151.0	*	1	1326 404	1.	0.0	2134.0	*	1	2326 704	1.	0.0 2134.0
1	0328	105	28.	115.9	2152.5	*	1	1328 405	1.	0.0	2134.0	*	1	2328 705	1.	0.0 2134.0
1	0330	106	30.	130.6	2153.9	*	1	1330 406	1.	0.0	2134.0	*	1	2330 706	1.	0.0 2134.0
1	0332	107	100.	145.3	2155.3	*	1	1332 407	1.	0.0	2134.0	*	1	2332 707	1.	0.0 2134.0
1	0334	108	555.	159.2	2156.5	*	1	1334 408	1.	0.0	2134.0	*	1	2334 708	1.	0.0 2134.0
1	0336	109	1306.	171.1	2157.5	*	1	1336 409	1.	0.0	2134.0	*	1	2336 709	1.	0.0 2134.0
1	0338	110	3078.	179.3	2158.2	*	1	1338 410	1.	0.0	2134.0	*	1	2338 710	1.	0.0 2134.0
1	0340	111	5857.	180.7	2158.3	*	1	1340 411	1.	0.0	2134.0	*	1	2340 711	1.	0.0 2134.0
1	0342	112	9057.	173.2	2157.7	*	1	1342 412	1.	0.0	2134.0	*	1	2342 712	1.	0.0 2134.0
1	0344	113	12194.	156.2	2156.2	*	1	1344 413	1.	0.0	2134.0	*	1	2344 713	1.	0.0 2134.0
1	0346	114	15331.	130.1	2153.9	*	1	1346 414	1.	0.0	2134.0	*	1	2346 714	1.	0.0 2134.0
1	0348	115	13908.	98.3	2150.6	*	1	1348 415	1.	0.0	2134.0	*	1	2348 715	1.	0.0 2134.0
1	0350	116	10204.	76.0	2148.1	*	1	1350 416	1.	0.0	2134.0	*	1	2350 716	1.	0.0 2134.0
1	0352	117	7873.	61.2	2146.3	*	1	1352 417	1.	0.0	2134.0	*	1	2352 717	1.	0.0 2134.0
1	0354	118	6350.	51.2	2144.9	*	1	1354 418	1.	0.0	2134.0	*	1	2354 718	1.	0.0 2134.0
1	0356	119	5316.	44.1	2143.9	*	1	1356 419	1.	0.0	2134.0	*	1	2356 719	1.	0.0 2134.0
1	0358	120	4592.	38.9	2143.1	*	1	1358 420	1.	0.0	2134.0	*	1	2358 720	1.	0.0 2134.0
1	0400	121	4066.	34.9	2142.5	*	1	1400 421	1.	0.0	2134.0	*	2	0000 721	1.	0.0 2134.0
1	0402	122	3671.	31.9	2142.0	*	1	1402 422	1.	0.0	2134.0	*	2	0002 722	1.	0.0 2134.0
1	0404	123	3360.	29.4	2141.6	*	1	1404 423	1.	0.0	2134.0	*	2	0004 723	1.	0.0 2134.0
1	0406	124	3107.	27.3	2141.2	*	1	1406 424	1.	0.0	2134.0	*	2	0006 724	1.	0.0 2134.0
1	0408	125	2894.	25.6	2141.0	*	1	1408 425	1.	0.0	2134.0	*	2	0008 725	1.	0.0 2134.0
1	0410	126	2710.	24.0	2140.7	*	1	1410 426	1.	0.0	2134.0	*	2	0010 726	1.	0.0 2134.0
1	0412	127	2546.	22.6	2140.4	*	1	1412 427	1.	0.0	2134.0	*	2	0012 727	1.	0.0 2134.0
1	0414	128	2397.	21.2	2140.2	*	1	1414 428	1.	0.0	2134.0	*	2	0014 728	1.	0.0 2134.0
1	0416	129	2259.	20.0	2140.0	*	1	1416 429	1.	0.0	2134.0	*	2	0016 729	1.	0.0 2134.0
1	0418	130	2129.	18.8	2139.8	*	1	1418 430	1.	0.0	2134.0	*	2	0018 730	1.	0.0 2134.0
1	0420	131	2003.	17.6	2139.6	*	1	1420 431	1.	0.0	2134.0	*	2	0020 731	1.	0.0 2134.0
1	0422	132	1882.	16.6	2139.4	*	1	1422 432	1.	0.0	2134.0	*	2	0022 732	1.	0.0 2134.0
1	0424	133	1767.	15.6	2139.2	*	1	1424 433	1.	0.0	2134.0	*	2	0024 733	1.	0.0 2134.0
1	0426	134	1658.	14.6	2139.0	*	1	1426 434	1.	0.0	2134.0	*	2	0026 734	1.	0.0 2134.0
1	0428	135	1555.	13.7	2138.8	*	1	1428 435	1.	0.0	2134.0	*	2	0028 735	1.	0.0 2134.0
1	0430	136	1457.	12.9	2138.6	*	1	1430 436	1.	0.0	2134.0	*	2	0030 736	1.	0.0 2134.0

1	0432 137	1365.	12.1	2138.4	*	1	1432 437	1.	0.0	2134.0	*	2	0032 737	1.	0.0 2134.0
1	0434 138	1280.	11.4	2138.3	*	1	1434 438	1.	0.0	2134.0	*	2	0034 738	1.	0.0 2134.0
1	0436 139	1200.	10.7	2138.1	*	1	1436 439	1.	0.0	2134.0	*	2	0036 739	1.	0.0 2134.0
1	0438 140	1125.	10.1	2137.9	*	1	1438 440	1.	0.0	2134.0	*	2	0038 740	1.	0.0 2134.0
1	0440 141	1056.	9.5	2137.8	*	1	1440 441	1.	0.0	2134.0	*	2	0040 741	1.	0.0 2134.0
1	0442 142	991.	9.0	2137.6	*	1	1442 442	1.	0.0	2134.0	*	2	0042 742	1.	0.0 2134.0
1	0444 143	930.	8.5	2137.5	*	1	1444 443	1.	0.0	2134.0	*	2	0044 743	1.	0.0 2134.0
1	0446 144	873.	8.1	2137.4	*	1	1446 444	1.	0.0	2134.0	*	2	0046 744	1.	0.0 2134.0
1	0448 145	821.	7.6	2137.2	*	1	1448 445	1.	0.0	2134.0	*	2	0048 745	1.	0.0 2134.0
1	0450 146	773.	7.3	2137.1	*	1	1450 446	1.	0.0	2134.0	*	2	0050 746	1.	0.0 2134.0
1	0452 147	729.	6.9	2137.0	*	1	1452 447	1.	0.0	2134.0	*	2	0052 747	1.	0.0 2134.0
1	0454 148	689.	6.6	2136.9	*	1	1454 448	1.	0.0	2134.0	*	2	0054 748	1.	0.0 2134.0
1	0456 149	652.	6.3	2136.8	*	1	1456 449	1.	0.0	2134.0	*	2	0056 749	1.	0.0 2134.0
1	0458 150	619.	6.0	2136.7	*	1	1458 450	1.	0.0	2134.0	*	2	0058 750	1.	0.0 2134.0
1	0500 151	588.	5.8	2136.6	*	1	1500 451	1.	0.0	2134.0	*	2	0100 751	1.	0.0 2134.0
1	0502 152	559.	5.6	2136.5	*	1	1502 452	1.	0.0	2134.0	*	2	0102 752	1.	0.0 2134.0
1	0504 153	533.	5.4	2136.5	*	1	1504 453	1.	0.0	2134.0	*	2	0104 753	1.	0.0 2134.0
1	0506 154	509.	5.2	2136.4	*	1	1506 454	1.	0.0	2134.0	*	2	0106 754	1.	0.0 2134.0
1	0508 155	486.	5.0	2136.3	*	1	1508 455	1.	0.0	2134.0	*	2	0108 755	1.	0.0 2134.0
1	0510 156	465.	4.8	2136.3	*	1	1510 456	1.	0.0	2134.0	*	2	0110 756	1.	0.0 2134.0
1	0512 157	444.	4.7	2136.2	*	1	1512 457	1.	0.0	2134.0	*	2	0112 757	1.	0.0 2134.0
1	0514 158	423.	4.5	2136.1	*	1	1514 458	1.	0.0	2134.0	*	2	0114 758	1.	0.0 2134.0
1	0516 159	401.	4.3	2136.1	*	1	1516 459	1.	0.0	2134.0	*	2	0116 759	1.	0.0 2134.0
1	0518 160	380.	4.2	2136.0	*	1	1518 460	1.	0.0	2134.0	*	2	0118 760	1.	0.0 2134.0
1	0520 161	359.	4.0	2135.9	*	1	1520 461	1.	0.0	2134.0	*	2	0120 761	1.	0.0 2134.0
1	0522 162	339.	3.9	2135.8	*	1	1522 462	1.	0.0	2134.0	*	2	0122 762	1.	0.0 2134.0
1	0524 163	320.	3.7	2135.8	*	1	1524 463	1.	0.0	2134.0	*	2	0124 763	1.	0.0 2134.0
1	0526 164	302.	3.5	2135.7	*	1	1526 464	1.	0.0	2134.0	*	2	0126 764	1.	0.0 2134.0
1	0528 165	284.	3.4	2135.6	*	1	1528 465	1.	0.0	2134.0	*	2	0128 765	1.	0.0 2134.0
1	0530 166	267.	3.3	2135.6	*	1	1530 466	1.	0.0	2134.0	*	2	0130 766	1.	0.0 2134.0
1	0532 167	252.	3.1	2135.5	*	1	1532 467	1.	0.0	2134.0	*	2	0132 767	1.	0.0 2134.0
1	0534 168	237.	3.0	2135.5	*	1	1534 468	1.	0.0	2134.0	*	2	0134 768	1.	0.0 2134.0
1	0536 169	223.	2.9	2135.4	*	1	1536 469	1.	0.0	2134.0	*	2	0136 769	1.	0.0 2134.0
1	0538 170	210.	2.8	2135.4	*	1	1538 470	1.	0.0	2134.0	*	2	0138 770	1.	0.0 2134.0
1	0540 171	199.	2.6	2135.3	*	1	1540 471	1.	0.0	2134.0	*	2	0140 771	1.	0.0 2134.0
1	0542 172	188.	2.5	2135.3	*	1	1542 472	1.	0.0	2134.0	*	2	0142 772	1.	0.0 2134.0
1	0544 173	177.	2.4	2135.2	*	1	1544 473	1.	0.0	2134.0	*	2	0144 773	1.	0.0 2134.0
1	0546 174	168.	2.4	2135.2	*	1	1546 474	1.	0.0	2134.0	*	2	0146 774	1.	0.0 2134.0
1	0548 175	159.	2.3	2135.1	*	1	1548 475	1.	0.0	2134.0	*	2	0148 775	1.	0.0 2134.0
1	0550 176	150.	2.2	2135.1	*	1	1550 476	1.	0.0	2134.0	*	2	0150 776	1.	0.0 2134.0
1	0552 177	142.	2.1	2135.0	*	1	1552 477	1.	0.0	2134.0	*	2	0152 777	1.	0.0 2134.0
1	0554 178	134.	2.0	2135.0	*	1	1554 478	1.	0.0	2134.0	*	2	0154 778	1.	0.0 2134.0
1	0556 179	127.	1.9	2135.0	*	1	1556 479	1.	0.0	2134.0	*	2	0156 779	1.	0.0 2134.0
1	0558 180	120.	1.9	2134.9	*	1	1558 480	1.	0.0	2134.0	*	2	0158 780	1.	0.0 2134.0
1	0600 181	114.	1.8	2134.9	*	1	1600 481	1.	0.0	2134.0	*	2	0200 781	1.	0.0 2134.0
1	0602 182	108.	1.7	2134.9	*	1	1602 482	1.	0.0	2134.0	*	2	0202 782	1.	0.0 2134.0
1	0604 183	104.	1.7	2134.8	*	1	1604 483	1.	0.0	2134.0	*	2	0204 783	1.	0.0 2134.0
1	0606 184	99.	1.6	2134.8	*	1	1606 484	1.	0.0	2134.0	*	2	0206 784	1.	0.0 2134.0
1	0608 185	95.	1.6	2134.8	*	1	1608 485	1.	0.0	2134.0	*	2	0208 785	1.	0.0 2134.0
1	0610 186	91.	1.5	2134.8	*	1	1610 486	1.	0.0	2134.0	*	2	0210 786	1.	0.0 2134.0
1	0612 187	87.	1.5	2134.8	*	1	1612 487	1.	0.0	2134.0	*	2	0212 787	1.	0.0 2134.0
1	0614 188	83.	1.4	2134.7	*	1	1614 488	1.	0.0	2134.0	*	2	0214 788	1.	0.0 2134.0
1	0616 189	79.	1.4	2134.7	*	1	1616 489	1.	0.0	2134.0	*	2	0216 789	1.	0.0 2134.0
1	0618 190	75.	1.4	2134.7	*	1	1618 490	1.	0.0	2134.0	*	2	0218 790	1.	0.0 2134.0
1	0620 191	72.	1.3	2134.7	*	1	1620 491	1.	0.0	2134.0	*	2	0220 791	1.	0.0 2134.0
1	0622 192	69.	1.3	2134.6	*	1	1622 492	1.	0.0	2134.0	*	2	0222 792	1.	0.0 2134.0
1	0624 193	65.	1.2	2134.6	*	1	1624 493	1.	0.0	2134.0	*	2	0224 793	1.	0.0 2134.0
1	0626 194	62.	1.2	2134.6	*	1	1626 494	1.	0.0	2134.0	*	2	0226 794	1.	0.0 2134.0
1	0628 195	59.	1.1	2134.6	*	1	1628 495	1.	0.0	2134.0	*	2	0228 795	1.	0.0 2134.0
1	0630 196	56.	1.1	2134.6	*	1	1630 496	1.	0.0	2134.0	*	2	0230 796	1.	0.0 2134.0
1	0632 197	53.	1.1	2134.5	*	1	1632 497	1.	0.0	2134.0	*	2	0232 797	1.	0.0 2134.0
1	0634 198	50.	1.0	2134.5	*	1	1634 498	1.	0.0	2134.0	*	2	0234 798	1.	0.0 2134.0
1	0636 199	47.	1.0	2134.5	*	1	1636 499	1.	0.0	2134.0	*	2	0236 799	1.	0.0 2134.0
1	0638 200	44.	0.9	2134.5	*	1	1638 500	1.	0.0	2134.0	*	2	0238 800	1.	0.0 2134.0
1	0640 201	42.	0.9	2134.5	*	1	1640 501	1.	0.0	2134.0	*	2	0240 801	1.	0.0 2134.0

1	0642	202	39.	0.9	2134.4	*	1	1642	502	1.	0.0	2134.0	*	2	0242 802	1.	0.0	2134.0
1	0644	203	37.	0.8	2134.4	*	1	1644	503	1.	0.0	2134.0	*	2	0244 803	1.	0.0	2134.0
1	0646	204	35.	0.8	2134.4	*	1	1646	504	1.	0.0	2134.0	*	2	0246 804	1.	0.0	2134.0
1	0648	205	33.	0.8	2134.4	*	1	1648	505	1.	0.0	2134.0	*	2	0248 805	1.	0.0	2134.0
1	0650	206	32.	0.7	2134.4	*	1	1650	506	1.	0.0	2134.0	*	2	0250 806	1.	0.0	2134.0
1	0652	207	30.	0.7	2134.4	*	1	1652	507	1.	0.0	2134.0	*	2	0252 807	1.	0.0	2134.0
1	0654	208	29.	0.7	2134.4	*	1	1654	508	1.	0.0	2134.0	*	2	0254 808	1.	0.0	2134.0
1	0656	209	27.	0.7	2134.3	*	1	1656	509	1.	0.0	2134.0	*	2	0256 809	1.	0.0	2134.0
1	0658	210	26.	0.7	2134.3	*	1	1658	510	1.	0.0	2134.0	*	2	0258 810	1.	0.0	2134.0
1	0700	211	25.	0.6	2134.3	*	1	1700	511	1.	0.0	2134.0	*	2	0300 811	1.	0.0	2134.0
1	0702	212	24.	0.6	2134.3	*	1	1702	512	1.	0.0	2134.0	*	2	0302 812	1.	0.0	2134.0
1	0704	213	23.	0.6	2134.3	*	1	1704	513	1.	0.0	2134.0	*	2	0304 813	1.	0.0	2134.0
1	0706	214	21.	0.6	2134.3	*	1	1706	514	1.	0.0	2134.0	*	2	0306 814	1.	0.0	2134.0
1	0708	215	20.	0.6	2134.3	*	1	1708	515	1.	0.0	2134.0	*	2	0308 815	1.	0.0	2134.0
1	0710	216	19.	0.5	2134.3	*	1	1710	516	1.	0.0	2134.0	*	2	0310 816	1.	0.0	2134.0
1	0712	217	19.	0.5	2134.3	*	1	1712	517	1.	0.0	2134.0	*	2	0312 817	1.	0.0	2134.0
1	0714	218	18.	0.5	2134.3	*	1	1714	518	1.	0.0	2134.0	*	2	0314 818	1.	0.0	2134.0
1	0716	219	17.	0.5	2134.3	*	1	1716	519	1.	0.0	2134.0	*	2	0316 819	1.	0.0	2134.0
1	0718	220	16.	0.5	2134.2	*	1	1718	520	1.	0.0	2134.0	*	2	0318 820	1.	0.0	2134.0
1	0720	221	15.	0.4	2134.2	*	1	1720	521	1.	0.0	2134.0	*	2	0320 821	1.	0.0	2134.0
1	0722	222	14.	0.4	2134.2	*	1	1722	522	1.	0.0	2134.0	*	2	0322 822	1.	0.0	2134.0
1	0724	223	14.	0.4	2134.2	*	1	1724	523	1.	0.0	2134.0	*	2	0324 823	1.	0.0	2134.0
1	0726	224	13.	0.4	2134.2	*	1	1726	524	1.	0.0	2134.0	*	2	0326 824	1.	0.0	2134.0
1	0728	225	12.	0.4	2134.2	*	1	1728	525	1.	0.0	2134.0	*	2	0328 825	1.	0.0	2134.0
1	0730	226	12.	0.4	2134.2	*	1	1730	526	1.	0.0	2134.0	*	2	0330 826	1.	0.0	2134.0
1	0732	227	11.	0.4	2134.2	*	1	1732	527	1.	0.0	2134.0	*	2	0332 827	1.	0.0	2134.0
1	0734	228	11.	0.3	2134.2	*	1	1734	528	1.	0.0	2134.0	*	2	0334 828	1.	0.0	2134.0
1	0736	229	10.	0.3	2134.2	*	1	1736	529	1.	0.0	2134.0	*	2	0336 829	1.	0.0	2134.0
1	0738	230	9.	0.3	2134.2	*	1	1738	530	1.	0.0	2134.0	*	2	0338 830	1.	0.0	2134.0
1	0740	231	9.	0.3	2134.2	*	1	1740	531	1.	0.0	2134.0	*	2	0340 831	1.	0.0	2134.0
1	0742	232	8.	0.3	2134.2	*	1	1742	532	1.	0.0	2134.0	*	2	0342 832	1.	0.0	2134.0
1	0744	233	8.	0.3	2134.2	*	1	1744	533	1.	0.0	2134.0	*	2	0344 833	1.	0.0	2134.0
1	0746	234	8.	0.3	2134.1	*	1	1746	534	1.	0.0	2134.0	*	2	0346 834	1.	0.0	2134.0
1	0748	235	7.	0.3	2134.1	*	1	1748	535	1.	0.0	2134.0	*	2	0348 835	1.	0.0	2134.0
1	0750	236	7.	0.3	2134.1	*	1	1750	536	1.	0.0	2134.0	*	2	0350 836	1.	0.0	2134.0
1	0752	237	7.	0.3	2134.1	*	1	1752	537	1.	0.0	2134.0	*	2	0352 837	1.	0.0	2134.0
1	0754	238	6.	0.2	2134.1	*	1	1754	538	1.	0.0	2134.0	*	2	0354 838	1.	0.0	2134.0
1	0756	239	6.	0.2	2134.1	*	1	1756	539	1.	0.0	2134.0	*	2	0356 839	1.	0.0	2134.0
1	0758	240	5.	0.2	2134.1	*	1	1758	540	1.	0.0	2134.0	*	2	0358 840	1.	0.0	2134.0
1	0800	241	5.	0.2	2134.1	*	1	1800	541	1.	0.0	2134.0	*	2	0400 841	1.	0.0	2134.0
1	0802	242	5.	0.2	2134.1	*	1	1802	542	1.	0.0	2134.0	*	2	0402 842	1.	0.0	2134.0
1	0804	243	5.	0.2	2134.1	*	1	1804	543	1.	0.0	2134.0	*	2	0404 843	1.	0.0	2134.0
1	0806	244	5.	0.2	2134.1	*	1	1806	544	1.	0.0	2134.0	*	2	0406 844	1.	0.0	2134.0
1	0808	245	4.	0.2	2134.1	*	1	1808	545	1.	0.0	2134.0	*	2	0408 845	1.	0.0	2134.0
1	0810	246	4.	0.2	2134.1	*	1	1810	546	1.	0.0	2134.0	*	2	0410 846	1.	0.0	2134.0
1	0812	247	4.	0.2	2134.1	*	1	1812	547	1.	0.0	2134.0	*	2	0412 847	1.	0.0	2134.0
1	0814	248	4.	0.2	2134.1	*	1	1814	548	1.	0.0	2134.0	*	2	0414 848	1.	0.0	2134.0
1	0816	249	3.	0.2	2134.1	*	1	1816	549	1.	0.0	2134.0	*	2	0416 849	1.	0.0	2134.0
1	0818	250	3.	0.2	2134.1	*	1	1818	550	1.	0.0	2134.0	*	2	0418 850	1.	0.0	2134.0
1	0820	251	3.	0.1	2134.1	*	1	1820	551	1.	0.0	2134.0	*	2	0420 851	1.	0.0	2134.0
1	0822	252	3.	0.1	2134.1	*	1	1822	552	1.	0.0	2134.0	*	2	0422 852	1.	0.0	2134.0
1	0824	253	3.	0.1	2134.1	*	1	1824	553	1.	0.0	2134.0	*	2	0424 853	1.	0.0	2134.0
1	0826	254	3.	0.1	2134.1	*	1	1826	554	1.	0.0	2134.0	*	2	0426 854	1.	0.0	2134.0
1	0828	255	2.	0.1	2134.1	*	1	1828	555	1.	0.0	2134.0	*	2	0428 855	1.	0.0	2134.0
1	0830	256	2.	0.1	2134.1	*	1	1830	556	1.	0.0	2134.0	*	2	0430 856	1.	0.0	2134.0
1	0832	257	2.	0.1	2134.1	*	1	1832	557	1.	0.0	2134.0	*	2	0432 857	1.	0.0	2134.0
1	0834	258	2.	0.1	2134.1	*	1	1834	558	1.	0.0	2134.0	*	2	0434 858	1.	0.0	2134.0
1	0836	259	2.	0.1	2134.1	*	1	1836	559	1.	0.0	2134.0	*	2	0436 859	1.	0.0	2134.0
1	0838	260	2.	0.1	2134.1	*	1	1838	560	1.	0.0	2134.0	*	2	0438 860	1.	0.0	2134.0
1	0840	261	2.	0.1	2134.1	*	1	1840	561	1.	0.0	2134.0	*	2	0440 861	1.	0.0	2134.0
1	0842	262	2.	0.1	2134.1	*	1	1842	562	1.	0.0	2134.0	*	2	0442 862	1.	0.0	2134.0
1	0844	263	2.	0.1	2134.1	*	1	1844	563	1.	0.0	2134.0	*	2	0444 863	1.	0.0	2134.0
1	0846	264	2.	0.1	2134.1	*	1	1846	564	1.	0.0	2134.0	*	2	0446 864	1.	0.0	2134.0
1	0848	265	2.	0.1	2134.0	*	1	1848	565	1.	0.0	2134.0	*	2	0448 865	1.	0.0	2134.0
1	0850	266	2.	0.1	2134.0	*	1	1850	566	1.	0.0	2134.0	*	2	0450 866	1.	0.0	2134.0

1	0852	267	1.	0.1	2134.0 *	1	1852	567	1.	0.0	2134.0 *	2	0452	867	1.	0.0	2134.0
1	0854	268	1.	0.1	2134.0 *	1	1854	568	1.	0.0	2134.0 *	2	0454	868	1.	0.0	2134.0
1	0856	269	1.	0.1	2134.0 *	1	1856	569	1.	0.0	2134.0 *	2	0456	869	1.	0.0	2134.0
1	0858	270	1.	0.1	2134.0 *	1	1858	570	1.	0.0	2134.0 *	2	0458	870	1.	0.0	2134.0
1	0900	271	1.	0.1	2134.0 *	1	1900	571	1.	0.0	2134.0 *	2	0500	871	1.	0.0	2134.0
1	0902	272	1.	0.1	2134.0 *	1	1902	572	1.	0.0	2134.0 *	2	0502	872	1.	0.0	2134.0
1	0904	273	1.	0.1	2134.0 *	1	1904	573	1.	0.0	2134.0 *	2	0504	873	1.	0.0	2134.0
1	0906	274	1.	0.1	2134.0 *	1	1906	574	1.	0.0	2134.0 *	2	0506	874	1.	0.0	2134.0
1	0908	275	1.	0.1	2134.0 *	1	1908	575	1.	0.0	2134.0 *	2	0508	875	1.	0.0	2134.0
1	0910	276	1.	0.1	2134.0 *	1	1910	576	1.	0.0	2134.0 *	2	0510	876	1.	0.0	2134.0
1	0912	277	1.	0.1	2134.0 *	1	1912	577	1.	0.0	2134.0 *	2	0512	877	1.	0.0	2134.0
1	0914	278	1.	0.1	2134.0 *	1	1914	578	1.	0.0	2134.0 *	2	0514	878	1.	0.0	2134.0
1	0916	279	1.	0.1	2134.0 *	1	1916	579	1.	0.0	2134.0 *	2	0516	879	1.	0.0	2134.0
1	0918	280	1.	0.1	2134.0 *	1	1918	580	1.	0.0	2134.0 *	2	0518	880	1.	0.0	2134.0
1	0920	281	1.	0.1	2134.0 *	1	1920	581	1.	0.0	2134.0 *	2	0520	881	1.	0.0	2134.0
1	0922	282	1.	0.1	2134.0 *	1	1922	582	1.	0.0	2134.0 *	2	0522	882	1.	0.0	2134.0
1	0924	283	1.	0.1	2134.0 *	1	1924	583	1.	0.0	2134.0 *	2	0524	883	1.	0.0	2134.0
1	0926	284	1.	0.1	2134.0 *	1	1926	584	1.	0.0	2134.0 *	2	0526	884	1.	0.0	2134.0
1	0928	285	1.	0.1	2134.0 *	1	1928	585	1.	0.0	2134.0 *	2	0528	885	1.	0.0	2134.0
1	0930	286	1.	0.1	2134.0 *	1	1930	586	1.	0.0	2134.0 *	2	0530	886	1.	0.0	2134.0
1	0932	287	1.	0.1	2134.0 *	1	1932	587	1.	0.0	2134.0 *	2	0532	887	1.	0.0	2134.0
1	0934	288	1.	0.0	2134.0 *	1	1934	588	1.	0.0	2134.0 *	2	0534	888	1.	0.0	2134.0
1	0936	289	1.	0.0	2134.0 *	1	1936	589	1.	0.0	2134.0 *	2	0536	889	1.	0.0	2134.0
1	0938	290	1.	0.0	2134.0 *	1	1938	590	1.	0.0	2134.0 *	2	0538	890	1.	0.0	2134.0
1	0940	291	1.	0.0	2134.0 *	1	1940	591	1.	0.0	2134.0 *	2	0540	891	1.	0.0	2134.0
1	0942	292	1.	0.0	2134.0 *	1	1942	592	1.	0.0	2134.0 *	2	0542	892	1.	0.0	2134.0
1	0944	293	1.	0.0	2134.0 *	1	1944	593	1.	0.0	2134.0 *	2	0544	893	1.	0.0	2134.0
1	0946	294	1.	0.0	2134.0 *	1	1946	594	1.	0.0	2134.0 *	2	0546	894	1.	0.0	2134.0
1	0948	295	1.	0.0	2134.0 *	1	1948	595	1.	0.0	2134.0 *	2	0548	895	1.	0.0	2134.0
1	0950	296	1.	0.0	2134.0 *	1	1950	596	1.	0.0	2134.0 *	2	0550	896	1.	0.0	2134.0
1	0952	297	1.	0.0	2134.0 *	1	1952	597	1.	0.0	2134.0 *	2	0552	897	1.	0.0	2134.0
1	0954	298	1.	0.0	2134.0 *	1	1954	598	1.	0.0	2134.0 *	2	0554	898	1.	0.0	2134.0
1	0956	299	1.	0.0	2134.0 *	1	1956	599	1.	0.0	2134.0 *	2	0556	899	1.	0.0	2134.0
1	0958	300	1.	0.0	2134.0 *	1	1958	600	1.	0.0	2134.0 *	2	0558	900	1.	0.0	2134.0
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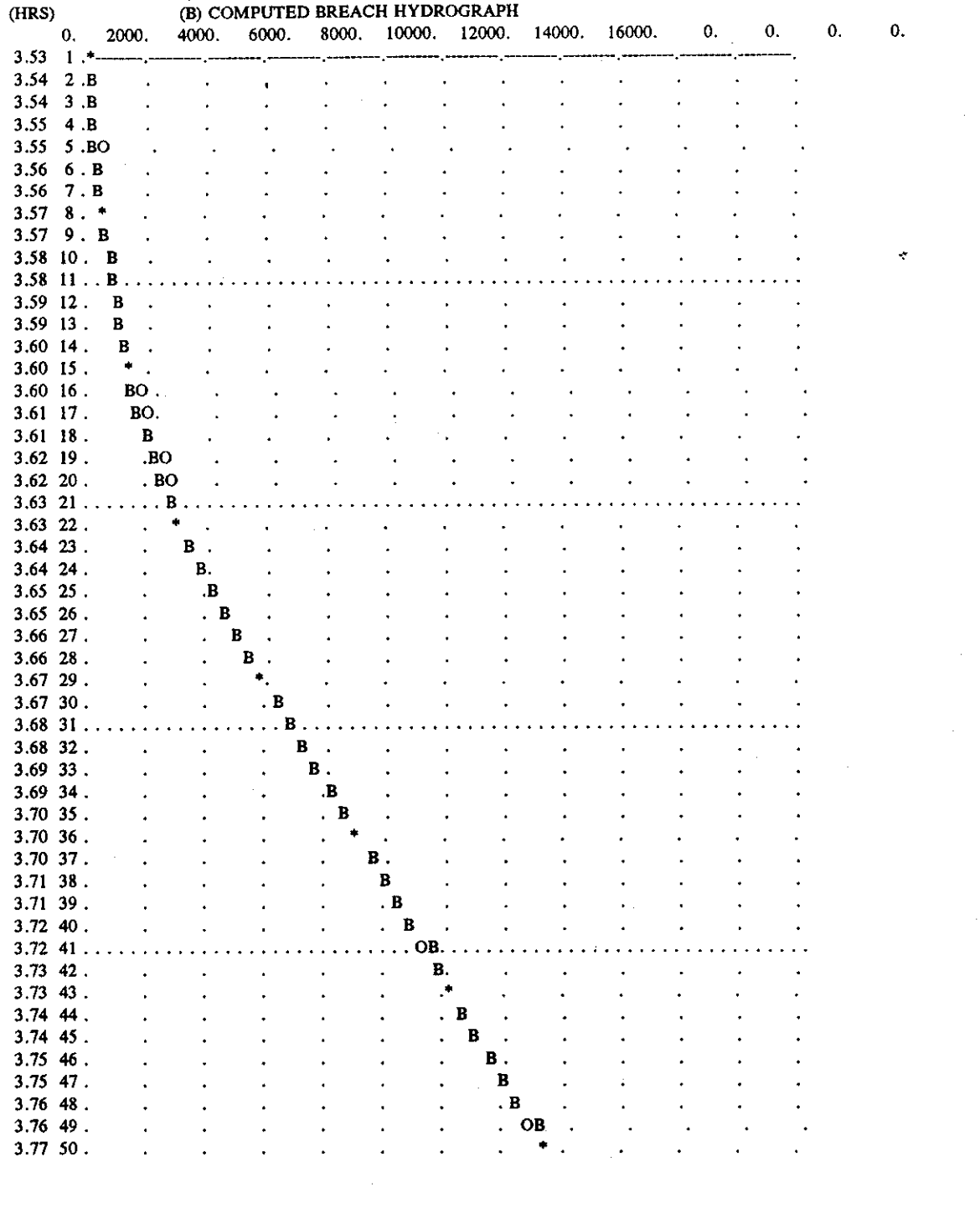
PEAK OUTFLOW IS 16423. AT TIME 3.78 HOURS

THE DAM BREACH HYDROGRAPH WAS DEVELOPED USING A TIME INTERVAL OF 0.005 HOURS DURING BREACH FORMATION.
DOWNSTREAM CALCULATIONS WILL USE A TIME INTERVAL OF 0.033 HOURS.
THIS TABLE COMPARES THE HYDROGRAPH FOR DOWNSTREAM CALCULATIONS WITH THE COMPUTED BREACH HYDROGRAPH.
INTERMEDIATE FLOWS ARE INTERPOLATED FROM END-OF-PERIOD VALUES.

TIME (HOURS)	TIME FROM BEGINNING OF BREACH (HOURS)	INTERPOLATED BREACH HYDROGRAPH (CFS)	-	COMPUTED BREACH HYDROGRAPH (CFS)	=	ERROR (CFS)	ACCUMULATED ERROR (AC-FT)	ACCUMULATED ERROR
3.533	0.000	100.		100.		0.	0.	0.
3.538	0.005	165.		149.		16.	16.	0.
3.543	0.010	230.		198.		33.	49.	0.
3.548	0.014	295.		245.		50.	99.	0.
3.552	0.019	360.		292.		68.	167.	0.
3.557	0.024	425.		380.		45.	213.	0.
3.562	0.029	490.		469.		22.	234.	0.
3.567	0.033	555.		555.		0.	234.	0.
3.571	0.038	663.		640.		23.	257.	0.
3.576	0.043	770.		722.		48.	304.	0.
3.581	0.048	877.		802.		75.	379.	0.
3.586	0.052	984.		901.		83.	462.	0.
3.590	0.057	1091.		1014.		77.	540.	0.
3.595	0.062	1199.		1149.		49.	589.	0.
3.600	0.067	1306.		1306.		0.	589.	0.
3.605	0.071	1559.		1484.		75.	664.	0.
3.610	0.076	1812.		1684.		128.	792.	0.
3.614	0.081	2065.		1909.		157.	949.	0.
3.619	0.086	2319.		2157.		162.	1111.	0.
3.624	0.090	2572.		2440.		132.	1243.	0.
3.629	0.095	2825.		2749.		76.	1320.	1.
3.633	0.100	3078.		3078.		0.	1320.	1.
3.638	0.105	3475.		3428.		48.	1367.	1.
3.643	0.110	3872.		3796.		76.	1444.	1.
3.648	0.114	4269.		4180.		89.	1532.	1.
3.652	0.119	4666.		4581.		85.	1617.	1.
3.657	0.124	5063.		4995.		68.	1685.	1.
3.662	0.129	5460.		5421.		39.	1725.	1.
3.667	0.133	5857.		5857.		0.	1725.	1.
3.671	0.138	6314.		6301.		13.	1738.	1.
3.676	0.143	6771.		6751.		21.	1759.	1.
3.681	0.148	7228.		7204.		24.	1783.	1.
3.686	0.152	7685.		7659.		27.	1809.	1.
3.690	0.157	8143.		8120.		23.	1832.	1.
3.695	0.162	8600.		8590.		10.	1842.	1.
3.700	0.167	9057.		9057.		0.	1842.	1.
3.705	0.171	9505.		9518.		-13.	1829.	1.
3.710	0.176	9953.		9972.		-19.	1810.	1.
3.714	0.181	10401.		10416.		-15.	1795.	1.
3.719	0.186	10849.		10855.		-6.	1789.	1.
3.724	0.190	11298.		11316.		-18.	1771.	1.
3.729	0.195	11746.		11763.		-17.	1754.	1.
3.733	0.200	12194.		12194.		0.	1754.	1.
3.738	0.205	12642.		12617.		25.	1779.	1.
3.743	0.210	13090.		13086.		4.	1783.	1.
3.748	0.214	13538.		13532.		6.	1789.	1.
3.752	0.219	13987.		13954.		32.	1821.	1.
3.757	0.224	14435.		14441.		-6.	1815.	1.
3.762	0.229	14883.		14901.		-18.	1797.	1.
3.767	0.233	15331.		15331.		0.	1797.	1.

STATION DAMOUT

TIME (HRS) — (O) INTERPOLATED BREACH HYDROGRAPH — (B) COMPUTED BREACH HYDROGRAPH — (*) POINTS AT NORMAL TIME INTERVAL



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PEAK FLOW    TIME                    MAXIMUM AVERAGE FLOW
                        6-HR     24-HR     72-HR    29.97-HR  (CFS)     (HR)
              (CFS)   15331.     3.77              891.      223.      179.       179.
            (INCHES)    6.679     6.701     6.705     6.705
            (AC-FT)     442.      443.      443.      443.

PEAK STORAGE  TIME                    MAXIMUM AVERAGE STORAGE
                        6-HR     24-HR     72-HR    29.97-HR  (AC-FT)    (HR)
  181.    3.66           20.       5.        4.        4.

PEAK STAGE   TIME                    MAXIMUM AVERAGE STAGE
                        6-HR     24-HR     72-HR    29.97-HR  (FEET)     (HR)
2158.37    3.66       2138.43   2135.14   2134.92   2134.90

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

 69 KP      PLAN  2 FOR STATION   DAMOUT

 70 KO       OUTPUT CONTROL VARIABLES
               IPRNT          1  PRINT CONTROL
               IPLOT          0  PLOT CONTROL
               QSCAL         0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

 60 RS       STORAGE ROUTING
               NSTPS          1  NUMBER OF SUBREACHES
               ITYP        STOR  TYPE OF INITIAL CONDITION
              RSVRIC       0.00  INITIAL CONDITION
                 X         0.00 WORKING R AND D COEFFICIENT

 61 SA          AREA        1.9      2.3      5.8      6.8      9.1     10.2     11.0     11.3     11.6     11.9
                      12.1     12.3     12.8     13.3     13.8

 63 SE       ELEVATION    2134.00  2136.00  2140.00  2144.00  2150.00  2153.00  2155.00  2156.00  2157.00  2158.00
                    2159.00  2160.00  2161.00  2162.00  2163.00

 65 SQ       DISCHARGE        0.      10.      14.      19.      23.      29.      31.     295.     823.    1539.
                     2423.    3450.    4577.    5773.    7015.

 67 ST       TOP OF DAM
               TOPEL     2163.50  ELEVATION AT TOP OF DAM
              DAMWID      300.00  DAM WIDTH
               COQD        3.08  WEIR COEFFICIENT
               EXPD        1.50  EXPONENT OF HEAD

 71 SB       BREACH DATA
               ELBM      2134.00  ELEVATION AT BOTTOM OF BREACH
              BRWID       40.00  WIDTH OF BREACH BOTTOM
                 Z         0.00  BREACH SIDE SLOPE
              TFAIL        0.25  TIME FOR BREACH TO DEVELOP
             FAILEL      2155.00  W.S. ELEVATION TO TRIGGER FAILURE

                                        ***

                          COMPUTED STORAGE-ELEVATION DATA

      STORAGE      0.00     4.21    19.93    45.05    92.37   121.24   142.40   153.55   165.02   176.77
    ELEVATION   2134.00  2136.00  2140.00  2144.00  2150.00  2153.00  2155.00  2156.00  2157.00  2158.00
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STORAGE	188.75	200.95	213.51	226.57	240.13
ELEVATION	2159.00	2160.00	2161.00	2162.00	2163.00

BEGIN DAM FAILURE AT 3.53 HOURS

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HYDROGRAPH AT STATION DAMOUT
PLAN 2, RATIO = 0.50

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2134.0	*	1	1000	301	1.	0.0	2134.0	*	1	2000	601	1.	0.0	2134.0			
1	0002	2	0.	0.0	2134.0	*	1	1002	302	1.	0.0	2134.0	*	1	2002	602	1.	0.0	2134.0			
1	0004	3	0.	0.0	2134.0	*	1	1004	303	1.	0.0	2134.0	*	1	2004	603	1.	0.0	2134.0			
1	0006	4	0.	0.0	2134.0	*	1	1006	304	1.	0.0	2134.0	*	1	2006	604	1.	0.0	2134.0			
1	0008	5	0.	0.0	2134.0	*	1	1008	305	1.	0.0	2134.0	*	1	2008	605	1.	0.0	2134.0			
1	0010	6	0.	0.0	2134.0	*	1	1010	306	1.	0.0	2134.0	*	1	2010	606	1.	0.0	2134.0			
1	0012	7	0.	0.0	2134.0	*	1	1012	307	1.	0.0	2134.0	*	1	2012	607	1.	0.0	2134.0			
1	0014	8	0.	0.0	2134.0	*	1	1014	308	1.	0.0	2134.0	*	1	2014	608	1.	0.0	2134.0			
1	0016	9	0.	0.0	2134.0	*	1	1016	309	1.	0.0	2134.0	*	1	2016	609	1.	0.0	2134.0			
1	0018	10	0.	0.0	2134.0	*	1	1018	310	1.	0.0	2134.0	*	1	2018	610	1.	0.0	2134.0			
1	0020	11	0.	0.0	2134.0	*	1	1020	311	1.	0.0	2134.0	*	1	2020	611	1.	0.0	2134.0			
1	0022	12	0.	0.1	2134.0	*	1	1022	312	1.	0.0	2134.0	*	1	2022	612	1.	0.0	2134.0			
1	0024	13	0.	0.1	2134.0	*	1	1024	313	1.	0.0	2134.0	*	1	2024	613	1.	0.0	2134.0			
1	0026	14	0.	0.1	2134.0	*	1	1026	314	1.	0.0	2134.0	*	1	2026	614	1.	0.0	2134.0			
1	0028	15	0.	0.1	2134.1	*	1	1028	315	1.	0.0	2134.0	*	1	2028	615	1.	0.0	2134.0			
1	0030	16	0.	0.1	2134.1	*	1	1030	316	1.	0.0	2134.0	*	1	2030	616	1.	0.0	2134.0			
1	0032	17	0.	0.2	2134.1	*	1	1032	317	1.	0.0	2134.0	*	1	2032	617	1.	0.0	2134.0			
1	0034	18	0.	0.2	2134.1	*	1	1034	318	1.	0.0	2134.0	*	1	2034	618	1.	0.0	2134.0			
1	0036	19	1.	0.2	2134.1	*	1	1036	319	1.	0.0	2134.0	*	1	2036	619	1.	0.0	2134.0			
1	0038	20	1.	0.3	2134.1	*	1	1038	320	1.	0.0	2134.0	*	1	2038	620	1.	0.0	2134.0			
1	0040	21	1.	0.3	2134.2	*	1	1040	321	1.	0.0	2134.0	*	1	2040	621	1.	0.0	2134.0			
1	0042	22	1.	0.3	2134.2	*	1	1042	322	1.	0.0	2134.0	*	1	2042	622	1.	0.0	2134.0			
1	0044	23	1.	0.4	2134.2	*	1	1044	323	1.	0.0	2134.0	*	1	2044	623	1.	0.0	2134.0			
1	0046	24	1.	0.4	2134.2	*	1	1046	324	1.	0.0	2134.0	*	1	2046	624	1.	0.0	2134.0			
1	0048	25	1.	0.5	2134.3	*	1	1048	325	1.	0.0	2134.0	*	1	2048	625	1.	0.0	2134.0			
1	0050	26	1.	0.5	2134.3	*	1	1050	326	1.	0.0	2134.0	*	1	2050	626	1.	0.0	2134.0			
1	0052	27	1.	0.6	2134.3	*	1	1052	327	1.	0.0	2134.0	*	1	2052	627	1.	0.0	2134.0			
1	0054	28	2.	0.7	2134.3	*	1	1054	328	1.	0.0	2134.0	*	1	2054	628	1.	0.0	2134.0			
1	0056	29	2.	0.7	2134.4	*	1	1056	329	1.	0.0	2134.0	*	1	2056	629	1.	0.0	2134.0			
1	0058	30	2.	0.8	2134.4	*	1	1058	330	1.	0.0	2134.0	*	1	2058	630	1.	0.0	2134.0			
1	0100	31	2.	0.8	2134.4	*	1	1100	331	1.	0.0	2134.0	*	1	2100	631	1.	0.0	2134.0			
1	0102	32	2.	0.9	2134.5	*	1	1102	332	1.	0.0	2134.0	*	1	2102	632	1.	0.0	2134.0			
1	0104	33	2.	1.0	2134.5	*	1	1104	333	1.	0.0	2134.0	*	1	2104	633	1.	0.0	2134.0			
1	0106	34	3.	1.1	2134.5	*	1	1106	334	1.	0.0	2134.0	*	1	2106	634	1.	0.0	2134.0			
1	0108	35	3.	1.1	2134.6	*	1	1108	335	1.	0.0	2134.0	*	1	2108	635	1.	0.0	2134.0			
1	0110	36	3.	1.2	2134.6	*	1	1110	336	1.	0.0	2134.0	*	1	2110	636	1.	0.0	2134.0			
1	0112	37	3.	1.3	2134.7	*	1	1112	337	1.	0.0	2134.0	*	1	2112	637	1.	0.0	2134.0			
1	0114	38	3.	1.4	2134.7	*	1	1114	338	1.	0.0	2134.0	*	1	2114	638	1.	0.0	2134.0			
1	0116	39	3.	1.4	2134.7	*	1	1116	339	1.	0.0	2134.0	*	1	2116	639	1.	0.0	2134.0			
1	0118	40	4.	1.5	2134.8	*	1	1118	340	1.	0.0	2134.0	*	1	2118	640	1.	0.0	2134.0			
1	0120	41	4.	1.6	2134.8	*	1	1120	341	1.	0.0	2134.0	*	1	2120	641	1.	0.0	2134.0			
1	0122	42	4.	1.7	2134.9	*	1	1122	342	1.	0.0	2134.0	*	1	2122	642	1.	0.0	2134.0			
1	0124	43	4.	1.8	2134.9	*	1	1124	343	1.	0.0	2134.0	*	1	2124	643	1.	0.0	2134.0			
1	0126	44	5.	1.9	2135.0	*	1	1126	344	1.	0.0	2134.0	*	1	2126	644	1.	0.0	2134.0			
1	0128	45	5.	2.0	2135.0	*	1	1128	345	1.	0.0	2134.0	*	1	2128	645	1.	0.0	2134.0			
1	0130	46	5.	2.2	2135.1	*	1	1130	346	1.	0.0	2134.0	*	1	2130	646	1.	0.0	2134.0			
1	0132	47	5.	2.3	2135.1	*	1	1132	347	1.	0.0	2134.0	*	1	2132	647	1.	0.0	2134.0			
1	0134	48	6.	2.4	2135.2	*	1	1134	348	1.	0.0	2134.0	*	1	2134	648	1.	0.0	2134.0			

1	0136	49	6.	2.5	2135.2	*	1	1136 349	1.	0.0	2134.0	*	1	2136 649	1.	0.0	2134.0
1	0138	50	6.	2.6	2135.3	*	1	1138 350	1.	0.0	2134.0	*	1	2138 650	1.	0.0	2134.0
1	0140	51	6.	2.8	2135.4	*	1	1140 351	1.	0.0	2134.0	*	1	2140 651	1.	0.0	2134.0
1	0142	52	7.	2.9	2135.4	*	1	1142 352	1.	0.0	2134.0	*	1	2142 652	1.	0.0	2134.0
1	0144	53	7.	3.0	2135.5	*	1	1144 353	1.	0.0	2134.0	*	1	2144 653	1.	0.0	2134.0
1	0146	54	7.	3.2	2135.5	*	1	1146 354	1.	0.0	2134.0	*	1	2146 654	1.	0.0	2134.0
1	0148	55	8.	3.3	2135.6	*	1	1148 355	1.	0.0	2134.0	*	1	2148 655	1.	0.0	2134.0
1	0150	56	8.	3.4	2135.7	*	1	1150 356	1.	0.0	2134.0	*	1	2150 656	1.	0.0	2134.0
1	0152	57	8.	3.6	2135.7	*	1	1152 357	1.	0.0	2134.0	*	1	2152 657	1.	0.0	2134.0
1	0154	58	8.	3.7	2135.8	*	1	1154 358	1.	0.0	2134.0	*	1	2154 658	1.	0.0	2134.0
1	0156	59	9.	3.8	2135.8	*	1	1156 359	1.	0.0	2134.0	*	1	2156 659	1.	0.0	2134.0
1	0158	60	9.	4.0	2135.9	*	1	1158 360	1.	0.0	2134.0	*	1	2158 660	1.	0.0	2134.0
1	0200	61	9.	4.1	2136.0	*	1	1200 361	1.	0.0	2134.0	*	1	2200 661	1.	0.0	2134.0
1	0202	62	10.	4.3	2136.0	*	1	1202 362	1.	0.0	2134.0	*	1	2202 662	1.	0.0	2134.0
1	0204	63	10.	4.4	2136.1	*	1	1204 363	1.	0.0	2134.0	*	1	2204 663	1.	0.0	2134.0
1	0206	64	10.	4.6	2136.2	*	1	1206 364	1.	0.0	2134.0	*	1	2206 664	1.	0.0	2134.0
1	0208	65	10.	4.8	2136.2	*	1	1208 365	1.	0.0	2134.0	*	1	2208 665	1.	0.0	2134.0
1	0210	66	10.	4.9	2136.3	*	1	1210 366	1.	0.0	2134.0	*	1	2210 666	1.	0.0	2134.0
1	0212	67	10.	5.2	2136.4	*	1	1212 367	1.	0.0	2134.0	*	1	2212 667	1.	0.0	2134.0
1	0214	68	10.	5.4	2136.5	*	1	1214 368	1.	0.0	2134.0	*	1	2214 668	1.	0.0	2134.0
1	0216	69	10.	5.7	2136.6	*	1	1216 369	1.	0.0	2134.0	*	1	2216 669	1.	0.0	2134.0
1	0218	70	10.	6.0	2136.7	*	1	1218 370	1.	0.0	2134.0	*	1	2218 670	1.	0.0	2134.0
1	0220	71	10.	6.4	2136.8	*	1	1220 371	1.	0.0	2134.0	*	1	2220 671	1.	0.0	2134.0
1	0222	72	10.	6.8	2137.0	*	1	1222 372	1.	0.0	2134.0	*	1	2222 672	1.	0.0	2134.0
1	0224	73	11.	7.2	2137.1	*	1	1224 373	1.	0.0	2134.0	*	1	2224 673	1.	0.0	2134.0
1	0226	74	11.	7.8	2137.3	*	1	1226 374	1.	0.0	2134.0	*	1	2226 674	1.	0.0	2134.0
1	0228	75	11.	8.3	2137.4	*	1	1228 375	1.	0.0	2134.0	*	1	2228 675	1.	0.0	2134.0
1	0230	76	11.	9.0	2137.6	*	1	1230 376	1.	0.0	2134.0	*	1	2230 676	1.	0.0	2134.0
1	0232	77	11.	9.6	2137.8	*	1	1232 377	1.	0.0	2134.0	*	1	2232 677	1.	0.0	2134.0
1	0234	78	12.	10.4	2138.0	*	1	1234 378	1.	0.0	2134.0	*	1	2234 678	1.	0.0	2134.0
1	0236	79	12.	11.2	2138.2	*	1	1236 379	1.	0.0	2134.0	*	1	2236 679	1.	0.0	2134.0
1	0238	80	12.	12.0	2138.4	*	1	1238 380	1.	0.0	2134.0	*	1	2238 680	1.	0.0	2134.0
1	0240	81	12.	12.9	2138.6	*	1	1240 381	1.	0.0	2134.0	*	1	2240 681	1.	0.0	2134.0
1	0242	82	12.	13.8	2138.8	*	1	1242 382	1.	0.0	2134.0	*	1	2242 682	1.	0.0	2134.0
1	0244	83	13.	14.7	2139.0	*	1	1244 383	1.	0.0	2134.0	*	1	2244 683	1.	0.0	2134.0
1	0246	84	13.	15.7	2139.2	*	1	1246 384	1.	0.0	2134.0	*	1	2246 684	1.	0.0	2134.0
1	0248	85	13.	16.7	2139.4	*	1	1248 385	1.	0.0	2134.0	*	1	2248 685	1.	0.0	2134.0
1	0250	86	13.	17.8	2139.6	*	1	1250 386	1.	0.0	2134.0	*	1	2250 686	1.	0.0	2134.0
1	0252	87	13.	18.8	2139.8	*	1	1252 387	1.	0.0	2134.0	*	1	2252 687	1.	0.0	2134.0
1	0254	88	14.	19.9	2140.0	*	1	1254 388	1.	0.0	2134.0	*	1	2254 688	1.	0.0	2134.0
1	0256	89	14.	21.1	2140.2	*	1	1256 389	1.	0.0	2134.0	*	1	2256 689	1.	0.0	2134.0
1	0258	90	14.	22.2	2140.4	*	1	1258 390	1.	0.0	2134.0	*	1	2258 690	1.	0.0	2134.0
1	0300	91	14.	23.4	2140.6	*	1	1300 391	1.	0.0	2134.0	*	1	2300 691	1.	0.0	2134.0
1	0302	92	15.	24.6	2140.8	*	1	1302 392	1.	0.0	2134.0	*	1	2302 692	1.	0.0	2134.0
1	0304	93	15.	25.9	2141.0	*	1	1304 393	1.	0.0	2134.0	*	1	2304 693	1.	0.0	2134.0
1	0306	94	15.	27.4	2141.3	*	1	1306 394	1.	0.0	2134.0	*	1	2306 694	1.	0.0	2134.0
1	0308	95	16.	29.4	2141.6	*	1	1308 395	1.	0.0	2134.0	*	1	2308 695	1.	0.0	2134.0
1	0310	96	16.	32.0	2142.0	*	1	1310 396	1.	0.0	2134.0	*	1	2310 696	1.	0.0	2134.0
1	0312	97	17.	35.5	2142.6	*	1	1312 397	1.	0.0	2134.0	*	1	2312 697	1.	0.0	2134.0
1	0314	98	18.	40.2	2143.3	*	1	1314 398	1.	0.0	2134.0	*	1	2314 698	1.	0.0	2134.0
1	0316	99	19.	46.4	2144.2	*	1	1316 399	1.	0.0	2134.0	*	1	2316 699	1.	0.0	2134.0
1	0318	100	20.	54.2	2145.3	*	1	1318 400	1.	0.0	2134.0	*	1	2318 700	1.	0.0	2134.0
1	0320	101	21.	63.8	2146.6	*	1	1320 401	1.	0.0	2134.0	*	1	2320 701	1.	0.0	2134.0
1	0322	102	22.	75.1	2148.0	*	1	1322 402	1.	0.0	2134.0	*	1	2322 702	1.	0.0	2134.0
1	0324	103	23.	87.7	2149.5	*	1	1324 403	1.	0.0	2134.0	*	1	2324 703	1.	0.0	2134.0
1	0326	104	25.	101.5	2151.0	*	1	1326 404	1.	0.0	2134.0	*	1	2326 704	1.	0.0	2134.0
1	0328	105	28.	115.9	2152.5	*	1	1328 405	1.	0.0	2134.0	*	1	2328 705	1.	0.0	2134.0
1	0330	106	30.	130.6	2153.9	*	1	1330 406	1.	0.0	2134.0	*	1	2330 706	1.	0.0	2134.0
1	0332	107	100.	145.3	2155.3	*	1	1332 407	1.	0.0	2134.0	*	1	2332 707	1.	0.0	2134.0
1	0334	108	555.	159.2	2156.5	*	1	1334 408	1.	0.0	2134.0	*	1	2334 708	1.	0.0	2134.0
1	0336	109	1282.	171.1	2157.5	*	1	1336 409	1.	0.0	2134.0	*	1	2336 709	1.	0.0	2134.0
1	0338	110	2600.	179.9	2158.3	*	1	1338 410	1.	0.0	2134.0	*	1	2338 710	1.	0.0	2134.0
1	0340	111	4403.	183.8	2158.6	*	1	1340 411	1.	0.0	2134.0	*	1	2340 711	1.	0.0	2134.0
1	0342	112	6494.	181.8	2158.4	*	1	1342 412	1.	0.0	2134.0	*	1	2342 712	1.	0.0	2134.0
1	0344	113	8735.	173.3	2157.7	*	1	1344 413	1.	0.0	2134.0	*	1	2344 713	1.	0.0	2134.0

1	0346 114	11088.	157.8	2156.4	*	1	1346 414	1.	0.0	2134.0	*	1	2346 714	1.	0.0	2134.0
1	0348 115	11424.	136.4	2154.4	*	1	1348 415	1.	0.0	2134.0	*	1	2348 715	1.	0.0	2134.0
1	0350 116	9939.	117.6	2152.6	*	1	1350 416	1.	0.0	2134.0	*	1	2350 716	1.	0.0	2134.0
1	0352 117	8682.	101.9	2151.0	*	1	1352 417	1.	0.0	2134.0	*	1	2352 717	1.	0.0	2134.0
1	0354 118	7619.	88.8	2149.6	*	1	1354 418	1.	0.0	2134.0	*	1	2354 718	1.	0.0	2134.0
1	0356 119	6721.	78.0	2148.4	*	1	1356 419	1.	0.0	2134.0	*	1	2356 719	1.	0.0	2134.0
1	0358 120	5962.	68.9	2147.2	*	1	1358 420	1.	0.0	2134.0	*	1	2358 720	1.	0.0	2134.0
1	0400 121	5320.	61.4	2146.3	*	1	1400 421	1.	0.0	2134.0	*	2	0000 721	1.	0.0	2134.0
1	0402 122	4778.	55.1	2145.4	*	1	1402 422	1.	0.0	2134.0	*	2	0002 722	1.	0.0	2134.0
1	0404 123	4318.	49.7	2144.7	*	1	1404 423	1.	0.0	2134.0	*	2	0004 723	1.	0.0	2134.0
1	0406 124	3926.	45.2	2144.0	*	1	1406 424	1.	0.0	2134.0	*	2	0006 724	1.	0.0	2134.0
1	0408 125	3591.	41.3	2143.4	*	1	1408 425	1.	0.0	2134.0	*	2	0008 725	1.	0.0	2134.0
1	0410 126	3303.	37.9	2142.9	*	1	1410 426	1.	0.0	2134.0	*	2	0010 726	1.	0.0	2134.0
1	0412 127	3054.	35.0	2142.5	*	1	1412 427	1.	0.0	2134.0	*	2	0012 727	1.	0.0	2134.0
1	0414 128	2833.	32.4	2142.1	*	1	1414 428	1.	0.0	2134.0	*	2	0014 728	1.	0.0	2134.0
1	0416 129	2636.	30.0	2141.7	*	1	1416 429	1.	0.0	2134.0	*	2	0016 729	1.	0.0	2134.0
1	0418 130	2458.	27.8	2141.3	*	1	1418 430	1.	0.0	2134.0	*	2	0018 730	1.	0.0	2134.0
1	0420 131	2296.	25.8	2141.0	*	1	1420 431	1.	0.0	2134.0	*	2	0020 731	1.	0.0	2134.0
1	0422 132	2148.	24.0	2140.7	*	1	1422 432	1.	0.0	2134.0	*	2	0022 732	1.	0.0	2134.0
1	0424 133	2011.	22.3	2140.4	*	1	1424 433	1.	0.0	2134.0	*	2	0024 733	1.	0.0	2134.0
1	0426 134	1885.	20.7	2140.1	*	1	1426 434	1.	0.0	2134.0	*	2	0026 734	1.	0.0	2134.0
1	0428 135	1768.	19.2	2139.9	*	1	1428 435	1.	0.0	2134.0	*	2	0028 735	1.	0.0	2134.0
1	0430 136	1656.	17.8	2139.6	*	1	1430 436	1.	0.0	2134.0	*	2	0030 736	1.	0.0	2134.0
1	0432 137	1548.	16.5	2139.4	*	1	1432 437	1.	0.0	2134.0	*	2	0032 737	1.	0.0	2134.0
1	0434 138	1447.	15.3	2139.1	*	1	1434 438	1.	0.0	2134.0	*	2	0034 738	1.	0.0	2134.0
1	0436 139	1351.	14.2	2138.9	*	1	1436 439	1.	0.0	2134.0	*	2	0036 739	1.	0.0	2134.0
1	0438 140	1262.	13.2	2138.7	*	1	1438 440	1.	0.0	2134.0	*	2	0038 740	1.	0.0	2134.0
1	0440 141	1178.	12.3	2138.5	*	1	1440 441	1.	0.0	2134.0	*	2	0040 741	1.	0.0	2134.0
1	0442 142	1100.	11.4	2138.3	*	1	1442 442	1.	0.0	2134.0	*	2	0042 742	1.	0.0	2134.0
1	0444 143	1027.	10.6	2138.1	*	1	1444 443	1.	0.0	2134.0	*	2	0044 743	1.	0.0	2134.0
1	0446 144	959.	9.9	2137.9	*	1	1446 444	1.	0.0	2134.0	*	2	0046 744	1.	0.0	2134.0
1	0448 145	896.	9.3	2137.7	*	1	1448 445	1.	0.0	2134.0	*	2	0048 745	1.	0.0	2134.0
1	0450 146	839.	8.7	2137.6	*	1	1450 446	1.	0.0	2134.0	*	2	0050 746	1.	0.0	2134.0
1	0452 147	787.	8.2	2137.4	*	1	1452 447	1.	0.0	2134.0	*	2	0052 747	1.	0.0	2134.0
1	0454 148	739.	7.7	2137.3	*	1	1454 448	1.	0.0	2134.0	*	2	0054 748	1.	0.0	2134.0
1	0456 149	696.	7.3	2137.1	*	1	1456 449	1.	0.0	2134.0	*	2	0056 749	1.	0.0	2134.0
1	0458 150	657.	6.9	2137.0	*	1	1458 450	1.	0.0	2134.0	*	2	0058 750	1.	0.0	2134.0
1	0500 151	621.	6.6	2136.9	*	1	1500 451	1.	0.0	2134.0	*	2	0100 751	1.	0.0	2134.0
1	0502 152	588.	6.3	2136.8	*	1	1502 452	1.	0.0	2134.0	*	2	0102 752	1.	0.0	2134.0
1	0504 153	558.	6.0	2136.7	*	1	1504 453	1.	0.0	2134.0	*	2	0104 753	1.	0.0	2134.0
1	0506 154	531.	5.8	2136.6	*	1	1506 454	1.	0.0	2134.0	*	2	0106 754	1.	0.0	2134.0
1	0508 155	505.	5.5	2136.5	*	1	1508 455	1.	0.0	2134.0	*	2	0108 755	1.	0.0	2134.0
1	0510 156	481.	5.3	2136.4	*	1	1510 456	1.	0.0	2134.0	*	2	0110 756	1.	0.0	2134.0
1	0512 157	458.	5.1	2136.4	*	1	1512 457	1.	0.0	2134.0	*	2	0112 757	1.	0.0	2134.0
1	0514 158	436.	4.9	2136.3	*	1	1514 458	1.	0.0	2134.0	*	2	0114 758	1.	0.0	2134.0
1	0516 159	413.	4.7	2136.2	*	1	1516 459	1.	0.0	2134.0	*	2	0116 759	1.	0.0	2134.0
1	0518 160	391.	4.5	2136.1	*	1	1518 460	1.	0.0	2134.0	*	2	0118 760	1.	0.0	2134.0
1	0520 161	370.	4.3	2136.0	*	1	1520 461	1.	0.0	2134.0	*	2	0120 761	1.	0.0	2134.0
1	0522 162	349.	4.1	2136.0	*	1	1522 462	1.	0.0	2134.0	*	2	0122 762	1.	0.0	2134.0
1	0524 163	328.	4.0	2135.9	*	1	1524 463	1.	0.0	2134.0	*	2	0124 763	1.	0.0	2134.0
1	0526 164	309.	3.8	2135.8	*	1	1526 464	1.	0.0	2134.0	*	2	0126 764	1.	0.0	2134.0
1	0528 165	291.	3.6	2135.7	*	1	1528 465	1.	0.0	2134.0	*	2	0128 765	1.	0.0	2134.0
1	0530 166	273.	3.5	2135.7	*	1	1530 466	1.	0.0	2134.0	*	2	0130 766	1.	0.0	2134.0
1	0532 167	257.	3.3	2135.6	*	1	1532 467	1.	0.0	2134.0	*	2	0132 767	1.	0.0	2134.0
1	0534 168	242.	3.2	2135.5	*	1	1534 468	1.	0.0	2134.0	*	2	0134 768	1.	0.0	2134.0
1	0536 169	227.	3.0	2135.5	*	1	1536 469	1.	0.0	2134.0	*	2	0136 769	1.	0.0	2134.0
1	0538 170	214.	2.9	2135.4	*	1	1538 470	1.	0.0	2134.0	*	2	0138 770	1.	0.0	2134.0
1	0540 171	202.	2.8	2135.4	*	1	1540 471	1.	0.0	2134.0	*	2	0140 771	1.	0.0	2134.0
1	0542 172	191.	2.7	2135.3	*	1	1542 472	1.	0.0	2134.0	*	2	0142 772	1.	0.0	2134.0
1	0544 173	181.	2.6	2135.3	*	1	1544 473	1.	0.0	2134.0	*	2	0144 773	1.	0.0	2134.0
1	0546 174	171.	2.5	2135.2	*	1	1546 474	1.	0.0	2134.0	*	2	0146 774	1.	0.0	2134.0
1	0548 175	161.	2.4	2135.2	*	1	1548 475	1.	0.0	2134.0	*	2	0148 775	1.	0.0	2134.0
1	0550 176	152.	2.3	2135.1	*	1	1550 476	1.	0.0	2134.0	*	2	0150 776	1.	0.0	2134.0
1	0552 177	144.	2.2	2135.1	*	1	1552 477	1.	0.0	2134.0	*	2	0152 777	1.	0.0	2134.0
1	0554 178	136.	2.1	2135.0	*	1	1554 478	1.	0.0	2134.0	*	2	0154 778	1.	0.0	2134.0

1	0556	179	129.	2.0	2135.0	*	1	1556	479	1.	0.0	2134.0	*	2	0156	779	1.	0.0	2134.0
1	0558	180	122.	1.9	2135.0	*	1	1558	480	1.	0.0	2134.0	*	2	0158	780	1.	0.0	2134.0
1	0600	181	116.	1.9	2134.9	*	1	1600	481	1.	0.0	2134.0	*	2	0200	781	1.	0.0	2134.0
1	0602	182	110.	1.8	2134.9	*	1	1602	482	1.	0.0	2134.0	*	2	0202	782	1.	0.0	2134.0
1	0604	183	105.	1.7	2134.9	*	1	1604	483	1.	0.0	2134.0	*	2	0204	783	1.	0.0	2134.0
1	0606	184	100.	1.7	2134.8	*	1	1606	484	1.	0.0	2134.0	*	2	0206	784	1.	0.0	2134.0
1	0608	185	96.	1.6	2134.8	*	1	1608	485	1.	0.0	2134.0	*	2	0208	785	1.	0.0	2134.0
1	0610	186	92.	1.6	2134.8	*	1	1610	486	1.	0.0	2134.0	*	2	0210	786	1.	0.0	2134.0
1	0612	187	88.	1.5	2134.8	*	1	1612	487	1.	0.0	2134.0	*	2	0212	787	1.	0.0	2134.0
1	0614	188	84.	1.5	2134.8	*	1	1614	488	1.	0.0	2134.0	*	2	0214	788	1.	0.0	2134.0
1	0616	189	80.	1.4	2134.7	*	1	1616	489	1.	0.0	2134.0	*	2	0216	789	1.	0.0	2134.0
1	0618	190	76.	1.4	2134.7	*	1	1618	490	1.	0.0	2134.0	*	2	0218	790	1.	0.0	2134.0
1	0620	191	73.	1.3	2134.7	*	1	1620	491	1.	0.0	2134.0	*	2	0220	791	1.	0.0	2134.0
1	0622	192	69.	1.3	2134.7	*	1	1622	492	1.	0.0	2134.0	*	2	0222	792	1.	0.0	2134.0
1	0624	193	66.	1.3	2134.6	*	1	1624	493	1.	0.0	2134.0	*	2	0224	793	1.	0.0	2134.0
1	0626	194	63.	1.2	2134.6	*	1	1626	494	1.	0.0	2134.0	*	2	0226	794	1.	0.0	2134.0
1	0628	195	59.	1.2	2134.6	*	1	1628	495	1.	0.0	2134.0	*	2	0228	795	1.	0.0	2134.0
1	0630	196	56.	1.1	2134.6	*	1	1630	496	1.	0.0	2134.0	*	2	0230	796	1.	0.0	2134.0
1	0632	197	53.	1.1	2134.6	*	1	1632	497	1.	0.0	2134.0	*	2	0232	797	1.	0.0	2134.0
1	0634	198	50.	1.0	2134.5	*	1	1634	498	1.	0.0	2134.0	*	2	0234	798	1.	0.0	2134.0
1	0636	199	47.	1.0	2134.5	*	1	1636	499	1.	0.0	2134.0	*	2	0236	799	1.	0.0	2134.0
1	0638	200	45.	1.0	2134.5	*	1	1638	500	1.	0.0	2134.0	*	2	0238	800	1.	0.0	2134.0
1	0640	201	42.	0.9	2134.5	*	1	1640	501	1.	0.0	2134.0	*	2	0240	801	1.	0.0	2134.0
1	0642	202	40.	0.9	2134.5	*	1	1642	502	1.	0.0	2134.0	*	2	0242	802	1.	0.0	2134.0
1	0644	203	37.	0.8	2134.4	*	1	1644	503	1.	0.0	2134.0	*	2	0244	803	1.	0.0	2134.0
1	0646	204	36.	0.8	2134.4	*	1	1646	504	1.	0.0	2134.0	*	2	0246	804	1.	0.0	2134.0
1	0648	205	34.	0.8	2134.4	*	1	1648	505	1.	0.0	2134.0	*	2	0248	805	1.	0.0	2134.0
1	0650	206	32.	0.8	2134.4	*	1	1650	506	1.	0.0	2134.0	*	2	0250	806	1.	0.0	2134.0
1	0652	207	30.	0.7	2134.4	*	1	1652	507	1.	0.0	2134.0	*	2	0252	807	1.	0.0	2134.0
1	0654	208	29.	0.7	2134.4	*	1	1654	508	1.	0.0	2134.0	*	2	0254	808	1.	0.0	2134.0
1	0656	209	28.	0.7	2134.4	*	1	1656	509	1.	0.0	2134.0	*	2	0256	809	1.	0.0	2134.0
1	0658	210	26.	0.7	2134.3	*	1	1658	510	1.	0.0	2134.0	*	2	0258	810	1.	0.0	2134.0
1	0700	211	25.	0.6	2134.3	*	1	1700	511	1.	0.0	2134.0	*	2	0300	811	1.	0.0	2134.0
1	0702	212	24.	0.6	2134.3	*	1	1702	512	1.	0.0	2134.0	*	2	0302	812	1.	0.0	2134.0
1	0704	213	23.	0.6	2134.3	*	1	1704	513	1.	0.0	2134.0	*	2	0304	813	1.	0.0	2134.0
1	0706	214	22.	0.6	2134.3	*	1	1706	514	1.	0.0	2134.0	*	2	0306	814	1.	0.0	2134.0
1	0708	215	21.	0.6	2134.3	*	1	1708	515	1.	0.0	2134.0	*	2	0308	815	1.	0.0	2134.0
1	0710	216	20.	0.5	2134.3	*	1	1710	516	1.	0.0	2134.0	*	2	0310	816	1.	0.0	2134.0
1	0712	217	19.	0.5	2134.3	*	1	1712	517	1.	0.0	2134.0	*	2	0312	817	1.	0.0	2134.0
1	0714	218	18.	0.5	2134.3	*	1	1714	518	1.	0.0	2134.0	*	2	0314	818	1.	0.0	2134.0
1	0716	219	17.	0.5	2134.3	*	1	1716	519	1.	0.0	2134.0	*	2	0316	819	1.	0.0	2134.0
1	0718	220	16.	0.5	2134.2	*	1	1718	520	1.	0.0	2134.0	*	2	0318	820	1.	0.0	2134.0
1	0720	221	15.	0.5	2134.2	*	1	1720	521	1.	0.0	2134.0	*	2	0320	821	1.	0.0	2134.0
1	0722	222	14.	0.4	2134.2	*	1	1722	522	1.	0.0	2134.0	*	2	0322	822	1.	0.0	2134.0
1	0724	223	14.	0.4	2134.2	*	1	1724	523	1.	0.0	2134.0	*	2	0324	823	1.	0.0	2134.0
1	0726	224	13.	0.4	2134.2	*	1	1726	524	1.	0.0	2134.0	*	2	0326	824	1.	0.0	2134.0
1	0728	225	12.	0.4	2134.2	*	1	1728	525	1.	0.0	2134.0	*	2	0328	825	1.	0.0	2134.0
1	0730	226	12.	0.4	2134.2	*	1	1730	526	1.	0.0	2134.0	*	2	0330	826	1.	0.0	2134.0
1	0732	227	11.	0.4	2134.2	*	1	1732	527	1.	0.0	2134.0	*	2	0332	827	1.	0.0	2134.0
1	0734	228	11.	0.4	2134.2	*	1	1734	528	1.	0.0	2134.0	*	2	0334	828	1.	0.0	2134.0
1	0736	229	10.	0.3	2134.2	*	1	1736	529	1.	0.0	2134.0	*	2	0336	829	1.	0.0	2134.0
1	0738	230	9.	0.3	2134.2	*	1	1738	530	1.	0.0	2134.0	*	2	0338	830	1.	0.0	2134.0
1	0740	231	9.	0.3	2134.2	*	1	1740	531	1.	0.0	2134.0	*	2	0340	831	1.	0.0	2134.0
1	0742	232	8.	0.3	2134.2	*	1	1742	532	1.	0.0	2134.0	*	2	0342	832	1.	0.0	2134.0
1	0744	233	8.	0.3	2134.2	*	1	1744	533	1.	0.0	2134.0	*	2	0344	833	1.	0.0	2134.0
1	0746	234	8.	0.3	2134.1	*	1	1746	534	1.	0.0	2134.0	*	2	0346	834	1.	0.0	2134.0
1	0748	235	7.	0.3	2134.1	*	1	1748	535	1.	0.0	2134.0	*	2	0348	835	1.	0.0	2134.0
1	0750	236	7.	0.3	2134.1	*	1	1750	536	1.	0.0	2134.0	*	2	0350	836	1.	0.0	2134.0
1	0752	237	7.	0.3	2134.1	*	1	1752	537	1.	0.0	2134.0	*	2	0352	837	1.	0.0	2134.0
1	0754	238	6.	0.2	2134.1	*	1	1754	538	1.	0.0	2134.0	*	2	0354	838	1.	0.0	2134.0
1	0756	239	6.	0.2	2134.1	*	1	1756	539	1.	0.0	2134.0	*	2	0356	839	1.	0.0	2134.0
1	0758	240	5.	0.2	2134.1	*	1	1758	540	1.	0.0	2134.0	*	2	0358	840	1.	0.0	2134.0
1	0800	241	5.	0.2	2134.1	*	1	1800	541	1.	0.0	2134.0	*	2	0400	841	1.	0.0	2134.0
1	0802	242	5.	0.2	2134.1	*	1	1802	542	1.	0.0	2134.0	*	2	0402	842	1.	0.0	2134.0
1	0804	243	5.	0.2	2134.1	*	1	1804	543	1.	0.0	2134.0	*	2	0404	843	1.	0.0	2134.0

1	0806 244	5.	0.2	2134.1	*	1	1806 544	1.	0.0	2134.0	*	2	0406 844	1.	0.0 2134.0
1	0808 245	4.	0.2	2134.1	*	1	1808 545	1.	0.0	2134.0	*	2	0408 845	1.	0.0 2134.0
1	0810 246	4.	0.2	2134.1	*	1	1810 546	1.	0.0	2134.0	*	2	0410 846	1.	0.0 2134.0
1	0812 247	4.	0.2	2134.1	*	1	1812 547	1.	0.0	2134.0	*	2	0412 847	1.	0.0 2134.0
1	0814 248	4.	0.2	2134.1	*	1	1814 548	1.	0.0	2134.0	*	2	0414 848	1.	0.0 2134.0
1	0816 249	3.	0.2	2134.1	*	1	1816 549	1.	0.0	2134.0	*	2	0416 849	1.	0.0 2134.0
1	0818 250	3.	0.2	2134.1	*	1	1818 550	1.	0.0	2134.0	*	2	0418 850	1.	0.0 2134.0
1	0820 251	3.	0.1	2134.1	*	1	1820 551	1.	0.0	2134.0	*	2	0420 851	1.	0.0 2134.0
1	0822 252	3.	0.1	2134.1	*	1	1822 552	1.	0.0	2134.0	*	2	0422 852	1.	0.0 2134.0
1	0824 253	3.	0.1	2134.1	*	1	1824 553	1.	0.0	2134.0	*	2	0424 853	1.	0.0 2134.0
1	0826 254	3.	0.1	2134.1	*	1	1826 554	1.	0.0	2134.0	*	2	0426 854	1.	0.0 2134.0
1	0828 255	2.	0.1	2134.1	*	1	1828 555	1.	0.0	2134.0	*	2	0428 855	1.	0.0 2134.0
1	0830 256	2.	0.1	2134.1	*	1	1830 556	1.	0.0	2134.0	*	2	0430 856	1.	0.0 2134.0
1	0832 257	2.	0.1	2134.1	*	1	1832 557	1.	0.0	2134.0	*	2	0432 857	1.	0.0 2134.0
1	0834 258	2.	0.1	2134.1	*	1	1834 558	1.	0.0	2134.0	*	2	0434 858	1.	0.0 2134.0
1	0836 259	2.	0.1	2134.1	*	1	1836 559	1.	0.0	2134.0	*	2	0436 859	1.	0.0 2134.0
1	0838 260	2.	0.1	2134.1	*	1	1838 560	1.	0.0	2134.0	*	2	0438 860	1.	0.0 2134.0
1	0840 261	2.	0.1	2134.1	*	1	1840 561	1.	0.0	2134.0	*	2	0440 861	1.	0.0 2134.0
1	0842 262	2.	0.1	2134.1	*	1	1842 562	1.	0.0	2134.0	*	2	0442 862	1.	0.0 2134.0
1	0844 263	2.	0.1	2134.1	*	1	1844 563	1.	0.0	2134.0	*	2	0444 863	1.	0.0 2134.0
1	0846 264	2.	0.1	2134.1	*	1	1846 564	1.	0.0	2134.0	*	2	0446 864	1.	0.0 2134.0
1	0848 265	2.	0.1	2134.1	*	1	1848 565	1.	0.0	2134.0	*	2	0448 865	1.	0.0 2134.0
1	0850 266	2.	0.1	2134.0	*	1	1850 566	1.	0.0	2134.0	*	2	0450 866	1.	0.0 2134.0
1	0852 267	1.	0.1	2134.0	*	1	1852 567	1.	0.0	2134.0	*	2	0452 867	1.	0.0 2134.0
1	0854 268	1.	0.1	2134.0	*	1	1854 568	1.	0.0	2134.0	*	2	0454 868	1.	0.0 2134.0
1	0856 269	1.	0.1	2134.0	*	1	1856 569	1.	0.0	2134.0	*	2	0456 869	1.	0.0 2134.0
1	0858 270	1.	0.1	2134.0	*	1	1858 570	1.	0.0	2134.0	*	2	0458 870	1.	0.0 2134.0
1	0900 271	1.	0.1	2134.0	*	1	1900 571	1.	0.0	2134.0	*	2	0500 871	1.	0.0 2134.0
1	0902 272	1.	0.1	2134.0	*	1	1902 572	1.	0.0	2134.0	*	2	0502 872	1.	0.0 2134.0
1	0904 273	1.	0.1	2134.0	*	1	1904 573	1.	0.0	2134.0	*	2	0504 873	1.	0.0 2134.0
1	0906 274	1.	0.1	2134.0	*	1	1906 574	1.	0.0	2134.0	*	2	0506 874	1.	0.0 2134.0
1	0908 275	1.	0.1	2134.0	*	1	1908 575	1.	0.0	2134.0	*	2	0508 875	1.	0.0 2134.0
1	0910 276	1.	0.1	2134.0	*	1	1910 576	1.	0.0	2134.0	*	2	0510 876	1.	0.0 2134.0
1	0912 277	1.	0.1	2134.0	*	1	1912 577	1.	0.0	2134.0	*	2	0512 877	1.	0.0 2134.0
1	0914 278	1.	0.1	2134.0	*	1	1914 578	1.	0.0	2134.0	*	2	0514 878	1.	0.0 2134.0
1	0916 279	1.	0.1	2134.0	*	1	1916 579	1.	0.0	2134.0	*	2	0516 879	1.	0.0 2134.0
1	0918 280	1.	0.1	2134.0	*	1	1918 580	1.	0.0	2134.0	*	2	0518 880	1.	0.0 2134.0
1	0920 281	1.	0.1	2134.0	*	1	1920 581	1.	0.0	2134.0	*	2	0520 881	1.	0.0 2134.0
1	0922 282	1.	0.1	2134.0	*	1	1922 582	1.	0.0	2134.0	*	2	0522 882	1.	0.0 2134.0
1	0924 283	1.	0.1	2134.0	*	1	1924 583	1.	0.0	2134.0	*	2	0524 883	1.	0.0 2134.0
1	0926 284	1.	0.1	2134.0	*	1	1926 584	1.	0.0	2134.0	*	2	0526 884	1.	0.0 2134.0
1	0928 285	1.	0.1	2134.0	*	1	1928 585	1.	0.0	2134.0	*	2	0528 885	1.	0.0 2134.0
1	0930 286	1.	0.1	2134.0	*	1	1930 586	1.	0.0	2134.0	*	2	0530 886	1.	0.0 2134.0
1	0932 287	1.	0.1	2134.0	*	1	1932 587	1.	0.0	2134.0	*	2	0532 887	1.	0.0 2134.0
1	0934 288	1.	0.0	2134.0	*	1	1934 588	1.	0.0	2134.0	*	2	0534 888	1.	0.0 2134.0
1	0936 289	1.	0.0	2134.0	*	1	1936 589	1.	0.0	2134.0	*	2	0536 889	1.	0.0 2134.0
1	0938 290	1.	0.0	2134.0	*	1	1938 590	1.	0.0	2134.0	*	2	0538 890	1.	0.0 2134.0
1	0940 291	1.	0.0	2134.0	*	1	1940 591	1.	0.0	2134.0	*	2	0540 891	1.	0.0 2134.0
1	0942 292	1.	0.0	2134.0	*	1	1942 592	1.	0.0	2134.0	*	2	0542 892	1.	0.0 2134.0
1	0944 293	1.	0.0	2134.0	*	1	1944 593	1.	0.0	2134.0	*	2	0544 893	1.	0.0 2134.0
1	0946 294	1.	0.0	2134.0	*	1	1946 594	1.	0.0	2134.0	*	2	0546 894	1.	0.0 2134.0
1	0948 295	1.	0.0	2134.0	*	1	1948 595	1.	0.0	2134.0	*	2	0548 895	1.	0.0 2134.0
1	0950 296	1.	0.0	2134.0	*	1	1950 596	1.	0.0	2134.0	*	2	0550 896	1.	0.0 2134.0
1	0952 297	1.	0.0	2134.0	*	1	1952 597	1.	0.0	2134.0	*	2	0552 897	1.	0.0 2134.0
1	0954 298	1.	0.0	2134.0	*	1	1954 598	1.	0.0	2134.0	*	2	0554 898	1.	0.0 2134.0
1	0956 299	1.	0.0	2134.0	*	1	1956 599	1.	0.0	2134.0	*	2	0556 899	1.	0.0 2134.0
1	0958 300	1.	0.0	2134.0	*	1	1958 600	1.	0.0	2134.0	*	2	0558 900	1.	0.0 2134.0
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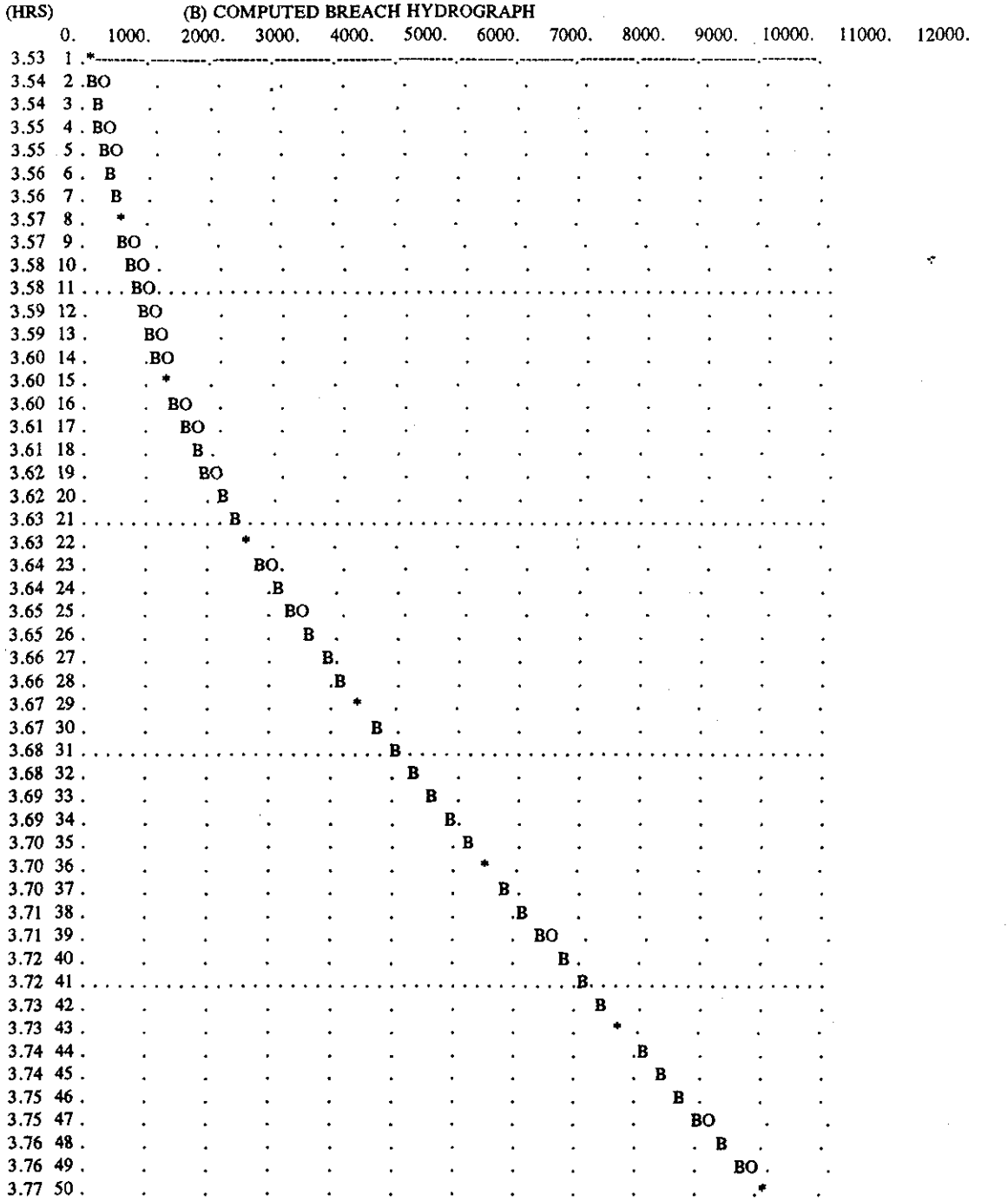
PEAK OUTFLOW IS 12217. AT TIME 3.79 HOURS

THE DAM BREACH HYDROGRAPH WAS DEVELOPED USING A TIME INTERVAL OF 0.005 HOURS DURING BREACH FORMATION.
DOWNSTREAM CALCULATIONS WILL USE A TIME INTERVAL OF 0.033 HOURS.
THIS TABLE COMPARES THE HYDROGRAPH FOR DOWNSTREAM CALCULATIONS WITH THE COMPUTED BREACH HYDROGRAPH.
INTERMEDIATE FLOWS ARE INTERPOLATED FROM END-OF-PERIOD VALUES.

TIME (HOURS)	TIME FROM BEGINNING OF BREACH (HOURS)	INTERPOLATED BREACH HYDROGRAPH (CFS)	-	COMPUTED BREACH HYDROGRAPH (CFS)	=	ERROR (CFS)	ACCUMULATED ERROR (AC-FT)	ACCUMULATED ERROR
3.533	0.000	100.		100.		0.	0.	
3.538	0.005	165.		149.		16.	16.	0.
3.543	0.010	230.		198.		33.	49.	0.
3.548	0.014	295.		245.		50.	99.	0.
3.552	0.019	360.		292.		68.	167.	0.
3.557	0.024	425.		380.		45.	213.	0.
3.562	0.029	490.		469.		22.	234.	0.
3.567	0.033	555.		555.		0.	234.	0.
3.571	0.038	659.		640.		19.	254.	0.
3.576	0.043	763.		722.		41.	294.	0.
3.581	0.048	867.		802.		65.	359.	0.
3.586	0.052	971.		901.		70.	429.	0.
3.590	0.057	1075.		1013.		62.	490.	0.
3.595	0.062	1178.		1142.		37.	527.	0.
3.600	0.067	1282.		1282.		0.	527.	0.
3.605	0.071	1470.		1433.		37.	564.	0.
3.610	0.076	1659.		1594.		64.	628.	0.
3.614	0.081	1847.		1766.		81.	709.	0.
3.619	0.086	2035.		1948.		87.	796.	0.
3.624	0.090	2223.		2155.		68.	864.	0.
3.629	0.095	2412.		2373.		38.	902.	0.
3.633	0.100	2600.		2600.		0.	902.	0.
3.638	0.105	2857.		2835.		23.	925.	0.
3.643	0.110	3115.		3077.		37.	962.	0.
3.648	0.114	3372.		3328.		45.	1007.	0.
3.652	0.119	3630.		3586.		44.	1051.	0.
3.657	0.124	3888.		3852.		36.	1087.	0.
3.662	0.129	4145.		4124.		21.	1108.	0.
3.667	0.133	4403.		4403.		0.	1108.	0.
3.671	0.138	4701.		4688.		14.	1122.	0.
3.676	0.143	5000.		4978.		22.	1144.	0.
3.681	0.148	5299.		5273.		26.	1170.	0.
3.686	0.152	5598.		5573.		25.	1195.	0.
3.690	0.157	5897.		5877.		20.	1215.	0.
3.695	0.162	6195.		6184.		11.	1226.	0.
3.700	0.167	6494.		6494.		0.	1226.	0.
3.705	0.171	6814.		6806.		8.	1234.	0.
3.710	0.176	7134.		7120.		14.	1248.	0.
3.714	0.181	7455.		7435.		20.	1268.	0.
3.719	0.186	7775.		7750.		25.	1293.	1.
3.724	0.190	8095.		8069.		26.	1318.	1.
3.729	0.195	8415.		8403.		13.	1331.	1.
3.733	0.200	8735.		8735.		0.	1331.	1.
3.738	0.205	9072.		9066.		5.	1336.	1.
3.743	0.210	9408.		9395.		13.	1348.	1.
3.748	0.214	9744.		9721.		23.	1371.	1.
3.752	0.219	10080.		10043.		37.	1409.	1.
3.757	0.224	10416.		10393.		23.	1432.	1.
3.762	0.229	10752.		10743.		9.	1441.	1.
3.767	0.233	11088.		11088.		0.	1441.	1.

STATION DAMOUT

TIME (HRS) — (O) INTERPOLATED BREACH HYDROGRAPH — (B) COMPUTED BREACH HYDROGRAPH — (*) POINTS AT NORMAL TIME INTERVAL



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PEAK FLOW    TIME                    MAXIMUM AVERAGE FLOW
                          6-HR      24-HR      72-HR     29.97-HR  (CFS)      (HR)
              (CFS)  11424.     3.80              891.      224.      179.       179.
           (INCHES)    6,683     6.705     6.709     6.709
           (AC-FT)     442.      443.      444.      444.

PEAK STORAGE  TIME                    MAXIMUM AVERAGE STORAGE
                          6-HR      24-HR      72-HR     29.97-HR  (AC-FT)    (HR)
   184.     3.67            23.       6.        5.        5.

PEAK STAGE   TIME                     MAXIMUM AVERAGE STAGE
                          6-HR      24-HR      72-HR     29.97-HR  (FEET)     (HR)
 2158.60    3.67          2138.85   2135.25   2135.00   2134.98

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

 72 KP      PLAN  3 FOR STATION   DAMOUT

 73 KO       OUTPUT CONTROL VARIABLES
               IPRNT        1  PRINT CONTROL
               IPLOT        0  PLOT CONTROL
               QSCAL        0.  HYDROGRAPH PLOT SCALE

         HYDROGRAPH ROUTING DATA

 60 RS       STORAGE ROUTING
               NSTPS        1  NUMBER OF SUBREACHES
               ITYP      STOR  TYPE OF INITIAL CONDITION
              RSVRIC     0.00  INITIAL CONDITION
                 X       0.00 WORKING R AND D COEFFICIENT

 61 SA          AREA      1.9      2.3      5.8      6.8      9.1     10.2     11.0     11.3     11.6     11.9
                      12.1     12.3     12.8     13.3     13.8

 63 SE       ELEVATION   2134.00  2136.00  2140.00  2144.00  2150.00  2153.00  2155.00  2156.00  2157.00  2158.00
                    2159.00  2160.00  2161.00  2162.00  2163.00

 65 SQ       DISCHARGE      0.      10.      14.      19.      23.      29.      31.     295.     823.    1539.
                     2423.    3450.    4577.    5773.    7015.

 67 ST       TOP OF DAM
               TOPEL    2163.50  ELEVATION AT TOP OF DAM
              DAMWID     300.00  DAM WIDTH
               COQD      3.08  WEIR COEFFICIENT
               EXPD      1.50  EXPONENT OF HEAD

 74 SB       BREACH DATA
               ELBM    2134.00  ELEVATION AT BOTTOM OF BREACH
              BRWID      40.00  WIDTH OF BREACH BOTTOM
                 Z      0.00  BREACH SIDE SLOPE
              TFAIL      1.00  TIME FOR BREACH TO DEVELOP
             FAILEL    2155.00  W.S. ELEVATION TO TRIGGER FAILURE

                                   ***

                        COMPUTED STORAGE-ELEVATION DATA

      STORAGE     0.00     4.21    19.93    45.05    92.37   121.24   142.40   153.55   165.02   176.77
    ELEVATION  2134.00  2136.00  2140.00  2144.00  2150.00  2153.00  2155.00  2156.00  2157.00  2158.00
```

STORAGE	188.75	200.95	213.51	226.57	240.13
ELEVATION	2159.00	2160.00	2161.00	2162.00	2163.00

BEGIN DAM FAILURE AT 3.53 HOURS

****

HYDROGRAPH AT STATION DAMOUT
PLAN 3, RATIO = 0.50

****

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2134.0	*	1	1000	301	0.	0.0	2134.0	*	1	2000	601	0.	0.0	2134.0			
1	0002	2	0.	0.0	2134.0	*	1	1002	302	0.	0.0	2134.0	*	1	2002	602	0.	0.0	2134.0			
1	0004	3	0.	0.0	2134.0	*	1	1004	303	0.	0.0	2134.0	*	1	2004	603	0.	0.0	2134.0			
1	0006	4	0.	0.0	2134.0	*	1	1006	304	0.	0.0	2134.0	*	1	2006	604	0.	0.0	2134.0			
1	0008	5	0.	0.0	2134.0	*	1	1008	305	0.	0.0	2134.0	*	1	2008	605	0.	0.0	2134.0			
1	0010	6	0.	0.0	2134.0	*	1	1010	306	0.	0.0	2134.0	*	1	2010	606	0.	0.0	2134.0			
1	0012	7	0.	0.0	2134.0	*	1	1012	307	0.	0.0	2134.0	*	1	2012	607	0.	0.0	2134.0			
1	0014	8	0.	0.0	2134.0	*	1	1014	308	0.	0.0	2134.0	*	1	2014	608	0.	0.0	2134.0			
1	0016	9	0.	0.0	2134.0	*	1	1016	309	0.	0.0	2134.0	*	1	2016	609	0.	0.0	2134.0			
1	0018	10	0.	0.0	2134.0	*	1	1018	310	0.	0.0	2134.0	*	1	2018	610	0.	0.0	2134.0			
1	0020	11	0.	0.0	2134.0	*	1	1020	311	0.	0.0	2134.0	*	1	2020	611	0.	0.0	2134.0			
1	0022	12	0.	0.1	2134.0	*	1	1022	312	0.	0.0	2134.0	*	1	2022	612	0.	0.0	2134.0			
1	0024	13	0.	0.1	2134.0	*	1	1024	313	0.	0.0	2134.0	*	1	2024	613	0.	0.0	2134.0			
1	0026	14	0.	0.1	2134.0	*	1	1026	314	0.	0.0	2134.0	*	1	2026	614	0.	0.0	2134.0			
1	0028	15	0.	0.1	2134.1	*	1	1028	315	0.	0.0	2134.0	*	1	2028	615	0.	0.0	2134.0			
1	0030	16	0.	0.1	2134.1	*	1	1030	316	0.	0.0	2134.0	*	1	2030	616	0.	0.0	2134.0			
1	0032	17	0.	0.2	2134.1	*	1	1032	317	0.	0.0	2134.0	*	1	2032	617	0.	0.0	2134.0			
1	0034	18	0.	0.2	2134.1	*	1	1034	318	0.	0.0	2134.0	*	1	2034	618	0.	0.0	2134.0			
1	0036	19	1.	0.2	2134.1	*	1	1036	319	0.	0.0	2134.0	*	1	2036	619	0.	0.0	2134.0			
1	0038	20	1.	0.3	2134.1	*	1	1038	320	0.	0.0	2134.0	*	1	2038	620	0.	0.0	2134.0			
1	0040	21	1.	0.3	2134.2	*	1	1040	321	0.	0.0	2134.0	*	1	2040	621	0.	0.0	2134.0			
1	0042	22	1.	0.3	2134.2	*	1	1042	322	0.	0.0	2134.0	*	1	2042	622	0.	0.0	2134.0			
1	0044	23	1.	0.4	2134.2	*	1	1044	323	0.	0.0	2134.0	*	1	2044	623	0.	0.0	2134.0			
1	0046	24	1.	0.4	2134.2	*	1	1046	324	0.	0.0	2134.0	*	1	2046	624	0.	0.0	2134.0			
1	0048	25	1.	0.5	2134.3	*	1	1048	325	0.	0.0	2134.0	*	1	2048	625	0.	0.0	2134.0			
1	0050	26	1.	0.5	2134.3	*	1	1050	326	0.	0.0	2134.0	*	1	2050	626	0.	0.0	2134.0			
1	0052	27	1.	0.6	2134.3	*	1	1052	327	0.	0.0	2134.0	*	1	2052	627	0.	0.0	2134.0			
1	0054	28	2.	0.7	2134.3	*	1	1054	328	0.	0.0	2134.0	*	1	2054	628	0.	0.0	2134.0			
1	0056	29	2.	0.7	2134.4	*	1	1056	329	0.	0.0	2134.0	*	1	2056	629	0.	0.0	2134.0			
1	0058	30	2.	0.8	2134.4	*	1	1058	330	0.	0.0	2134.0	*	1	2058	630	0.	0.0	2134.0			
1	0100	31	2.	0.8	2134.4	*	1	1100	331	0.	0.0	2134.0	*	1	2100	631	0.	0.0	2134.0			
1	0102	32	2.	0.9	2134.5	*	1	1102	332	0.	0.0	2134.0	*	1	2102	632	0.	0.0	2134.0			
1	0104	33	2.	1.0	2134.5	*	1	1104	333	0.	0.0	2134.0	*	1	2104	633	0.	0.0	2134.0			
1	0106	34	3.	1.1	2134.5	*	1	1106	334	0.	0.0	2134.0	*	1	2106	634	0.	0.0	2134.0			
1	0108	35	3.	1.1	2134.6	*	1	1108	335	0.	0.0	2134.0	*	1	2108	635	0.	0.0	2134.0			
1	0110	36	3.	1.2	2134.6	*	1	1110	336	0.	0.0	2134.0	*	1	2110	636	0.	0.0	2134.0			
1	0112	37	3.	1.3	2134.7	*	1	1112	337	0.	0.0	2134.0	*	1	2112	637	0.	0.0	2134.0			
1	0114	38	3.	1.4	2134.7	*	1	1114	338	0.	0.0	2134.0	*	1	2114	638	0.	0.0	2134.0			
1	0116	39	3.	1.4	2134.7	*	1	1116	339	0.	0.0	2134.0	*	1	2116	639	0.	0.0	2134.0			
1	0118	40	4.	1.5	2134.8	*	1	1118	340	0.	0.0	2134.0	*	1	2118	640	0.	0.0	2134.0			
1	0120	41	4.	1.6	2134.8	*	1	1120	341	0.	0.0	2134.0	*	1	2120	641	0.	0.0	2134.0			
1	0122	42	4.	1.7	2134.9	*	1	1122	342	0.	0.0	2134.0	*	1	2122	642	0.	0.0	2134.0			
1	0124	43	4.	1.8	2134.9	*	1	1124	343	0.	0.0	2134.0	*	1	2124	643	0.	0.0	2134.0			
1	0126	44	5.	1.9	2135.0	*	1	1126	344	0.	0.0	2134.0	*	1	2126	644	0.	0.0	2134.0			
1	0128	45	5.	2.0	2135.0	*	1	1128	345	0.	0.0	2134.0	*	1	2128	645	0.	0.0	2134.0			
1	0130	46	5.	2.2	2135.1	*	1	1130	346	0.	0.0	2134.0	*	1	2130	646	0.	0.0	2134.0			
1	0132	47	5.	2.3	2135.1	*	1	1132	347	0.	0.0	2134.0	*	1	2132	647	0.	0.0	2134.0			
1	0134	48	6.	2.4	2135.2	*	1	1134	348	0.	0.0	2134.0	*	1	2134	648	0.	0.0	2134.0			

1	0136	49	6.	2.5	2135.2	*	1	1136 349	0.	0.0	2134.0	*	1	2136 649	0.	0.0	2134.0
1	0138	50	6.	2.6	2135.3	*	1	1138 350	0.	0.0	2134.0	*	1	2138 650	0.	0.0	2134.0
1	0140	51	6.	2.8	2135.4	*	1	1140 351	0.	0.0	2134.0	*	1	2140 651	0.	0.0	2134.0
1	0142	52	7.	2.9	2135.4	*	1	1142 352	0.	0.0	2134.0	*	1	2142 652	0.	0.0	2134.0
1	0144	53	7.	3.0	2135.5	*	1	1144 353	0.	0.0	2134.0	*	1	2144 653	0.	0.0	2134.0
1	0146	54	7.	3.2	2135.5	*	1	1146 354	0.	0.0	2134.0	*	1	2146 654	0.	0.0	2134.0
1	0148	55	8.	3.3	2135.6	*	1	1148 355	0.	0.0	2134.0	*	1	2148 655	0.	0.0	2134.0
1	0150	56	8.	3.4	2135.7	*	1	1150 356	0.	0.0	2134.0	*	1	2150 656	0.	0.0	2134.0
1	0152	57	8.	3.6	2135.7	*	1	1152 357	0.	0.0	2134.0	*	1	2152 657	0.	0.0	2134.0
1	0154	58	8.	3.7	2135.8	*	1	1154 358	0.	0.0	2134.0	*	1	2154 658	0.	0.0	2134.0
1	0156	59	9.	3.8	2135.8	*	1	1156 359	0.	0.0	2134.0	*	1	2156 659	0.	0.0	2134.0
1	0158	60	9.	4.0	2135.9	*	1	1158 360	0.	0.0	2134.0	*	1	2158 660	0.	0.0	2134.0
1	0200	61	9.	4.1	2136.0	*	1	1200 361	0.	0.0	2134.0	*	1	2200 661	0.	0.0	2134.0
1	0202	62	10.	4.3	2136.0	*	1	1202 362	0.	0.0	2134.0	*	1	2202 662	0.	0.0	2134.0
1	0204	63	10.	4.4	2136.1	*	1	1204 363	0.	0.0	2134.0	*	1	2204 663	0.	0.0	2134.0
1	0206	64	10.	4.6	2136.2	*	1	1206 364	0.	0.0	2134.0	*	1	2206 664	0.	0.0	2134.0
1	0208	65	10.	4.8	2136.2	*	1	1208 365	0.	0.0	2134.0	*	1	2208 665	0.	0.0	2134.0
1	0210	66	10.	4.9	2136.3	*	1	1210 366	0.	0.0	2134.0	*	1	2210 666	0.	0.0	2134.0
1	0212	67	10.	5.2	2136.4	*	1	1212 367	0.	0.0	2134.0	*	1	2212 667	0.	0.0	2134.0
1	0214	68	10.	5.4	2136.5	*	1	1214 368	0.	0.0	2134.0	*	1	2214 668	0.	0.0	2134.0
1	0216	69	10.	5.7	2136.6	*	1	1216 369	0.	0.0	2134.0	*	1	2216 669	0.	0.0	2134.0
1	0218	70	10.	6.0	2136.7	*	1	1218 370	0.	0.0	2134.0	*	1	2218 670	0.	0.0	2134.0
1	0220	71	10.	6.4	2136.8	*	1	1220 371	0.	0.0	2134.0	*	1	2220 671	0.	0.0	2134.0
1	0222	72	10.	6.8	2137.0	*	1	1222 372	0.	0.0	2134.0	*	1	2222 672	0.	0.0	2134.0
1	0224	73	11.	7.2	2137.1	*	1	1224 373	0.	0.0	2134.0	*	1	2224 673	0.	0.0	2134.0
1	0226	74	11.	7.8	2137.3	*	1	1226 374	0.	0.0	2134.0	*	1	2226 674	0.	0.0	2134.0
1	0228	75	11.	8.3	2137.4	*	1	1228 375	0.	0.0	2134.0	*	1	2228 675	0.	0.0	2134.0
1	0230	76	11.	9.0	2137.6	*	1	1230 376	0.	0.0	2134.0	*	1	2230 676	0.	0.0	2134.0
1	0232	77	11.	9.6	2137.8	*	1	1232 377	0.	0.0	2134.0	*	1	2232 677	0.	0.0	2134.0
1	0234	78	12.	10.4	2138.0	*	1	1234 378	0.	0.0	2134.0	*	1	2234 678	0.	0.0	2134.0
1	0236	79	12.	11.2	2138.2	*	1	1236 379	0.	0.0	2134.0	*	1	2236 679	0.	0.0	2134.0
1	0238	80	12.	12.0	2138.4	*	1	1238 380	0.	0.0	2134.0	*	1	2238 680	0.	0.0	2134.0
1	0240	81	12.	12.9	2138.6	*	1	1240 381	0.	0.0	2134.0	*	1	2240 681	0.	0.0	2134.0
1	0242	82	12.	13.8	2138.8	*	1	1242 382	0.	0.0	2134.0	*	1	2242 682	0.	0.0	2134.0
1	0244	83	13.	14.7	2139.0	*	1	1244 383	0.	0.0	2134.0	*	1	2244 683	0.	0.0	2134.0
1	0246	84	13.	15.7	2139.2	*	1	1246 384	0.	0.0	2134.0	*	1	2246 684	0.	0.0	2134.0
1	0248	85	13.	16.7	2139.4	*	1	1248 385	0.	0.0	2134.0	*	1	2248 685	0.	0.0	2134.0
1	0250	86	13.	17.8	2139.6	*	1	1250 386	0.	0.0	2134.0	*	1	2250 686	0.	0.0	2134.0
1	0252	87	13.	18.8	2139.8	*	1	1252 387	0.	0.0	2134.0	*	1	2252 687	0.	0.0	2134.0
1	0254	88	14.	19.9	2140.0	*	1	1254 388	0.	0.0	2134.0	*	1	2254 688	0.	0.0	2134.0
1	0256	89	14.	21.1	2140.2	*	1	1256 389	0.	0.0	2134.0	*	1	2256 689	0.	0.0	2134.0
1	0258	90	14.	22.2	2140.4	*	1	1258 390	0.	0.0	2134.0	*	1	2258 690	0.	0.0	2134.0
1	0300	91	14.	23.4	2140.6	*	1	1300 391	0.	0.0	2134.0	*	1	2300 691	0.	0.0	2134.0
1	0302	92	15.	24.6	2140.8	*	1	1302 392	0.	0.0	2134.0	*	1	2302 692	0.	0.0	2134.0
1	0304	93	15.	25.9	2141.0	*	1	1304 393	0.	0.0	2134.0	*	1	2304 693	0.	0.0	2134.0
1	0306	94	15.	27.4	2141.3	*	1	1306 394	0.	0.0	2134.0	*	1	2306 694	0.	0.0	2134.0
1	0308	95	16.	29.4	2141.6	*	1	1308 395	0.	0.0	2134.0	*	1	2308 695	0.	0.0	2134.0
1	0310	96	16.	32.0	2142.0	*	1	1310 396	0.	0.0	2134.0	*	1	2310 696	0.	0.0	2134.0
1	0312	97	17.	35.5	2142.6	*	1	1312 397	0.	0.0	2134.0	*	1	2312 697	0.	0.0	2134.0
1	0314	98	18.	40.2	2143.3	*	1	1314 398	0.	0.0	2134.0	*	1	2314 698	0.	0.0	2134.0
1	0316	99	19.	46.4	2144.2	*	1	1316 399	0.	0.0	2134.0	*	1	2316 699	0.	0.0	2134.0
1	0318	100	20.	54.2	2145.3	*	1	1318 400	0.	0.0	2134.0	*	1	2318 700	0.	0.0	2134.0
1	0320	101	21.	63.8	2146.6	*	1	1320 401	0.	0.0	2134.0	*	1	2320 701	0.	0.0	2134.0
1	0322	102	22.	75.1	2148.0	*	1	1322 402	0.	0.0	2134.0	*	1	2322 702	0.	0.0	2134.0
1	0324	103	23.	87.7	2149.5	*	1	1324 403	0.	0.0	2134.0	*	1	2324 703	0.	0.0	2134.0
1	0326	104	25.	101.5	2151.0	*	1	1326 404	0.	0.0	2134.0	*	1	2326 704	0.	0.0	2134.0
1	0328	105	28.	115.9	2152.5	*	1	1328 405	0.	0.0	2134.0	*	1	2328 705	0.	0.0	2134.0
1	0330	106	30.	130.6	2153.9	*	1	1330 406	0.	0.0	2134.0	*	1	2330 706	0.	0.0	2134.0
1	0332	107	100.	145.3	2155.3	*	1	1332 407	0.	0.0	2134.0	*	1	2332 707	0.	0.0	2134.0
1	0334	108	558.	159.2	2156.5	*	1	1334 408	0.	0.0	2134.0	*	1	2334 708	0.	0.0	2134.0
1	0336	109	1205.	171.3	2157.5	*	1	1336 409	0.	0.0	2134.0	*	1	2336 709	0.	0.0	2134.0
1	0338	110	1857.	181.1	2158.4	*	1	1338 410	0.	0.0	2134.0	*	1	2338 710	0.	0.0	2134.0
1	0340	111	2415.	188.6	2159.0	*	1	1340 411	0.	0.0	2134.0	*	1	2340 711	0.	0.0	2134.0
1	0342	112	2905.	194.2	2159.5	*	1	1342 412	0.	0.0	2134.0	*	1	2342 712	0.	0.0	2134.0
1	0344	113	3285.	198.0	2159.8	*	1	1344 413	0.	0.0	2134.0	*	1	2344 713	0.	0.0	2134.0

1	0346	114	3570.	200.3	2159.9	*	1	1346	414	0.	0.0	2134.0	*	1	2346 714	0.	0.0	2134.0
1	0348	115	3780.	201.2	2160.0	*	1	1348	415	0.	0.0	2134.0	*	1	2348 715	0.	0.0	2134.0
1	0350	116	3925.	201.1	2160.0	*	1	1350	416	0.	0.0	2134.0	*	1	2350 716	0.	0.0	2134.0
1	0352	117	4023.	200.1	2159.9	*	1	1352	417	0.	0.0	2134.0	*	1	2352 717	0.	0.0	2134.0
1	0354	118	4086.	198.3	2159.8	*	1	1354	418	0.	0.0	2134.0	*	1	2354 718	0.	0.0	2134.0
1	0356	119	4120.	195.9	2159.6	*	1	1356	419	0.	0.0	2134.0	*	1	2356 719	0.	0.0	2134.0
1	0358	120	4133.	193.0	2159.3	*	1	1358	420	0.	0.0	2134.0	*	1	2358 720	0.	0.0	2134.0
1	0400	121	4130.	189.6	2159.1	*	1	1400	421	0.	0.0	2134.0	*	2	0000 721	0.	0.0	2134.0
1	0402	122	4149.	185.7	2158.7	*	1	1402	422	0.	0.0	2134.0	*	2	0002 722	0.	0.0	2134.0
1	0404	123	4163.	181.5	2158.4	*	1	1404	423	0.	0.0	2134.0	*	2	0004 723	0.	0.0	2134.0
1	0406	124	4167.	176.8	2158.0	*	1	1406	424	0.	0.0	2134.0	*	2	0006 724	0.	0.0	2134.0
1	0408	125	4219.	171.7	2157.6	*	1	1408	425	0.	0.0	2134.0	*	2	0008 725	0.	0.0	2134.0
1	0410	126	4252.	166.2	2157.1	*	1	1410	426	0.	0.0	2134.0	*	2	0010 726	0.	0.0	2134.0
1	0412	127	4337.	160.1	2156.6	*	1	1412	427	0.	0.0	2134.0	*	2	0012 727	0.	0.0	2134.0
1	0414	128	4408.	153.6	2156.0	*	1	1414	428	0.	0.0	2134.0	*	2	0014 728	0.	0.0	2134.0
1	0416	129	4599.	146.3	2155.4	*	1	1416	429	0.	0.0	2134.0	*	2	0016 729	0.	0.0	2134.0
1	0418	130	4836.	138.2	2154.6	*	1	1418	430	0.	0.0	2134.0	*	2	0018 730	0.	0.0	2134.0
1	0420	131	5112.	129.0	2153.8	*	1	1420	431	0.	0.0	2134.0	*	2	0020 731	0.	0.0	2134.0
1	0422	132	5323.	118.9	2152.8	*	1	1422	432	0.	0.0	2134.0	*	2	0022 732	0.	0.0	2134.0
1	0424	133	5465.	108.1	2151.7	*	1	1424	433	0.	0.0	2134.0	*	2	0024 733	0.	0.0	2134.0
1	0426	134	5536.	96.7	2150.5	*	1	1426	434	0.	0.0	2134.0	*	2	0026 734	0.	0.0	2134.0
1	0428	135	5536.	84.9	2149.2	*	1	1428	435	0.	0.0	2134.0	*	2	0028 735	0.	0.0	2134.0
1	0430	136	5462.	73.1	2147.8	*	1	1430	436	0.	0.0	2134.0	*	2	0030 736	0.	0.0	2134.0
1	0432	137	5317.	61.4	2146.3	*	1	1432	437	0.	0.0	2134.0	*	2	0032 737	0.	0.0	2134.0
1	0434	138	4421.	50.9	2144.8	*	1	1434	438	0.	0.0	2134.0	*	2	0034 738	0.	0.0	2134.0
1	0436	139	3696.	42.5	2143.6	*	1	1436	439	0.	0.0	2134.0	*	2	0036 739	0.	0.0	2134.0
1	0438	140	3117.	35.7	2142.6	*	1	1438	440	0.	0.0	2134.0	*	2	0038 740	0.	0.0	2134.0
1	0440	141	2656.	30.2	2141.7	*	1	1440	441	0.	0.0	2134.0	*	2	0040 741	0.	0.0	2134.0
1	0442	142	2286.	25.7	2141.0	*	1	1442	442	0.	0.0	2134.0	*	2	0042 742	0.	0.0	2134.0
1	0444	143	1987.	22.0	2140.4	*	1	1444	443	0.	0.0	2134.0	*	2	0044 743	0.	0.0	2134.0
1	0446	144	1743.	18.9	2139.8	*	1	1446	444	0.	0.0	2134.0	*	2	0046 744	0.	0.0	2134.0
1	0448	145	1532.	16.3	2139.3	*	1	1448	445	0.	0.0	2134.0	*	2	0048 745	0.	0.0	2134.0
1	0450	146	1348.	14.2	2138.9	*	1	1450	446	0.	0.0	2134.0	*	2	0050 746	0.	0.0	2134.0
1	0452	147	1190.	12.4	2138.5	*	1	1452	447	0.	0.0	2134.0	*	2	0052 747	0.	0.0	2134.0
1	0454	148	1055.	10.9	2138.2	*	1	1454	448	0.	0.0	2134.0	*	2	0054 748	0.	0.0	2134.0
1	0456	149	942.	9.8	2137.8	*	1	1456	449	0.	0.0	2134.0	*	2	0056 749	0.	0.0	2134.0
1	0458	150	846.	8.8	2137.6	*	1	1458	450	0.	0.0	2134.0	*	2	0058 750	0.	0.0	2134.0
1	0500	151	765.	8.0	2137.3	*	1	1500	451	0.	0.0	2134.0	*	2	0100 751	0.	0.0	2134.0
1	0502	152	698.	7.3	2137.1	*	1	1502	452	0.	0.0	2134.0	*	2	0102 752	0.	0.0	2134.0
1	0504	153	641.	6.8	2137.0	*	1	1504	453	0.	0.0	2134.0	*	2	0104 753	0.	0.0	2134.0
1	0506	154	593.	6.3	2136.8	*	1	1506	454	0.	0.0	2134.0	*	2	0106 754	0.	0.0	2134.0
1	0508	155	552.	6.0	2136.7	*	1	1508	455	0.	0.0	2134.0	*	2	0108 755	0.	0.0	2134.0
1	0510	156	516.	5.6	2136.6	*	1	1510	456	0.	0.0	2134.0	*	2	0110 756	0.	0.0	2134.0
1	0512	157	484.	5.3	2136.5	*	1	1512	457	0.	0.0	2134.0	*	2	0112 757	0.	0.0	2134.0
1	0514	158	455.	5.1	2136.4	*	1	1514	458	0.	0.0	2134.0	*	2	0114 758	0.	0.0	2134.0
1	0516	159	428.	4.8	2136.3	*	1	1516	459	0.	0.0	2134.0	*	2	0116 759	0.	0.0	2134.0
1	0518	160	402.	4.6	2136.2	*	1	1518	460	0.	0.0	2134.0	*	2	0118 760	0.	0.0	2134.0
1	0520	161	377.	4.4	2136.1	*	1	1520	461	0.	0.0	2134.0	*	2	0120 761	0.	0.0	2134.0
1	0522	162	354.	4.2	2136.0	*	1	1522	462	0.	0.0	2134.0	*	2	0122 762	0.	0.0	2134.0
1	0524	163	332.	4.0	2135.9	*	1	1524	463	0.	0.0	2134.0	*	2	0124 763	0.	0.0	2134.0
1	0526	164	312.	3.8	2135.8	*	1	1526	464	0.	0.0	2134.0	*	2	0126 764	0.	0.0	2134.0
1	0528	165	293.	3.6	2135.7	*	1	1528	465	0.	0.0	2134.0	*	2	0128 765	0.	0.0	2134.0
1	0530	166	275.	3.5	2135.7	*	1	1530	466	0.	0.0	2134.0	*	2	0130 766	0.	0.0	2134.0
1	0532	167	258.	3.3	2135.6	*	1	1532	467	0.	0.0	2134.0	*	2	0132 767	0.	0.0	2134.0
1	0534	168	242.	3.2	2135.5	*	1	1534	468	0.	0.0	2134.0	*	2	0134 768	0.	0.0	2134.0
1	0536	169	228.	3.0	2135.5	*	1	1536	469	0.	0.0	2134.0	*	2	0136 769	0.	0.0	2134.0
1	0538	170	215.	2.9	2135.4	*	1	1538	470	0.	0.0	2134.0	*	2	0138 770	0.	0.0	2134.0
1	0540	171	203.	2.8	2135.4	*	1	1540	471	0.	0.0	2134.0	*	2	0140 771	0.	0.0	2134.0
1	0542	172	191.	2.7	2135.3	*	1	1542	472	0.	0.0	2134.0	*	2	0142 772	0.	0.0	2134.0
1	0544	173	181.	2.6	2135.3	*	1	1544	473	0.	0.0	2134.0	*	2	0144 773	0.	0.0	2134.0
1	0546	174	171.	2.5	2135.2	*	1	1546	474	0.	0.0	2134.0	*	2	0146 774	0.	0.0	2134.0
1	0548	175	161.	2.4	2135.2	*	1	1548	475	0.	0.0	2134.0	*	2	0148 775	0.	0.0	2134.0
1	0550	176	152.	2.3	2135.1	*	1	1550	476	0.	0.0	2134.0	*	2	0150 776	0.	0.0	2134.0
1	0552	177	144.	2.2	2135.1	*	1	1552	477	0.	0.0	2134.0	*	2	0152 777	0.	0.0	2134.0
1	0554	178	136.	2.1	2135.0	*	1	1554	478	0.	0.0	2134.0	*	2	0154 778	0.	0.0	2134.0

1	0556	179	129.	2.0	2135.0	*	1	1556	479	0.	0.0	2134.0	*	2	0156 779	0.	0.0	2134.0
1	0558	180	122.	1.9	2135.0	*	1	1558	480	0.	0.0	2134.0	*	2	0158 780	0.	0.0	2134.0
1	0600	181	116.	1.9	2134.9	*	1	1600	481	0.	0.0	2134.0	*	2	0200 781	0.	0.0	2134.0
1	0602	182	110.	1.8	2134.9	*	1	1602	482	0.	0.0	2134.0	*	2	0202 782	0.	0.0	2134.0
1	0604	183	105.	1.7	2134.9	*	1	1604	483	0.	0.0	2134.0	*	2	0204 783	0.	0.0	2134.0
1	0606	184	100.	1.7	2134.8	*	1	1606	484	0.	0.0	2134.0	*	2	0206 784	0.	0.0	2134.0
1	0608	185	96.	1.6	2134.8	*	1	1608	485	0.	0.0	2134.0	*	2	0208 785	0.	0.0	2134.0
1	0610	186	91.	1.6	2134.8	*	1	1610	486	0.	0.0	2134.0	*	2	0210 786	0.	0.0	2134.0
1	0612	187	88.	1.5	2134.8	*	1	1612	487	0.	0.0	2134.0	*	2	0212 787	0.	0.0	2134.0
1	0614	188	84.	1.5	2134.8	*	1	1614	488	0.	0.0	2134.0	*	2	0214 788	0.	0.0	2134.0
1	0616	189	80.	1.4	2134.7	*	1	1616	489	0.	0.0	2134.0	*	2	0216 789	0.	0.0	2134.0
1	0618	190	76.	1.4	2134.7	*	1	1618	490	0.	0.0	2134.0	*	2	0218 790	0.	0.0	2134.0
1	0620	191	73.	1.3	2134.7	*	1	1620	491	0.	0.0	2134.0	*	2	0220 791	0.	0.0	2134.0
1	0622	192	69.	1.3	2134.7	*	1	1622	492	0.	0.0	2134.0	*	2	0222 792	0.	0.0	2134.0
1	0624	193	66.	1.3	2134.6	*	1	1624	493	0.	0.0	2134.0	*	2	0224 793	0.	0.0	2134.0
1	0626	194	63.	1.2	2134.6	*	1	1626	494	0.	0.0	2134.0	*	2	0226 794	0.	0.0	2134.0
1	0628	195	59.	1.2	2134.6	*	1	1628	495	0.	0.0	2134.0	*	2	0228 795	0.	0.0	2134.0
1	0630	196	56.	1.1	2134.6	*	1	1630	496	0.	0.0	2134.0	*	2	0230 796	0.	0.0	2134.0
1	0632	197	53.	1.1	2134.6	*	1	1632	497	0.	0.0	2134.0	*	2	0232 797	0.	0.0	2134.0
1	0634	198	50.	1.0	2134.5	*	1	1634	498	0.	0.0	2134.0	*	2	0234 798	0.	0.0	2134.0
1	0636	199	47.	1.0	2134.5	*	1	1636	499	0.	0.0	2134.0	*	2	0236 799	0.	0.0	2134.0
1	0638	200	45.	1.0	2134.5	*	1	1638	500	0.	0.0	2134.0	*	2	0238 800	0.	0.0	2134.0
1	0640	201	42.	0.9	2134.5	*	1	1640	501	0.	0.0	2134.0	*	2	0240 801	0.	0.0	2134.0
1	0642	202	40.	0.9	2134.5	*	1	1642	502	0.	0.0	2134.0	*	2	0242 802	0.	0.0	2134.0
1	0644	203	38.	0.8	2134.4	*	1	1644	503	0.	0.0	2134.0	*	2	0244 803	0.	0.0	2134.0
1	0646	204	36.	0.8	2134.4	*	1	1646	504	0.	0.0	2134.0	*	2	0246 804	0.	0.0	2134.0
1	0648	205	34.	0.8	2134.4	*	1	1648	505	0.	0.0	2134.0	*	2	0248 805	0.	0.0	2134.0
1	0650	206	32.	0.8	2134.4	*	1	1650	506	0.	0.0	2134.0	*	2	0250 806	0.	0.0	2134.0
1	0652	207	31.	0.7	2134.4	*	1	1652	507	0.	0.0	2134.0	*	2	0252 807	0.	0.0	2134.0
1	0654	208	29.	0.7	2134.4	*	1	1654	508	0.	0.0	2134.0	*	2	0254 808	0.	0.0	2134.0
1	0656	209	28.	0.7	2134.4	*	1	1656	509	0.	0.0	2134.0	*	2	0256 809	0.	0.0	2134.0
1	0658	210	27.	0.7	2134.3	*	1	1658	510	0.	0.0	2134.0	*	2	0258 810	0.	0.0	2134.0
1	0700	211	25.	0.6	2134.3	*	1	1700	511	0.	0.0	2134.0	*	2	0300 811	0.	0.0	2134.0
1	0702	212	24.	0.6	2134.3	*	1	1702	512	0.	0.0	2134.0	*	2	0302 812	0.	0.0	2134.0
1	0704	213	23.	0.6	2134.3	*	1	1704	513	0.	0.0	2134.0	*	2	0304 813	0.	0.0	2134.0
1	0706	214	22.	0.6	2134.3	*	1	1706	514	0.	0.0	2134.0	*	2	0306 814	0.	0.0	2134.0
1	0708	215	21.	0.6	2134.3	*	1	1708	515	0.	0.0	2134.0	*	2	0308 815	0.	0.0	2134.0
1	0710	216	20.	0.5	2134.3	*	1	1710	516	0.	0.0	2134.0	*	2	0310 816	0.	0.0	2134.0
1	0712	217	19.	0.5	2134.3	*	1	1712	517	0.	0.0	2134.0	*	2	0312 817	0.	0.0	2134.0
1	0714	218	18.	0.5	2134.3	*	1	1714	518	0.	0.0	2134.0	*	2	0314 818	0.	0.0	2134.0
1	0716	219	17.	0.5	2134.3	*	1	1716	519	0.	0.0	2134.0	*	2	0316 819	0.	0.0	2134.0
1	0718	220	16.	0.5	2134.2	*	1	1718	520	0.	0.0	2134.0	*	2	0318 820	0.	0.0	2134.0
1	0720	221	15.	0.5	2134.2	*	1	1720	521	0.	0.0	2134.0	*	2	0320 821	0.	0.0	2134.0
1	0722	222	15.	0.4	2134.2	*	1	1722	522	0.	0.0	2134.0	*	2	0322 822	0.	0.0	2134.0
1	0724	223	14.	0.4	2134.2	*	1	1724	523	0.	0.0	2134.0	*	2	0324 823	0.	0.0	2134.0
1	0726	224	13.	0.4	2134.2	*	1	1726	524	0.	0.0	2134.0	*	2	0326 824	0.	0.0	2134.0
1	0728	225	13.	0.4	2134.2	*	1	1728	525	0.	0.0	2134.0	*	2	0328 825	0.	0.0	2134.0
1	0730	226	12.	0.4	2134.2	*	1	1730	526	0.	0.0	2134.0	*	2	0330 826	0.	0.0	2134.0
1	0732	227	11.	0.4	2134.2	*	1	1732	527	0.	0.0	2134.0	*	2	0332 827	0.	0.0	2134.0
1	0734	228	11.	0.4	2134.2	*	1	1734	528	0.	0.0	2134.0	*	2	0334 828	0.	0.0	2134.0
1	0736	229	10.	0.3	2134.2	*	1	1736	529	0.	0.0	2134.0	*	2	0336 829	0.	0.0	2134.0
1	0738	230	10.	0.3	2134.2	*	1	1738	530	0.	0.0	2134.0	*	2	0338 830	0.	0.0	2134.0
1	0740	231	9.	0.3	2134.2	*	1	1740	531	0.	0.0	2134.0	*	2	0340 831	0.	0.0	2134.0
1	0742	232	9.	0.3	2134.2	*	1	1742	532	0.	0.0	2134.0	*	2	0342 832	0.	0.0	2134.0
1	0744	233	8.	0.3	2134.2	*	1	1744	533	0.	0.0	2134.0	*	2	0344 833	0.	0.0	2134.0
1	0746	234	8.	0.3	2134.1	*	1	1746	534	0.	0.0	2134.0	*	2	0346 834	0.	0.0	2134.0
1	0748	235	7.	0.3	2134.1	*	1	1748	535	0.	0.0	2134.0	*	2	0348 835	0.	0.0	2134.0
1	0750	236	7.	0.3	2134.1	*	1	1750	536	0.	0.0	2134.0	*	2	0350 836	0.	0.0	2134.0
1	0752	237	7.	0.3	2134.1	*	1	1752	537	0.	0.0	2134.0	*	2	0352 837	0.	0.0	2134.0
1	0754	238	6.	0.2	2134.1	*	1	1754	538	0.	0.0	2134.0	*	2	0354 838	0.	0.0	2134.0
1	0756	239	6.	0.2	2134.1	*	1	1756	539	0.	0.0	2134.0	*	2	0356 839	0.	0.0	2134.0
1	0758	240	6.	0.2	2134.1	*	1	1758	540	0.	0.0	2134.0	*	2	0358 840	0.	0.0	2134.0
1	0800	241	5.	0.2	2134.1	*	1	1800	541	0.	0.0	2134.0	*	2	0400 841	0.	0.0	2134.0
1	0802	242	5.	0.2	2134.1	*	1	1802	542	0.	0.0	2134.0	*	2	0402 842	0.	0.0	2134.0
1	0804	243	5.	0.2	2134.1	*	1	1804	543	0.	0.0	2134.0	*	2	0404 843	0.	0.0	2134.0

1	0806	244	5.	0.2	2134.1	*	1	1806	544	0.	0.0	2134.0	*	2	0406 844	0.	0.0	2134.0
1	0808	245	4.	0.2	2134.1	*	1	1808	545	0.	0.0	2134.0	*	2	0408 845	0.	0.0	2134.0
1	0810	246	4.	0.2	2134.1	*	1	1810	546	0.	0.0	2134.0	*	2	0410 846	0.	0.0	2134.0
1	0812	247	4.	0.2	2134.1	*	1	1812	547	0.	0.0	2134.0	*	2	0412 847	0.	0.0	2134.0
1	0814	248	4.	0.2	2134.1	*	1	1814	548	0.	0.0	2134.0	*	2	0414 848	0.	0.0	2134.0
1	0816	249	3.	0.2	2134.1	*	1	1816	549	0.	0.0	2134.0	*	2	0416 849	0.	0.0	2134.0
1	0818	250	3.	0.2	2134.1	*	1	1818	550	0.	0.0	2134.0	*	2	0418 850	0.	0.0	2134.0
1	0820	251	3.	0.2	2134.1	*	1	1820	551	0.	0.0	2134.0	*	2	0420 851	0.	0.0	2134.0
1	0822	252	3.	0.1	2134.1	*	1	1822	552	0.	0.0	2134.0	*	2	0422 852	0.	0.0	2134.0
1	0824	253	3.	0.1	2134.1	*	1	1824	553	0.	0.0	2134.0	*	2	0424 853	0.	0.0	2134.0
1	0826	254	3.	0.1	2134.1	*	1	1826	554	0.	0.0	2134.0	*	2	0426 854	0.	0.0	2134.0
1	0828	255	3.	0.1	2134.1	*	1	1828	555	0.	0.0	2134.0	*	2	0428 855	0.	0.0	2134.0
1	0830	256	2.	0.1	2134.1	*	1	1830	556	0.	0.0	2134.0	*	2	0430 856	0.	0.0	2134.0
1	0832	257	2.	0.1	2134.1	*	1	1832	557	0.	0.0	2134.0	*	2	0432 857	0.	0.0	2134.0
1	0834	258	2.	0.1	2134.1	*	1	1834	558	0.	0.0	2134.0	*	2	0434 858	0.	0.0	2134.0
1	0836	259	2.	0.1	2134.1	*	1	1836	559	0.	0.0	2134.0	*	2	0436 859	0.	0.0	2134.0
1	0838	260	2.	0.1	2134.1	*	1	1838	560	0.	0.0	2134.0	*	2	0438 860	0.	0.0	2134.0
1	0840	261	2.	0.1	2134.1	*	1	1840	561	0.	0.0	2134.0	*	2	0440 861	0.	0.0	2134.0
1	0842	262	2.	0.1	2134.1	*	1	1842	562	0.	0.0	2134.0	*	2	0442 862	0.	0.0	2134.0
1	0844	263	2.	0.1	2134.1	*	1	1844	563	0.	0.0	2134.0	*	2	0444 863	0.	0.0	2134.0
1	0846	264	2.	0.1	2134.0	*	1	1846	564	0.	0.0	2134.0	*	2	0446 864	0.	0.0	2134.0
1	0848	265	2.	0.1	2134.0	*	1	1848	565	0.	0.0	2134.0	*	2	0448 865	0.	0.0	2134.0
1	0850	266	1.	0.1	2134.0	*	1	1850	566	0.	0.0	2134.0	*	2	0450 866	0.	0.0	2134.0
1	0852	267	1.	0.1	2134.0	*	1	1852	567	0.	0.0	2134.0	*	2	0452 867	0.	0.0	2134.0
1	0854	268	1.	0.1	2134.0	*	1	1854	568	0.	0.0	2134.0	*	2	0454 868	0.	0.0	2134.0
1	0856	269	1.	0.1	2134.0	*	1	1856	569	0.	0.0	2134.0	*	2	0456 869	0.	0.0	2134.0
1	0858	270	1.	0.1	2134.0	*	1	1858	570	0.	0.0	2134.0	*	2	0458 870	0.	0.0	2134.0
1	0900	271	1.	0.1	2134.0	*	1	1900	571	0.	0.0	2134.0	*	2	0500 871	0.	0.0	2134.0
1	0902	272	1.	0.1	2134.0	*	1	1902	572	0.	0.0	2134.0	*	2	0502 872	0.	0.0	2134.0
1	0904	273	1.	0.1	2134.0	*	1	1904	573	0.	0.0	2134.0	*	2	0504 873	0.	0.0	2134.0
1	0906	274	1.	0.1	2134.0	*	1	1906	574	0.	0.0	2134.0	*	2	0506 874	0.	0.0	2134.0
1	0908	275	1.	0.1	2134.0	*	1	1908	575	0.	0.0	2134.0	*	2	0508 875	0.	0.0	2134.0
1	0910	276	1.	0.1	2134.0	*	1	1910	576	0.	0.0	2134.0	*	2	0510 876	0.	0.0	2134.0
1	0912	277	1.	0.1	2134.0	*	1	1912	577	0.	0.0	2134.0	*	2	0512 877	0.	0.0	2134.0
1	0914	278	1.	0.1	2134.0	*	1	1914	578	0.	0.0	2134.0	*	2	0514 878	0.	0.0	2134.0
1	0916	279	1.	0.1	2134.0	*	1	1916	579	0.	0.0	2134.0	*	2	0516 879	0.	0.0	2134.0
1	0918	280	1.	0.1	2134.0	*	1	1918	580	0.	0.0	2134.0	*	2	0518 880	0.	0.0	2134.0
1	0920	281	1.	0.1	2134.0	*	1	1920	581	0.	0.0	2134.0	*	2	0520 881	0.	0.0	2134.0
1	0922	282	1.	0.1	2134.0	*	1	1922	582	0.	0.0	2134.0	*	2	0522 882	0.	0.0	2134.0
1	0924	283	1.	0.1	2134.0	*	1	1924	583	0.	0.0	2134.0	*	2	0524 883	0.	0.0	2134.0
1	0926	284	1.	0.0	2134.0	*	1	1926	584	0.	0.0	2134.0	*	2	0526 884	0.	0.0	2134.0
1	0928	285	1.	0.0	2134.0	*	1	1928	585	0.	0.0	2134.0	*	2	0528 885	0.	0.0	2134.0
1	0930	286	1.	0.0	2134.0	*	1	1930	586	0.	0.0	2134.0	*	2	0530 886	0.	0.0	2134.0
1	0932	287	1.	0.0	2134.0	*	1	1932	587	0.	0.0	2134.0	*	2	0532 887	0.	0.0	2134.0
1	0934	288	1.	0.0	2134.0	*	1	1934	588	0.	0.0	2134.0	*	2	0534 888	0.	0.0	2134.0
1	0936	289	1.	0.0	2134.0	*	1	1936	589	0.	0.0	2134.0	*	2	0536 889	0.	0.0	2134.0
1	0938	290	1.	0.0	2134.0	*	1	1938	590	0.	0.0	2134.0	*	2	0538 890	0.	0.0	2134.0
1	0940	291	0.	0.0	2134.0	*	1	1940	591	0.	0.0	2134.0	*	2	0540 891	0.	0.0	2134.0
1	0942	292	0.	0.0	2134.0	*	1	1942	592	0.	0.0	2134.0	*	2	0542 892	0.	0.0	2134.0
1	0944	293	0.	0.0	2134.0	*	1	1944	593	0.	0.0	2134.0	*	2	0544 893	0.	0.0	2134.0
1	0946	294	0.	0.0	2134.0	*	1	1946	594	0.	0.0	2134.0	*	2	0546 894	0.	0.0	2134.0
1	0948	295	0.	0.0	2134.0	*	1	1948	595	0.	0.0	2134.0	*	2	0548 895	0.	0.0	2134.0
1	0950	296	0.	0.0	2134.0	*	1	1950	596	0.	0.0	2134.0	*	2	0550 896	0.	0.0	2134.0
1	0952	297	0.	0.0	2134.0	*	1	1952	597	0.	0.0	2134.0	*	2	0552 897	0.	0.0	2134.0
1	0954	298	0.	0.0	2134.0	*	1	1954	598	0.	0.0	2134.0	*	2	0554 898	0.	0.0	2134.0
1	0956	299	0.	0.0	2134.0	*	1	1956	599	0.	0.0	2134.0	*	2	0556 899	0.	0.0	2134.0
1	0958	300	0.	0.0	2134.0	*	1	1958	600	0.	0.0	2134.0	*	2	0558 900	0.	0.0	2134.0
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PEAK OUTFLOW IS 5545. AT TIME 4.45 HOURS

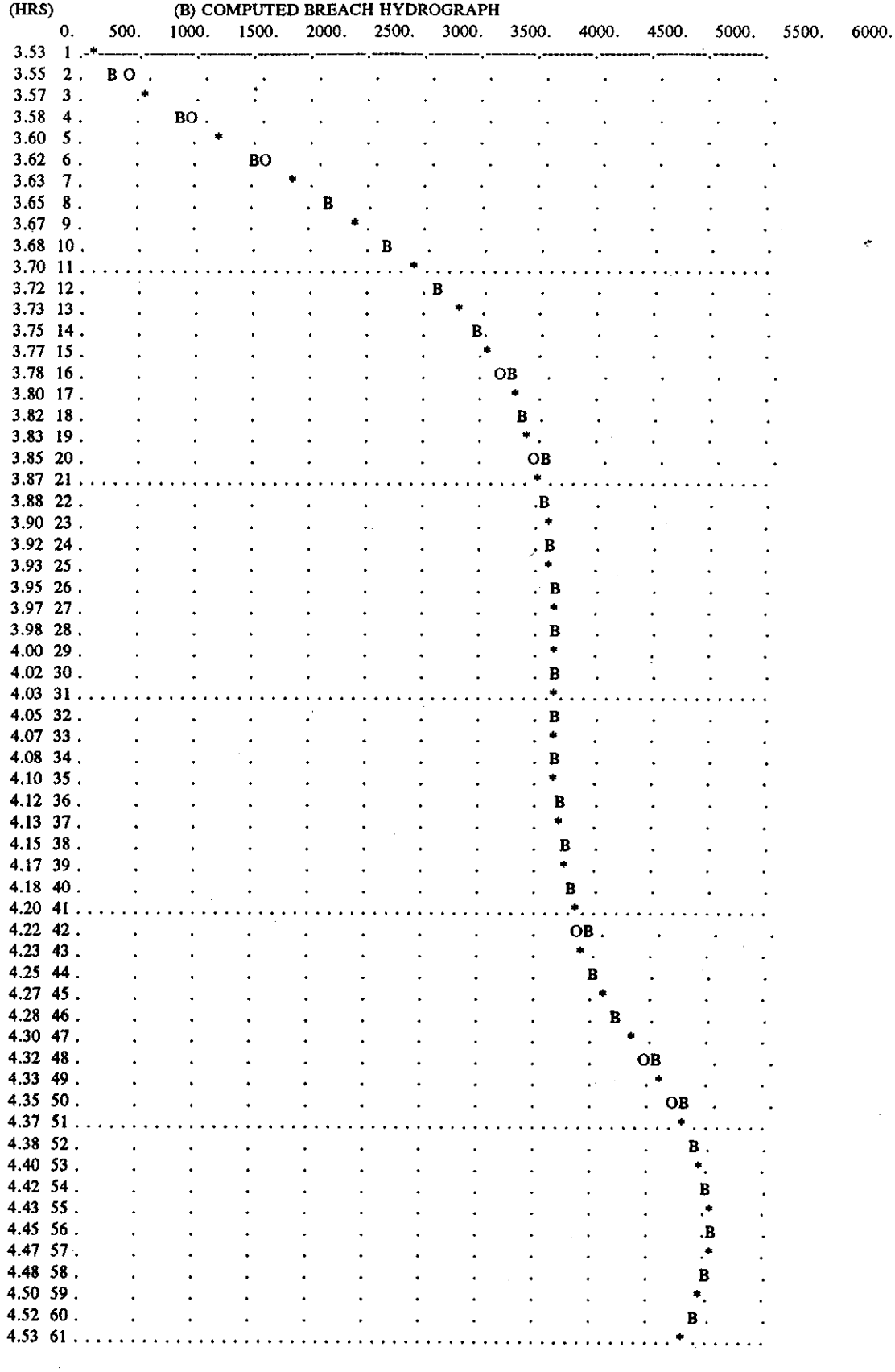
THE DAM BREACH HYDROGRAPH WAS DEVELOPED USING A TIME INTERVAL OF 0.017 HOURS DURING BREACH FORMATION.
DOWNSTREAM CALCULATIONS WILL USE A TIME INTERVAL OF 0.033 HOURS.
THIS TABLE COMPARES THE HYDROGRAPH FOR DOWNSTREAM CALCULATIONS WITH THE COMPUTED BREACH HYDROGRAPH.
INTERMEDIATE FLOWS ARE INTERPOLATED FROM END-OF-PERIOD VALUES.

TIME (HOURS)	TIME FROM BEGINNING OF BREACH (HOURS)	INTERPOLATED BREACH HYDROGRAPH (CFS)	-	COMPUTED BREACH HYDROGRAPH (CFS)	=	ERROR (CFS)	ACCUMULATED ERROR (AC-FT)	ACCUMULATED ERROR
3.533	0.000	100.		100.		0.	0.	0.
3.550	0.017	329.		269.		60.	60.	0.
3.567	0.033	558.		558.		0.	60.	0.
3.583	0.050	881.		853.		28.	88.	0.
3.600	0.067	1205.		1205.		0.	88.	0.
3.617	0.083	1531.		1519.		12.	100.	0.
3.633	0.100	1857.		1857.		0.	100.	0.
3.650	0.117	2136.		2156.		-20.	80.	0.
3.667	0.133	2415.		2415.		0.	80.	0.
3.683	0.150	2660.		2673.		-13.	66.	0.
3.700	0.167	2905.		2905.		0.	66.	0.
3.717	0.183	3095.		3108.		-13.	53.	0.
3.733	0.200	3285.		3285.		0.	53.	0.
3.750	0.217	3427.		3438.		-11.	42.	0.
3.767	0.233	3570.		3570.		0.	42.	0.
3.783	0.250	3675.		3682.		-7.	35.	0.
3.800	0.267	3780.		3780.		0.	35.	0.
3.817	0.283	3852.		3860.		-7.	28.	0.
3.833	0.300	3925.		3925.		0.	28.	0.
3.850	0.317	3974.		3979.		-4.	23.	0.
3.867	0.333	4023.		4023.		0.	23.	0.
3.883	0.350	4055.		4059.		-4.	19.	0.
3.900	0.367	4086.		4086.		0.	19.	0.
3.917	0.383	4103.		4106.		-3.	16.	0.
3.933	0.400	4120.		4120.		0.	16.	0.
3.950	0.417	4127.		4129.		-2.	14.	0.
3.967	0.433	4133.		4133.		0.	14.	0.
3.983	0.450	4132.		4134.		-2.	12.	0.
4.000	0.467	4130.		4130.		0.	12.	0.
4.017	0.483	4139.		4137.		2.	14.	0.
4.033	0.500	4149.		4149.		0.	14.	0.
4.050	0.517	4156.		4157.		-1.	14.	0.
4.067	0.533	4163.		4163.		0.	14.	0.
4.083	0.550	4165.		4166.		-1.	12.	0.
4.100	0.567	4167.		4167.		0.	12.	0.
4.117	0.583	4193.		4195.		-2.	10.	0.
4.133	0.600	4219.		4219.		0.	10.	0.
4.150	0.617	4236.		4238.		-2.	8.	0.
4.167	0.633	4252.		4252.		0.	8.	0.
4.183	0.650	4294.		4289.		6.	13.	0.
4.200	0.667	4337.		4337.		0.	13.	0.
4.217	0.683	4373.		4377.		-4.	9.	0.
4.233	0.700	4408.		4408.		0.	9.	0.
4.250	0.717	4504.		4510.		-6.	3.	0.
4.267	0.733	4599.		4599.		0.	3.	0.
4.283	0.750	4718.		4676.		41.	44.	0.
4.300	0.767	4836.		4836.		0.	44.	0.
4.317	0.783	4974.		4982.		-8.	37.	0.
4.333	0.800	5112.		5112.		0.	37.	0.
4.350	0.817	5218.		5226.		-8.	28.	0.
4.367	0.833	5323.		5323.		0.	28.	0.
4.383	0.850	5394.		5403.		-9.	19.	0.
4.400	0.867	5465.		5465.		0.	19.	0.

4.417	0.883	5501.	5510.	-9.	11.	0.
4.433	0.900	5536.	5536.	0.	11.	0.
4.450	0.917	5536.	5545.	-9.	2.	0.
4.467	0.933	5536.	5536.	0.	2.	0.
4.483	0.950	5499.	5508.	-9.	-8.	0.
4.500	0.967	5462.	5462.	0.	-8.	0.
4.517	0.983	5389.	5398.	-9.	-16.	0.
4.533	1.000	5317.	5317.	0.	-16.	0.

STATION DAMOUT

TIME (HRS) | (O) INTERPOLATED BREACH HYDROGRAPH | (B) COMPUTED BREACH HYDROGRAPH | (*) POINTS AT NORMAL TIME INTERVAL



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PEAK FLOW    TIME                    MAXIMUM AVERAGE FLOW
                        6-HR     24-HR     72-HR    29.97-HR  (CFS)     (HR)
              (CFS)    5536.     4.43              893.      224.      179.      179.
            (INCHES)   6.695     6.709     6.711     6.711
            (AC-FT)    443.      444.      444.      444.

PEAK STORAGE  TIME                    MAXIMUM AVERAGE STORAGE
                        6-HR     24-HR     72-HR    29.97-HR  (AC-FT)    (HR)
  201.     3.82          37.       9.        8.        8.

PEAK STAGE   TIME                    MAXIMUM AVERAGE STAGE
                        6-HR     24-HR     72-HR    29.97-HR  (FEET)     (HR)
 2160.03     3.82      2140.53   2135.66   2135.33   2135.32

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

 75 KP      PLAN  4 FOR STATION   DAMOUT

 76 KO       OUTPUT CONTROL VARIABLES
               IPRNT        1  PRINT CONTROL
               IPLOT        0  PLOT CONTROL
               QSCAL        0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

 60 RS       STORAGE ROUTING
               NSTPS        1  NUMBER OF SUBREACHES
               ITYP      STOR  TYPE OF INITIAL CONDITION
              RSVRIC      0.00  INITIAL CONDITION
                 X        0.00 WORKING R AND D COEFFICIENT

 61 SA          AREA      1.9      2.3      5.8      6.8      9.1     10.2     11.0     11.3     11.6     11.9
                     12.1     12.3     12.8     13.3     13.8

 63 SE       ELEVATION   2134.00  2136.00  2140.00  2144.00  2150.00  2153.00  2155.00  2156.00  2157.00  2158.00
                   2159.00  2160.00  2161.00  2162.00  2163.00

 65 SQ       DISCHARGE      0.      10.      14.      19.      23.      29.      31.     295.     823.    1539.
                     2423.    3450.    4577.    5773.    7015.

 67 ST       TOP OF DAM
               TOPEL    2163.50  ELEVATION AT TOP OF DAM
              DAMWID     300.00  DAM WIDTH
               COQD      3.08  WEIR COEFFICIENT
               EXPD      1.50  EXPONENT OF HEAD

 77 SB       BREACH DATA
               ELBM    2134.00  ELEVATION AT BOTTOM OF BREACH
              BRWID     250.00  WIDTH OF BREACH BOTTOM
                 Z      2.00  BREACH SIDE SLOPE
              TFAIL      0.25  TIME FOR BREACH TO DEVELOP
             FAILEL    2134.01  W.S. ELEVATION TO TRIGGER FAILURE

                                   ***

                        COMPUTED STORAGE-ELEVATION DATA

      STORAGE      0.00     4.21    19.93    45.05    92.37   121.24   142.40   153.55   165.02   176.77
    ELEVATION   2134.00  2136.00  2140.00  2144.00  2150.00  2153.00  2155.00  2156.00  2157.00  2158.00
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STORAGE	188.75	200.95	213.51	226.57	240.13
ELEVATION	2159.00	2160.00	2161.00	2162.00	2163.00

BEGIN DAM FAILURE AT 0.30 HOURS

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HYDROGRAPH AT STATION DAMOUT
PLAN 4, RATIO = 0.50

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2134.0	*	1	1000	301	1.	0.0	2134.0	*	1	2000	601	1.	0.0	2134.0			
1	0002	2	0.	0.0	2134.0	*	1	1002	302	1.	0.0	2134.0	*	1	2002	602	1.	0.0	2134.0			
1	0004	3	0.	0.0	2134.0	*	1	1004	303	1.	0.0	2134.0	*	1	2004	603	1.	0.0	2134.0			
1	0006	4	0.	0.0	2134.0	*	1	1006	304	1.	0.0	2134.0	*	1	2006	604	1.	0.0	2134.0			
1	0008	5	0.	0.0	2134.0	*	1	1008	305	1.	0.0	2134.0	*	1	2008	605	1.	0.0	2134.0			
1	0010	6	0.	0.0	2134.0	*	1	1010	306	1.	0.0	2134.0	*	1	2010	606	1.	0.0	2134.0			
1	0012	7	0.	0.0	2134.0	*	1	1012	307	1.	0.0	2134.0	*	1	2012	607	1.	0.0	2134.0			
1	0014	8	0.	0.0	2134.0	*	1	1014	308	1.	0.0	2134.0	*	1	2014	608	1.	0.0	2134.0			
1	0016	9	0.	0.0	2134.0	*	1	1016	309	1.	0.0	2134.0	*	1	2016	609	1.	0.0	2134.0			
1	0018	10	0.	0.0	2134.0	*	1	1018	310	1.	0.0	2134.0	*	1	2018	610	1.	0.0	2134.0			
1	0020	11	0.	0.0	2134.0	*	1	1020	311	1.	0.0	2134.0	*	1	2020	611	1.	0.0	2134.0			
1	0022	12	0.	0.1	2134.0	*	1	1022	312	1.	0.0	2134.0	*	1	2022	612	1.	0.0	2134.0			
1	0024	13	0.	0.1	2134.0	*	1	1024	313	1.	0.0	2134.0	*	1	2024	613	1.	0.0	2134.0			
1	0026	14	0.	0.1	2134.0	*	1	1026	314	1.	0.0	2134.0	*	1	2026	614	1.	0.0	2134.0			
1	0028	15	0.	0.1	2134.1	*	1	1028	315	1.	0.0	2134.0	*	1	2028	615	1.	0.0	2134.0			
1	0030	16	0.	0.1	2134.1	*	1	1030	316	1.	0.0	2134.0	*	1	2030	616	1.	0.0	2134.0			
1	0032	17	0.	0.2	2134.1	*	1	1032	317	1.	0.0	2134.0	*	1	2032	617	1.	0.0	2134.0			
1	0034	18	20.	0.2	2134.1	*	1	1034	318	1.	0.0	2134.0	*	1	2034	618	1.	0.0	2134.0			
1	0036	19	18.	0.2	2134.1	*	1	1036	319	1.	0.0	2134.0	*	1	2036	619	1.	0.0	2134.0			
1	0038	20	16.	0.1	2134.1	*	1	1038	320	1.	0.0	2134.0	*	1	2038	620	1.	0.0	2134.0			
1	0040	21	16.	0.1	2134.1	*	1	1040	321	1.	0.0	2134.0	*	1	2040	621	1.	0.0	2134.0			
1	0042	22	16.	0.1	2134.1	*	1	1042	322	1.	0.0	2134.0	*	1	2042	622	1.	0.0	2134.0			
1	0044	23	17.	0.1	2134.1	*	1	1044	323	1.	0.0	2134.0	*	1	2044	623	1.	0.0	2134.0			
1	0046	24	18.	0.2	2134.1	*	1	1046	324	1.	0.0	2134.0	*	1	2046	624	1.	0.0	2134.0			
1	0048	25	19.	0.2	2134.1	*	1	1048	325	1.	0.0	2134.0	*	1	2048	625	1.	0.0	2134.0			
1	0050	26	20.	0.2	2134.1	*	1	1050	326	1.	0.0	2134.0	*	1	2050	626	1.	0.0	2134.0			
1	0052	27	21.	0.2	2134.1	*	1	1052	327	1.	0.0	2134.0	*	1	2052	627	1.	0.0	2134.0			
1	0054	28	22.	0.2	2134.1	*	1	1054	328	1.	0.0	2134.0	*	1	2054	628	1.	0.0	2134.0			
1	0056	29	23.	0.2	2134.1	*	1	1056	329	1.	0.0	2134.0	*	1	2056	629	1.	0.0	2134.0			
1	0058	30	24.	0.2	2134.1	*	1	1058	330	1.	0.0	2134.0	*	1	2058	630	1.	0.0	2134.0			
1	0100	31	24.	0.2	2134.1	*	1	1100	331	1.	0.0	2134.0	*	1	2100	631	1.	0.0	2134.0			
1	0102	32	25.	0.2	2134.1	*	1	1102	332	1.	0.0	2134.0	*	1	2102	632	1.	0.0	2134.0			
1	0104	33	26.	0.2	2134.1	*	1	1104	333	1.	0.0	2134.0	*	1	2104	633	1.	0.0	2134.0			
1	0106	34	27.	0.2	2134.1	*	1	1106	334	1.	0.0	2134.0	*	1	2106	634	1.	0.0	2134.0			
1	0108	35	28.	0.2	2134.1	*	1	1108	335	1.	0.0	2134.0	*	1	2108	635	1.	0.0	2134.0			
1	0110	36	29.	0.2	2134.1	*	1	1110	336	1.	0.0	2134.0	*	1	2110	636	1.	0.0	2134.0			
1	0112	37	30.	0.2	2134.1	*	1	1112	337	1.	0.0	2134.0	*	1	2112	637	1.	0.0	2134.0			
1	0114	38	31.	0.2	2134.1	*	1	1114	338	1.	0.0	2134.0	*	1	2114	638	1.	0.0	2134.0			
1	0116	39	33.	0.2	2134.1	*	1	1116	339	1.	0.0	2134.0	*	1	2116	639	1.	0.0	2134.0			
1	0118	40	34.	0.2	2134.1	*	1	1118	340	1.	0.0	2134.0	*	1	2118	640	1.	0.0	2134.0			
1	0120	41	36.	0.2	2134.1	*	1	1120	341	1.	0.0	2134.0	*	1	2120	641	1.	0.0	2134.0			
1	0122	42	37.	0.3	2134.1	*	1	1122	342	1.	0.0	2134.0	*	1	2122	642	1.	0.0	2134.0			
1	0124	43	39.	0.3	2134.1	*	1	1124	343	1.	0.0	2134.0	*	1	2124	643	1.	0.0	2134.0			
1	0126	44	41.	0.3	2134.1	*	1	1126	344	1.	0.0	2134.0	*	1	2126	644	1.	0.0	2134.0			
1	0128	45	42.	0.3	2134.1	*	1	1128	345	1.	0.0	2134.0	*	1	2128	645	1.	0.0	2134.0			
1	0130	46	44.	0.3	2134.1	*	1	1130	346	1.	0.0	2134.0	*	1	2130	646	1.	0.0	2134.0			
1	0132	47	45.	0.3	2134.1	*	1	1132	347	1.	0.0	2134.0	*	1	2132	647	1.	0.0	2134.0			
1	0134	48	47.	0.3	2134.2	*	1	1134	348	1.	0.0	2134.0	*	1	2134	648	1.	0.0	2134.0			

1	0136	49	48.	0.3	2134.2	*	1	1136	349	1.	0.0	2134.0	*	1	2136	649	1.	0.0	2134.0
1	0138	50	50.	0.3	2134.2	*	1	1138	350	1.	0.0	2134.0	*	1	2138	650	1.	0.0	2134.0
1	0140	51	51.	0.3	2134.2	*	1	1140	351	1.	0.0	2134.0	*	1	2140	651	1.	0.0	2134.0
1	0142	52	52.	0.3	2134.2	*	1	1142	352	1.	0.0	2134.0	*	1	2142	652	1.	0.0	2134.0
1	0144	53	53.	0.3	2134.2	*	1	1144	353	1.	0.0	2134.0	*	1	2144	653	1.	0.0	2134.0
1	0146	54	54.	0.3	2134.2	*	1	1146	354	1.	0.0	2134.0	*	1	2146	654	1.	0.0	2134.0
1	0148	55	55.	0.3	2134.2	*	1	1148	355	1.	0.0	2134.0	*	1	2148	655	1.	0.0	2134.0
1	0150	56	56.	0.3	2134.2	*	1	1150	356	1.	0.0	2134.0	*	1	2150	656	1.	0.0	2134.0
1	0152	57	57.	0.3	2134.2	*	1	1152	357	1.	0.0	2134.0	*	1	2152	657	1.	0.0	2134.0
1	0154	58	58.	0.3	2134.2	*	1	1154	358	1.	0.0	2134.0	*	1	2154	658	1.	0.0	2134.0
1	0156	59	58.	0.3	2134.2	*	1	1156	359	1.	0.0	2134.0	*	1	2156	659	1.	0.0	2134.0
1	0158	60	59.	0.3	2134.2	*	1	1158	360	1.	0.0	2134.0	*	1	2158	660	1.	0.0	2134.0
1	0200	61	60.	0.3	2134.2	*	1	1200	361	1.	0.0	2134.0	*	1	2200	661	1.	0.0	2134.0
1	0202	62	61.	0.4	2134.2	*	1	1202	362	1.	0.0	2134.0	*	1	2202	662	1.	0.0	2134.0
1	0204	63	63.	0.4	2134.2	*	1	1204	363	1.	0.0	2134.0	*	1	2204	663	1.	0.0	2134.0
1	0206	64	65.	0.4	2134.2	*	1	1206	364	1.	0.0	2134.0	*	1	2206	664	1.	0.0	2134.0
1	0208	65	69.	0.4	2134.2	*	1	1208	365	1.	0.0	2134.0	*	1	2208	665	1.	0.0	2134.0
1	0210	66	74.	0.4	2134.2	*	1	1210	366	1.	0.0	2134.0	*	1	2210	666	1.	0.0	2134.0
1	0212	67	82.	0.4	2134.2	*	1	1212	367	1.	0.0	2134.0	*	1	2212	667	1.	0.0	2134.0
1	0214	68	91.	0.5	2134.2	*	1	1214	368	1.	0.0	2134.0	*	1	2214	668	1.	0.0	2134.0
1	0216	69	103.	0.5	2134.3	*	1	1216	369	1.	0.0	2134.0	*	1	2216	669	1.	0.0	2134.0
1	0218	70	116.	0.5	2134.3	*	1	1218	370	1.	0.0	2134.0	*	1	2218	670	1.	0.0	2134.0
1	0220	71	132.	0.6	2134.3	*	1	1220	371	1.	0.0	2134.0	*	1	2220	671	1.	0.0	2134.0
1	0222	72	151.	0.6	2134.3	*	1	1222	372	1.	0.0	2134.0	*	1	2222	672	1.	0.0	2134.0
1	0224	73	170.	0.7	2134.4	*	1	1224	373	1.	0.0	2134.0	*	1	2224	673	1.	0.0	2134.0
1	0226	74	189.	0.8	2134.4	*	1	1226	374	1.	0.0	2134.0	*	1	2226	674	1.	0.0	2134.0
1	0228	75	209.	0.8	2134.4	*	1	1228	375	1.	0.0	2134.0	*	1	2228	675	1.	0.0	2134.0
1	0230	76	229.	0.9	2134.4	*	1	1230	376	1.	0.0	2134.0	*	1	2230	676	1.	0.0	2134.0
1	0232	77	249.	0.9	2134.5	*	1	1232	377	1.	0.0	2134.0	*	1	2232	677	1.	0.0	2134.0
1	0234	78	269.	1.0	2134.5	*	1	1234	378	1.	0.0	2134.0	*	1	2234	678	1.	0.0	2134.0
1	0236	79	288.	1.0	2134.5	*	1	1236	379	1.	0.0	2134.0	*	1	2236	679	1.	0.0	2134.0
1	0238	80	306.	1.0	2134.5	*	1	1238	380	1.	0.0	2134.0	*	1	2238	680	1.	0.0	2134.0
1	0240	81	322.	1.1	2134.6	*	1	1240	381	1.	0.0	2134.0	*	1	2240	681	1.	0.0	2134.0
1	0242	82	337.	1.1	2134.6	*	1	1242	382	1.	0.0	2134.0	*	1	2242	682	1.	0.0	2134.0
1	0244	83	352.	1.2	2134.6	*	1	1244	383	1.	0.0	2134.0	*	1	2244	683	1.	0.0	2134.0
1	0246	84	365.	1.2	2134.6	*	1	1246	384	1.	0.0	2134.0	*	1	2246	684	1.	0.0	2134.0
1	0248	85	378.	1.2	2134.6	*	1	1248	385	1.	0.0	2134.0	*	1	2248	685	1.	0.0	2134.0
1	0250	86	390.	1.2	2134.6	*	1	1250	386	1.	0.0	2134.0	*	1	2250	686	1.	0.0	2134.0
1	0252	87	401.	1.3	2134.6	*	1	1252	387	1.	0.0	2134.0	*	1	2252	687	1.	0.0	2134.0
1	0254	88	411.	1.3	2134.7	*	1	1254	388	1.	0.0	2134.0	*	1	2254	688	1.	0.0	2134.0
1	0256	89	420.	1.3	2134.7	*	1	1256	389	1.	0.0	2134.0	*	1	2256	689	1.	0.0	2134.0
1	0258	90	428.	1.3	2134.7	*	1	1258	390	1.	0.0	2134.0	*	1	2258	690	1.	0.0	2134.0
1	0300	91	436.	1.3	2134.7	*	1	1300	391	1.	0.0	2134.0	*	1	2300	691	1.	0.0	2134.0
1	0302	92	447.	1.4	2134.7	*	1	1302	392	1.	0.0	2134.0	*	1	2302	692	1.	0.0	2134.0
1	0304	93	477.	1.4	2134.7	*	1	1304	393	1.	0.0	2134.0	*	1	2304	693	1.	0.0	2134.0
1	0306	94	554.	1.6	2134.8	*	1	1306	394	1.	0.0	2134.0	*	1	2306	694	1.	0.0	2134.0
1	0308	95	706.	1.9	2134.9	*	1	1308	395	1.	0.0	2134.0	*	1	2308	695	1.	0.0	2134.0
1	0310	96	944.	2.3	2135.1	*	1	1310	396	1.	0.0	2134.0	*	1	2310	696	1.	0.0	2134.0
1	0312	97	1273.	2.8	2135.4	*	1	1312	397	1.	0.0	2134.0	*	1	2312	697	1.	0.0	2134.0
1	0314	98	1700.	3.5	2135.7	*	1	1314	398	1.	0.0	2134.0	*	1	2314	698	1.	0.0	2134.0
1	0316	99	2246.	4.3	2136.0	*	1	1316	399	1.	0.0	2134.0	*	1	2316	699	1.	0.0	2134.0
1	0318	100	2865.	5.1	2136.4	*	1	1318	400	1.	0.0	2134.0	*	1	2318	700	1.	0.0	2134.0
1	0320	101	3499.	6.0	2136.7	*	1	1320	401	1.	0.0	2134.0	*	1	2320	701	1.	0.0	2134.0
1	0322	102	4074.	6.9	2137.0	*	1	1322	402	1.	0.0	2134.0	*	1	2322	702	1.	0.0	2134.0
1	0324	103	4572.	7.6	2137.2	*	1	1324	403	1.	0.0	2134.0	*	1	2324	703	1.	0.0	2134.0
1	0326	104	4964.	8.2	2137.4	*	1	1326	404	1.	0.0	2134.0	*	1	2326	704	1.	0.0	2134.0
1	0328	105	5224.	8.6	2137.5	*	1	1328	405	1.	0.0	2134.0	*	1	2328	705	1.	0.0	2134.0
1	0330	106	5359.	8.8	2137.6	*	1	1330	406	1.	0.0	2134.0	*	1	2330	706	1.	0.0	2134.0
1	0332	107	5389.	8.9	2137.6	*	1	1332	407	1.	0.0	2134.0	*	1	2332	707	1.	0.0	2134.0
1	0334	108	5343. ←	8.8	2137.6	*	1	1334	408	1.	0.0	2134.0	*	1	2334	708	1.	0.0	2134.0
1	0336	109	5241.	8.6	2137.5	*	1	1336	409	1.	0.0	2134.0	*	1	2336	709	1.	0.0	2134.0
1	0338	110	5098.	8.4	2137.5	*	1	1338	410	1.	0.0	2134.0	*	1	2338	710	1.	0.0	2134.0
1	0340	111	4922.	8.1	2137.4	*	1	1340	411	1.	0.0	2134.0	*	1	2340	711	1.	0.0	2134.0
1	0342	112	4721.	7.8	2137.3	*	1	1342	412	1.	0.0	2134.0	*	1	2342	712	1.	0.0	2134.0
1	0344	113	4503.	7.5	2137.2	*	1	1344	413	1.	0.0	2134.0	*	1	2344	713	1.	0.0	2134.0

1	0346	114	4275.	7.2	2137.1	*	1	1346	414	1.	0.0	2134.0	*	1	2346 714	1.	0.0	2134.0
1	0348	115	4046.	6.8	2137.0	*	1	1348	415	1.	0.0	2134.0	*	1	2348 715	1.	0.0	2134.0
1	0350	116	3826.	6.5	2136.9	*	1	1350	416	1.	0.0	2134.0	*	1	2350 716	1.	0.0	2134.0
1	0352	117	3617.	6.2	2136.8	*	1	1352	417	1.	0.0	2134.0	*	1	2352 717	1.	0.0	2134.0
1	0354	118	3417.	5.9	2136.7	*	1	1354	418	1.	0.0	2134.0	*	1	2354 718	1.	0.0	2134.0
1	0356	119	3232.	5.6	2136.6	*	1	1356	419	1.	0.0	2134.0	*	1	2356 719	1.	0.0	2134.0
1	0358	120	3060.	5.4	2136.5	*	1	1358	420	1.	0.0	2134.0	*	1	2358 720	1.	0.0	2134.0
1	0400	121	2897.	5.2	2136.4	*	1	1400	421	1.	0.0	2134.0	*	2	0000 721	1.	0.0	2134.0
1	0402	122	2748.	5.0	2136.3	*	1	1402	422	1.	0.0	2134.0	*	2	0002 722	1.	0.0	2134.0
1	0404	123	2611.	4.8	2136.2	*	1	1404	423	1.	0.0	2134.0	*	2	0004 723	1.	0.0	2134.0
1	0406	124	2478.	4.6	2136.2	*	1	1406	424	1.	0.0	2134.0	*	2	0006 724	1.	0.0	2134.0
1	0408	125	2350.	4.4	2136.1	*	1	1408	425	1.	0.0	2134.0	*	2	0008 725	1.	0.0	2134.0
1	0410	126	2228.	4.2	2136.0	*	1	1410	426	1.	0.0	2134.0	*	2	0010 726	1.	0.0	2134.0
1	0412	127	2109.	4.1	2135.9	*	1	1412	427	1.	0.0	2134.0	*	2	0012 727	1.	0.0	2134.0
1	0414	128	1990.	3.9	2135.9	*	1	1414	428	1.	0.0	2134.0	*	2	0014 728	1.	0.0	2134.0
1	0416	129	1875.	3.7	2135.8	*	1	1416	429	1.	0.0	2134.0	*	2	0016 729	1.	0.0	2134.0
1	0418	130	1765.	3.6	2135.7	*	1	1418	430	1.	0.0	2134.0	*	2	0018 730	1.	0.0	2134.0
1	0420	131	1659.	3.4	2135.7	*	1	1420	431	1.	0.0	2134.0	*	2	0020 731	1.	0.0	2134.0
1	0422	132	1557.	3.3	2135.6	*	1	1422	432	1.	0.0	2134.0	*	2	0022 732	1.	0.0	2134.0
1	0424	133	1462.	3.1	2135.5	*	1	1424	433	1.	0.0	2134.0	*	2	0024 733	1.	0.0	2134.0
1	0426	134	1374.	3.0	2135.5	*	1	1426	434	1.	0.0	2134.0	*	2	0026 734	1.	0.0	2134.0
1	0428	135	1290.	2.9	2135.4	*	1	1428	435	1.	0.0	2134.0	*	2	0028 735	1.	0.0	2134.0
1	0430	136	1210.	2.7	2135.3	*	1	1430	436	1.	0.0	2134.0	*	2	0030 736	1.	0.0	2134.0
1	0432	137	1137.	2.6	2135.3	*	1	1432	437	1.	0.0	2134.0	*	2	0032 737	1.	0.0	2134.0
1	0434	138	1069.	2.5	2135.2	*	1	1434	438	1.	0.0	2134.0	*	2	0034 738	1.	0.0	2134.0
1	0436	139	1006.	2.4	2135.2	*	1	1436	439	1.	0.0	2134.0	*	2	0036 739	1.	0.0	2134.0
1	0438	140	947.	2.3	2135.1	*	1	1438	440	1.	0.0	2134.0	*	2	0038 740	1.	0.0	2134.0
1	0440	141	891.	2.2	2135.1	*	1	1440	441	1.	0.0	2134.0	*	2	0040 741	1.	0.0	2134.0
1	0442	142	839.	2.1	2135.1	*	1	1442	442	1.	0.0	2134.0	*	2	0042 742	1.	0.0	2134.0
1	0444	143	790.	2.0	2135.0	*	1	1444	443	1.	0.0	2134.0	*	2	0044 743	1.	0.0	2134.0
1	0446	144	745.	1.9	2135.0	*	1	1446	444	1.	0.0	2134.0	*	2	0046 744	1.	0.0	2134.0
1	0448	145	703.	1.9	2134.9	*	1	1448	445	1.	0.0	2134.0	*	2	0048 745	1.	0.0	2134.0
1	0450	146	666.	1.8	2134.9	*	1	1450	446	1.	0.0	2134.0	*	2	0050 746	1.	0.0	2134.0
1	0452	147	632.	1.7	2134.9	*	1	1452	447	1.	0.0	2134.0	*	2	0052 747	1.	0.0	2134.0
1	0454	148	601.	1.7	2134.8	*	1	1454	448	1.	0.0	2134.0	*	2	0054 748	1.	0.0	2134.0
1	0456	149	573.	1.6	2134.8	*	1	1456	449	1.	0.0	2134.0	*	2	0056 749	1.	0.0	2134.0
1	0458	150	546.	1.6	2134.8	*	1	1458	450	1.	0.0	2134.0	*	2	0058 750	1.	0.0	2134.0
1	0500	151	521.	1.5	2134.8	*	1	1500	451	1.	0.0	2134.0	*	2	0100 751	1.	0.0	2134.0
1	0502	152	499.	1.5	2134.7	*	1	1502	452	1.	0.0	2134.0	*	2	0102 752	1.	0.0	2134.0
1	0504	153	478.	1.4	2134.7	*	1	1504	453	1.	0.0	2134.0	*	2	0104 753	1.	0.0	2134.0
1	0506	154	458.	1.4	2134.7	*	1	1506	454	1.	0.0	2134.0	*	2	0106 754	1.	0.0	2134.0
1	0508	155	439.	1.3	2134.7	*	1	1508	455	1.	0.0	2134.0	*	2	0108 755	1.	0.0	2134.0
1	0510	156	420.	1.3	2134.7	*	1	1510	456	1.	0.0	2134.0	*	2	0110 756	1.	0.0	2134.0
1	0512	157	400.	1.3	2134.6	*	1	1512	457	1.	0.0	2134.0	*	2	0112 757	1.	0.0	2134.0
1	0514	158	380.	1.2	2134.6	*	1	1514	458	1.	0.0	2134.0	*	2	0114 758	1.	0.0	2134.0
1	0516	159	359.	1.2	2134.6	*	1	1516	459	1.	0.0	2134.0	*	2	0116 759	1.	0.0	2134.0
1	0518	160	338.	1.1	2134.6	*	1	1518	460	1.	0.0	2134.0	*	2	0118 760	1.	0.0	2134.0
1	0520	161	318.	1.1	2134.6	*	1	1520	461	1.	0.0	2134.0	*	2	0120 761	1.	0.0	2134.0
1	0522	162	299.	1.0	2134.5	*	1	1522	462	1.	0.0	2134.0	*	2	0122 762	1.	0.0	2134.0
1	0524	163	281.	1.0	2134.5	*	1	1524	463	1.	0.0	2134.0	*	2	0124 763	1.	0.0	2134.0
1	0526	164	263.	0.9	2134.5	*	1	1526	464	1.	0.0	2134.0	*	2	0126 764	1.	0.0	2134.0
1	0528	165	247.	0.9	2134.5	*	1	1528	465	1.	0.0	2134.0	*	2	0128 765	1.	0.0	2134.0
1	0530	166	231.	0.9	2134.4	*	1	1530	466	1.	0.0	2134.0	*	2	0130 766	1.	0.0	2134.0
1	0532	167	217.	0.8	2134.4	*	1	1532	467	1.	0.0	2134.0	*	2	0132 767	1.	0.0	2134.0
1	0534	168	203.	0.8	2134.4	*	1	1534	468	1.	0.0	2134.0	*	2	0134 768	1.	0.0	2134.0
1	0536	169	191.	0.8	2134.4	*	1	1536	469	1.	0.0	2134.0	*	2	0136 769	1.	0.0	2134.0
1	0538	170	180.	0.7	2134.4	*	1	1538	470	1.	0.0	2134.0	*	2	0138 770	1.	0.0	2134.0
1	0540	171	171.	0.7	2134.4	*	1	1540	471	1.	0.0	2134.0	*	2	0140 771	1.	0.0	2134.0
1	0542	172	161.	0.7	2134.3	*	1	1542	472	1.	0.0	2134.0	*	2	0142 772	1.	0.0	2134.0
1	0544	173	152.	0.6	2134.3	*	1	1544	473	1.	0.0	2134.0	*	2	0144 773	1.	0.0	2134.0
1	0546	174	143.	0.6	2134.3	*	1	1546	474	1.	0.0	2134.0	*	2	0146 774	1.	0.0	2134.0
1	0548	175	136.	0.6	2134.3	*	1	1548	475	1.	0.0	2134.0	*	2	0148 775	1.	0.0	2134.0
1	0550	176	128.	0.6	2134.3	*	1	1550	476	1.	0.0	2134.0	*	2	0150 776	1.	0.0	2134.0
1	0552	177	120.	0.6	2134.3	*	1	1552	477	1.	0.0	2134.0	*	2	0152 777	1.	0.0	2134.0
1	0554	178	114.	0.5	2134.3	*	1	1554	478	1.	0.0	2134.0	*	2	0154 778	1.	0.0	2134.0

1	0556 179	107.	0.5	2134.3	*	1	1556 479	1.	0.0	2134.0	*	2	0156 779	1.	0.0 2134.0
1	0558 180	101.	0.5	2134.3	*	1	1558 480	1.	0.0	2134.0	*	2	0158 780	1.	0.0 2134.0
1	0600 181	96.	0.5	2134.2	*	1	1600 481	1.	0.0	2134.0	*	2	0200 781	1.	0.0 2134.0
1	0602 182	93.	0.5	2134.2	*	1	1602 482	1.	0.0	2134.0	*	2	0202 782	1.	0.0 2134.0
1	0604 183	89.	0.5	2134.2	*	1	1604 483	1.	0.0	2134.0	*	2	0204 783	1.	0.0 2134.0
1	0606 184	85.	0.4	2134.2	*	1	1606 484	1.	0.0	2134.0	*	2	0206 784	1.	0.0 2134.0
1	0608 185	81.	0.4	2134.2	*	1	1608 485	1.	0.0	2134.0	*	2	0208 785	1.	0.0 2134.0
1	0610 186	78.	0.4	2134.2	*	1	1610 486	1.	0.0	2134.0	*	2	0210 786	1.	0.0 2134.0
1	0612 187	74.	0.4	2134.2	*	1	1612 487	1.	0.0	2134.0	*	2	0212 787	1.	0.0 2134.0
1	0614 188	71.	0.4	2134.2	*	1	1614 488	1.	0.0	2134.0	*	2	0214 788	1.	0.0 2134.0
1	0616 189	67.	0.4	2134.2	*	1	1616 489	1.	0.0	2134.0	*	2	0216 789	1.	0.0 2134.0
1	0618 190	64.	0.4	2134.2	*	1	1618 490	1.	0.0	2134.0	*	2	0218 790	1.	0.0 2134.0
1	0620 191	60.	0.3	2134.2	*	1	1620 491	1.	0.0	2134.0	*	2	0220 791	1.	0.0 2134.0
1	0622 192	57.	0.3	2134.2	*	1	1622 492	1.	0.0	2134.0	*	2	0222 792	1.	0.0 2134.0
1	0624 193	54.	0.3	2134.2	*	1	1624 493	1.	0.0	2134.0	*	2	0224 793	1.	0.0 2134.0
1	0626 194	51.	0.3	2134.2	*	1	1626 494	1.	0.0	2134.0	*	2	0226 794	1.	0.0 2134.0
1	0628 195	48.	0.3	2134.2	*	1	1628 495	1.	0.0	2134.0	*	2	0228 795	1.	0.0 2134.0
1	0630 196	45.	0.3	2134.1	*	1	1630 496	1.	0.0	2134.0	*	2	0230 796	1.	0.0 2134.0
1	0632 197	42.	0.3	2134.1	*	1	1632 497	1.	0.0	2134.0	*	2	0232 797	1.	0.0 2134.0
1	0634 198	39.	0.3	2134.1	*	1	1634 498	1.	0.0	2134.0	*	2	0234 798	1.	0.0 2134.0
1	0636 199	37.	0.2	2134.1	*	1	1636 499	1.	0.0	2134.0	*	2	0236 799	1.	0.0 2134.0
1	0638 200	34.	0.2	2134.1	*	1	1638 500	1.	0.0	2134.0	*	2	0238 800	1.	0.0 2134.0
1	0640 201	32.	0.2	2134.1	*	1	1640 501	1.	0.0	2134.0	*	2	0240 801	1.	0.0 2134.0
1	0642 202	30.	0.2	2134.1	*	1	1642 502	1.	0.0	2134.0	*	2	0242 802	1.	0.0 2134.0
1	0644 203	29.	0.2	2134.1	*	1	1644 503	1.	0.0	2134.0	*	2	0244 803	1.	0.0 2134.0
1	0646 204	27.	0.2	2134.1	*	1	1646 504	1.	0.0	2134.0	*	2	0246 804	1.	0.0 2134.0
1	0648 205	26.	0.2	2134.1	*	1	1648 505	1.	0.0	2134.0	*	2	0248 805	1.	0.0 2134.0
1	0650 206	25.	0.2	2134.1	*	1	1650 506	1.	0.0	2134.0	*	2	0250 806	1.	0.0 2134.0
1	0652 207	23.	0.2	2134.1	*	1	1652 507	1.	0.0	2134.0	*	2	0252 807	1.	0.0 2134.0
1	0654 208	22.	0.2	2134.1	*	1	1654 508	1.	0.0	2134.0	*	2	0254 808	1.	0.0 2134.0
1	0656 209	21.	0.2	2134.1	*	1	1656 509	1.	0.0	2134.0	*	2	0256 809	1.	0.0 2134.0
1	0658 210	20.	0.2	2134.1	*	1	1658 510	1.	0.0	2134.0	*	2	0258 810	1.	0.0 2134.0
1	0700 211	19.	0.2	2134.1	*	1	1700 511	1.	0.0	2134.0	*	2	0300 811	1.	0.0 2134.0
1	0702 212	18.	0.2	2134.1	*	1	1702 512	1.	0.0	2134.0	*	2	0302 812	1.	0.0 2134.0
1	0704 213	17.	0.1	2134.1	*	1	1704 513	1.	0.0	2134.0	*	2	0304 813	1.	0.0 2134.0
1	0706 214	16.	0.1	2134.1	*	1	1706 514	1.	0.0	2134.0	*	2	0306 814	1.	0.0 2134.0
1	0708 215	15.	0.1	2134.1	*	1	1708 515	1.	0.0	2134.0	*	2	0308 815	1.	0.0 2134.0
1	0710 216	15.	0.1	2134.1	*	1	1710 516	1.	0.0	2134.0	*	2	0310 816	1.	0.0 2134.0
1	0712 217	14.	0.1	2134.1	*	1	1712 517	1.	0.0	2134.0	*	2	0312 817	1.	0.0 2134.0
1	0714 218	13.	0.1	2134.1	*	1	1714 518	1.	0.0	2134.0	*	2	0314 818	1.	0.0 2134.0
1	0716 219	12.	0.1	2134.1	*	1	1716 519	1.	0.0	2134.0	*	2	0316 819	1.	0.0 2134.0
1	0718 220	12.	0.1	2134.1	*	1	1718 520	1.	0.0	2134.0	*	2	0318 820	1.	0.0 2134.0
1	0720 221	11.	0.1	2134.1	*	1	1720 521	1.	0.0	2134.0	*	2	0320 821	1.	0.0 2134.0
1	0722 222	10.	0.1	2134.1	*	1	1722 522	1.	0.0	2134.0	*	2	0322 822	1.	0.0 2134.0
1	0724 223	10.	0.1	2134.1	*	1	1724 523	1.	0.0	2134.0	*	2	0324 823	1.	0.0 2134.0
1	0726 224	9.	0.1	2134.1	*	1	1726 524	1.	0.0	2134.0	*	2	0326 824	1.	0.0 2134.0
1	0728 225	9.	0.1	2134.1	*	1	1728 525	1.	0.0	2134.0	*	2	0328 825	1.	0.0 2134.0
1	0730 226	8.	0.1	2134.0	*	1	1730 526	1.	0.0	2134.0	*	2	0330 826	1.	0.0 2134.0
1	0732 227	8.	0.1	2134.0	*	1	1732 527	1.	0.0	2134.0	*	2	0332 827	1.	0.0 2134.0
1	0734 228	8.	0.1	2134.0	*	1	1734 528	1.	0.0	2134.0	*	2	0334 828	1.	0.0 2134.0
1	0736 229	7.	0.1	2134.0	*	1	1736 529	1.	0.0	2134.0	*	2	0336 829	1.	0.0 2134.0
1	0738 230	7.	0.1	2134.0	*	1	1738 530	1.	0.0	2134.0	*	2	0338 830	1.	0.0 2134.0
1	0740 231	6.	0.1	2134.0	*	1	1740 531	1.	0.0	2134.0	*	2	0340 831	1.	0.0 2134.0
1	0742 232	6.	0.1	2134.0	*	1	1742 532	1.	0.0	2134.0	*	2	0342 832	1.	0.0 2134.0
1	0744 233	6.	0.1	2134.0	*	1	1744 533	1.	0.0	2134.0	*	2	0344 833	1.	0.0 2134.0
1	0746 234	5.	0.1	2134.0	*	1	1746 534	1.	0.0	2134.0	*	2	0346 834	1.	0.0 2134.0
1	0748 235	5.	0.1	2134.0	*	1	1748 535	1.	0.0	2134.0	*	2	0348 835	1.	0.0 2134.0
1	0750 236	4.	0.1	2134.0	*	1	1750 536	1.	0.0	2134.0	*	2	0350 836	1.	0.0 2134.0
1	0752 237	4.	0.1	2134.0	*	1	1752 537	1.	0.0	2134.0	*	2	0352 837	1.	0.0 2134.0
1	0754 238	4.	0.1	2134.0	*	1	1754 538	1.	0.0	2134.0	*	2	0354 838	1.	0.0 2134.0
1	0756 239	3.	0.0	2134.0	*	1	1756 539	1.	0.0	2134.0	*	2	0356 839	1.	0.0 2134.0
1	0758 240	3.	0.0	2134.0	*	1	1758 540	1.	0.0	2134.0	*	2	0358 840	1.	0.0 2134.0
1	0800 241	3.	0.0	2134.0	*	1	1800 541	1.	0.0	2134.0	*	2	0400 841	1.	0.0 2134.0
1	0802 242	3.	0.0	2134.0	*	1	1802 542	1.	0.0	2134.0	*	2	0402 842	1.	0.0 2134.0
1	0804 243	3.	0.0	2134.0	*	1	1804 543	1.	0.0	2134.0	*	2	0404 843	1.	0.0 2134.0

1	0806	244	2.	0.0	2134.0	*	1	1806	544	1.	0.0	2134.0	*	2	0406 844	1.	0.0	2134.0
1	0808	245	2.	0.0	2134.0	*	1	1808	545	1.	0.0	2134.0	*	2	0408 845	1.	0.0	2134.0
1	0810	246	2.	0.0	2134.0	*	1	1810	546	1.	0.0	2134.0	*	2	0410 846	1.	0.0	2134.0
1	0812	247	2.	0.0	2134.0	*	1	1812	547	1.	0.0	2134.0	*	2	0412 847	1.	0.0	2134.0
1	0814	248	2.	0.0	2134.0	*	1	1814	548	1.	0.0	2134.0	*	2	0414 848	1.	0.0	2134.0
1	0816	249	2.	0.0	2134.0	*	1	1816	549	1.	0.0	2134.0	*	2	0416 849	1.	0.0	2134.0
1	0818	250	2.	0.0	2134.0	*	1	1818	550	1.	0.0	2134.0	*	2	0418 850	1.	0.0	2134.0
1	0820	251	2.	0.0	2134.0	*	1	1820	551	1.	0.0	2134.0	*	2	0420 851	1.	0.0	2134.0
1	0822	252	2.	0.0	2134.0	*	1	1822	552	1.	0.0	2134.0	*	2	0422 852	1.	0.0	2134.0
1	0824	253	1.	0.0	2134.0	*	1	1824	553	1.	0.0	2134.0	*	2	0424 853	1.	0.0	2134.0
1	0826	254	1.	0.0	2134.0	*	1	1826	554	1.	0.0	2134.0	*	2	0426 854	1.	0.0	2134.0
1	0828	255	1.	0.0	2134.0	*	1	1828	555	1.	0.0	2134.0	*	2	0428 855	1.	0.0	2134.0
1	0830	256	1.	0.0	2134.0	*	1	1830	556	1.	0.0	2134.0	*	2	0430 856	1.	0.0	2134.0
1	0832	257	1.	0.0	2134.0	*	1	1832	557	1.	0.0	2134.0	*	2	0432 857	1.	0.0	2134.0
1	0834	258	1.	0.0	2134.0	*	1	1834	558	1.	0.0	2134.0	*	2	0434 858	1.	0.0	2134.0
1	0836	259	1.	0.0	2134.0	*	1	1836	559	1.	0.0	2134.0	*	2	0436 859	1.	0.0	2134.0
1	0838	260	1.	0.0	2134.0	*	1	1838	560	1.	0.0	2134.0	*	2	0438 860	1.	0.0	2134.0
1	0840	261	1.	0.0	2134.0	*	1	1840	561	1.	0.0	2134.0	*	2	0440 861	1.	0.0	2134.0
1	0842	262	1.	0.0	2134.0	*	1	1842	562	1.	0.0	2134.0	*	2	0442 862	1.	0.0	2134.0
1	0844	263	1.	0.0	2134.0	*	1	1844	563	1.	0.0	2134.0	*	2	0444 863	1.	0.0	2134.0
1	0846	264	1.	0.0	2134.0	*	1	1846	564	1.	0.0	2134.0	*	2	0446 864	1.	0.0	2134.0
1	0848	265	1.	0.0	2134.0	*	1	1848	565	1.	0.0	2134.0	*	2	0448 865	1.	0.0	2134.0
1	0850	266	1.	0.0	2134.0	*	1	1850	566	1.	0.0	2134.0	*	2	0450 866	1.	0.0	2134.0
1	0852	267	1.	0.0	2134.0	*	1	1852	567	1.	0.0	2134.0	*	2	0452 867	1.	0.0	2134.0
1	0854	268	1.	0.0	2134.0	*	1	1854	568	1.	0.0	2134.0	*	2	0454 868	1.	0.0	2134.0
1	0856	269	1.	0.0	2134.0	*	1	1856	569	1.	0.0	2134.0	*	2	0456 869	1.	0.0	2134.0
1	0858	270	1.	0.0	2134.0	*	1	1858	570	1.	0.0	2134.0	*	2	0458 870	1.	0.0	2134.0
1	0900	271	1.	0.0	2134.0	*	1	1900	571	1.	0.0	2134.0	*	2	0500 871	1.	0.0	2134.0
1	0902	272	1.	0.0	2134.0	*	1	1902	572	1.	0.0	2134.0	*	2	0502 872	1.	0.0	2134.0
1	0904	273	1.	0.0	2134.0	*	1	1904	573	1.	0.0	2134.0	*	2	0504 873	1.	0.0	2134.0
1	0906	274	1.	0.0	2134.0	*	1	1906	574	1.	0.0	2134.0	*	2	0506 874	1.	0.0	2134.0
1	0908	275	1.	0.0	2134.0	*	1	1908	575	1.	0.0	2134.0	*	2	0508 875	1.	0.0	2134.0
1	0910	276	1.	0.0	2134.0	*	1	1910	576	1.	0.0	2134.0	*	2	0510 876	1.	0.0	2134.0
1	0912	277	1.	0.0	2134.0	*	1	1912	577	1.	0.0	2134.0	*	2	0512 877	1.	0.0	2134.0
1	0914	278	1.	0.0	2134.0	*	1	1914	578	1.	0.0	2134.0	*	2	0514 878	1.	0.0	2134.0
1	0916	279	1.	0.0	2134.0	*	1	1916	579	1.	0.0	2134.0	*	2	0516 879	1.	0.0	2134.0
1	0918	280	1.	0.0	2134.0	*	1	1918	580	1.	0.0	2134.0	*	2	0518 880	1.	0.0	2134.0
1	0920	281	1.	0.0	2134.0	*	1	1920	581	1.	0.0	2134.0	*	2	0520 881	1.	0.0	2134.0
1	0922	282	1.	0.0	2134.0	*	1	1922	582	1.	0.0	2134.0	*	2	0522 882	1.	0.0	2134.0
1	0924	283	1.	0.0	2134.0	*	1	1924	583	1.	0.0	2134.0	*	2	0524 883	1.	0.0	2134.0
1	0926	284	1.	0.0	2134.0	*	1	1926	584	1.	0.0	2134.0	*	2	0526 884	1.	0.0	2134.0
1	0928	285	1.	0.0	2134.0	*	1	1928	585	1.	0.0	2134.0	*	2	0528 885	1.	0.0	2134.0
1	0930	286	1.	0.0	2134.0	*	1	1930	586	1.	0.0	2134.0	*	2	0530 886	1.	0.0	2134.0
1	0932	287	1.	0.0	2134.0	*	1	1932	587	1.	0.0	2134.0	*	2	0532 887	1.	0.0	2134.0
1	0934	288	1.	0.0	2134.0	*	1	1934	588	1.	0.0	2134.0	*	2	0534 888	1.	0.0	2134.0
1	0936	289	1.	0.0	2134.0	*	1	1936	589	1.	0.0	2134.0	*	2	0536 889	1.	0.0	2134.0
1	0938	290	1.	0.0	2134.0	*	1	1938	590	1.	0.0	2134.0	*	2	0538 890	1.	0.0	2134.0
1	0940	291	1.	0.0	2134.0	*	1	1940	591	1.	0.0	2134.0	*	2	0540 891	1.	0.0	2134.0
1	0942	292	1.	0.0	2134.0	*	1	1942	592	1.	0.0	2134.0	*	2	0542 892	1.	0.0	2134.0
1	0944	293	1.	0.0	2134.0	*	1	1944	593	1.	0.0	2134.0	*	2	0544 893	1.	0.0	2134.0
1	0946	294	1.	0.0	2134.0	*	1	1946	594	1.	0.0	2134.0	*	2	0546 894	1.	0.0	2134.0
1	0948	295	1.	0.0	2134.0	*	1	1948	595	1.	0.0	2134.0	*	2	0548 895	1.	0.0	2134.0
1	0950	296	1.	0.0	2134.0	*	1	1950	596	1.	0.0	2134.0	*	2	0550 896	1.	0.0	2134.0
1	0952	297	1.	0.0	2134.0	*	1	1952	597	1.	0.0	2134.0	*	2	0552 897	1.	0.0	2134.0
1	0954	298	1.	0.0	2134.0	*	1	1954	598	1.	0.0	2134.0	*	2	0554 898	1.	0.0	2134.0
1	0956	299	1.	0.0	2134.0	*	1	1956	599	1.	0.0	2134.0	*	2	0556 899	1.	0.0	2134.0
1	0958	300	1.	0.0	2134.0	*	1	1958	600	1.	0.0	2134.0	*	2	0558 900	1.	0.0	2134.0
					*						*							

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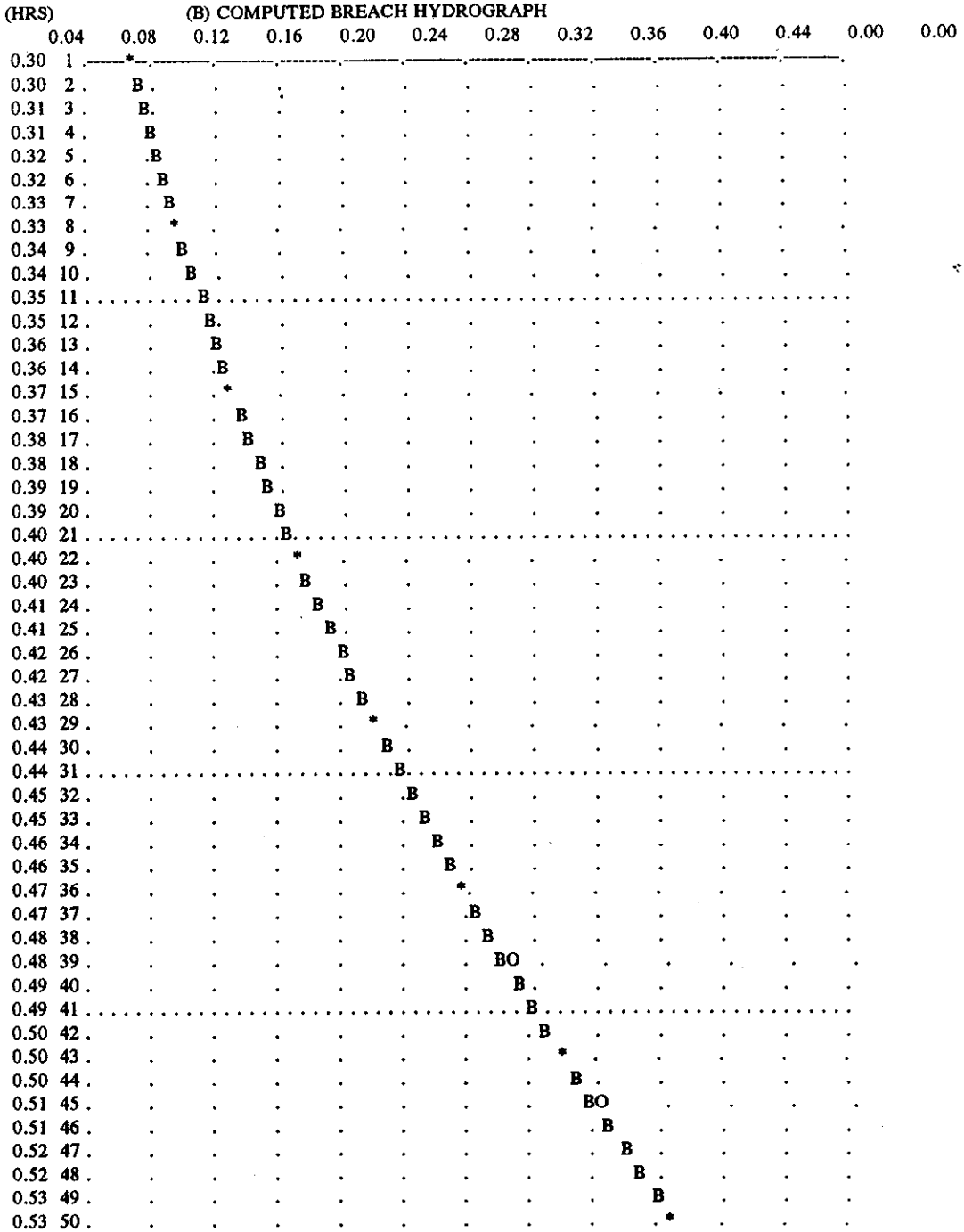
PEAK OUTFLOW IS 5389. AT TIME 3.53 HOURS

THE DAM BREACH HYDROGRAPH WAS DEVELOPED USING A TIME INTERVAL OF 0.005 HOURS DURING BREACH FORMATION.
DOWNSTREAM CALCULATIONS WILL USE A TIME INTERVAL OF 0.033 HOURS.
THIS TABLE COMPARES THE HYDROGRAPH FOR DOWNSTREAM CALCULATIONS WITH THE COMPUTED BREACH HYDROGRAPH.
INTERMEDIATE FLOWS ARE INTERPOLATED FROM END-OF-PERIOD VALUES.

TIME (HOURS)	TIME FROM BEGINNING OF BREACH (HOURS)	INTERPOLATED BREACH HYDROGRAPH (CFS)	-	COMPUTED BREACH HYDROGRAPH (CFS)	=	ERROR (CFS)	ACCUMULATED ERROR (AC-FT)	ACCUMULATED ERROR
0.300	0.000	0.	0.	0.	0.	0.		
0.305	0.005	0.	0.	0.	0.	0.		
0.310	0.010	0.	0.	0.	0.	0.		
0.314	0.014	0.	0.	0.	0.	0.		
0.319	0.019	0.	0.	0.	0.	0.		
0.324	0.024	0.	0.	0.	0.	0.		
0.329	0.029	0.	0.	0.	0.	0.		
0.333	0.033	0.	0.	0.	0.	0.		
0.338	0.038	0.	0.	0.	0.	0.		
0.343	0.043	0.	0.	0.	0.	0.		
0.348	0.048	0.	0.	0.	0.	0.		
0.352	0.052	0.	0.	0.	0.	0.		
0.357	0.057	0.	0.	0.	0.	0.		
0.362	0.062	0.	0.	0.	0.	0.		
0.367	0.067	0.	0.	0.	0.	0.		
0.371	0.071	0.	0.	0.	0.	0.		
0.376	0.076	0.	0.	0.	0.	0.		
0.381	0.081	0.	0.	0.	0.	0.		
0.386	0.086	0.	0.	0.	0.	0.		
0.390	0.090	0.	0.	0.	0.	0.		
0.395	0.095	0.	0.	0.	0.	0.		
0.400	0.100	0.	0.	0.	0.	0.		
0.405	0.105	0.	0.	0.	0.	0.		
0.410	0.110	0.	0.	0.	0.	0.		
0.414	0.114	0.	0.	0.	0.	0.		
0.419	0.119	0.	0.	0.	0.	0.		
0.424	0.124	0.	0.	0.	0.	0.		
0.429	0.129	0.	0.	0.	0.	0.		
0.433	0.133	0.	0.	0.	0.	0.		
0.438	0.138	0.	0.	0.	0.	0.		
0.443	0.143	0.	0.	0.	0.	0.		
0.448	0.148	0.	0.	0.	0.	0.		
0.452	0.152	0.	0.	0.	0.	0.		
0.457	0.157	0.	0.	0.	0.	0.		
0.462	0.162	0.	0.	0.	0.	0.		
0.467	0.167	0.	0.	0.	0.	0.		
0.471	0.171	0.	0.	0.	0.	0.		
0.476	0.176	0.	0.	0.	0.	0.		
0.481	0.181	0.	0.	0.	0.	0.		
0.486	0.186	0.	0.	0.	0.	0.		
0.490	0.190	0.	0.	0.	0.	0.		
0.495	0.195	0.	0.	0.	0.	0.		
0.500	0.200	0.	0.	0.	0.	0.		
0.505	0.205	0.	0.	0.	0.	0.		
0.510	0.210	0.	0.	0.	0.	0.		
0.514	0.214	0.	0.	0.	0.	0.		
0.519	0.219	0.	0.	0.	0.	0.		
0.524	0.224	0.	0.	0.	0.	0.		
0.529	0.229	0.	0.	0.	0.	0.		
0.533	0.233	0.	0.	0.	0.	0.		

STATION DAMOUT

TIME (HRS) — (O) INTERPOLATED BREACH HYDROGRAPH — (B) COMPUTED BREACH HYDROGRAPH — (*) POINTS AT NORMAL TIME INTERVAL



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PEAK FLOW     TIME                    MAXIMUM AVERAGE FLOW
                          6-HR      24-HR      72-HR    29.97-HR  (CFS)      (HR)
                  (CFS)   5389.     3.53                891.      224.       180.       180.
                (INCHES)    6.682      6.718      6.722      6.722
                (AC-FT)     442.       444.       445.       445.

PEAK STORAGE  TIME                    MAXIMUM AVERAGE STORAGE
                          6-HR      24-HR      72-HR    29.97-HR  (AC-FT)    (HR)
    9.    3.53              2.         0.         0.         0.

PEAK STAGE    TIME                    MAXIMUM AVERAGE STAGE
                          6-HR      24-HR      72-HR    29.97-HR  (FEET)     (HR)
 2137.60    3.53          2134.86    2134.23    2134.18    2134.18

              CUMULATIVE AREA =    1.24 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
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       **************
       *            *
 78 KK   *    RCH1  *      Route breach hydrograph downstream
       *            *
       **************

 81 KO        OUTPUT CONTROL VARIABLES
                IPRNT          1  PRINT CONTROL
                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

 82 RS        STORAGE ROUTING
                NSTPS          1  NUMBER OF SUBREACHES
                 ITYP       STOR  TYPE OF INITIAL CONDITION
                RSVRIC       0.00  INITIAL CONDITION
                    X       0.00 WORKING R AND D COEFFICIENT

 83 RC        NORMAL DEPTH CHANNEL
                  ANL      0.045  LEFT OVERBANK N-VALUE
                 ANCH      0.035  MAIN CHANNEL N-VALUE
                  ANR      0.045  RIGHT OVERBANK N-VALUE
                RLNTH      1500.  REACH LENGTH
                  SEL     0.0140  ENERGY SLOPE
                ELMAX        0.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                              CROSS-SECTION DATA
                     — LEFT OVERBANK — + —— MAIN CHANNEL —— + — RIGHT OVERBANK —
 85 RY      ELEVATION  2130.00  2112.00  2108.00  2104.50  2104.50  2108.80  2108.00  2130.00
 84 RX      DISTANCE    100.00   150.00   183.00   191.00   215.00   250.00   435.00   614.00

                                          ***

                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

       STORAGE      0.00     1.43     3.51     7.41    19.65    33.22    47.77    63.07    79.03    95.68
      OUTFLOW       0.00   221.18   797.49  1842.72  4891.86  9968.23 16778.22 25220.16 35185.12 46632.96
    ELEVATION    2104.50  2105.84  2107.18  2108.53  2109.87  2111.21  2112.55  2113.89  2115.24  2116.58
```

STORAGE	113.00	131.00	149.68	169.03	189.06	209.77	231.15	253.21	275.95	299.37
OUTFLOW	59542.46	73904.16	89716.45	106983.27	125712.55	145915.17	167604.31	190794.84	215503.08	241746.25
ELEVATION	2117.92	2119.26	2120.60	2121.95	2123.29	2124.63	2125.97	2127.31	2128.66	2130.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 46633. TO 241746.

THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.

THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION RCH1
PLAN 1, RATIO = 0.50

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2104.5	*	1	1000	301	1.	0.0	2104.5	*	1	2000	601	1.	0.0	2104.5			
1	0002	2	0.	0.0	2104.5	*	1	1002	302	1.	0.0	2104.5	*	1	2002	602	1.	0.0	2104.5			
1	0004	3	0.	0.0	2104.5	*	1	1004	303	1.	0.0	2104.5	*	1	2004	603	1.	0.0	2104.5			
1	0006	4	0.	0.0	2104.5	*	1	1006	304	1.	0.0	2104.5	*	1	2006	604	1.	0.0	2104.5			
1	0008	5	0.	0.0	2104.5	*	1	1008	305	1.	0.0	2104.5	*	1	2008	605	1.	0.0	2104.5			
1	0010	6	0.	0.0	2104.5	*	1	1010	306	1.	0.0	2104.5	*	1	2010	606	1.	0.0	2104.5			
1	0012	7	0.	0.0	2104.5	*	1	1012	307	1.	0.0	2104.5	*	1	2012	607	1.	0.0	2104.5			
1	0014	8	0.	0.0	2104.5	*	1	1014	308	1.	0.0	2104.5	*	1	2014	608	1.	0.0	2104.5			
1	0016	9	0.	0.0	2104.5	*	1	1016	309	1.	0.0	2104.5	*	1	2016	609	1.	0.0	2104.5			
1	0018	10	0.	0.0	2104.5	*	1	1018	310	1.	0.0	2104.5	*	1	2018	610	1.	0.0	2104.5			
1	0020	11	0.	0.0	2104.5	*	1	1020	311	1.	0.0	2104.5	*	1	2020	611	1.	0.0	2104.5			
1	0022	12	0.	0.0	2104.5	*	1	1022	312	1.	0.0	2104.5	*	1	2022	612	1.	0.0	2104.5			
1	0024	13	0.	0.0	2104.5	*	1	1024	313	1.	0.0	2104.5	*	1	2024	613	1.	0.0	2104.5			
1	0026	14	0.	0.0	2104.5	*	1	1026	314	1.	0.0	2104.5	*	1	2026	614	1.	0.0	2104.5			
1	0028	15	0.	0.0	2104.5	*	1	1028	315	1.	0.0	2104.5	*	1	2028	615	1.	0.0	2104.5			
1	0030	16	0.	0.0	2104.5	*	1	1030	316	1.	0.0	2104.5	*	1	2030	616	1.	0.0	2104.5			
1	0032	17	0.	0.0	2104.5	*	1	1032	317	1.	0.0	2104.5	*	1	2032	617	1.	0.0	2104.5			
1	0034	18	0.	0.0	2104.5	*	1	1034	318	1.	0.0	2104.5	*	1	2034	618	1.	0.0	2104.5			
1	0036	19	0.	0.0	2104.5	*	1	1036	319	1.	0.0	2104.5	*	1	2036	619	1.	0.0	2104.5			
1	0038	20	0.	0.0	2104.5	*	1	1038	320	1.	0.0	2104.5	*	1	2038	620	1.	0.0	2104.5			
1	0040	21	1.	0.0	2104.5	*	1	1040	321	1.	0.0	2104.5	*	1	2040	621	1.	0.0	2104.5			
1	0042	22	1.	0.0	2104.5	*	1	1042	322	1.	0.0	2104.5	*	1	2042	622	1.	0.0	2104.5			
1	0044	23	1.	0.0	2104.5	*	1	1044	323	1.	0.0	2104.5	*	1	2044	623	1.	0.0	2104.5			
1	0046	24	1.	0.0	2104.5	*	1	1046	324	1.	0.0	2104.5	*	1	2046	624	1.	0.0	2104.5			
1	0048	25	1.	0.0	2104.5	*	1	1048	325	1.	0.0	2104.5	*	1	2048	625	1.	0.0	2104.5			
1	0050	26	1.	0.0	2104.5	*	1	1050	326	1.	0.0	2104.5	*	1	2050	626	1.	0.0	2104.5			
1	0052	27	1.	0.0	2104.5	*	1	1052	327	1.	0.0	2104.5	*	1	2052	627	1.	0.0	2104.5			
1	0054	28	1.	0.0	2104.5	*	1	1054	328	1.	0.0	2104.5	*	1	2054	628	1.	0.0	2104.5			
1	0056	29	1.	0.0	2104.5	*	1	1056	329	1.	0.0	2104.5	*	1	2056	629	1.	0.0	2104.5			
1	0058	30	2.	0.0	2104.5	*	1	1058	330	1.	0.0	2104.5	*	1	2058	630	1.	0.0	2104.5			
1	0100	31	2.	0.0	2104.5	*	1	1100	331	1.	0.0	2104.5	*	1	2100	631	1.	0.0	2104.5			
1	0102	32	2.	0.0	2104.5	*	1	1102	332	1.	0.0	2104.5	*	1	2102	632	1.	0.0	2104.5			
1	0104	33	2.	0.0	2104.5	*	1	1104	333	1.	0.0	2104.5	*	1	2104	633	1.	0.0	2104.5			
1	0106	34	2.	0.0	2104.5	*	1	1106	334	1.	0.0	2104.5	*	1	2106	634	1.	0.0	2104.5			
1	0108	35	2.	0.0	2104.5	*	1	1108	335	1.	0.0	2104.5	*	1	2108	635	1.	0.0	2104.5			
1	0110	36	3.	0.0	2104.5	*	1	1110	336	1.	0.0	2104.5	*	1	2110	636	1.	0.0	2104.5			
1	0112	37	3.	0.0	2104.5	*	1	1112	337	1.	0.0	2104.5	*	1	2112	637	1.	0.0	2104.5			
1	0114	38	3.	0.0	2104.5	*	1	1114	338	1.	0.0	2104.5	*	1	2114	638	1.	0.0	2104.5			
1	0116	39	3.	0.0	2104.5	*	1	1116	339	1.	0.0	2104.5	*	1	2116	639	1.	0.0	2104.5			
1	0118	40	3.	0.0	2104.5	*	1	1118	340	1.	0.0	2104.5	*	1	2118	640	1.	0.0	2104.5			
1	0120	41	3.	0.0	2104.5	*	1	1120	341	1.	0.0	2104.5	*	1	2120	641	1.	0.0	2104.5			

1	0122	42	4.	0.0	2104.5	*	1	1122	342	1.	0.0	2104.5	*	1	2122	642	1.	0.0	2104.5
1	0124	43	4.	0.0	2104.5	*	1	1124	343	1.	0.0	2104.5	*	1	2124	643	1.	0.0	2104.5
1	0126	44	4.	0.0	2104.5	*	1	1126	344	1.	0.0	2104.5	*	1	2126	644	1.	0.0	2104.5
1	0128	45	4.	0.0	2104.5	*	1	1128	345	1.	0.0	2104.5	*	1	2128	645	1.	0.0	2104.5
1	0130	46	5.	0.0	2104.5	*	1	1130	346	1.	0.0	2104.5	*	1	2130	646	1.	0.0	2104.5
1	0132	47	5.	0.0	2104.5	*	1	1132	347	1.	0.0	2104.5	*	1	2132	647	1.	0.0	2104.5
1	0134	48	5.	0.0	2104.5	*	1	1134	348	1.	0.0	2104.5	*	1	2134	648	1.	0.0	2104.5
1	0136	49	5.	0.0	2104.5	*	1	1136	349	1.	0.0	2104.5	*	1	2136	649	1.	0.0	2104.5
1	0138	50	6.	0.0	2104.5	*	1	1138	350	1.	0.0	2104.5	*	1	2138	650	1.	0.0	2104.5
1	0140	51	6.	0.0	2104.5	*	1	1140	351	1.	0.0	2104.5	*	1	2140	651	1.	0.0	2104.5
1	0142	52	6.	0.0	2104.5	*	1	1142	352	1.	0.0	2104.5	*	1	2142	652	1.	0.0	2104.5
1	0144	53	6.	0.0	2104.5	*	1	1144	353	1.	0.0	2104.5	*	1	2144	653	1.	0.0	2104.5
1	0146	54	7.	0.0	2104.5	*	1	1146	354	1.	0.0	2104.5	*	1	2146	654	1.	0.0	2104.5
1	0148	55	7.	0.0	2104.5	*	1	1148	355	1.	0.0	2104.5	*	1	2148	655	1.	0.0	2104.5
1	0150	56	7.	0.0	2104.5	*	1	1150	356	1.	0.0	2104.5	*	1	2150	656	1.	0.0	2104.5
1	0152	57	7.	0.0	2104.5	*	1	1152	357	1.	0.0	2104.5	*	1	2152	657	1.	0.0	2104.5
1	0154	58	8.	0.1	2104.5	*	1	1154	358	1.	0.0	2104.5	*	1	2154	658	1.	0.0	2104.5
1	0156	59	8.	0.1	2104.5	*	1	1156	359	1.	0.0	2104.5	*	1	2156	659	1.	0.0	2104.5
1	0158	60	8.	0.1	2104.6	*	1	1158	360	1.	0.0	2104.5	*	1	2158	660	1.	0.0	2104.5
1	0200	61	9.	0.1	2104.6	*	1	1200	361	1.	0.0	2104.5	*	1	2200	661	1.	0.0	2104.5
1	0202	62	9.	0.1	2104.6	*	1	1202	362	1.	0.0	2104.5	*	1	2202	662	1.	0.0	2104.5
1	0204	63	9.	0.1	2104.6	*	1	1204	363	1.	0.0	2104.5	*	1	2204	663	1.	0.0	2104.5
1	0206	64	9.	0.1	2104.6	*	1	1206	364	1.	0.0	2104.5	*	1	2206	664	1.	0.0	2104.5
1	0208	65	9.	0.1	2104.6	*	1	1208	365	1.	0.0	2104.5	*	1	2208	665	1.	0.0	2104.5
1	0210	66	10.	0.1	2104.6	*	1	1210	366	1.	0.0	2104.5	*	1	2210	666	1.	0.0	2104.5
1	0212	67	10.	0.1	2104.6	*	1	1212	367	1.	0.0	2104.5	*	1	2212	667	1.	0.0	2104.5
1	0214	68	10.	0.1	2104.6	*	1	1214	368	1.	0.0	2104.5	*	1	2214	668	1.	0.0	2104.5
1	0216	69	10.	0.1	2104.6	*	1	1216	369	1.	0.0	2104.5	*	1	2216	669	1.	0.0	2104.5
1	0218	70	10.	0.1	2104.6	*	1	1218	370	1.	0.0	2104.5	*	1	2218	670	1.	0.0	2104.5
1	0220	71	10.	0.1	2104.6	*	1	1220	371	1.	0.0	2104.5	*	1	2220	671	1.	0.0	2104.5
1	0222	72	10.	0.1	2104.6	*	1	1222	372	1.	0.0	2104.5	*	1	2222	672	1.	0.0	2104.5
1	0224	73	10.	0.1	2104.6	*	1	1224	373	1.	0.0	2104.5	*	1	2224	673	1.	0.0	2104.5
1	0226	74	10.	0.1	2104.6	*	1	1226	374	1.	0.0	2104.5	*	1	2226	674	1.	0.0	2104.5
1	0228	75	11.	0.1	2104.6	*	1	1228	375	1.	0.0	2104.5	*	1	2228	675	1.	0.0	2104.5
1	0230	76	11.	0.1	2104.6	*	1	1230	376	1.	0.0	2104.5	*	1	2230	676	1.	0.0	2104.5
1	0232	77	11.	0.1	2104.6	*	1	1232	377	1.	0.0	2104.5	*	1	2232	677	1.	0.0	2104.5
1	0234	78	11.	0.1	2104.6	*	1	1234	378	1.	0.0	2104.5	*	1	2234	678	1.	0.0	2104.5
1	0236	79	11.	0.1	2104.6	*	1	1236	379	1.	0.0	2104.5	*	1	2236	679	1.	0.0	2104.5
1	0238	80	11.	0.1	2104.6	*	1	1238	380	1.	0.0	2104.5	*	1	2238	680	1.	0.0	2104.5
1	0240	81	12.	0.1	2104.6	*	1	1240	381	1.	0.0	2104.5	*	1	2240	681	1.	0.0	2104.5
1	0242	82	12.	0.1	2104.6	*	1	1242	382	1.	0.0	2104.5	*	1	2242	682	1.	0.0	2104.5
1	0244	83	12.	0.1	2104.6	*	1	1244	383	1.	0.0	2104.5	*	1	2244	683	1.	0.0	2104.5
1	0246	84	12.	0.1	2104.6	*	1	1246	384	1.	0.0	2104.5	*	1	2246	684	1.	0.0	2104.5
1	0248	85	12.	0.1	2104.6	*	1	1248	385	1.	0.0	2104.5	*	1	2248	685	1.	0.0	2104.5
1	0250	86	13.	0.1	2104.6	*	1	1250	386	1.	0.0	2104.5	*	1	2250	686	1.	0.0	2104.5
1	0252	87	13.	0.1	2104.6	*	1	1252	387	1.	0.0	2104.5	*	1	2252	687	1.	0.0	2104.5
1	0254	88	13.	0.1	2104.6	*	1	1254	388	1.	0.0	2104.5	*	1	2254	688	1.	0.0	2104.5
1	0256	89	13.	0.1	2104.6	*	1	1256	389	1.	0.0	2104.5	*	1	2256	689	1.	0.0	2104.5
1	0258	90	13.	0.1	2104.6	*	1	1258	390	1.	0.0	2104.5	*	1	2258	690	1.	0.0	2104.5
1	0300	91	14.	0.1	2104.6	*	1	1300	391	1.	0.0	2104.5	*	1	2300	691	1.	0.0	2104.5
1	0302	92	14.	0.1	2104.6	*	1	1302	392	1.	0.0	2104.5	*	1	2302	692	1.	0.0	2104.5
1	0304	93	14.	0.1	2104.6	*	1	1304	393	1.	0.0	2104.5	*	1	2304	693	1.	0.0	2104.5
1	0306	94	15.	0.1	2104.6	*	1	1306	394	1.	0.0	2104.5	*	1	2306	694	1.	0.0	2104.5
1	0308	95	15.	0.1	2104.6	*	1	1308	395	1.	0.0	2104.5	*	1	2308	695	1.	0.0	2104.5
1	0310	96	15.	0.1	2104.6	*	1	1310	396	1.	0.0	2104.5	*	1	2310	696	1.	0.0	2104.5
1	0312	97	16.	0.1	2104.6	*	1	1312	397	1.	0.0	2104.5	*	1	2312	697	1.	0.0	2104.5
1	0314	98	16.	0.1	2104.6	*	1	1314	398	1.	0.0	2104.5	*	1	2314	698	1.	0.0	2104.5
1	0316	99	17.	0.1	2104.6	*	1	1316	399	1.	0.0	2104.5	*	1	2316	699	1.	0.0	2104.5
1	0318	100	18.	0.1	2104.6	*	1	1318	400	1.	0.0	2104.5	*	1	2318	700	1.	0.0	2104.5
1	0320	101	19.	0.1	2104.6	*	1	1320	401	1.	0.0	2104.5	*	1	2320	701	1.	0.0	2104.5
1	0322	102	20.	0.1	2104.6	*	1	1322	402	1.	0.0	2104.5	*	1	2322	702	1.	0.0	2104.5
1	0324	103	21.	0.1	2104.6	*	1	1324	403	1.	0.0	2104.5	*	1	2324	703	1.	0.0	2104.5
1	0326	104	22.	0.1	2104.6	*	1	1326	404	1.	0.0	2104.5	*	1	2326	704	1.	0.0	2104.5
1	0328	105	23.	0.2	2104.6	*	1	1328	405	1.	0.0	2104.5	*	1	2328	705	1.	0.0	2104.5
1	0330	106	25.	0.2	2104.7	*	1	1330	406	1.	0.0	2104.5	*	1	2330	706	1.	0.0	2104.5

1	0332	107	39.	0.3	2104.7	*	1	1332	407	1.	0.0	2104.5	*	1	2332 707	1.	0.0	2104.5
1	0334	108	140.	0.9	2105.4	*	1	1334	408	1.	0.0	2104.5	*	1	2334 708	1.	0.0	2104.5
1	0336	109	531.	2.5	2106.6	*	1	1336	409	1.	0.0	2104.5	*	1	2336 709	1.	0.0	2104.5
1	0338	110	1434.	5.9	2108.0	*	1	1338	410	1.	0.0	2104.5	*	1	2338 710	1.	0.0	2104.5
1	0340	111	3005.	12.1	2109.0	*	1	1340	411	1.	0.0	2104.5	*	1	2340 711	1.	0.0	2104.5
1	0342	112	5408.	21.0	2110.0	*	1	1342	412	1.	0.0	2104.5	*	1	2342 712	1.	0.0	2104.5
1	0344	113	8957.	30.5	2110.9	*	1	1344	413	1.	0.0	2104.5	*	1	2344 713	1.	0.0	2104.5
1	0346	114	12569.	38.8	2111.7	*	1	1346	414	1.	0.0	2104.5	*	1	2346 714	1.	0.0	2104.5
1	0348	115	14176.	42.2	2112.0	*	1	1348	415	1.	0.0	2104.5	*	1	2348 715	1.	0.0	2104.5
1	0350	116	12515.	38.7	2111.7	*	1	1350	416	1.	0.0	2104.5	*	1	2350 716	1.	0.0	2104.5
1	0352	117	9814.	32.8	2111.2	*	1	1352	417	1.	0.0	2104.5	*	1	2352 717	1.	0.0	2104.5
1	0354	118	7976.	27.9	2110.7	*	1	1354	418	1.	0.0	2104.5	*	1	2354 718	1.	0.0	2104.5
1	0356	119	6518.	24.0	2110.3	*	1	1356	419	1.	0.0	2104.5	*	1	2356 719	1.	0.0	2104.5
1	0358	120	5454.	21.2	2110.0	*	1	1358	420	1.	0.0	2104.5	*	1	2358 720	1.	0.0	2104.5
1	0400	121	4740.	19.0	2109.8	*	1	1400	421	1.	0.0	2104.5	*	2	0000 721	1.	0.0	2104.5
1	0402	122	4295.	17.3	2109.6	*	1	1402	422	1.	0.0	2104.5	*	2	0002 722	1.	0.0	2104.5
1	0404	123	3897.	15.7	2109.4	*	1	1404	423	1.	0.0	2104.5	*	2	0004 723	1.	0.0	2104.5
1	0406	124	3558.	14.3	2109.3	*	1	1406	424	1.	0.0	2104.5	*	2	0006 724	1.	0.0	2104.5
1	0408	125	3273.	13.2	2109.2	*	1	1408	425	1.	0.0	2104.5	*	2	0008 725	1.	0.0	2104.5
1	0410	126	3033.	12.2	2109.0	*	1	1410	426	1.	0.0	2104.5	*	2	0010 726	1.	0.0	2104.5
1	0412	127	2826.	11.4	2109.0	*	1	1412	427	1.	0.0	2104.5	*	2	0012 727	1.	0.0	2104.5
1	0414	128	2645.	10.6	2108.9	*	1	1414	428	1.	0.0	2104.5	*	2	0014 728	1.	0.0	2104.5
1	0416	129	2483.	10.0	2108.8	*	1	1416	429	1.	0.0	2104.5	*	2	0016 729	1.	0.0	2104.5
1	0418	130	2336.	9.4	2108.7	*	1	1418	430	1.	0.0	2104.5	*	2	0018 730	1.	0.0	2104.5
1	0420	131	2198.	8.8	2108.7	*	1	1420	431	1.	0.0	2104.5	*	2	0020 731	1.	0.0	2104.5
1	0422	132	2067.	8.3	2108.6	*	1	1422	432	1.	0.0	2104.5	*	2	0022 732	1.	0.0	2104.5
1	0424	133	1943.	7.8	2108.6	*	1	1424	433	1.	0.0	2104.5	*	2	0024 733	1.	0.0	2104.5
1	0426	134	1824.	7.3	2108.5	*	1	1426	434	1.	0.0	2104.5	*	2	0026 734	1.	0.0	2104.5
1	0428	135	1707.	6.9	2108.4	*	1	1428	435	1.	0.0	2104.5	*	2	0028 735	1.	0.0	2104.5
1	0430	136	1598.	6.5	2108.2	*	1	1430	436	1.	0.0	2104.5	*	2	0030 736	1.	0.0	2104.5
1	0432	137	1497.	6.1	2108.1	*	1	1432	437	1.	0.0	2104.5	*	2	0032 737	1.	0.0	2104.5
1	0434	138	1403.	5.8	2108.0	*	1	1434	438	1.	0.0	2104.5	*	2	0034 738	1.	0.0	2104.5
1	0436	139	1315.	5.4	2107.8	*	1	1436	439	1.	0.0	2104.5	*	2	0036 739	1.	0.0	2104.5
1	0438	140	1233.	5.1	2107.7	*	1	1438	440	1.	0.0	2104.5	*	2	0038 740	1.	0.0	2104.5
1	0440	141	1156.	4.8	2107.6	*	1	1440	441	1.	0.0	2104.5	*	2	0040 741	1.	0.0	2104.5
1	0442	142	1084.	4.6	2107.6	*	1	1442	442	1.	0.0	2104.5	*	2	0042 742	1.	0.0	2104.5
1	0444	143	1017.	4.3	2107.5	*	1	1444	443	1.	0.0	2104.5	*	2	0044 743	1.	0.0	2104.5
1	0446	144	955.	4.1	2107.4	*	1	1446	444	1.	0.0	2104.5	*	2	0046 744	1.	0.0	2104.5
1	0448	145	897.	3.9	2107.3	*	1	1448	445	1.	0.0	2104.5	*	2	0048 745	1.	0.0	2104.5
1	0450	146	843.	3.7	2107.2	*	1	1450	446	1.	0.0	2104.5	*	2	0050 746	1.	0.0	2104.5
1	0452	147	793.	3.5	2107.2	*	1	1452	447	1.	0.0	2104.5	*	2	0052 747	1.	0.0	2104.5
1	0454	148	747.	3.3	2107.1	*	1	1454	448	1.	0.0	2104.5	*	2	0054 748	1.	0.0	2104.5
1	0456	149	705.	3.2	2107.0	*	1	1456	449	1.	0.0	2104.5	*	2	0056 749	1.	0.0	2104.5
1	0458	150	666.	3.0	2106.9	*	1	1458	450	1.	0.0	2104.5	*	2	0058 750	1.	0.0	2104.5
1	0500	151	632.	2.9	2106.8	*	1	1500	451	1.	0.0	2104.5	*	2	0100 751	1.	0.0	2104.5
1	0502	152	600.	2.8	2106.7	*	1	1502	452	1.	0.0	2104.5	*	2	0102 752	1.	0.0	2104.5
1	0504	153	570.	2.7	2106.7	*	1	1504	453	1.	0.0	2104.5	*	2	0104 753	1.	0.0	2104.5
1	0506	154	543.	2.6	2106.6	*	1	1506	454	1.	0.0	2104.5	*	2	0106 754	1.	0.0	2104.5
1	0508	155	518.	2.5	2106.5	*	1	1508	455	1.	0.0	2104.5	*	2	0108 755	1.	0.0	2104.5
1	0510	156	495.	2.4	2106.5	*	1	1510	456	1.	0.0	2104.5	*	2	0110 756	1.	0.0	2104.5
1	0512	157	472.	2.3	2106.4	*	1	1512	457	1.	0.0	2104.5	*	2	0112 757	1.	0.0	2104.5
1	0514	158	451.	2.3	2106.4	*	1	1514	458	1.	0.0	2104.5	*	2	0114 758	1.	0.0	2104.5
1	0516	159	429.	2.2	2106.3	*	1	1516	459	1.	0.0	2104.5	*	2	0116 759	1.	0.0	2104.5
1	0518	160	408.	2.1	2106.3	*	1	1518	460	1.	0.0	2104.5	*	2	0118 760	1.	0.0	2104.5
1	0520	161	387.	2.0	2106.2	*	1	1520	461	1.	0.0	2104.5	*	2	0120 761	1.	0.0	2104.5
1	0522	162	366.	2.0	2106.2	*	1	1522	462	1.	0.0	2104.5	*	2	0122 762	1.	0.0	2104.5
1	0524	163	346.	1.9	2106.1	*	1	1524	463	1.	0.0	2104.5	*	2	0124 763	1.	0.0	2104.5
1	0526	164	327.	1.8	2106.1	*	1	1526	464	1.	0.0	2104.5	*	2	0126 764	1.	0.0	2104.5
1	0528	165	308.	1.7	2106.0	*	1	1528	465	1.	0.0	2104.5	*	2	0128 765	1.	0.0	2104.5
1	0530	166	290.	1.7	2106.0	*	1	1530	466	1.	0.0	2104.5	*	2	0130 766	1.	0.0	2104.5
1	0532	167	273.	1.6	2106.0	*	1	1532	467	1.	0.0	2104.5	*	2	0132 767	1.	0.0	2104.5
1	0534	168	257.	1.6	2105.9	*	1	1534	468	1.	0.0	2104.5	*	2	0134 768	1.	0.0	2104.5
1	0536	169	242.	1.5	2105.9	*	1	1536	469	1.	0.0	2104.5	*	2	0136 769	1.	0.0	2104.5
1	0538	170	228.	1.5	2105.9	*	1	1538	470	1.	0.0	2104.5	*	2	0138 770	1.	0.0	2104.5
1	0540	171	217.	1.4	2105.8	*	1	1540	471	1.	0.0	2104.5	*	2	0140 771	1.	0.0	2104.5

1	0542	172	209.	1.4	2105.8	*	1	1542	472	1.	0.0	2104.5	*	2	0142 772	1.	0.0	2104.5
1	0544	173	200.	1.3	2105.7	*	1	1544	473	1.	0.0	2104.5	*	2	0144 773	1.	0.0	2104.5
1	0546	174	190.	1.2	2105.7	*	1	1546	474	1.	0.0	2104.5	*	2	0146 774	1.	0.0	2104.5
1	0548	175	181.	1.2	2105.6	*	1	1548	475	1.	0.0	2104.5	*	2	0148 775	1.	0.0	2104.5
1	0550	176	171.	1.1	2105.5	*	1	1550	476	1.	0.0	2104.5	*	2	0150 776	1.	0.0	2104.5
1	0552	177	162.	1.1	2105.5	*	1	1552	477	1.	0.0	2104.5	*	2	0152 777	1.	0.0	2104.5
1	0554	178	154.	1.0	2105.4	*	1	1554	478	1.	0.0	2104.5	*	2	0154 778	1.	0.0	2104.5
1	0556	179	146.	0.9	2105.4	*	1	1556	479	1.	0.0	2104.5	*	2	0156 779	1.	0.0	2104.5
1	0558	180	138.	0.9	2105.3	*	1	1558	480	1.	0.0	2104.5	*	2	0158 780	1.	0.0	2104.5
1	0600	181	130.	0.8	2105.3	*	1	1600	481	1.	0.0	2104.5	*	2	0200 781	1.	0.0	2104.5
1	0602	182	124.	0.8	2105.3	*	1	1602	482	1.	0.0	2104.5	*	2	0202 782	1.	0.0	2104.5
1	0604	183	118.	0.8	2105.2	*	1	1604	483	1.	0.0	2104.5	*	2	0204 783	1.	0.0	2104.5
1	0606	184	112.	0.7	2105.2	*	1	1606	484	1.	0.0	2104.5	*	2	0206 784	1.	0.0	2104.5
1	0608	185	107.	0.7	2105.1	*	1	1608	485	1.	0.0	2104.5	*	2	0208 785	1.	0.0	2104.5
1	0610	186	102.	0.7	2105.1	*	1	1610	486	1.	0.0	2104.5	*	2	0210 786	1.	0.0	2104.5
1	0612	187	97.	0.6	2105.1	*	1	1612	487	1.	0.0	2104.5	*	2	0212 787	1.	0.0	2104.5
1	0614	188	93.	0.6	2105.1	*	1	1614	488	1.	0.0	2104.5	*	2	0214 788	1.	0.0	2104.5
1	0616	189	89.	0.6	2105.0	*	1	1616	489	1.	0.0	2104.5	*	2	0216 789	1.	0.0	2104.5
1	0618	190	85.	0.5	2105.0	*	1	1618	490	1.	0.0	2104.5	*	2	0218 790	1.	0.0	2104.5
1	0620	191	81.	0.5	2105.0	*	1	1620	491	1.	0.0	2104.5	*	2	0220 791	1.	0.0	2104.5
1	0622	192	77.	0.5	2105.0	*	1	1622	492	1.	0.0	2104.5	*	2	0222 792	1.	0.0	2104.5
1	0624	193	74.	0.5	2104.9	*	1	1624	493	1.	0.0	2104.5	*	2	0224 793	1.	0.0	2104.5
1	0626	194	70.	0.5	2104.9	*	1	1626	494	1.	0.0	2104.5	*	2	0226 794	1.	0.0	2104.5
1	0628	195	67.	0.4	2104.9	*	1	1628	495	1.	0.0	2104.5	*	2	0228 795	1.	0.0	2104.5
1	0630	196	64.	0.4	2104.9	*	1	1630	496	1.	0.0	2104.5	*	2	0230 796	1.	0.0	2104.5
1	0632	197	60.	0.4	2104.9	*	1	1632	497	1.	0.0	2104.5	*	2	0232 797	1.	0.0	2104.5
1	0634	198	57.	0.4	2104.8	*	1	1634	498	1.	0.0	2104.5	*	2	0234 798	1.	0.0	2104.5
1	0636	199	54.	0.4	2104.8	*	1	1636	499	1.	0.0	2104.5	*	2	0236 799	1.	0.0	2104.5
1	0638	200	51.	0.3	2104.8	*	1	1638	500	1.	0.0	2104.5	*	2	0238 800	1.	0.0	2104.5
1	0640	201	48.	0.3	2104.8	*	1	1640	501	1.	0.0	2104.5	*	2	0240 801	1.	0.0	2104.5
1	0642	202	46.	0.3	2104.8	*	1	1642	502	1.	0.0	2104.5	*	2	0242 802	1.	0.0	2104.5
1	0644	203	43.	0.3	2104.8	*	1	1644	503	1.	0.0	2104.5	*	2	0244 803	1.	0.0	2104.5
1	0646	204	41.	0.3	2104.7	*	1	1646	504	1.	0.0	2104.5	*	2	0246 804	1.	0.0	2104.5
1	0648	205	38.	0.2	2104.7	*	1	1648	505	1.	0.0	2104.5	*	2	0248 805	1.	0.0	2104.5
1	0650	206	36.	0.2	2104.7	*	1	1650	506	1.	0.0	2104.5	*	2	0250 806	1.	0.0	2104.5
1	0652	207	34.	0.2	2104.7	*	1	1652	507	1.	0.0	2104.5	*	2	0252 807	1.	0.0	2104.5
1	0654	208	33.	0.2	2104.7	*	1	1654	508	1.	0.0	2104.5	*	2	0254 808	1.	0.0	2104.5
1	0656	209	31.	0.2	2104.7	*	1	1656	509	1.	0.0	2104.5	*	2	0256 809	1.	0.0	2104.5
1	0658	210	30.	0.2	2104.7	*	1	1658	510	1.	0.0	2104.5	*	2	0258 810	1.	0.0	2104.5
1	0700	211	28.	0.2	2104.7	*	1	1700	511	1.	0.0	2104.5	*	2	0300 811	1.	0.0	2104.5
1	0702	212	27.	0.2	2104.7	*	1	1702	512	1.	0.0	2104.5	*	2	0302 812	1.	0.0	2104.5
1	0704	213	26.	0.2	2104.7	*	1	1704	513	1.	0.0	2104.5	*	2	0304 813	1.	0.0	2104.5
1	0706	214	24.	0.2	2104.6	*	1	1706	514	1.	0.0	2104.5	*	2	0306 814	1.	0.0	2104.5
1	0708	215	23.	0.1	2104.6	*	1	1708	515	1.	0.0	2104.5	*	2	0308 815	1.	0.0	2104.5
1	0710	216	22.	0.1	2104.6	*	1	1710	516	1.	0.0	2104.5	*	2	0310 816	1.	0.0	2104.5
1	0712	217	21.	0.1	2104.6	*	1	1712	517	1.	0.0	2104.5	*	2	0312 817	1.	0.0	2104.5
1	0714	218	20.	0.1	2104.6	*	1	1714	518	1.	0.0	2104.5	*	2	0314 818	1.	0.0	2104.5
1	0716	219	19.	0.1	2104.6	*	1	1716	519	1.	0.0	2104.5	*	2	0316 819	1.	0.0	2104.5
1	0718	220	18.	0.1	2104.6	*	1	1718	520	1.	0.0	2104.5	*	2	0318 820	1.	0.0	2104.5
1	0720	221	17.	0.1	2104.6	*	1	1720	521	1.	0.0	2104.5	*	2	0320 821	1.	0.0	2104.5
1	0722	222	16.	0.1	2104.6	*	1	1722	522	1.	0.0	2104.5	*	2	0322 822	1.	0.0	2104.5
1	0724	223	15.	0.1	2104.6	*	1	1724	523	1.	0.0	2104.5	*	2	0324 823	1.	0.0	2104.5
1	0726	224	15.	0.1	2104.6	*	1	1726	524	1.	0.0	2104.5	*	2	0326 824	1.	0.0	2104.5
1	0728	225	14.	0.1	2104.6	*	1	1728	525	1.	0.0	2104.5	*	2	0328 825	1.	0.0	2104.5
1	0730	226	13.	0.1	2104.6	*	1	1730	526	1.	0.0	2104.5	*	2	0330 826	1.	0.0	2104.5
1	0732	227	13.	0.1	2104.6	*	1	1732	527	1.	0.0	2104.5	*	2	0332 827	1.	0.0	2104.5
1	0734	228	12.	0.1	2104.6	*	1	1734	528	1.	0.0	2104.5	*	2	0334 828	1.	0.0	2104.5
1	0736	229	11.	0.1	2104.6	*	1	1736	529	1.	0.0	2104.5	*	2	0336 829	1.	0.0	2104.5
1	0738	230	11.	0.1	2104.6	*	1	1738	530	1.	0.0	2104.5	*	2	0338 830	1.	0.0	2104.5
1	0740	231	10.	0.1	2104.6	*	1	1740	531	1.	0.0	2104.5	*	2	0340 831	1.	0.0	2104.5
1	0742	232	10.	0.1	2104.6	*	1	1742	532	1.	0.0	2104.5	*	2	0342 832	1.	0.0	2104.5
1	0744	233	9.	0.1	2104.6	*	1	1744	533	1.	0.0	2104.5	*	2	0344 833	1.	0.0	2104.5
1	0746	234	9.	0.1	2104.6	*	1	1746	534	1.	0.0	2104.5	*	2	0346 834	1.	0.0	2104.5
1	0748	235	8.	0.1	2104.6	*	1	1748	535	1.	0.0	2104.5	*	2	0348 835	1.	0.0	2104.5
1	0750	236	8.	0.1	2104.5	*	1	1750	536	1.	0.0	2104.5	*	2	0350 836	1.	0.0	2104.5

1	0752	237	7.	0.0	2104.5	*	1	1752	537	1.	0.0	2104.5	*	2	0352 837	1.	0.0	2104.5
1	0754	238	7.	0.0	2104.5	*	1	1754	538	1.	0.0	2104.5	*	2	0354 838	1.	0.0	2104.5
1	0756	239	7.	0.0	2104.5	*	1	1756	539	1.	0.0	2104.5	*	2	0356 839	1.	0.0	2104.5
1	0758	240	6.	0.0	2104.5	*	1	1758	540	1.	0.0	2104.5	*	2	0358 840	1.	0.0	2104.5
1	0800	241	6.	0.0	2104.5	*	1	1800	541	1.	0.0	2104.5	*	2	0400 841	1.	0.0	2104.5
1	0802	242	6.	0.0	2104.5	*	1	1802	542	1.	0.0	2104.5	*	2	0402 842	1.	0.0	2104.5
1	0804	243	5.	0.0	2104.5	*	1	1804	543	1.	0.0	2104.5	*	2	0404 843	1.	0.0	2104.5
1	0806	244	5.	0.0	2104.5	*	1	1806	544	1.	0.0	2104.5	*	2	0406 844	1.	0.0	2104.5
1	0808	245	5.	0.0	2104.5	*	1	1808	545	1.	0.0	2104.5	*	2	0408 845	1.	0.0	2104.5
1	0810	246	5.	0.0	2104.5	*	1	1810	546	1.	0.0	2104.5	*	2	0410 846	1.	0.0	2104.5
1	0812	247	4.	0.0	2104.5	*	1	1812	547	1.	0.0	2104.5	*	2	0412 847	1.	0.0	2104.5
1	0814	248	4.	0.0	2104.5	*	1	1814	548	1.	0.0	2104.5	*	2	0414 848	1.	0.0	2104.5
1	0816	249	4.	0.0	2104.5	*	1	1816	549	1.	0.0	2104.5	*	2	0416 849	1.	0.0	2104.5
1	0818	250	4.	0.0	2104.5	*	1	1818	550	1.	0.0	2104.5	*	2	0418 850	1.	0.0	2104.5
1	0820	251	4.	0.0	2104.5	*	1	1820	551	1.	0.0	2104.5	*	2	0420 851	1.	0.0	2104.5
1	0822	252	3.	0.0	2104.5	*	1	1822	552	1.	0.0	2104.5	*	2	0422 852	1.	0.0	2104.5
1	0824	253	3.	0.0	2104.5	*	1	1824	553	1.	0.0	2104.5	*	2	0424 853	1.	0.0	2104.5
1	0826	254	3.	0.0	2104.5	*	1	1826	554	1.	0.0	2104.5	*	2	0426 854	1.	0.0	2104.5
1	0828	255	3.	0.0	2104.5	*	1	1828	555	1.	0.0	2104.5	*	2	0428 855	1.	0.0	2104.5
1	0830	256	3.	0.0	2104.5	*	1	1830	556	1.	0.0	2104.5	*	2	0430 856	1.	0.0	2104.5
1	0832	257	3.	0.0	2104.5	*	1	1832	557	1.	0.0	2104.5	*	2	0432 857	1.	0.0	2104.5
1	0834	258	2.	0.0	2104.5	*	1	1834	558	1.	0.0	2104.5	*	2	0434 858	1.	0.0	2104.5
1	0836	259	2.	0.0	2104.5	*	1	1836	559	1.	0.0	2104.5	*	2	0436 859	1.	0.0	2104.5
1	0838	260	2.	0.0	2104.5	*	1	1838	560	1.	0.0	2104.5	*	2	0438 860	1.	0.0	2104.5
1	0840	261	2.	0.0	2104.5	*	1	1840	561	1.	0.0	2104.5	*	2	0440 861	1.	0.0	2104.5
1	0842	262	2.	0.0	2104.5	*	1	1842	562	1.	0.0	2104.5	*	2	0442 862	1.	0.0	2104.5
1	0844	263	2.	0.0	2104.5	*	1	1844	563	1.	0.0	2104.5	*	2	0444 863	1.	0.0	2104.5
1	0846	264	2.	0.0	2104.5	*	1	1846	564	1.	0.0	2104.5	*	2	0446 864	1.	0.0	2104.5
1	0848	265	2.	0.0	2104.5	*	1	1848	565	1.	0.0	2104.5	*	2	0448 865	1.	0.0	2104.5
1	0850	266	2.	0.0	2104.5	*	1	1850	566	1.	0.0	2104.5	*	2	0450 866	1.	0.0	2104.5
1	0852	267	2.	0.0	2104.5	*	1	1852	567	1.	0.0	2104.5	*	2	0452 867	1.	0.0	2104.5
1	0854	268	2.	0.0	2104.5	*	1	1854	568	1.	0.0	2104.5	*	2	0454 868	1.	0.0	2104.5
1	0856	269	1.	0.0	2104.5	*	1	1856	569	1.	0.0	2104.5	*	2	0456 869	1.	0.0	2104.5
1	0858	270	1.	0.0	2104.5	*	1	1858	570	1.	0.0	2104.5	*	2	0458 870	1.	0.0	2104.5
1	0900	271	1.	0.0	2104.5	*	1	1900	571	1.	0.0	2104.5	*	2	0500 871	1.	0.0	2104.5
1	0902	272	1.	0.0	2104.5	*	1	1902	572	1.	0.0	2104.5	*	2	0502 872	1.	0.0	2104.5
1	0904	273	1.	0.0	2104.5	*	1	1904	573	1.	0.0	2104.5	*	2	0504 873	1.	0.0	2104.5
1	0906	274	1.	0.0	2104.5	*	1	1906	574	1.	0.0	2104.5	*	2	0506 874	1.	0.0	2104.5
1	0908	275	1.	0.0	2104.5	*	1	1908	575	1.	0.0	2104.5	*	2	0508 875	1.	0.0	2104.5
1	0910	276	1.	0.0	2104.5	*	1	1910	576	1.	0.0	2104.5	*	2	0510 876	1.	0.0	2104.5
1	0912	277	1.	0.0	2104.5	*	1	1912	577	1.	0.0	2104.5	*	2	0512 877	1.	0.0	2104.5
1	0914	278	1.	0.0	2104.5	*	1	1914	578	1.	0.0	2104.5	*	2	0514 878	1.	0.0	2104.5
1	0916	279	1.	0.0	2104.5	*	1	1916	579	1.	0.0	2104.5	*	2	0516 879	1.	0.0	2104.5
1	0918	280	1.	0.0	2104.5	*	1	1918	580	1.	0.0	2104.5	*	2	0518 880	1.	0.0	2104.5
1	0920	281	1.	0.0	2104.5	*	1	1920	581	1.	0.0	2104.5	*	2	0520 881	1.	0.0	2104.5
1	0922	282	1.	0.0	2104.5	*	1	1922	582	1.	0.0	2104.5	*	2	0522 882	1.	0.0	2104.5
1	0924	283	1.	0.0	2104.5	*	1	1924	583	1.	0.0	2104.5	*	2	0524 883	1.	0.0	2104.5
1	0926	284	1.	0.0	2104.5	*	1	1926	584	1.	0.0	2104.5	*	2	0526 884	1.	0.0	2104.5
1	0928	285	1.	0.0	2104.5	*	1	1928	585	1.	0.0	2104.5	*	2	0528 885	1.	0.0	2104.5
1	0930	286	1.	0.0	2104.5	*	1	1930	586	1.	0.0	2104.5	*	2	0530 886	1.	0.0	2104.5
1	0932	287	1.	0.0	2104.5	*	1	1932	587	1.	0.0	2104.5	*	2	0532 887	1.	0.0	2104.5
1	0934	288	1.	0.0	2104.5	*	1	1934	588	1.	0.0	2104.5	*	2	0534 888	1.	0.0	2104.5
1	0936	289	1.	0.0	2104.5	*	1	1936	589	1.	0.0	2104.5	*	2	0536 889	1.	0.0	2104.5
1	0938	290	1.	0.0	2104.5	*	1	1938	590	1.	0.0	2104.5	*	2	0538 890	1.	0.0	2104.5
1	0940	291	1.	0.0	2104.5	*	1	1940	591	1.	0.0	2104.5	*	2	0540 891	1.	0.0	2104.5
1	0942	292	1.	0.0	2104.5	*	1	1942	592	1.	0.0	2104.5	*	2	0542 892	1.	0.0	2104.5
1	0944	293	1.	0.0	2104.5	*	1	1944	593	1.	0.0	2104.5	*	2	0544 893	1.	0.0	2104.5
1	0946	294	1.	0.0	2104.5	*	1	1946	594	1.	0.0	2104.5	*	2	0546 894	1.	0.0	2104.5
1	0948	295	1.	0.0	2104.5	*	1	1948	595	1.	0.0	2104.5	*	2	0548 895	1.	0.0	2104.5
1	0950	296	1.	0.0	2104.5	*	1	1950	596	1.	0.0	2104.5	*	2	0550 896	1.	0.0	2104.5
1	0952	297	1.	0.0	2104.5	*	1	1952	597	1.	0.0	2104.5	*	2	0552 897	1.	0.0	2104.5
1	0954	298	1.	0.0	2104.5	*	1	1954	598	1.	0.0	2104.5	*	2	0554 898	1.	0.0	2104.5
1	0956	299	1.	0.0	2104.5	*	1	1956	599	1.	0.0	2104.5	*	2	0556 899	1.	0.0	2104.5
1	0958	300	1.	0.0	2104.5	*	1	1958	600	1.	0.0	2104.5	*	2	0558 900	1.	0.0	2104.5
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 PEAK FLOW    TIME                    MAXIMUM AVERAGE FLOW
                          6-HR      24-HR      72-HR    29.97-HR  (CFS)      (HR)
                 (CFS)  14176.     3.80                891.      223.       179.       179.
               (INCHES)   6.679      6.701      6.705      6.705
               (AC-FT)    442.       443.       443.       443.

PEAK STORAGE   TIME                    MAXIMUM AVERAGE STORAGE
                          6-HR      24-HR      72-HR    29.97-HR  (AC-FT)     (HR)
   42.     3.80             3.         1.         1.         1.

 PEAK STAGE    TIME                    MAXIMUM AVERAGE STAGE
                          6-HR      24-HR      72-HR    29.97-HR  (FEET)      (HR)
 2112.04     3.80          2105.87    2104.85    2104.78    2104.78

               CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

 86 KP       PLAN  2 FOR STATION     RCH1          Route breach hydrograph downstream

 87 KO        OUTPUT CONTROL VARIABLES
                IPRNT          3  PRINT CONTROL
                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

 82 RS        STORAGE ROUTING
                NSTPS          1  NUMBER OF SUBREACHES
                 ITYP       STOR  TYPE OF INITIAL CONDITION
                RSVRIC       0.00  INITIAL CONDITION
                    X       0.00 WORKING R AND D COEFFICIENT

 83 RC        NORMAL DEPTH CHANNEL
                  ANL      0.045  LEFT OVERBANK N-VALUE
                 ANCH      0.035  MAIN CHANNEL N-VALUE
                  ANR      0.045  RIGHT OVERBANK N-VALUE
                RLNTH       1500.  REACH LENGTH
                  SEL     0.0140  ENERGY SLOPE
                ELMAX     2130.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                              CROSS-SECTION DATA
                   — LEFT OVERBANK — + —— MAIN CHANNEL —— + — RIGHT OVERBANK —
 85 RY       ELEVATION  2130.00  2112.00  2108.00  2104.50  2104.50  2108.80  2108.00  2130.00
 84 RX       DISTANCE    100.00   150.00   183.00   191.00   215.00   250.00   435.00   614.00

                                          ***

                              COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE      0.00     1.43     3.51     7.41    19.65    33.22    47.77    63.07    79.03    95.68
        OUTFLOW      0.00   221.18   797.49  1842.72  4891.86  9968.23 16778.22 25220.16 35185.12 46632.96
      ELEVATION   2104.50  2105.84  2107.18  2108.53  2109.87  2111.21  2112.55  2113.89  2115.24  2116.58

        STORAGE    113.00   131.00   149.68   169.03   189.06   209.77   231.15   253.21   275.95   299.37
        OUTFLOW  59542.46 73904.16 89716.45 106983.27 125712.55 145915.17 167604.31 190794.84 215503.08 241746.25
      ELEVATION   2117.92  2119.26  2120.60  2121.95  2123.29  2124.63  2125.97  2127.31  2128.66  2130.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN    46633. TO
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241746.

THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.

THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** *** *** *** ***

HYDROGRAPH AT STATION RCH1
FOR PLAN 2, RATIO = 0.50

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	29.97-HR	(CFS)	(HR)
(CFS)		10645.	3.83	891.	224.	179.	179.
(INCHES)		6.682	6.705	6.709	6.709		
(AC-FT)		442.	443.	444.	444.		

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE					
		6-HR	24-HR	72-HR	29.97-HR	(AC-FT)	(HR)
35.	3.83	3.	1.	1.	1.		

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE					
		6-HR	24-HR	72-HR	29.97-HR	(FEET)	(HR)
2111.34	3.83	2105.90	2104.85	2104.78	2104.78		

CUMULATIVE AREA = 1.24 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

88 KP PLAN 3 FOR STATION RCH1 Route breach hydrograph downstream

89 KO OUTPUT CONTROL VARIABLES
IPRNT 3 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

82 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC 0.00 INITIAL CONDITION
X 0.00 WORKING R AND D COEFFICIENT

83 RC NORMAL DEPTH CHANNEL
ANL 0.045 LEFT OVERBANK N-VALUE
ANCH 0.035 MAIN CHANNEL N-VALUE
ANR 0.045 RIGHT OVERBANK N-VALUE
RLNTH 1500. REACH LENGTH
SEL 0.0140 ENERGY SLOPE
ELMAX 2130.0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		— LEFT OVERBANK — +			——— MAIN CHANNEL ——— +		— RIGHT OVERBANK —		
85 RY	ELEVATION	2130.00	2112.00	2108.00	2104.50	2104.50	2108.80	2108.00	2130.00
84 RX	DISTANCE	100.00	150.00	183.00	191.00	215.00	250.00	435.00	614.00

***

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.43	3.51	7.41	19.65	33.22	47.77	63.07	79.03	95.68
OUTFLOW	0.00	221.18	797.49	1842.72	4891.86	9968.23	16778.22	25220.16	35185.12	46632.96

```
ELEVATION   2104.50  2105.84  2107.18  2108.53  2109.87  2111.21  2112.55  2113.89  2115.24  2116.58

 STORAGE    113.00   131.00   149.68   169.03   189.06   209.77   231.15   253.21   275.95   299.37
 OUTFLOW   59542.46 73904.16 89716.45 106983.27 125712.55 145915.17 167604.31 190794.84 215503.08 241746.25
ELEVATION   2117.92  2119.26  2120.60  2121.95  2123.29  2124.63  2125.97  2127.31  2128.66  2130.00
```

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 46633. TO 241746.

THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.

THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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***        ***        ***        ***        ***

              HYDROGRAPH AT STATION     RCH1
               FOR PLAN 3, RATIO = 0.50

PEAK FLOW    TIME                  MAXIMUM AVERAGE FLOW
                        6-HR      24-HR      72-HR     29.97-HR  (CFS)      (HR)
             (CFS)    5502.      4.47                893.      224.       179.       179.
            (INCHES)   6.695      6.709      6.711      6.711
            (AC-FT)    443.       444.       444.       444.

PEAK STORAGE  TIME                  MAXIMUM AVERAGE STORAGE
                        6-HR      24-HR      72-HR     29.97-HR  (AC-FT)    (HR)
   21.     4.47          4.         1.         1.         1.

PEAK STAGE   TIME                  MAXIMUM AVERAGE STAGE
                        6-HR      24-HR      72-HR     29.97-HR  (FEET)     (HR)
 2110.03     4.47       2105.97   2104.87    2104.80    2104.80

             CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

 90 KP      PLAN  4 FOR STATION     RCH1          Route breach hydrograph downstream

 91 KO        OUTPUT CONTROL VARIABLES
               IPRNT        3  PRINT CONTROL
               IPLOT        0  PLOT CONTROL
               QSCAL        0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

 82 RS        STORAGE ROUTING
               NSTPS        1  NUMBER OF SUBREACHES
               ITYP      STOR  TYPE OF INITIAL CONDITION
              RSVRIC      0.00  INITIAL CONDITION
                 X       0.00 WORKING R AND D COEFFICIENT

 83 RC        NORMAL DEPTH CHANNEL
                ANL      0.045  LEFT OVERBANK N-VALUE
               ANCH      0.035  MAIN CHANNEL N-VALUE
                ANR      0.045  RIGHT OVERBANK N-VALUE
              RLNTH       1500.  REACH LENGTH
                SEL     0.0140  ENERGY SLOPE
              ELMAX      2130.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                          CROSS-SECTION DATA
                 --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
 85 RY      ELEVATION  2130.00  2112.00  2108.00  2104.50  2104.50  2108.80  2108.00  2130.00
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84 RX      DISTANCE    100.00    150.00    183.00    191.00    215.00    250.00    435.00    614.00

                                          ***

                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

      STORAGE      0.00      1.43      3.51      7.41     19.65     33.22     47.77     63.07     79.03     95.68
      OUTFLOW      0.00    221.18    797.49   1842.72   4891.86   9968.23  16778.22  25220.16  35185.12  46632.96
    ELEVATION   2104.50   2105.84   2107.18   2108.53   2109.87   2111.21   2112.55   2113.89   2115.24   2116.58

      STORAGE    113.00    131.00    149.68    169.03    189.06    209.77    231.15    253.21    275.95    299.37
      OUTFLOW  59542.46  73904.16  89716.45 106983.27 125712.55 145915.17 167604.31 190794.84 215503.08 241746.25
    ELEVATION   2117.92   2119.26   2120.60   2121.95   2123.29   2124.63   2125.97   2127.31   2128.66   2130.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN    46633. TO
241746.
          THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK
INFLOWS.
          THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER
REACH.)

   ***        ***        ***        ***        ***

                HYDROGRAPH AT STATION     RCH1
                  FOR PLAN 4, RATIO = 0.50

PEAK FLOW    TIME                  MAXIMUM AVERAGE FLOW
                        6-HR      24-HR      72-HR    29.97-HR  (CFS)      (HR)
              (CFS)    5334.      3.57                891.      224.       180.       180.
            (INCHES)   6.682      6.718      6.722      6.722
            (AC-FT)    442.       444.       445.       445.

PEAK STORAGE  TIME                  MAXIMUM AVERAGE STORAGE
                        6-HR      24-HR      72-HR    29.97-HR  (AC-FT)    (HR)
   21.     3.57          4.         1.         1.         1.

PEAK STAGE   TIME                  MAXIMUM AVERAGE STAGE
                        6-HR      24-HR      72-HR    29.97-HR  (FEET)     (HR)
 2109.99     3.57       2106.30   2104.96    2104.87    2104.86

              CUMULATIVE AREA =    1.24 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
***

      **************
      *            *
92 KK   *    RCH2  *      Route breach hydrograph downstream
      *            *
      **************

95 KO        OUTPUT CONTROL VARIABLES
               IPRNT          1  PRINT CONTROL
               IPLOT          0  PLOT CONTROL
               QSCAL          0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

96 RS        STORAGE ROUTING
               NSTPS          1  NUMBER OF SUBREACHES
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ITYP	STOR	TYPE OF INITIAL CONDITION
RSVRIC	0.00	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

97 RC NORMAL DEPTH CHANNEL

ANL	0.080	LEFT OVERBANK N-VALUE
ANCH	0.025	MAIN CHANNEL N-VALUE
ANR	0.080	RIGHT OVERBANK N-VALUE
RLNTH	2350.	REACH LENGTH
SEL	0.0130	ENERGY SLOPE
ELMAX	0.0	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		--- LEFT OVERBANK ---			+ ----- MAIN CHANNEL -----		+ --- RIGHT OVERBANK ---		
99 RY	ELEVATION	2074.50	2074.00	2074.00	2072.00	2072.00	2077.00	2078.00	2090.00
98 RX	DISTANCE	100.00	160.00	210.00	226.00	246.00	283.00	391.00	498.00

***

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.39	3.54	10.45	19.17	28.24	38.94	53.62	68.99	84.80
OUTFLOW	0.00	144.37	537.43	1394.75	2822.57	4741.80	7348.56	10711.53	14745.14	19379.30
ELEVATION	2072.00	2072.95	2073.89	2074.84	2075.79	2076.74	2077.68	2078.63	2079.58	2080.53

STORAGE	101.04	117.70	134.81	152.34	170.30	188.70	207.53	226.79	246.48	266.60
OUTFLOW	24582.68	30334.55	36620.08	43428.23	50750.62	58580.82	66913.88	75745.97	85074.21	94896.46
ELEVATION	2081.47	2082.42	2083.37	2084.31	2085.26	2086.21	2087.16	2088.10	2089.05	2090.00

****
****

HYDROGRAPH AT STATION RCH2
PLAN 1, RATIO = 0.50

****
****

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2072.0	*	1	1000	301	1.	0.0	2072.0	*	1	2000	601	1.	0.0	2072.0			
1	0002	2	0.	0.0	2072.0	*	1	1002	302	1.	0.0	2072.0	*	1	2002	602	1.	0.0	2072.0			
1	0004	3	0.	0.0	2072.0	*	1	1004	303	1.	0.0	2072.0	*	1	2004	603	1.	0.0	2072.0			
1	0006	4	0.	0.0	2072.0	*	1	1006	304	1.	0.0	2072.0	*	1	2006	604	1.	0.0	2072.0			
1	0008	5	0.	0.0	2072.0	*	1	1008	305	1.	0.0	2072.0	*	1	2008	605	1.	0.0	2072.0			
1	0010	6	0.	0.0	2072.0	*	1	1010	306	1.	0.0	2072.0	*	1	2010	606	1.	0.0	2072.0			
1	0012	7	0.	0.0	2072.0	*	1	1012	307	1.	0.0	2072.0	*	1	2012	607	1.	0.0	2072.0			
1	0014	8	0.	0.0	2072.0	*	1	1014	308	1.	0.0	2072.0	*	1	2014	608	1.	0.0	2072.0			
1	0016	9	0.	0.0	2072.0	*	1	1016	309	1.	0.0	2072.0	*	1	2016	609	1.	0.0	2072.0			
1	0018	10	0.	0.0	2072.0	*	1	1018	310	1.	0.0	2072.0	*	1	2018	610	1.	0.0	2072.0			
1	0020	11	0.	0.0	2072.0	*	1	1020	311	1.	0.0	2072.0	*	1	2020	611	1.	0.0	2072.0			
1	0022	12	0.	0.0	2072.0	*	1	1022	312	1.	0.0	2072.0	*	1	2022	612	1.	0.0	2072.0			
1	0024	13	0.	0.0	2072.0	*	1	1024	313	1.	0.0	2072.0	*	1	2024	613	1.	0.0	2072.0			
1	0026	14	0.	0.0	2072.0	*	1	1026	314	1.	0.0	2072.0	*	1	2026	614	1.	0.0	2072.0			
1	0028	15	0.	0.0	2072.0	*	1	1028	315	1.	0.0	2072.0	*	1	2028	615	1.	0.0	2072.0			
1	0030	16	0.	0.0	2072.0	*	1	1030	316	1.	0.0	2072.0	*	1	2030	616	1.	0.0	2072.0			
1	0032	17	0.	0.0	2072.0	*	1	1032	317	1.	0.0	2072.0	*	1	2032	617	1.	0.0	2072.0			
1	0034	18	0.	0.0	2072.0	*	1	1034	318	1.	0.0	2072.0	*	1	2034	618	1.	0.0	2072.0			
1	0036	19	0.	0.0	2072.0	*	1	1036	319	1.	0.0	2072.0	*	1	2036	619	1.	0.0	2072.0			
1	0038	20	0.	0.0	2072.0	*	1	1038	320	1.	0.0	2072.0	*	1	2038	620	1.	0.0	2072.0			
1	0040	21	0.	0.0	2072.0	*	1	1040	321	1.	0.0	2072.0	*	1	2040	621	1.	0.0	2072.0			
1	0042	22	0.	0.0	2072.0	*	1	1042	322	1.	0.0	2072.0	*	1	2042	622	1.	0.0	2072.0			
1	0044	23	0.	0.0	2072.0	*	1	1044	323	1.	0.0	2072.0	*	1	2044	623	1.	0.0	2072.0			

1	0046	24	1.	0.0	2072.0	*	1	1046	324	1.	0.0	2072.0	*	1	2046	624	1.	0.0	2072.0
1	0048	25	1.	0.0	2072.0	*	1	1048	325	1.	0.0	2072.0	*	1	2048	625	1.	0.0	2072.0
1	0050	26	1.	0.0	2072.0	*	1	1050	326	1.	0.0	2072.0	*	1	2050	626	1.	0.0	2072.0
1	0052	27	1.	0.0	2072.0	*	1	1052	327	1.	0.0	2072.0	*	1	2052	627	1.	0.0	2072.0
1	0054	28	1.	0.0	2072.0	*	1	1054	328	1.	0.0	2072.0	*	1	2054	628	1.	0.0	2072.0
1	0056	29	1.	0.0	2072.0	*	1	1056	329	1.	0.0	2072.0	*	1	2056	629	1.	0.0	2072.0
1	0058	30	1.	0.0	2072.0	*	1	1058	330	1.	0.0	2072.0	*	1	2058	630	1.	0.0	2072.0
1	0100	31	1.	0.0	2072.0	*	1	1100	331	1.	0.0	2072.0	*	1	2100	631	1.	0.0	2072.0
1	0102	32	1.	0.0	2072.0	*	1	1102	332	1.	0.0	2072.0	*	1	2102	632	1.	0.0	2072.0
1	0104	33	2.	0.0	2072.0	*	1	1104	333	1.	0.0	2072.0	*	1	2104	633	1.	0.0	2072.0
1	0106	34	2.	0.0	2072.0	*	1	1106	334	1.	0.0	2072.0	*	1	2106	634	1.	0.0	2072.0
1	0108	35	2.	0.0	2072.0	*	1	1108	335	1.	0.0	2072.0	*	1	2108	635	1.	0.0	2072.0
1	0110	36	2.	0.0	2072.0	*	1	1110	336	1.	0.0	2072.0	*	1	2110	636	1.	0.0	2072.0
1	0112	37	2.	0.0	2072.0	*	1	1112	337	1.	0.0	2072.0	*	1	2112	637	1.	0.0	2072.0
1	0114	38	2.	0.0	2072.0	*	1	1114	338	1.	0.0	2072.0	*	1	2114	638	1.	0.0	2072.0
1	0116	39	2.	0.0	2072.0	*	1	1116	339	1.	0.0	2072.0	*	1	2116	639	1.	0.0	2072.0
1	0118	40	3.	0.0	2072.0	*	1	1118	340	1.	0.0	2072.0	*	1	2118	640	1.	0.0	2072.0
1	0120	41	3.	0.0	2072.0	*	1	1120	341	1.	0.0	2072.0	*	1	2120	641	1.	0.0	2072.0
1	0122	42	3.	0.0	2072.0	*	1	1122	342	1.	0.0	2072.0	*	1	2122	642	1.	0.0	2072.0
1	0124	43	3.	0.0	2072.0	*	1	1124	343	1.	0.0	2072.0	*	1	2124	643	1.	0.0	2072.0
1	0126	44	3.	0.0	2072.0	*	1	1126	344	1.	0.0	2072.0	*	1	2126	644	1.	0.0	2072.0
1	0128	45	4.	0.0	2072.0	*	1	1128	345	1.	0.0	2072.0	*	1	2128	645	1.	0.0	2072.0
1	0130	46	4.	0.0	2072.0	*	1	1130	346	1.	0.0	2072.0	*	1	2130	646	1.	0.0	2072.0
1	0132	47	4.	0.0	2072.0	*	1	1132	347	1.	0.0	2072.0	*	1	2132	647	1.	0.0	2072.0
1	0134	48	4.	0.0	2072.0	*	1	1134	348	1.	0.0	2072.0	*	1	2134	648	1.	0.0	2072.0
1	0136	49	4.	0.0	2072.0	*	1	1136	349	1.	0.0	2072.0	*	1	2136	649	1.	0.0	2072.0
1	0138	50	5.	0.0	2072.0	*	1	1138	350	1.	0.0	2072.0	*	1	2138	650	1.	0.0	2072.0
1	0140	51	5.	0.0	2072.0	*	1	1140	351	1.	0.0	2072.0	*	1	2140	651	1.	0.0	2072.0
1	0142	52	5.	0.1	2072.0	*	1	1142	352	1.	0.0	2072.0	*	1	2142	652	1.	0.0	2072.0
1	0144	53	5.	0.1	2072.0	*	1	1144	353	1.	0.0	2072.0	*	1	2144	653	1.	0.0	2072.0
1	0146	54	6.	0.1	2072.0	*	1	1146	354	1.	0.0	2072.0	*	1	2146	654	1.	0.0	2072.0
1	0148	55	6.	0.1	2072.0	*	1	1148	355	1.	0.0	2072.0	*	1	2148	655	1.	0.0	2072.0
1	0150	56	6.	0.1	2072.0	*	1	1150	356	1.	0.0	2072.0	*	1	2150	656	1.	0.0	2072.0
1	0152	57	7.	0.1	2072.0	*	1	1152	357	1.	0.0	2072.0	*	1	2152	657	1.	0.0	2072.0
1	0154	58	7.	0.1	2072.0	*	1	1154	358	1.	0.0	2072.0	*	1	2154	658	1.	0.0	2072.0
1	0156	59	7.	0.1	2072.0	*	1	1156	359	1.	0.0	2072.0	*	1	2156	659	1.	0.0	2072.0
1	0158	60	7.	0.1	2072.0	*	1	1158	360	1.	0.0	2072.0	*	1	2158	660	1.	0.0	2072.0
1	0200	61	8.	0.1	2072.1	*	1	1200	361	1.	0.0	2072.0	*	1	2200	661	1.	0.0	2072.0
1	0202	62	8.	0.1	2072.1	*	1	1202	362	1.	0.0	2072.0	*	1	2202	662	1.	0.0	2072.0
1	0204	63	8.	0.1	2072.1	*	1	1204	363	1.	0.0	2072.0	*	1	2204	663	1.	0.0	2072.0
1	0206	64	8.	0.1	2072.1	*	1	1206	364	1.	0.0	2072.0	*	1	2206	664	1.	0.0	2072.0
1	0208	65	9.	0.1	2072.1	*	1	1208	365	1.	0.0	2072.0	*	1	2208	665	1.	0.0	2072.0
1	0210	66	9.	0.1	2072.1	*	1	1210	366	1.	0.0	2072.0	*	1	2210	666	1.	0.0	2072.0
1	0212	67	9.	0.1	2072.1	*	1	1212	367	1.	0.0	2072.0	*	1	2212	667	1.	0.0	2072.0
1	0214	68	9.	0.1	2072.1	*	1	1214	368	1.	0.0	2072.0	*	1	2214	668	1.	0.0	2072.0
1	0216	69	9.	0.1	2072.1	*	1	1216	369	1.	0.0	2072.0	*	1	2216	669	1.	0.0	2072.0
1	0218	70	10.	0.1	2072.1	*	1	1218	370	1.	0.0	2072.0	*	1	2218	670	1.	0.0	2072.0
1	0220	71	10.	0.1	2072.1	*	1	1220	371	1.	0.0	2072.0	*	1	2220	671	1.	0.0	2072.0
1	0222	72	10.	0.1	2072.1	*	1	1222	372	1.	0.0	2072.0	*	1	2222	672	1.	0.0	2072.0
1	0224	73	10.	0.1	2072.1	*	1	1224	373	1.	0.0	2072.0	*	1	2224	673	1.	0.0	2072.0
1	0226	74	10.	0.1	2072.1	*	1	1226	374	1.	0.0	2072.0	*	1	2226	674	1.	0.0	2072.0
1	0228	75	10.	0.1	2072.1	*	1	1228	375	1.	0.0	2072.0	*	1	2228	675	1.	0.0	2072.0
1	0230	76	10.	0.1	2072.1	*	1	1230	376	1.	0.0	2072.0	*	1	2230	676	1.	0.0	2072.0
1	0232	77	10.	0.1	2072.1	*	1	1232	377	1.	0.0	2072.0	*	1	2232	677	1.	0.0	2072.0
1	0234	78	11.	0.1	2072.1	*	1	1234	378	1.	0.0	2072.0	*	1	2234	678	1.	0.0	2072.0
1	0236	79	11.	0.1	2072.1	*	1	1236	379	1.	0.0	2072.0	*	1	2236	679	1.	0.0	2072.0
1	0238	80	11.	0.1	2072.1	*	1	1238	380	1.	0.0	2072.0	*	1	2238	680	1.	0.0	2072.0
1	0240	81	11.	0.1	2072.1	*	1	1240	381	1.	0.0	2072.0	*	1	2240	681	1.	0.0	2072.0
1	0242	82	11.	0.1	2072.1	*	1	1242	382	1.	0.0	2072.0	*	1	2242	682	1.	0.0	2072.0
1	0244	83	11.	0.1	2072.1	*	1	1244	383	1.	0.0	2072.0	*	1	2244	683	1.	0.0	2072.0
1	0246	84	12.	0.1	2072.1	*	1	1246	384	1.	0.0	2072.0	*	1	2246	684	1.	0.0	2072.0
1	0248	85	12.	0.1	2072.1	*	1	1248	385	1.	0.0	2072.0	*	1	2248	685	1.	0.0	2072.0
1	0250	86	12.	0.1	2072.1	*	1	1250	386	1.	0.0	2072.0	*	1	2250	686	1.	0.0	2072.0
1	0252	87	12.	0.1	2072.1	*	1	1252	387	1.	0.0	2072.0	*	1	2252	687	1.	0.0	2072.0
1	0254	88	12.	0.1	2072.1	*	1	1254	388	1.	0.0	2072.0	*	1	2254	688	1.	0.0	2072.0

1	0256	89	13.	0.1	2072.1	*	1	1256	389	1.	0.0	2072.0	*	1	2256 689	1.	0.0	2072.0
1	0258	90	13.	0.1	2072.1	*	1	1258	390	1.	0.0	2072.0	*	1	2258 690	1.	0.0	2072.0
1	0300	91	13.	0.1	2072.1	*	1	1300	391	1.	0.0	2072.0	*	1	2300 691	1.	0.0	2072.0
1	0302	92	13.	0.1	2072.1	*	1	1302	392	1.	0.0	2072.0	*	1	2302 692	1.	0.0	2072.0
1	0304	93	13.	0.1	2072.1	*	1	1304	393	1.	0.0	2072.0	*	1	2304 693	1.	0.0	2072.0
1	0306	94	14.	0.1	2072.1	*	1	1306	394	1.	0.0	2072.0	*	1	2306 694	1.	0.0	2072.0
1	0308	95	14.	0.1	2072.1	*	1	1308	395	1.	0.0	2072.0	*	1	2308 695	1.	0.0	2072.0
1	0310	96	14.	0.1	2072.1	*	1	1310	396	1.	0.0	2072.0	*	1	2310 696	1.	0.0	2072.0
1	0312	97	15.	0.1	2072.1	*	1	1312	397	1.	0.0	2072.0	*	1	2312 697	1.	0.0	2072.0
1	0314	98	15.	0.1	2072.1	*	1	1314	398	1.	0.0	2072.0	*	1	2314 698	1.	0.0	2072.0
1	0316	99	15.	0.1	2072.1	*	1	1316	399	1.	0.0	2072.0	*	1	2316 699	1.	0.0	2072.0
1	0318	100	16.	0.2	2072.1	*	1	1318	400	1.	0.0	2072.0	*	1	2318 700	1.	0.0	2072.0
1	0320	101	17.	0.2	2072.1	*	1	1320	401	1.	0.0	2072.0	*	1	2320 701	1.	0.0	2072.0
1	0322	102	17.	0.2	2072.1	*	1	1322	402	1.	0.0	2072.0	*	1	2322 702	1.	0.0	2072.0
1	0324	103	18.	0.2	2072.1	*	1	1324	403	1.	0.0	2072.0	*	1	2324 703	1.	0.0	2072.0
1	0326	104	19.	0.2	2072.1	*	1	1326	404	1.	0.0	2072.0	*	1	2326 704	1.	0.0	2072.0
1	0328	105	20.	0.2	2072.1	*	1	1328	405	1.	0.0	2072.0	*	1	2328 705	1.	0.0	2072.0
1	0330	106	21.	0.2	2072.1	*	1	1330	406	1.	0.0	2072.0	*	1	2330 706	1.	0.0	2072.0
1	0332	107	24.	0.2	2072.2	*	1	1332	407	1.	0.0	2072.0	*	1	2332 707	1.	0.0	2072.0
1	0334	108	40.	0.4	2072.3	*	1	1334	408	1.	0.0	2072.0	*	1	2334 708	1.	0.0	2072.0
1	0336	109	114.	1.1	2072.7	*	1	1336	409	1.	0.0	2072.0	*	1	2336 709	1.	0.0	2072.0
1	0338	110	446.	3.0	2073.7	*	1	1338	410	1.	0.0	2072.0	*	1	2338 710	1.	0.0	2072.0
1	0340	111	988.	7.2	2074.4	*	1	1340	411	1.	0.0	2072.0	*	1	2340 711	1.	0.0	2072.0
1	0342	112	2067.	14.6	2075.3	*	1	1342	412	1.	0.0	2072.0	*	1	2342 712	1.	0.0	2072.0
1	0344	113	4205.	25.7	2076.5	*	1	1344	413	1.	0.0	2072.0	*	1	2344 713	1.	0.0	2072.0
1	0346	114	7435.	39.3	2077.7	*	1	1346	414	1.	0.0	2072.0	*	1	2346 714	1.	0.0	2072.0
1	0348	115	10284.	51.8	2078.5	*	1	1348	415	1.	0.0	2072.0	*	1	2348 715	1.	0.0	2072.0
1	0350	116	11864.	58.0	2078.9	*	1	1350	416	1.	0.0	2072.0	*	1	2350 716	1.	0.0	2072.0
1	0352	117	11492.	56.6	2078.8	*	1	1352	417	1.	0.0	2072.0	*	1	2352 717	1.	0.0	2072.0
1	0354	118	10171.	51.3	2078.5	*	1	1354	418	1.	0.0	2072.0	*	1	2354 718	1.	0.0	2072.0
1	0356	119	8768.	45.1	2078.1	*	1	1356	419	1.	0.0	2072.0	*	1	2356 719	1.	0.0	2072.0
1	0358	120	7433.	39.3	2077.7	*	1	1358	420	1.	0.0	2072.0	*	1	2358 720	1.	0.0	2072.0
1	0400	121	6263.	34.5	2077.3	*	1	1400	421	1.	0.0	2072.0	*	2	0000 721	1.	0.0	2072.0
1	0402	122	5386.	30.9	2077.0	*	1	1402	422	1.	0.0	2072.0	*	2	0002 722	1.	0.0	2072.0
1	0404	123	4738.	28.2	2076.7	*	1	1404	423	1.	0.0	2072.0	*	2	0004 723	1.	0.0	2072.0
1	0406	124	4282.	26.1	2076.5	*	1	1406	424	1.	0.0	2072.0	*	2	0006 724	1.	0.0	2072.0
1	0408	125	3891.	24.2	2076.3	*	1	1408	425	1.	0.0	2072.0	*	2	0008 725	1.	0.0	2072.0
1	0410	126	3558.	22.6	2076.2	*	1	1410	426	1.	0.0	2072.0	*	2	0010 726	1.	0.0	2072.0
1	0412	127	3274.	21.3	2076.0	*	1	1412	427	1.	0.0	2072.0	*	2	0012 727	1.	0.0	2072.0
1	0414	128	3031.	20.2	2075.9	*	1	1414	428	1.	0.0	2072.0	*	2	0014 728	1.	0.0	2072.0
1	0416	129	2821.	19.2	2075.8	*	1	1416	429	1.	0.0	2072.0	*	2	0016 729	1.	0.0	2072.0
1	0418	130	2669.	18.2	2075.7	*	1	1418	430	1.	0.0	2072.0	*	2	0018 730	1.	0.0	2072.0
1	0420	131	2521.	17.3	2075.6	*	1	1420	431	1.	0.0	2072.0	*	2	0020 731	1.	0.0	2072.0
1	0422	132	2378.	16.5	2075.5	*	1	1422	432	1.	0.0	2072.0	*	2	0022 732	1.	0.0	2072.0
1	0424	133	2241.	15.6	2075.4	*	1	1424	433	1.	0.0	2072.0	*	2	0024 733	1.	0.0	2072.0
1	0426	134	2109.	14.8	2075.3	*	1	1426	434	1.	0.0	2072.0	*	2	0026 734	1.	0.0	2072.0
1	0428	135	1983.	14.0	2075.2	*	1	1428	435	1.	0.0	2072.0	*	2	0028 735	1.	0.0	2072.0
1	0430	136	1861.	13.3	2075.2	*	1	1430	436	1.	0.0	2072.0	*	2	0030 736	1.	0.0	2072.0
1	0432	137	1746.	12.6	2075.1	*	1	1432	437	1.	0.0	2072.0	*	2	0032 737	1.	0.0	2072.0
1	0434	138	1637.	11.9	2075.0	*	1	1434	438	1.	0.0	2072.0	*	2	0034 738	1.	0.0	2072.0
1	0436	139	1535.	11.3	2074.9	*	1	1436	439	1.	0.0	2072.0	*	2	0036 739	1.	0.0	2072.0
1	0438	140	1438.	10.7	2074.9	*	1	1438	440	1.	0.0	2072.0	*	2	0038 740	1.	0.0	2072.0
1	0440	141	1358.	10.2	2074.8	*	1	1440	441	1.	0.0	2072.0	*	2	0040 741	1.	0.0	2072.0
1	0442	142	1289.	9.6	2074.7	*	1	1442	442	1.	0.0	2072.0	*	2	0042 742	1.	0.0	2072.0
1	0444	143	1219.	9.0	2074.6	*	1	1444	443	1.	0.0	2072.0	*	2	0044 743	1.	0.0	2072.0
1	0446	144	1151.	8.5	2074.6	*	1	1446	444	1.	0.0	2072.0	*	2	0046 744	1.	0.0	2072.0
1	0448	145	1086.	8.0	2074.5	*	1	1448	445	1.	0.0	2072.0	*	2	0048 745	1.	0.0	2072.0
1	0450	146	1023.	7.5	2074.4	*	1	1450	446	1.	0.0	2072.0	*	2	0050 746	1.	0.0	2072.0
1	0452	147	963.	7.0	2074.4	*	1	1452	447	1.	0.0	2072.0	*	2	0052 747	1.	0.0	2072.0
1	0454	148	907.	6.5	2074.3	*	1	1454	448	1.	0.0	2072.0	*	2	0054 748	1.	0.0	2072.0
1	0456	149	854.	6.1	2074.2	*	1	1456	449	1.	0.0	2072.0	*	2	0056 749	1.	0.0	2072.0
1	0458	150	805.	5.7	2074.2	*	1	1458	450	1.	0.0	2072.0	*	2	0058 750	1.	0.0	2072.0
1	0500	151	759.	5.3	2074.1	*	1	1500	451	1.	0.0	2072.0	*	2	0100 751	1.	0.0	2072.0
1	0502	152	717.	5.0	2074.1	*	1	1502	452	1.	0.0	2072.0	*	2	0102 752	1.	0.0	2072.0
1	0504	153	679.	4.7	2074.1	*	1	1504	453	1.	0.0	2072.0	*	2	0104 753	1.	0.0	2072.0

1	0506	154	643.	4.4	2074.0 *	1	1506	454	1.	0.0	2072.0 *	2	0106	754	1.	0.0	2072.0
1	0508	155	610.	4.1	2074.0 *	1	1508	455	1.	0.0	2072.0 *	2	0108	755	1.	0.0	2072.0
1	0510	156	580.	3.9	2073.9 *	1	1510	456	1.	0.0	2072.0 *	2	0110	756	1.	0.0	2072.0
1	0512	157	552.	3.7	2073.9 *	1	1512	457	1.	0.0	2072.0 *	2	0112	757	1.	0.0	2072.0
1	0514	158	521.	3.4	2073.9 *	1	1514	458	1.	0.0	2072.0 *	2	0114	758	1.	0.0	2072.0
1	0516	159	488.	3.3	2073.8 *	1	1516	459	1.	0.0	2072.0 *	2	0116	759	1.	0.0	2072.0
1	0518	160	460.	3.1	2073.7 *	1	1518	460	1.	0.0	2072.0 *	2	0118	760	1.	0.0	2072.0
1	0520	161	435.	3.0	2073.6 *	1	1520	461	1.	0.0	2072.0 *	2	0120	761	1.	0.0	2072.0
1	0522	162	411.	2.8	2073.6 *	1	1522	462	1.	0.0	2072.0 *	2	0122	762	1.	0.0	2072.0
1	0524	163	389.	2.7	2073.5 *	1	1524	463	1.	0.0	2072.0 *	2	0124	763	1.	0.0	2072.0
1	0526	164	368.	2.6	2073.5 *	1	1526	464	1.	0.0	2072.0 *	2	0126	764	1.	0.0	2072.0
1	0528	165	347.	2.5	2073.4 *	1	1528	465	1.	0.0	2072.0 *	2	0128	765	1.	0.0	2072.0
1	0530	166	328.	2.4	2073.4 *	1	1530	466	1.	0.0	2072.0 *	2	0130	766	1.	0.0	2072.0
1	0532	167	309.	2.3	2073.3 *	1	1532	467	1.	0.0	2072.0 *	2	0132	767	1.	0.0	2072.0
1	0534	168	291.	2.2	2073.3 *	1	1534	468	1.	0.0	2072.0 *	2	0134	768	1.	0.0	2072.0
1	0536	169	274.	2.1	2073.3 *	1	1536	469	1.	0.0	2072.0 *	2	0136	769	1.	0.0	2072.0
1	0538	170	259.	2.0	2073.2 *	1	1538	470	1.	0.0	2072.0 *	2	0138	770	1.	0.0	2072.0
1	0540	171	244.	1.9	2073.2 *	1	1540	471	1.	0.0	2072.0 *	2	0140	771	1.	0.0	2072.0
1	0542	172	231.	1.9	2073.2 *	1	1542	472	1.	0.0	2072.0 *	2	0142	772	1.	0.0	2072.0
1	0544	173	220.	1.8	2073.1 *	1	1544	473	1.	0.0	2072.0 *	2	0144	773	1.	0.0	2072.0
1	0546	174	210.	1.8	2073.1 *	1	1546	474	1.	0.0	2072.0 *	2	0146	774	1.	0.0	2072.0
1	0548	175	200.	1.7	2073.1 *	1	1548	475	1.	0.0	2072.0 *	2	0148	775	1.	0.0	2072.0
1	0550	176	190.	1.6	2073.1 *	1	1550	476	1.	0.0	2072.0 *	2	0150	776	1.	0.0	2072.0
1	0552	177	181.	1.6	2073.0 *	1	1552	477	1.	0.0	2072.0 *	2	0152	777	1.	0.0	2072.0
1	0554	178	172.	1.5	2073.0 *	1	1554	478	1.	0.0	2072.0 *	2	0154	778	1.	0.0	2072.0
1	0556	179	163.	1.5	2073.0 *	1	1556	479	1.	0.0	2072.0 *	2	0156	779	1.	0.0	2072.0
1	0558	180	154.	1.4	2073.0 *	1	1558	480	1.	0.0	2072.0 *	2	0158	780	1.	0.0	2072.0
1	0600	181	146.	1.4	2073.0 *	1	1600	481	1.	0.0	2072.0 *	2	0200	781	1.	0.0	2072.0
1	0602	182	141.	1.4	2072.9 *	1	1602	482	1.	0.0	2072.0 *	2	0202	782	1.	0.0	2072.0
1	0604	183	136.	1.3	2072.9 *	1	1604	483	1.	0.0	2072.0 *	2	0204	783	1.	0.0	2072.0
1	0606	184	130.	1.3	2072.9 *	1	1606	484	1.	0.0	2072.0 *	2	0206	784	1.	0.0	2072.0
1	0608	185	125.	1.2	2072.8 *	1	1608	485	1.	0.0	2072.0 *	2	0208	785	1.	0.0	2072.0
1	0610	186	120.	1.2	2072.8 *	1	1610	486	1.	0.0	2072.0 *	2	0210	786	1.	0.0	2072.0
1	0612	187	115.	1.1	2072.8 *	1	1612	487	1.	0.0	2072.0 *	2	0212	787	1.	0.0	2072.0
1	0614	188	110.	1.1	2072.7 *	1	1614	488	1.	0.0	2072.0 *	2	0214	788	1.	0.0	2072.0
1	0616	189	105.	1.0	2072.7 *	1	1616	489	1.	0.0	2072.0 *	2	0216	789	1.	0.0	2072.0
1	0618	190	100.	1.0	2072.7 *	1	1618	490	1.	0.0	2072.0 *	2	0218	790	1.	0.0	2072.0
1	0620	191	96.	0.9	2072.6 *	1	1620	491	1.	0.0	2072.0 *	2	0220	791	1.	0.0	2072.0
1	0622	192	92.	0.9	2072.6 *	1	1622	492	1.	0.0	2072.0 *	2	0222	792	1.	0.0	2072.0
1	0624	193	88.	0.8	2072.6 *	1	1624	493	1.	0.0	2072.0 *	2	0224	793	1.	0.0	2072.0
1	0626	194	84.	0.8	2072.5 *	1	1626	494	1.	0.0	2072.0 *	2	0226	794	1.	0.0	2072.0
1	0628	195	80.	0.8	2072.5 *	1	1628	495	1.	0.0	2072.0 *	2	0228	795	1.	0.0	2072.0
1	0630	196	76.	0.7	2072.5 *	1	1630	496	1.	0.0	2072.0 *	2	0230	796	1.	0.0	2072.0
1	0632	197	73.	0.7	2072.5 *	1	1632	497	1.	0.0	2072.0 *	2	0232	797	1.	0.0	2072.0
1	0634	198	69.	0.7	2072.5 *	1	1634	498	1.	0.0	2072.0 *	2	0234	798	1.	0.0	2072.0
1	0636	199	66.	0.6	2072.4 *	1	1636	499	1.	0.0	2072.0 *	2	0236	799	1.	0.0	2072.0
1	0638	200	63.	0.6	2072.4 *	1	1638	500	1.	0.0	2072.0 *	2	0238	800	1.	0.0	2072.0
1	0640	201	59.	0.6	2072.4 *	1	1640	501	1.	0.0	2072.0 *	2	0240	801	1.	0.0	2072.0
1	0642	202	56.	0.5	2072.4 *	1	1642	502	1.	0.0	2072.0 *	2	0242	802	1.	0.0	2072.0
1	0644	203	53.	0.5	2072.3 *	1	1644	503	1.	0.0	2072.0 *	2	0244	803	1.	0.0	2072.0
1	0646	204	50.	0.5	2072.3 *	1	1646	504	1.	0.0	2072.0 *	2	0246	804	1.	0.0	2072.0
1	0648	205	48.	0.5	2072.3 *	1	1648	505	1.	0.0	2072.0 *	2	0248	805	1.	0.0	2072.0
1	0650	206	45.	0.4	2072.3 *	1	1650	506	1.	0.0	2072.0 *	2	0250	806	1.	0.0	2072.0
1	0652	207	43.	0.4	2072.3 *	1	1652	507	1.	0.0	2072.0 *	2	0252	807	1.	0.0	2072.0
1	0654	208	40.	0.4	2072.3 *	1	1654	508	1.	0.0	2072.0 *	2	0254	808	1.	0.0	2072.0
1	0656	209	38.	0.4	2072.3 *	1	1656	509	1.	0.0	2072.0 *	2	0256	809	1.	0.0	2072.0
1	0658	210	36.	0.4	2072.2 *	1	1658	510	1.	0.0	2072.0 *	2	0258	810	1.	0.0	2072.0
1	0700	211	34.	0.3	2072.2 *	1	1700	511	1.	0.0	2072.0 *	2	0300	811	1.	0.0	2072.0
1	0702	212	33.	0.3	2072.2 *	1	1702	512	1.	0.0	2072.0 *	2	0302	812	1.	0.0	2072.0
1	0704	213	31.	0.3	2072.2 *	1	1704	513	1.	0.0	2072.0 *	2	0304	813	1.	0.0	2072.0
1	0706	214	30.	0.3	2072.2 *	1	1706	514	1.	0.0	2072.0 *	2	0306	814	1.	0.0	2072.0
1	0708	215	28.	0.3	2072.2 *	1	1708	515	1.	0.0	2072.0 *	2	0308	815	1.	0.0	2072.0
1	0710	216	27.	0.3	2072.2 *	1	1710	516	1.	0.0	2072.0 *	2	0310	816	1.	0.0	2072.0
1	0712	217	25.	0.2	2072.2 *	1	1712	517	1.	0.0	2072.0 *	2	0312	817	1.	0.0	2072.0
1	0714	218	24.	0.2	2072.2 *	1	1714	518	1.	0.0	2072.0 *	2	0314	818	1.	0.0	2072.0

1	0716 219	23.	0.2	2072.2	*	1	1716 519	1.	0.0	2072.0	*	2	0316 819	1.	0.0 2072.0
1	0718 220	22.	0.2	2072.1	*	1	1718 520	1.	0.0	2072.0	*	2	0318 820	1.	0.0 2072.0
1	0720 221	21.	0.2	2072.1	*	1	1720 521	1.	0.0	2072.0	*	2	0320 821	1.	0.0 2072.0
1	0722 222	20.	0.2	2072.1	*	1	1722 522	1.	0.0	2072.0	*	2	0322 822	1.	0.0 2072.0
1	0724 223	19.	0.2	2072.1	*	1	1724 523	1.	0.0	2072.0	*	2	0324 823	1.	0.0 2072.0
1	0726 224	18.	0.2	2072.1	*	1	1726 524	1.	0.0	2072.0	*	2	0326 824	1.	0.0 2072.0
1	0728 225	17.	0.2	2072.1	*	1	1728 525	1.	0.0	2072.0	*	2	0328 825	1.	0.0 2072.0
1	0730 226	16.	0.2	2072.1	*	1	1730 526	1.	0.0	2072.0	*	2	0330 826	1.	0.0 2072.0
1	0732 227	15.	0.1	2072.1	*	1	1732 527	1.	0.0	2072.0	*	2	0332 827	1.	0.0 2072.0
1	0734 228	15.	0.1	2072.1	*	1	1734 528	1.	0.0	2072.0	*	2	0334 828	1.	0.0 2072.0
1	0736 229	14.	0.1	2072.1	*	1	1736 529	1.	0.0	2072.0	*	2	0336 829	1.	0.0 2072.0
1	0738 230	13.	0.1	2072.1	*	1	1738 530	1.	0.0	2072.0	*	2	0338 830	1.	0.0 2072.0
1	0740 231	13.	0.1	2072.1	*	1	1740 531	1.	0.0	2072.0	*	2	0340 831	1.	0.0 2072.0
1	0742 232	12.	0.1	2072.1	*	1	1742 532	1.	0.0	2072.0	*	2	0342 832	1.	0.0 2072.0
1	0744 233	11.	0.1	2072.1	*	1	1744 533	1.	0.0	2072.0	*	2	0344 833	1.	0.0 2072.0
1	0746 234	11.	0.1	2072.1	*	1	1746 534	1.	0.0	2072.0	*	2	0346 834	1.	0.0 2072.0
1	0748 235	10.	0.1	2072.1	*	1	1748 535	1.	0.0	2072.0	*	2	0348 835	1.	0.0 2072.0
1	0750 236	10.	0.1	2072.1	*	1	1750 536	1.	0.0	2072.0	*	2	0350 836	1.	0.0 2072.0
1	0752 237	9.	0.1	2072.1	*	1	1752 537	1.	0.0	2072.0	*	2	0352 837	1.	0.0 2072.0
1	0754 238	9.	0.1	2072.1	*	1	1754 538	1.	0.0	2072.0	*	2	0354 838	1.	0.0 2072.0
1	0756 239	8.	0.1	2072.1	*	1	1756 539	1.	0.0	2072.0	*	2	0356 839	1.	0.0 2072.0
1	0758 240	8.	0.1	2072.1	*	1	1758 540	1.	0.0	2072.0	*	2	0358 840	1.	0.0 2072.0
1	0800 241	7.	0.1	2072.0	*	1	1800 541	1.	0.0	2072.0	*	2	0400 841	1.	0.0 2072.0
1	0802 242	7.	0.1	2072.0	*	1	1802 542	1.	0.0	2072.0	*	2	0402 842	1.	0.0 2072.0
1	0804 243	7.	0.1	2072.0	*	1	1804 543	1.	0.0	2072.0	*	2	0404 843	1.	0.0 2072.0
1	0806 244	6.	0.1	2072.0	*	1	1806 544	1.	0.0	2072.0	*	2	0406 844	1.	0.0 2072.0
1	0808 245	6.	0.1	2072.0	*	1	1808 545	1.	0.0	2072.0	*	2	0408 845	1.	0.0 2072.0
1	0810 246	6.	0.1	2072.0	*	1	1810 546	1.	0.0	2072.0	*	2	0410 846	1.	0.0 2072.0
1	0812 247	5.	0.1	2072.0	*	1	1812 547	1.	0.0	2072.0	*	2	0412 847	1.	0.0 2072.0
1	0814 248	5.	0.0	2072.0	*	1	1814 548	1.	0.0	2072.0	*	2	0414 848	1.	0.0 2072.0
1	0816 249	5.	0.0	2072.0	*	1	1816 549	1.	0.0	2072.0	*	2	0416 849	1.	0.0 2072.0
1	0818 250	5.	0.0	2072.0	*	1	1818 550	1.	0.0	2072.0	*	2	0418 850	1.	0.0 2072.0
1	0820 251	4.	0.0	2072.0	*	1	1820 551	1.	0.0	2072.0	*	2	0420 851	1.	0.0 2072.0
1	0822 252	4.	0.0	2072.0	*	1	1822 552	1.	0.0	2072.0	*	2	0422 852	1.	0.0 2072.0
1	0824 253	4.	0.0	2072.0	*	1	1824 553	1.	0.0	2072.0	*	2	0424 853	1.	0.0 2072.0
1	0826 254	4.	0.0	2072.0	*	1	1826 554	1.	0.0	2072.0	*	2	0426 854	1.	0.0 2072.0
1	0828 255	3.	0.0	2072.0	*	1	1828 555	1.	0.0	2072.0	*	2	0428 855	1.	0.0 2072.0
1	0830 256	3.	0.0	2072.0	*	1	1830 556	1.	0.0	2072.0	*	2	0430 856	1.	0.0 2072.0
1	0832 257	3.	0.0	2072.0	*	1	1832 557	1.	0.0	2072.0	*	2	0432 857	1.	0.0 2072.0
1	0834 258	3.	0.0	2072.0	*	1	1834 558	1.	0.0	2072.0	*	2	0434 858	1.	0.0 2072.0
1	0836 259	3.	0.0	2072.0	*	1	1836 559	1.	0.0	2072.0	*	2	0436 859	1.	0.0 2072.0
1	0838 260	3.	0.0	2072.0	*	1	1838 560	1.	0.0	2072.0	*	2	0438 860	1.	0.0 2072.0
1	0840 261	3.	0.0	2072.0	*	1	1840 561	1.	0.0	2072.0	*	2	0440 861	1.	0.0 2072.0
1	0842 262	2.	0.0	2072.0	*	1	1842 562	1.	0.0	2072.0	*	2	0442 862	1.	0.0 2072.0
1	0844 263	2.	0.0	2072.0	*	1	1844 563	1.	0.0	2072.0	*	2	0444 863	1.	0.0 2072.0
1	0846 264	2.	0.0	2072.0	*	1	1846 564	1.	0.0	2072.0	*	2	0446 864	1.	0.0 2072.0
1	0848 265	2.	0.0	2072.0	*	1	1848 565	1.	0.0	2072.0	*	2	0448 865	1.	0.0 2072.0
1	0850 266	2.	0.0	2072.0	*	1	1850 566	1.	0.0	2072.0	*	2	0450 866	1.	0.0 2072.0
1	0852 267	2.	0.0	2072.0	*	1	1852 567	1.	0.0	2072.0	*	2	0452 867	1.	0.0 2072.0
1	0854 268	2.	0.0	2072.0	*	1	1854 568	1.	0.0	2072.0	*	2	0454 868	1.	0.0 2072.0
1	0856 269	2.	0.0	2072.0	*	1	1856 569	1.	0.0	2072.0	*	2	0456 869	1.	0.0 2072.0
1	0858 270	2.	0.0	2072.0	*	1	1858 570	1.	0.0	2072.0	*	2	0458 870	1.	0.0 2072.0
1	0900 271	2.	0.0	2072.0	*	1	1900 571	1.	0.0	2072.0	*	2	0500 871	1.	0.0 2072.0
1	0902 272	2.	0.0	2072.0	*	1	1902 572	1.	0.0	2072.0	*	2	0502 872	1.	0.0 2072.0
1	0904 273	1.	0.0	2072.0	*	1	1904 573	1.	0.0	2072.0	*	2	0504 873	1.	0.0 2072.0
1	0906 274	1.	0.0	2072.0	*	1	1906 574	1.	0.0	2072.0	*	2	0506 874	1.	0.0 2072.0
1	0908 275	1.	0.0	2072.0	*	1	1908 575	1.	0.0	2072.0	*	2	0508 875	1.	0.0 2072.0
1	0910 276	1.	0.0	2072.0	*	1	1910 576	1.	0.0	2072.0	*	2	0510 876	1.	0.0 2072.0
1	0912 277	1.	0.0	2072.0	*	1	1912 577	1.	0.0	2072.0	*	2	0512 877	1.	0.0 2072.0
1	0914 278	1.	0.0	2072.0	*	1	1914 578	1.	0.0	2072.0	*	2	0514 878	1.	0.0 2072.0
1	0916 279	1.	0.0	2072.0	*	1	1916 579	1.	0.0	2072.0	*	2	0516 879	1.	0.0 2072.0
1	0918 280	1.	0.0	2072.0	*	1	1918 580	1.	0.0	2072.0	*	2	0518 880	1.	0.0 2072.0
1	0920 281	1.	0.0	2072.0	*	1	1920 581	1.	0.0	2072.0	*	2	0520 881	1.	0.0 2072.0
1	0922 282	1.	0.0	2072.0	*	1	1922 582	1.	0.0	2072.0	*	2	0522 882	1.	0.0 2072.0
1	0924 283	1.	0.0	2072.0	*	1	1924 583	1.	0.0	2072.0	*	2	0524 883	1.	0.0 2072.0

1	0926	284	1.	0.0	2072.0 *	1	1926	584	1.	0.0	2072.0 *	2	0526	884	1.	0.0	2072.0
1	0928	285	1.	0.0	2072.0 *	1	1928	585	1.	0.0	2072.0 *	2	0528	885	1.	0.0	2072.0
1	0930	286	1.	0.0	2072.0 *	1	1930	586	1.	0.0	2072.0 *	2	0530	886	1.	0.0	2072.0
1	0932	287	1.	0.0	2072.0 *	1	1932	587	1.	0.0	2072.0 *	2	0532	887	1.	0.0	2072.0
1	0934	288	1.	0.0	2072.0 *	1	1934	588	1.	0.0	2072.0 *	2	0534	888	1.	0.0	2072.0
1	0936	289	1.	0.0	2072.0 *	1	1936	589	1.	0.0	2072.0 *	2	0536	889	1.	0.0	2072.0
1	0938	290	1.	0.0	2072.0 *	1	1938	590	1.	0.0	2072.0 *	2	0538	890	1.	0.0	2072.0
1	0940	291	1.	0.0	2072.0 *	1	1940	591	1.	0.0	2072.0 *	2	0540	891	1.	0.0	2072.0
1	0942	292	1.	0.0	2072.0 *	1	1942	592	1.	0.0	2072.0 *	2	0542	892	1.	0.0	2072.0
1	0944	293	1.	0.0	2072.0 *	1	1944	593	1.	0.0	2072.0 *	2	0544	893	1.	0.0	2072.0
1	0946	294	1.	0.0	2072.0 *	1	1946	594	1.	0.0	2072.0 *	2	0546	894	1.	0.0	2072.0
1	0948	295	1.	0.0	2072.0 *	1	1948	595	1.	0.0	2072.0 *	2	0548	895	1.	0.0	2072.0
1	0950	296	1.	0.0	2072.0 *	1	1950	596	1.	0.0	2072.0 *	2	0550	896	1.	0.0	2072.0
1	0952	297	1.	0.0	2072.0 *	1	1952	597	1.	0.0	2072.0 *	2	0552	897	1.	0.0	2072.0
1	0954	298	1.	0.0	2072.0 *	1	1954	598	1.	0.0	2072.0 *	2	0554	898	1.	0.0	2072.0
1	0956	299	1.	0.0	2072.0 *	1	1956	599	1.	0.0	2072.0 *	2	0556	899	1.	0.0	2072.0
1	0958	300	1.	0.0	2072.0 *	1	1958	600	1.	0.0	2072.0 *	2	0558	900	1.	0.0	2072.0
					*						*						

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PEAK FLOW TIME MAXIMUM AVERAGE FLOW

	6-HR	24-HR	72-HR	29.97-HR	(CFS)	(HR)
(CFS)	11864.	3.83	891.	223.	179.	179.
(INCHES)	6.678	6.701	6.705	6.705		
(AC-FT)	442.	443.	443.	443.		

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE

		6-HR	24-HR	72-HR	29.97-HR	(AC-FT)	(HR)
58.	3.83	5.	1.	1.	1.		

PEAK STAGE TIME MAXIMUM AVERAGE STAGE

		6-HR	24-HR	72-HR	29.97-HR	(FEET)	(HR)
2078.90	3.83	2073.25	2072.32	2072.26	2072.25		

CUMULATIVE AREA = 1.24 SQ MI

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100 KP PLAN 2 FOR STATION RCH2 Route breach hydrograph downstream

101 KO OUTPUT CONTROL VARIABLES
IPRNT 3 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

96 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC 0.00 INITIAL CONDITION
X 0.00 WORKING R AND D COEFFICIENT

97 RC NORMAL DEPTH CHANNEL
ANL 0.080 LEFT OVERBANK N-VALUE
ANCH 0.025 MAIN CHANNEL N-VALUE
ANR 0.080 RIGHT OVERBANK N-VALUE
RLNTH 2350. REACH LENGTH
SEL 0.0130 ENERGY SLOPE
ELMAX 2090.0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

--- LEFT OVERBANK --- + ----- MAIN CHANNEL ------- + --- RIGHT OVERBANK ---

99 RY	ELEVATION	2074.50	2074.00	2074.00	2072.00	2072.00	2077.00	2078.00	2090.00
98 RX	DISTANCE	100.00	160.00	210.00	226.00	246.00	283.00	391.00	498.00

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.39	3.54	10.45	19.17	28.24	38.94	53.62	68.99	84.80
OUTFLOW	0.00	144.37	537.43	1394.75	2822.57	4741.80	7348.56	10711.53	14745.14	19379.30
ELEVATION	2072.00	2072.95	2073.89	2074.84	2075.79	2076.74	2077.68	2078.63	2079.58	2080.53

STORAGE	101.04	117.70	134.81	152.34	170.30	188.70	207.53	226.79	246.48	266.60
OUTFLOW	24582.68	30334.55	36620.08	43428.23	50750.62	58580.82	66913.88	75745.97	85074.21	94896.46
ELEVATION	2081.47	2082.42	2083.37	2084.31	2085.26	2086.21	2087.16	2088.10	2089.05	2090.00

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HYDROGRAPH AT STATION RCH2
FOR PLAN 2, RATIO = 0.50

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	29.97-HR	(CFS)	(HR)
	(CFS)	9485.	3.87	891.	224.	179.	179.
	(INCHES)	6.682	6.705	6.709	6.709		
	(AC-FT)	442.	443.	444.	444.		

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE					
		6-HR	24-HR	72-HR	29.97-HR	(AC-FT)	(HR)
48.	3.87	5.	1.	1.	1.		

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE					
		6-HR	24-HR	72-HR	29.97-HR	(FEET)	(HR)
2078.29	3.87	2073.27	2072.32	2072.26	2072.26		

CUMULATIVE AREA = 1.24 SQ MI

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102 KP PLAN 3 FOR STATION RCH2 Route breach hydrograph downstream

103 KO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

96 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	STOR	TYPE OF INITIAL CONDITION
RSVRIC	0.00	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

97 RC NORMAL DEPTH CHANNEL

ANL	0.080	LEFT OVERBANK N-VALUE
ANCH	0.025	MAIN CHANNEL N-VALUE
ANR	0.080	RIGHT OVERBANK N-VALUE
RLNTH	2350.	REACH LENGTH
SEL	0.0130	ENERGY SLOPE
ELMAX	2090.0	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		--- LEFT OVERBANK ---		+ ----- MAIN CHANNEL ------		+ -- RIGHT OVERBANK --			
99 RY	ELEVATION	2074.50	2074.00	2074.00	2072.00	2072.00	2077.00	2078.00	2090.00
98 RX	DISTANCE	100.00	160.00	210.00	226.00	246.00	283.00	391.00	498.00

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.39	3.54	10.45	19.17	28.24	38.94	53.62	68.99	84.80
OUTFLOW	0.00	144.37	537.43	1394.75	2822.57	4741.80	7348.56	10711.53	14745.14	19379.30
ELEVATION	2072.00	2072.95	2073.89	2074.84	2075.79	2076.74	2077.68	2078.63	2079.58	2080.53

STORAGE	101.04	117.70	134.81	152.34	170.30	188.70	207.53	226.79	246.48	266.60
OUTFLOW	24582.68	30334.55	36620.08	43428.23	50750.62	58580.82	66913.88	75745.97	85074.21	94896.46
ELEVATION	2081.47	2082.42	2083.37	2084.31	2085.26	2086.21	2087.16	2088.10	2089.05	2090.00

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HYDROGRAPH AT STATION RCH2
FOR PLAN 3, RATIO = 0.50

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW					
		6-HR	24-HR	72-HR	29.97-HR	(CFS)	(HR)
	(CFS)	5433.	4.53	893.	224.	179.	179.
	(INCHES)	6.695	6.709	6.711	6.711		
	(AC-FT)	443.	444.	444.	444.		

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE					
		6-HR	24-HR	72-HR	29.97-HR	(AC-FT)	(HR)
31.	4.53	6.	1.	1.	1.		

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE					
		6-HR	24-HR	72-HR	29.97-HR	(FEET)	(HR)
2076.99	4.53	2073.32	2072.33	2072.27	2072.27		

CUMULATIVE AREA = 1.24 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

104 KP PLAN 4 FOR STATION RCH2 Route breach hydrograph downstream

105 KO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

96 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	STOR	TYPE OF INITIAL CONDITION
RSVRIC	0.00	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

97 RC NORMAL DEPTH CHANNEL

ANL	0.080	LEFT OVERBANK N-VALUE
ANCH	0.025	MAIN CHANNEL N-VALUE
ANR	0.080	RIGHT OVERBANK N-VALUE
RLNTH	2350.	REACH LENGTH
SEL	0.0130	ENERGY SLOPE
ELMAX	2090.0	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

--- LEFT OVERBANK --- + ----- MAIN CHANNEL ------ + --- RIGHT OVERBANK ---

99 RY	ELEVATION	2074.50	2074.00	2074.00	2072.00	2072.00	2077.00	2078.00	2090.00
98 RX	DISTANCE	100.00	160.00	210.00	226.00	246.00	283.00	391.00	498.00

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.39	3.54	10.45	19.17	28.24	38.94	53.62	68.99	84.80
OUTFLOW	0.00	144.37	537.43	1394.75	2822.57	4741.80	7348.56	10711.53	14745.14	19379.30
ELEVATION	2072.00	2072.95	2073.89	2074.84	2075.79	2076.74	2077.68	2078.63	2079.58	2080.53

STORAGE	101.04	117.70	134.81	152.34	170.30	188.70	207.53	226.79	246.48	266.60
OUTFLOW	24582.68	30334.55	36620.08	43428.23	50750.62	58580.82	66913.88	75745.97	85074.21	94896.46
ELEVATION	2081.47	2082.42	2083.37	2084.31	2085.26	2086.21	2087.16	2088.10	2089.05	2090.00

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HYDROGRAPH AT STATION RCH2
FOR PLAN 4, RATIO = 0.50

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
6-HR 24-HR 72-HR 29.97-HR (CFS) (HR)
(CFS) 5206. 3.63 891. 224. 180. 180.
(INCHES) 6.681 6.718 6.722 6.722
(AC-FT) 442. 444. 445. 445.

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE
6-HR 24-HR 72-HR 29.97-HR (AC-FT) (HR)
30. 3.63 6. 1. 1. 1.

PEAK STAGE TIME MAXIMUM AVERAGE STAGE
6-HR 24-HR 72-HR 29.97-HR (FEET) (HR)
2076.90 3.63 2073.59 2072.41 2072.33 2072.32

CUMULATIVE AREA = 1.24 SQ MI

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           *             *
106 KK     *    ATSF     *   Route breach hydrograph thru ATSF Culvert Crossing, Ponding Area
           *             *
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109 KO OUTPUT CONTROL VARIABLES
IPRNT 1 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

110 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC 0.00 INITIAL CONDITION
X 0.00 WORKING R AND D COEFFICIENT

111 SA	AREA	0.0	0.1	3.1	9.2	15.2	40.0
112 SE	ELEVATION	2061.50	2064.00	2066.00	2068.00	2070.00	2075.00
113 SQ	DISCHARGE	0.	10.	200.	340.	430.	24000.

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COMPUTED STORAGE-ELEVATION DATA

STORAGE	0.00	0.10	2.65	14.41	38.56	171.66
ELEVATION	2061.50	2064.00	2066.00	2068.00	2070.00	2075.00

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HYDROGRAPH AT STATION ATSF
PLAN 1, RATIO = 0.50

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2061.5	*	1	1000	301	1.	0.0	2061.7	*	1	2000	601	1.	0.0	2061.7			
1	0002	2	0.	0.0	2061.5	*	1	1002	302	1.	0.0	2061.7	*	1	2002	602	1.	0.0	2061.7			
1	0004	3	0.	0.0	2061.5	*	1	1004	303	1.	0.0	2061.7	*	1	2004	603	1.	0.0	2061.7			
1	0006	4	0.	0.0	2061.5	*	1	1006	304	1.	0.0	2061.7	*	1	2006	604	1.	0.0	2061.7			
1	0008	5	0.	0.0	2061.5	*	1	1008	305	1.	0.0	2061.7	*	1	2008	605	1.	0.0	2061.7			
1	0010	6	0.	0.0	2061.5	*	1	1010	306	1.	0.0	2061.7	*	1	2010	606	1.	0.0	2061.7			
1	0012	7	0.	0.0	2061.5	*	1	1012	307	1.	0.0	2061.7	*	1	2012	607	1.	0.0	2061.7			
1	0014	8	0.	0.0	2061.5	*	1	1014	308	1.	0.0	2061.7	*	1	2014	608	1.	0.0	2061.7			
1	0016	9	0.	0.0	2061.5	*	1	1016	309	1.	0.0	2061.7	*	1	2016	609	1.	0.0	2061.7			
1	0018	10	0.	0.0	2061.5	*	1	1018	310	1.	0.0	2061.7	*	1	2018	610	1.	0.0	2061.7			
1	0020	11	0.	0.0	2061.5	*	1	1020	311	1.	0.0	2061.7	*	1	2020	611	1.	0.0	2061.7			
1	0022	12	0.	0.0	2061.5	*	1	1022	312	1.	0.0	2061.7	*	1	2022	612	1.	0.0	2061.7			
1	0024	13	0.	0.0	2061.5	*	1	1024	313	1.	0.0	2061.7	*	1	2024	613	1.	0.0	2061.7			
1	0026	14	0.	0.0	2061.5	*	1	1026	314	1.	0.0	2061.7	*	1	2026	614	1.	0.0	2061.7			
1	0028	15	0.	0.0	2061.5	*	1	1028	315	1.	0.0	2061.7	*	1	2028	615	1.	0.0	2061.7			
1	0030	16	0.	0.0	2061.5	*	1	1030	316	1.	0.0	2061.7	*	1	2030	616	1.	0.0	2061.7			
1	0032	17	0.	0.0	2061.5	*	1	1032	317	1.	0.0	2061.7	*	1	2032	617	1.	0.0	2061.7			
1	0034	18	0.	0.0	2061.5	*	1	1034	318	1.	0.0	2061.7	*	1	2034	618	1.	0.0	2061.7			
1	0036	19	0.	0.0	2061.5	*	1	1036	319	1.	0.0	2061.7	*	1	2036	619	1.	0.0	2061.7			
1	0038	20	0.	0.0	2061.5	*	1	1038	320	1.	0.0	2061.7	*	1	2038	620	1.	0.0	2061.7			
1	0040	21	0.	0.0	2061.5	*	1	1040	321	1.	0.0	2061.7	*	1	2040	621	1.	0.0	2061.7			
1	0042	22	0.	0.0	2061.6	*	1	1042	322	1.	0.0	2061.7	*	1	2042	622	1.	0.0	2061.7			
1	0044	23	0.	0.0	2061.6	*	1	1044	323	1.	0.0	2061.7	*	1	2044	623	1.	0.0	2061.7			
1	0046	24	0.	0.0	2061.6	*	1	1046	324	1.	0.0	2061.7	*	1	2046	624	1.	0.0	2061.7			
1	0048	25	0.	0.0	2061.6	*	1	1048	325	1.	0.0	2061.7	*	1	2048	625	1.	0.0	2061.7			
1	0050	26	0.	0.0	2061.6	*	1	1050	326	1.	0.0	2061.7	*	1	2050	626	1.	0.0	2061.7			
1	0052	27	1.	0.0	2061.6	*	1	1052	327	1.	0.0	2061.7	*	1	2052	627	1.	0.0	2061.7			
1	0054	28	1.	0.0	2061.7	*	1	1054	328	1.	0.0	2061.7	*	1	2054	628	1.	0.0	2061.7			
1	0056	29	1.	0.0	2061.7	*	1	1056	329	1.	0.0	2061.7	*	1	2056	629	1.	0.0	2061.7			
1	0058	30	1.	0.0	2061.7	*	1	1058	330	1.	0.0	2061.7	*	1	2058	630	1.	0.0	2061.7			
1	0100	31	1.	0.0	2061.7	*	1	1100	331	1.	0.0	2061.7	*	1	2100	631	1.	0.0	2061.7			
1	0102	32	1.	0.0	2061.8	*	1	1102	332	1.	0.0	2061.7	*	1	2102	632	1.	0.0	2061.7			
1	0104	33	1.	0.0	2061.8	*	1	1104	333	1.	0.0	2061.7	*	1	2104	633	1.	0.0	2061.7			
1	0106	34	1.	0.0	2061.8	*	1	1106	334	1.	0.0	2061.7	*	1	2106	634	1.	0.0	2061.7			
1	0108	35	1.	0.0	2061.8	*	1	1108	335	1.	0.0	2061.7	*	1	2108	635	1.	0.0	2061.7			
1	0110	36	2.	0.0	2061.9	*	1	1110	336	1.	0.0	2061.7	*	1	2110	636	1.	0.0	2061.7			
1	0112	37	2.	0.0	2061.9	*	1	1112	337	1.	0.0	2061.7	*	1	2112	637	1.	0.0	2061.7			
1	0114	38	2.	0.0	2061.9	*	1	1114	338	1.	0.0	2061.7	*	1	2114	638	1.	0.0	2061.7			
1	0116	39	2.	0.0	2062.0	*	1	1116	339	1.	0.0	2061.7	*	1	2116	639	1.	0.0	2061.7			
1	0118	40	2.	0.0	2062.0	*	1	1118	340	1.	0.0	2061.7	*	1	2118	640	1.	0.0	2061.7			

1	0120	41	2.	0.0	2062.1	*	1	1120	341	1.	0.0	2061.7	*	1	2120	641	1.	0.0	2061.7
1	0122	42	2.	0.0	2062.1	*	1	1122	342	1.	0.0	2061.7	*	1	2122	642	1.	0.0	2061.7
1	0124	43	3.	0.0	2062.1	*	1	1124	343	1.	0.0	2061.7	*	1	2124	643	1.	0.0	2061.7
1	0126	44	3.	0.0	2062.2	*	1	1126	344	1.	0.0	2061.7	*	1	2126	644	1.	0.0	2061.7
1	0128	45	3.	0.0	2062.2	*	1	1128	345	1.	0.0	2061.7	*	1	2128	645	1.	0.0	2061.7
1	0130	46	3.	0.0	2062.3	*	1	1130	346	1.	0.0	2061.7	*	1	2130	646	1.	0.0	2061.7
1	0132	47	3.	0.0	2062.3	*	1	1132	347	1.	0.0	2061.7	*	1	2132	647	1.	0.0	2061.7
1	0134	48	3.	0.0	2062.4	*	1	1134	348	1.	0.0	2061.7	*	1	2134	648	1.	0.0	2061.7
1	0136	49	4.	0.0	2062.4	*	1	1136	349	1.	0.0	2061.7	*	1	2136	649	1.	0.0	2061.7
1	0138	50	4.	0.0	2062.5	*	1	1138	350	1.	0.0	2061.7	*	1	2138	650	1.	0.0	2061.7
1	0140	51	4.	0.0	2062.5	*	1	1140	351	1.	0.0	2061.7	*	1	2140	651	1.	0.0	2061.7
1	0142	52	4.	0.0	2062.6	*	1	1142	352	1.	0.0	2061.7	*	1	2142	652	1.	0.0	2061.7
1	0144	53	5.	0.0	2062.6	*	1	1144	353	1.	0.0	2061.7	*	1	2144	653	1.	0.0	2061.7
1	0146	54	5.	0.0	2062.7	*	1	1146	354	1.	0.0	2061.7	*	1	2146	654	1.	0.0	2061.7
1	0148	55	5.	0.1	2062.8	*	1	1148	355	1.	0.0	2061.7	*	1	2148	655	1.	0.0	2061.7
1	0150	56	5.	0.1	2062.8	*	1	1150	356	1.	0.0	2061.7	*	1	2150	656	1.	0.0	2061.7
1	0152	57	6.	0.1	2062.9	*	1	1152	357	1.	0.0	2061.7	*	1	2152	657	1.	0.0	2061.7
1	0154	58	6.	0.1	2063.0	*	1	1154	358	1.	0.0	2061.7	*	1	2154	658	1.	0.0	2061.7
1	0156	59	6.	0.1	2063.0	*	1	1156	359	1.	0.0	2061.7	*	1	2156	659	1.	0.0	2061.7
1	0158	60	6.	0.1	2063.1	*	1	1158	360	1.	0.0	2061.7	*	1	2158	660	1.	0.0	2061.7
1	0200	61	7.	0.1	2063.2	*	1	1200	361	1.	0.0	2061.7	*	1	2200	661	1.	0.0	2061.7
1	0202	62	7.	0.1	2063.2	*	1	1202	362	1.	0.0	2061.7	*	1	2202	662	1.	0.0	2061.7
1	0204	63	7.	0.1	2063.3	*	1	1204	363	1.	0.0	2061.7	*	1	2204	663	1.	0.0	2061.7
1	0206	64	7.	0.1	2063.4	*	1	1206	364	1.	0.0	2061.7	*	1	2206	664	1.	0.0	2061.7
1	0208	65	8.	0.1	2063.4	*	1	1208	365	1.	0.0	2061.7	*	1	2208	665	1.	0.0	2061.7
1	0210	66	8.	0.1	2063.5	*	1	1210	366	1.	0.0	2061.7	*	1	2210	666	1.	0.0	2061.7
1	0212	67	8.	0.1	2063.6	*	1	1212	367	1.	0.0	2061.7	*	1	2212	667	1.	0.0	2061.7
1	0214	68	8.	0.1	2063.6	*	1	1214	368	1.	0.0	2061.7	*	1	2214	668	1.	0.0	2061.7
1	0216	69	9.	0.1	2063.7	*	1	1216	369	1.	0.0	2061.7	*	1	2216	669	1.	0.0	2061.7
1	0218	70	9.	0.1	2063.7	*	1	1218	370	1.	0.0	2061.7	*	1	2218	670	1.	0.0	2061.7
1	0220	71	9.	0.1	2063.8	*	1	1220	371	1.	0.0	2061.7	*	1	2220	671	1.	0.0	2061.7
1	0222	72	9.	0.1	2063.8	*	1	1222	372	1.	0.0	2061.7	*	1	2222	672	1.	0.0	2061.7
1	0224	73	9.	0.1	2063.8	*	1	1224	373	1.	0.0	2061.7	*	1	2224	673	1.	0.0	2061.7
1	0226	74	9.	0.1	2063.9	*	1	1226	374	1.	0.0	2061.7	*	1	2226	674	1.	0.0	2061.7
1	0228	75	10.	0.1	2063.9	*	1	1228	375	1.	0.0	2061.7	*	1	2228	675	1.	0.0	2061.7
1	0230	76	10.	0.1	2063.9	*	1	1230	376	1.	0.0	2061.7	*	1	2230	676	1.	0.0	2061.7
1	0232	77	10.	0.1	2064.0	*	1	1232	377	1.	0.0	2061.7	*	1	2232	677	1.	0.0	2061.7
1	0234	78	10.	0.1	2064.0	*	1	1234	378	1.	0.0	2061.7	*	1	2234	678	1.	0.0	2061.7
1	0236	79	10.	0.1	2064.0	*	1	1236	379	1.	0.0	2061.7	*	1	2236	679	1.	0.0	2061.7
1	0238	80	10.	0.1	2064.0	*	1	1238	380	1.	0.0	2061.7	*	1	2238	680	1.	0.0	2061.7
1	0240	81	10.	0.1	2064.0	*	1	1240	381	1.	0.0	2061.7	*	1	2240	681	1.	0.0	2061.7
1	0242	82	11.	0.1	2064.0	*	1	1242	382	1.	0.0	2061.7	*	1	2242	682	1.	0.0	2061.7
1	0244	83	11.	0.1	2064.0	*	1	1244	383	1.	0.0	2061.7	*	1	2244	683	1.	0.0	2061.7
1	0246	84	11.	0.1	2064.0	*	1	1246	384	1.	0.0	2061.7	*	1	2246	684	1.	0.0	2061.7
1	0248	85	11.	0.1	2064.0	*	1	1248	385	1.	0.0	2061.7	*	1	2248	685	1.	0.0	2061.7
1	0250	86	11.	0.1	2064.0	*	1	1250	386	1.	0.0	2061.7	*	1	2250	686	1.	0.0	2061.7
1	0252	87	11.	0.1	2064.0	*	1	1252	387	1.	0.0	2061.7	*	1	2252	687	1.	0.0	2061.7
1	0254	88	11.	0.1	2064.0	*	1	1254	388	1.	0.0	2061.7	*	1	2254	688	1.	0.0	2061.7
1	0256	89	12.	0.1	2064.0	*	1	1256	389	1.	0.0	2061.7	*	1	2256	689	1.	0.0	2061.7
1	0258	90	12.	0.1	2064.0	*	1	1258	390	1.	0.0	2061.7	*	1	2258	690	1.	0.0	2061.7
1	0300	91	12.	0.1	2064.0	*	1	1300	391	1.	0.0	2061.7	*	1	2300	691	1.	0.0	2061.7
1	0302	92	12.	0.1	2064.0	*	1	1302	392	1.	0.0	2061.7	*	1	2302	692	1.	0.0	2061.7
1	0304	93	12.	0.1	2064.0	*	1	1304	393	1.	0.0	2061.7	*	1	2304	693	1.	0.0	2061.7
1	0306	94	13.	0.1	2064.0	*	1	1306	394	1.	0.0	2061.7	*	1	2306	694	1.	0.0	2061.7
1	0308	95	13.	0.1	2064.0	*	1	1308	395	1.	0.0	2061.7	*	1	2308	695	1.	0.0	2061.7
1	0310	96	13.	0.1	2064.0	*	1	1310	396	1.	0.0	2061.7	*	1	2310	696	1.	0.0	2061.7
1	0312	97	13.	0.1	2064.0	*	1	1312	397	1.	0.0	2061.7	*	1	2312	697	1.	0.0	2061.7
1	0314	98	14.	0.1	2064.0	*	1	1314	398	1.	0.0	2061.7	*	1	2314	698	1.	0.0	2061.7
1	0316	99	14.	0.2	2064.0	*	1	1316	399	1.	0.0	2061.7	*	1	2316	699	1.	0.0	2061.7
1	0318	100	14.	0.2	2064.0	*	1	1318	400	1.	0.0	2061.7	*	1	2318	700	1.	0.0	2061.7
1	0320	101	15.	0.2	2064.0	*	1	1320	401	1.	0.0	2061.7	*	1	2320	701	1.	0.0	2061.7
1	0322	102	15.	0.2	2064.1	*	1	1322	402	1.	0.0	2061.7	*	1	2322	702	1.	0.0	2061.7
1	0324	103	16.	0.2	2064.1	*	1	1324	403	1.	0.0	2061.7	*	1	2324	703	1.	0.0	2061.7
1	0326	104	16.	0.2	2064.1	*	1	1326	404	1.	0.0	2061.7	*	1	2326	704	1.	0.0	2061.7
1	0328	105	17.	0.2	2064.1	*	1	1328	405	1.	0.0	2061.7	*	1	2328	705	1.	0.0	2061.7

1	0330 106	17.	0.2	2064.1	*	1	1330 406	1.	0.0	2061.7	*	1	2330 706	1.	0.0 2061.7
1	0332 107	18.	0.2	2064.1	*	1	1332 407	1.	0.0	2061.7	*	1	2332 707	1.	0.0 2061.7
1	0334 108	21.	0.2	2064.1	*	1	1334 408	1.	0.0	2061.7	*	1	2334 708	1.	0.0 2061.7
1	0336 109	31.	0.4	2064.2	*	1	1336 409	1.	0.0	2061.7	*	1	2336 709	1.	0.0 2061.7
1	0338 110	77.	1.0	2064.7	*	1	1338 410	1.	0.0	2061.7	*	1	2338 710	1.	0.0 2061.7
1	0340 111	196.	2.6	2066.0	*	1	1340 411	1.	0.0	2061.7	*	1	2340 711	1.	0.0 2061.7
1	0342 112	242.	6.2	2066.6	*	1	1342 412	1.	0.0	2061.7	*	1	2342 712	1.	0.0 2061.7
1	0344 113	336.	14.1	2067.9	*	1	1344 413	1.	0.0	2061.7	*	1	2344 713	1.	0.0 2061.7
1	0346 114	395.	29.1	2069.2	*	1	1346 414	1.	0.0	2061.7	*	1	2346 714	1.	0.0 2061.7
1	0348 115	2392.	49.6	2070.4	*	1	1348 415	1.	0.0	2061.7	*	1	2348 715	1.	0.0 2061.7
1	0350 116	5797.	68.9	2071.1	*	1	1350 416	1.	0.0	2061.7	*	1	2350 716	1.	0.0 2061.7
1	0352 117	8104.	81.9	2071.6	*	1	1352 417	1.	0.0	2061.7	*	1	2352 717	1.	0.0 2061.7
1	0354 118	9174.	87.9	2071.9	*	1	1354 418	1.	0.0	2061.7	*	1	2354 718	1.	0.0 2061.7
1	0356 119	9290.	88.6	2071.9	*	1	1356 419	1.	0.0	2061.7	*	1	2356 719	1.	0.0 2061.7
1	0358 120	8823.	86.0	2071.8	*	1	1358 420	1.	0.0	2061.7	*	1	2358 720	1.	0.0 2061.7
1	0400 121	8049.	81.6	2071.6	*	1	1400 421	1.	0.0	2061.7	*	2	0000 721	1.	0.0 2061.7
1	0402 122	7176.	76.7	2071.4	*	1	1402 422	1.	0.0	2061.7	*	2	0002 722	1.	0.0 2061.7
1	0404 123	6347.	72.0	2071.3	*	1	1404 423	1.	0.0	2061.7	*	2	0004 723	1.	0.0 2061.7
1	0406 124	5627.	67.9	2071.1	*	1	1406 424	1.	0.0	2061.7	*	2	0006 724	1.	0.0 2061.7
1	0408 125	5023.	64.5	2071.0	*	1	1408 425	1.	0.0	2061.7	*	2	0008 725	1.	0.0 2061.7
1	0410 126	4513.	61.6	2070.9	*	1	1410 426	1.	0.0	2061.7	*	2	0010 726	1.	0.0 2061.7
1	0412 127	4083.	59.2	2070.8	*	1	1412 427	1.	0.0	2061.7	*	2	0012 727	1.	0.0 2061.7
1	0414 128	3718.	57.1	2070.7	*	1	1414 428	1.	0.0	2061.7	*	2	0014 728	1.	0.0 2061.7
1	0416 129	3407.	55.4	2070.6	*	1	1416 429	1.	0.0	2061.7	*	2	0016 729	1.	0.0 2061.7
1	0418 130	3148.	53.9	2070.6	*	1	1418 430	1.	0.0	2061.7	*	2	0018 730	1.	0.0 2061.7
1	0420 131	2931.	52.7	2070.5	*	1	1420 431	1.	0.0	2061.7	*	2	0020 731	1.	0.0 2061.7
1	0422 132	2742.	51.6	2070.5	*	1	1422 432	1.	0.0	2061.7	*	2	0022 732	1.	0.0 2061.7
1	0424 133	2572.	50.7	2070.5	*	1	1424 433	1.	0.0	2061.7	*	2	0024 733	1.	0.0 2061.7
1	0426 134	2417.	49.8	2070.4	*	1	1426 434	1.	0.0	2061.7	*	2	0026 734	1.	0.0 2061.7
1	0428 135	2271.	49.0	2070.4	*	1	1428 435	1.	0.0	2061.7	*	2	0028 735	1.	0.0 2061.7
1	0430 136	2134.	48.2	2070.4	*	1	1430 436	1.	0.0	2061.7	*	2	0030 736	1.	0.0 2061.7
1	0432 137	2005.	47.5	2070.3	*	1	1432 437	1.	0.0	2061.7	*	2	0032 737	1.	0.0 2061.7
1	0434 138	1882.	46.8	2070.3	*	1	1434 438	1.	0.0	2061.7	*	2	0034 738	1.	0.0 2061.7
1	0436 139	1766.	46.1	2070.3	*	1	1436 439	1.	0.0	2061.7	*	2	0036 739	1.	0.0 2061.7
1	0438 140	1656.	45.5	2070.3	*	1	1438 440	1.	0.0	2061.7	*	2	0038 740	1.	0.0 2061.7
1	0440 141	1555.	44.9	2070.2	*	1	1440 441	1.	0.0	2061.7	*	2	0040 741	1.	0.0 2061.7
1	0442 142	1464.	44.4	2070.2	*	1	1442 442	1.	0.0	2061.7	*	2	0042 742	1.	0.0 2061.7
1	0444 143	1382.	43.9	2070.2	*	1	1444 443	1.	0.0	2061.7	*	2	0044 743	1.	0.0 2061.7
1	0446 144	1305.	43.5	2070.2	*	1	1446 444	1.	0.0	2061.7	*	2	0046 744	1.	0.0 2061.7
1	0448 145	1232.	43.1	2070.2	*	1	1448 445	1.	0.0	2061.7	*	2	0048 745	1.	0.0 2061.7
1	0450 146	1162.	42.7	2070.2	*	1	1450 446	1.	0.0	2061.7	*	2	0050 746	1.	0.0 2061.7
1	0452 147	1096.	42.3	2070.1	*	1	1452 447	1.	0.0	2061.7	*	2	0052 747	1.	0.0 2061.7
1	0454 148	1033.	42.0	2070.1	*	1	1454 448	1.	0.0	2061.7	*	2	0054 748	1.	0.0 2061.7
1	0456 149	973.	41.6	2070.1	*	1	1456 449	1.	0.0	2061.7	*	2	0056 749	1.	0.0 2061.7
1	0458 150	917.	41.3	2070.1	*	1	1458 450	1.	0.0	2061.7	*	2	0058 750	1.	0.0 2061.7
1	0500 151	864.	41.0	2070.1	*	1	1500 451	1.	0.0	2061.7	*	2	0100 751	1.	0.0 2061.7
1	0502 152	815.	40.7	2070.1	*	1	1502 452	1.	0.0	2061.7	*	2	0102 752	1.	0.0 2061.7
1	0504 153	769.	40.5	2070.1	*	1	1504 453	1.	0.0	2061.7	*	2	0104 753	1.	0.0 2061.7
1	0506 154	727.	40.2	2070.1	*	1	1506 454	1.	0.0	2061.7	*	2	0106 754	1.	0.0 2061.7
1	0508 155	687.	40.0	2070.1	*	1	1508 455	1.	0.0	2061.7	*	2	0108 755	1.	0.0 2061.7
1	0510 156	651.	39.8	2070.0	*	1	1510 456	1.	0.0	2061.7	*	2	0110 756	1.	0.0 2061.7
1	0512 157	618.	39.6	2070.0	*	1	1512 457	1.	0.0	2061.7	*	2	0112 757	1.	0.0 2061.7
1	0514 158	586.	39.4	2070.0	*	1	1514 458	1.	0.0	2061.7	*	2	0114 758	1.	0.0 2061.7
1	0516 159	554.	39.3	2070.0	*	1	1516 459	1.	0.0	2061.7	*	2	0116 759	1.	0.0 2061.7
1	0518 160	523.	39.1	2070.0	*	1	1518 460	1.	0.0	2061.7	*	2	0118 760	1.	0.0 2061.7
1	0520 161	493.	38.9	2070.0	*	1	1520 461	1.	0.0	2061.7	*	2	0120 761	1.	0.0 2061.7
1	0522 162	466.	38.8	2070.0	*	1	1522 462	1.	0.0	2061.7	*	2	0122 762	1.	0.0 2061.7
1	0524 163	440.	38.6	2070.0	*	1	1524 463	1.	0.0	2061.7	*	2	0124 763	1.	0.0 2061.7
1	0526 164	430.	38.5	2070.0	*	1	1526 464	1.	0.0	2061.7	*	2	0126 764	1.	0.0 2061.7
1	0528 165	429.	38.3	2070.0	*	1	1528 465	1.	0.0	2061.7	*	2	0128 765	1.	0.0 2061.7
1	0530 166	428.	38.0	2070.0	*	1	1530 466	1.	0.0	2061.7	*	2	0130 766	1.	0.0 2061.7
1	0532 167	427.	37.7	2069.9	*	1	1532 467	1.	0.0	2061.7	*	2	0132 767	1.	0.0 2061.7
1	0534 168	426.	37.4	2069.9	*	1	1534 468	1.	0.0	2061.7	*	2	0134 768	1.	0.0 2061.7
1	0536 169	424.	37.0	2069.9	*	1	1536 469	1.	0.0	2061.7	*	2	0136 769	1.	0.0 2061.7
1	0538 170	422.	36.5	2069.8	*	1	1538 470	1.	0.0	2061.7	*	2	0138 770	1.	0.0 2061.7

1	0540 171	421.	36.1	2069.8 *	1	1540 471	1.	0.0	2061.7 *	2	0140 771	1.	0.0	2061.7
1	0542 172	419.	35.6	2069.8 *	1	1542 472	1.	0.0	2061.7 *	2	0142 772	1.	0.0	2061.7
1	0544 173	417.	35.0	2069.7 *	1	1544 473	1.	0.0	2061.7 *	2	0144 773	1.	0.0	2061.7
1	0546 174	415.	34.5	2069.7 *	1	1546 474	1.	0.0	2061.7 *	2	0146 774	1.	0.0	2061.7
1	0548 175	413.	33.9	2069.6 *	1	1548 475	1.	0.0	2061.7 *	2	0148 775	1.	0.0	2061.7
1	0550 176	410.	33.3	2069.6 *	1	1550 476	1.	0.0	2061.7 *	2	0150 776	1.	0.0	2061.7
1	0552 177	408.	32.7	2069.5 *	1	1552 477	1.	0.0	2061.7 *	2	0152 777	1.	0.0	2061.7
1	0554 178	406.	32.1	2069.5 *	1	1554 478	1.	0.0	2061.7 *	2	0154 778	1.	0.0	2061.7
1	0556 179	403.	31.4	2069.4 *	1	1556 479	1.	0.0	2061.7 *	2	0156 779	1.	0.0	2061.7
1	0558 180	401.	30.7	2069.4 *	1	1558 480	1.	0.0	2061.7 *	2	0158 780	1.	0.0	2061.7
1	0600 181	398.	30.1	2069.3 *	1	1600 481	1.	0.0	2061.7 *	2	0200 781	1.	0.0	2061.7
1	0602 182	396.	29.4	2069.2 *	1	1602 482	1.	0.0	2061.7 *	2	0202 782	1.	0.0	2061.7
1	0604 183	393.	28.7	2069.2 *	1	1604 483	1.	0.0	2061.7 *	2	0204 783	1.	0.0	2061.7
1	0606 184	390.	27.9	2069.1 *	1	1606 484	1.	0.0	2061.7 *	2	0206 784	1.	0.0	2061.7
1	0608 185	388.	27.2	2069.1 *	1	1608 485	1.	0.0	2061.7 *	2	0208 785	1.	0.0	2061.7
1	0610 186	385.	26.5	2069.0 *	1	1610 486	1.	0.0	2061.7 *	2	0210 786	1.	0.0	2061.7
1	0612 187	382.	25.8	2068.9 *	1	1612 487	1.	0.0	2061.7 *	2	0212 787	1.	0.0	2061.7
1	0614 188	380.	25.0	2068.9 *	1	1614 488	1.	0.0	2061.7 *	2	0214 788	1.	0.0	2061.7
1	0616 189	377.	24.3	2068.8 *	1	1616 489	1.	0.0	2061.7 *	2	0216 789	1.	0.0	2061.7
1	0618 190	374.	23.5	2068.8 *	1	1618 490	1.	0.0	2061.7 *	2	0218 790	1.	0.0	2061.7
1	0620 191	371.	22.8	2068.7 *	1	1620 491	1.	0.0	2061.7 *	2	0220 791	1.	0.0	2061.7
1	0622 192	368.	22.0	2068.6 *	1	1622 492	1.	0.0	2061.7 *	2	0222 792	1.	0.0	2061.7
1	0624 193	365.	21.2	2068.6 *	1	1624 493	1.	0.0	2061.7 *	2	0224 793	1.	0.0	2061.7
1	0626 194	363.	20.5	2068.5 *	1	1626 494	1.	0.0	2061.7 *	2	0226 794	1.	0.0	2061.7
1	0628 195	360.	19.7	2068.4 *	1	1628 495	1.	0.0	2061.7 *	2	0228 795	1.	0.0	2061.7
1	0630 196	357.	18.9	2068.4 *	1	1630 496	1.	0.0	2061.7 *	2	0230 796	1.	0.0	2061.7
1	0632 197	354.	18.2	2068.3 *	1	1632 497	1.	0.0	2061.7 *	2	0232 797	1.	0.0	2061.7
1	0634 198	351.	17.4	2068.2 *	1	1634 498	1.	0.0	2061.7 *	2	0234 798	1.	0.0	2061.7
1	0636 199	348.	16.6	2068.2 *	1	1636 499	1.	0.0	2061.7 *	2	0236 799	1.	0.0	2061.7
1	0638 200	345.	15.8	2068.1 *	1	1638 500	1.	0.0	2061.7 *	2	0238 800	1.	0.0	2061.7
1	0640 201	342.	15.1	2068.1 *	1	1640 501	1.	0.0	2061.7 *	2	0240 801	1.	0.0	2061.7
1	0642 202	338.	14.3	2068.0 *	1	1642 502	1.	0.0	2061.7 *	2	0242 802	1.	0.0	2061.7
1	0644 203	329.	13.5	2067.8 *	1	1644 503	1.	0.0	2061.7 *	2	0244 803	1.	0.0	2061.7
1	0646 204	320.	12.8	2067.7 *	1	1646 504	1.	0.0	2061.7 *	2	0246 804	1.	0.0	2061.7
1	0648 205	312.	12.0	2067.6 *	1	1648 505	1.	0.0	2061.7 *	2	0248 805	1.	0.0	2061.7
1	0650 206	303.	11.3	2067.5 *	1	1650 506	1.	0.0	2061.7 *	2	0250 806	1.	0.0	2061.7
1	0652 207	295.	10.6	2067.4 *	1	1652 507	1.	0.0	2061.7 *	2	0252 807	1.	0.0	2061.7
1	0654 208	286.	9.9	2067.2 *	1	1654 508	1.	0.0	2061.7 *	2	0254 808	1.	0.0	2061.7
1	0656 209	278.	9.2	2067.1 *	1	1656 509	1.	0.0	2061.7 *	2	0256 809	1.	0.0	2061.7
1	0658 210	271.	8.6	2067.0 *	1	1658 510	1.	0.0	2061.7 *	2	0258 810	1.	0.0	2061.7
1	0700 211	263.	8.0	2066.9 *	1	1700 511	1.	0.0	2061.7 *	2	0300 811	1.	0.0	2061.7
1	0702 212	256.	7.3	2066.8 *	1	1702 512	1.	0.0	2061.7 *	2	0302 812	1.	0.0	2061.7
1	0704 213	248.	6.7	2066.7 *	1	1704 513	1.	0.0	2061.7 *	2	0304 813	1.	0.0	2061.7
1	0706 214	241.	6.1	2066.6 *	1	1706 514	1.	0.0	2061.7 *	2	0306 814	1.	0.0	2061.7
1	0708 215	235.	5.6	2066.5 *	1	1708 515	1.	0.0	2061.7 *	2	0308 815	1.	0.0	2061.7
1	0710 216	228.	5.0	2066.4 *	1	1710 516	1.	0.0	2061.7 *	2	0310 816	1.	0.0	2061.7
1	0712 217	221.	4.4	2066.3 *	1	1712 517	1.	0.0	2061.7 *	2	0312 817	1.	0.0	2061.7
1	0714 218	215.	3.9	2066.2 *	1	1714 518	1.	0.0	2061.7 *	2	0314 818	1.	0.0	2061.7
1	0716 219	209.	3.4	2066.1 *	1	1716 519	1.	0.0	2061.7 *	2	0316 819	1.	0.0	2061.7
1	0718 220	203.	2.9	2066.0 *	1	1718 520	1.	0.0	2061.7 *	2	0318 820	1.	0.0	2061.7
1	0720 221	183.	2.4	2065.8 *	1	1720 521	1.	0.0	2061.7 *	2	0320 821	1.	0.0	2061.7
1	0722 222	152.	2.0	2065.5 *	1	1722 522	1.	0.0	2061.7 *	2	0322 822	1.	0.0	2061.7
1	0724 223	128.	1.7	2065.2 *	1	1724 523	1.	0.0	2061.7 *	2	0324 823	1.	0.0	2061.7
1	0726 224	107.	1.4	2065.0 *	1	1726 524	1.	0.0	2061.7 *	2	0326 824	1.	0.0	2061.7
1	0728 225	91.	1.2	2064.8 *	1	1728 525	1.	0.0	2061.7 *	2	0328 825	1.	0.0	2061.7
1	0730 226	77.	1.0	2064.7 *	1	1730 526	1.	0.0	2061.7 *	2	0330 826	1.	0.0	2061.7
1	0732 227	66.	0.8	2064.6 *	1	1732 527	1.	0.0	2061.7 *	2	0332 827	1.	0.0	2061.7
1	0734 228	56.	0.7	2064.5 *	1	1734 528	1.	0.0	2061.7 *	2	0334 828	1.	0.0	2061.7
1	0736 229	48.	0.6	2064.4 *	1	1736 529	1.	0.0	2061.7 *	2	0336 829	1.	0.0	2061.7
1	0738 230	42.	0.5	2064.3 *	1	1738 530	1.	0.0	2061.7 *	2	0338 830	1.	0.0	2061.7
1	0740 231	36.	0.5	2064.3 *	1	1740 531	1.	0.0	2061.7 *	2	0340 831	1.	0.0	2061.7
1	0742 232	32.	0.4	2064.2 *	1	1742 532	1.	0.0	2061.7 *	2	0342 832	1.	0.0	2061.7
1	0744 233	28.	0.3	2064.2 *	1	1744 533	1.	0.0	2061.7 *	2	0344 833	1.	0.0	2061.7
1	0746 234	25.	0.3	2064.2 *	1	1746 534	1.	0.0	2061.7 *	2	0346 834	1.	0.0	2061.7
1	0748 235	22.	0.3	2064.1 *	1	1748 535	1.	0.0	2061.7 *	2	0348 835	1.	0.0	2061.7

1	0750	236	20.	0.2	2064.1	*	1	1750	536	1.	0.0	2061.7	*	2	0350 836	1.	0.0	2061.7
1	0752	237	18.	0.2	2064.1	*	1	1752	537	1.	0.0	2061.7	*	2	0352 837	1.	0.0	2061.7
1	0754	238	16.	0.2	2064.1	*	1	1754	538	1.	0.0	2061.7	*	2	0354 838	1.	0.0	2061.7
1	0756	239	15.	0.2	2064.1	*	1	1756	539	1.	0.0	2061.7	*	2	0356 839	1.	0.0	2061.7
1	0758	240	14.	0.1	2064.0	*	1	1758	540	1.	0.0	2061.7	*	2	0358 840	1.	0.0	2061.7
1	0800	241	12.	0.1	2064.0	*	1	1800	541	1.	0.0	2061.7	*	2	0400 841	1.	0.0	2061.7
1	0802	242	11.	0.1	2064.0	*	1	1802	542	1.	0.0	2061.7	*	2	0402 842	1.	0.0	2061.7
1	0804	243	11.	0.1	2064.0	*	1	1804	543	1.	0.0	2061.7	*	2	0404 843	1.	0.0	2061.7
1	0806	244	10.	0.1	2063.9	*	1	1806	544	1.	0.0	2061.7	*	2	0406 844	1.	0.0	2061.7
1	0808	245	9.	0.1	2063.7	*	1	1808	545	1.	0.0	2061.7	*	2	0408 845	1.	0.0	2061.7
1	0810	246	8.	0.1	2063.5	*	1	1810	546	1.	0.0	2061.7	*	2	0410 846	1.	0.0	2061.7
1	0812	247	7.	0.1	2063.4	*	1	1812	547	1.	0.0	2061.7	*	2	0412 847	1.	0.0	2061.7
1	0814	248	7.	0.1	2063.2	*	1	1814	548	1.	0.0	2061.7	*	2	0414 848	1.	0.0	2061.7
1	0816	249	6.	0.1	2063.1	*	1	1816	549	1.	0.0	2061.7	*	2	0416 849	1.	0.0	2061.7
1	0818	250	6.	0.1	2063.0	*	1	1818	550	1.	0.0	2061.7	*	2	0418 850	1.	0.0	2061.7
1	0820	251	6.	0.1	2062.9	*	1	1820	551	1.	0.0	2061.7	*	2	0420 851	1.	0.0	2061.7
1	0822	252	5.	0.1	2062.8	*	1	1822	552	1.	0.0	2061.7	*	2	0422 852	1.	0.0	2061.7
1	0824	253	5.	0.0	2062.7	*	1	1824	553	1.	0.0	2061.7	*	2	0424 853	1.	0.0	2061.7
1	0826	254	5.	0.0	2062.7	*	1	1826	554	1.	0.0	2061.7	*	2	0426 854	1.	0.0	2061.7
1	0828	255	4.	0.0	2062.6	*	1	1828	555	1.	0.0	2061.7	*	2	0428 855	1.	0.0	2061.7
1	0830	256	4.	0.0	2062.5	*	1	1830	556	1.	0.0	2061.7	*	2	0430 856	1.	0.0	2061.7
1	0832	257	4.	0.0	2062.5	*	1	1832	557	1.	0.0	2061.7	*	2	0432 857	1.	0.0	2061.7
1	0834	258	4.	0.0	2062.4	*	1	1834	558	1.	0.0	2061.7	*	2	0434 858	1.	0.0	2061.7
1	0836	259	4.	0.0	2062.4	*	1	1836	559	1.	0.0	2061.7	*	2	0436 859	1.	0.0	2061.7
1	0838	260	3.	0.0	2062.3	*	1	1838	560	1.	0.0	2061.7	*	2	0438 860	1.	0.0	2061.7
1	0840	261	3.	0.0	2062.3	*	1	1840	561	1.	0.0	2061.7	*	2	0440 861	1.	0.0	2061.7
1	0842	262	3.	0.0	2062.3	*	1	1842	562	1.	0.0	2061.7	*	2	0442 862	1.	0.0	2061.7
1	0844	263	3.	0.0	2062.2	*	1	1844	563	1.	0.0	2061.7	*	2	0444 863	1.	0.0	2061.7
1	0846	264	3.	0.0	2062.2	*	1	1846	564	1.	0.0	2061.7	*	2	0446 864	1.	0.0	2061.7
1	0848	265	3.	0.0	2062.1	*	1	1848	565	1.	0.0	2061.7	*	2	0448 865	1.	0.0	2061.7
1	0850	266	2.	0.0	2062.1	*	1	1850	566	1.	0.0	2061.7	*	2	0450 866	1.	0.0	2061.7
1	0852	267	2.	0.0	2062.1	*	1	1852	567	1.	0.0	2061.7	*	2	0452 867	1.	0.0	2061.7
1	0854	268	2.	0.0	2062.1	*	1	1854	568	1.	0.0	2061.7	*	2	0454 868	1.	0.0	2061.7
1	0856	269	2.	0.0	2062.0	*	1	1856	569	1.	0.0	2061.7	*	2	0456 869	1.	0.0	2061.7
1	0858	270	2.	0.0	2062.0	*	1	1858	570	1.	0.0	2061.7	*	2	0458 870	1.	0.0	2061.7
1	0900	271	2.	0.0	2062.0	*	1	1900	571	1.	0.0	2061.7	*	2	0500 871	1.	0.0	2061.7
1	0902	272	2.	0.0	2062.0	*	1	1902	572	1.	0.0	2061.7	*	2	0502 872	1.	0.0	2061.7
1	0904	273	2.	0.0	2061.9	*	1	1904	573	1.	0.0	2061.7	*	2	0504 873	1.	0.0	2061.7
1	0906	274	2.	0.0	2061.9	*	1	1906	574	1.	0.0	2061.7	*	2	0506 874	1.	0.0	2061.7
1	0908	275	2.	0.0	2061.9	*	1	1908	575	1.	0.0	2061.7	*	2	0508 875	1.	0.0	2061.7
1	0910	276	2.	0.0	2061.9	*	1	1910	576	1.	0.0	2061.7	*	2	0510 876	1.	0.0	2061.7
1	0912	277	1.	0.0	2061.9	*	1	1912	577	1.	0.0	2061.7	*	2	0512 877	1.	0.0	2061.7
1	0914	278	1.	0.0	2061.8	*	1	1914	578	1.	0.0	2061.7	*	2	0514 878	1.	0.0	2061.7
1	0916	279	1.	0.0	2061.8	*	1	1916	579	1.	0.0	2061.7	*	2	0516 879	1.	0.0	2061.7
1	0918	280	1.	0.0	2061.8	*	1	1918	580	1.	0.0	2061.7	*	2	0518 880	1.	0.0	2061.7
1	0920	281	1.	0.0	2061.8	*	1	1920	581	1.	0.0	2061.7	*	2	0520 881	1.	0.0	2061.7
1	0922	282	1.	0.0	2061.8	*	1	1922	582	1.	0.0	2061.7	*	2	0522 882	1.	0.0	2061.7
1	0924	283	1.	0.0	2061.8	*	1	1924	583	1.	0.0	2061.7	*	2	0524 883	1.	0.0	2061.7
1	0926	284	1.	0.0	2061.7	*	1	1926	584	1.	0.0	2061.7	*	2	0526 884	1.	0.0	2061.7
1	0928	285	1.	0.0	2061.7	*	1	1928	585	1.	0.0	2061.7	*	2	0528 885	1.	0.0	2061.7
1	0930	286	1.	0.0	2061.7	*	1	1930	586	1.	0.0	2061.7	*	2	0530 886	1.	0.0	2061.7
1	0932	287	1.	0.0	2061.7	*	1	1932	587	1.	0.0	2061.7	*	2	0532 887	1.	0.0	2061.7
1	0934	288	1.	0.0	2061.7	*	1	1934	588	1.	0.0	2061.7	*	2	0534 888	1.	0.0	2061.7
1	0936	289	1.	0.0	2061.7	*	1	1936	589	1.	0.0	2061.7	*	2	0536 889	1.	0.0	2061.7
1	0938	290	1.	0.0	2061.7	*	1	1938	590	1.	0.0	2061.7	*	2	0538 890	1.	0.0	2061.7
1	0940	291	1.	0.0	2061.7	*	1	1940	591	1.	0.0	2061.7	*	2	0540 891	1.	0.0	2061.7
1	0942	292	1.	0.0	2061.7	*	1	1942	592	1.	0.0	2061.7	*	2	0542 892	1.	0.0	2061.7
1	0944	293	1.	0.0	2061.7	*	1	1944	593	1.	0.0	2061.7	*	2	0544 893	1.	0.0	2061.7
1	0946	294	1.	0.0	2061.7	*	1	1946	594	1.	0.0	2061.7	*	2	0546 894	1.	0.0	2061.7
1	0948	295	1.	0.0	2061.7	*	1	1948	595	1.	0.0	2061.7	*	2	0548 895	1.	0.0	2061.7
1	0950	296	1.	0.0	2061.7	*	1	1950	596	1.	0.0	2061.7	*	2	0550 896	1.	0.0	2061.7
1	0952	297	1.	0.0	2061.7	*	1	1952	597	1.	0.0	2061.7	*	2	0552 897	1.	0.0	2061.7
1	0954	298	1.	0.0	2061.7	*	1	1954	598	1.	0.0	2061.7	*	2	0554 898	1.	0.0	2061.7
1	0956	299	1.	0.0	2061.7	*	1	1956	599	1.	0.0	2061.7	*	2	0556 899	1.	0.0	2061.7
1	0958	300	1.	0.0	2061.7	*	1	1958	600	1.	0.0	2061.7	*	2	0558 900	1.	0.0	2061.7

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PEAK FLOW    TIME                          MAXIMUM AVERAGE FLOW
                          6-HR'    24-HR     72-HR    29.97-HR  (CFS)     (HR)
              (CFS)      9290.    3.93                891.      223.      179.       179.
            (INCHES)     6.678    6.701     6.705     6.705
            (AC-FT)      442.     443.      443.      443.

PEAK STORAGE  TIME                          MAXIMUM AVERAGE STORAGE
                          6-HR     24-HR     72-HR    29.97-HR  (AC-FT)    (HR)
   89.    3.93            21.      5.        4.        4.

PEAK STAGE   TIME                          MAXIMUM AVERAGE STAGE
                          6-HR     24-HR     72-HR    29.97-HR  (FEET)     (HR)
 2071.88    3.93          2067.29  2063.14   2062.84   2062.82

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

114 KP      PLAN  2 FOR STATION     ATSF        Route breach hydrograph thru ATSF Culvert Crossing, Ponding Area

115 KO       OUTPUT CONTROL VARIABLES
               IPRNT        3  PRINT CONTROL
               IPLOT        0  PLOT CONTROL
               QSCAL        0.  HYDROGRAPH PLOT SCALE

         HYDROGRAPH ROUTING DATA

110 RS       STORAGE ROUTING
               NSTPS        1  NUMBER OF SUBREACHES
               ITYP       STOR  TYPE OF INITIAL CONDITION
              RSVRIC      0.00  INITIAL CONDITION
                 X       0.00 WORKING R AND D COEFFICIENT

111 SA          AREA       0.0      0.1      3.1      9.2      15.2     40.0

112 SE       ELEVATION    2061.50  2064.00  2066.00  2068.00  2070.00  2075.00

113 SQ       DISCHARGE        0.      10.      200.     340.     430.   24000.

                                          ***

                                COMPUTED STORAGE-ELEVATION DATA

      STORAGE      0.00     0.10     2.65     14.41    38.56    171.66
    ELEVATION    2061.50  2064.00  2066.00  2068.00  2070.00  2075.00

   ***          ***          ***          ***          ***

                HYDROGRAPH AT STATION     ATSF
                  FOR PLAN 2, RATIO = 0.50

PEAK FLOW    TIME                          MAXIMUM AVERAGE FLOW
                          6-HR     24-HR     72-HR    29.97-HR  (CFS)     (HR)
              (CFS)      8036.    3.97                891.      224.      179.       179.
            (INCHES)     6.682    6.705     6.709     6.709
            (AC-FT)      442.     443.      444.      444.

PEAK STORAGE  TIME                          MAXIMUM AVERAGE STORAGE
                          6-HR     24-HR     72-HR    29.97-HR  (AC-FT)    (HR)
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  82.    3.97              21.       5.       4.       4.

PEAK STAGE   TIME                    MAXIMUM AVERAGE STAGE
                          6-HR     24-HR     72-HR    29.97-HR  (FEET)     (HR)
 2071.61     3.97         2067.30   2063.14   2062.84   2062.82

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

116 KP      PLAN  3 FOR STATION     ATSF        Route breach hydrograph thru ATSF Culvert Crossing, Ponding Area

117 KO        OUTPUT CONTROL VARIABLES
                IPRNT         3  PRINT CONTROL
                IPLOT         0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE

          HYDROGRAPH ROUTING DATA

110 RS        STORAGE ROUTING
                NSTPS         1  NUMBER OF SUBREACHES
                 ITYP      STOR  TYPE OF INITIAL CONDITION
                RSVRIC      0.00  INITIAL CONDITION
                  X       0.00 WORKING R AND D COEFFICIENT

111 SA          AREA       0.0      0.1      3.1      9.2     15.2     40.0

112 SE       ELEVATION    2061.50  2064.00  2066.00  2068.00  2070.00  2075.00

113 SQ       DISCHARGE        0.      10.     200.     340.     430.   24000.

                                        ***

                          COMPUTED STORAGE-ELEVATION DATA

      STORAGE      0.00     0.10     2.65    14.41    38.56   171.66
    ELEVATION    2061.50  2064.00  2066.00  2068.00  2070.00  2075.00

   ***        ***        ***        ***        ***

              HYDROGRAPH AT STATION     ATSF
               FOR PLAN 3, RATIO = 0.50

PEAK FLOW    TIME                    MAXIMUM AVERAGE FLOW
                          6-HR     24-HR     72-HR    29.97-HR  (CFS)      (HR)
              (CFS)     5287.     4.57          893.      224.      179.       179.
            (INCHES)    6.695     6.709     6.711     6.711
            (AC-FT)     443.      444.      444.      444.

PEAK STORAGE  TIME                    MAXIMUM AVERAGE STORAGE
                          6-HR     24-HR     72-HR    29.97-HR  (AC-FT)    (HR)
   66.     4.57              21.       5.       4.       4.

PEAK STAGE   TIME                    MAXIMUM AVERAGE STAGE
                          6-HR     24-HR     72-HR    29.97-HR  (FEET)     (HR)
 2071.03     4.57         2067.27   2063.07   2062.76   2062.75

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***
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118 KP    PLAN  4 FOR STATION     ATSF         Route breach hydrograph thru ATSF Culvert Crossing, Ponding Area

119 KO         OUTPUT CONTROL VARIABLES
                 IPRNT          3  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 QSCAL          0.  HYDROGRAPH PLOT SCALE

           HYDROGRAPH ROUTING DATA

110 RS         STORAGE ROUTING
                 NSTPS          1  NUMBER OF SUBREACHES
                 ITYP        STOR  TYPE OF INITIAL CONDITION
                RSVRIC       0.00  INITIAL CONDITION
                   X        0.00 WORKING R AND D COEFFICIENT

111 SA            AREA       0.0      0.1      3.1      9.2     15.2     40.0

112 SE         ELEVATION   2061.50  2064.00  2066.00  2068.00  2070.00  2075.00

113 SQ         DISCHARGE       0.      10.     200.     340.     430.   24000.

                                        ***

                             COMPUTED STORAGE-ELEVATION DATA

         STORAGE      0.00     0.10     2.65    14.41    38.56   171.66
       ELEVATION   2061.50  2064.00  2066.00  2068.00  2070.00  2075.00

    ***        ***        ***        ***        ***

                 HYDROGRAPH AT STATION     ATSF
                  FOR PLAN 4, RATIO = 0.50

PEAK FLOW     TIME                    MAXIMUM AVERAGE FLOW
                          6-HR      24-HR      72-HR    29.97-HR  (CFS)      (HR)
                 (CFS)  4980.     3.73              890.       224.       180.       180.
               (INCHES)    6.673      6.718      6.722      6.722
               (AC-FT)     441.       444.       445.       445.

PEAK STORAGE   TIME                   MAXIMUM AVERAGE STORAGE
                          6-HR      24-HR      72-HR    29.97-HR  (AC-FT)     (HR)
    64.     3.73               24.        6.         5.         5.

PEAK STAGE    TIME                    MAXIMUM AVERAGE STAGE
                          6-HR      24-HR      72-HR    29.97-HR  (FEET)      (HR)
 2070.97     3.73            2067.94    2063.38    2063.03    2063.01

                 CUMULATIVE AREA =     1.24 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
***


        **************
        *            *
120 KK  *    RCH4    *    Route breach hydrograph downstream
        *            *
        **************

123 KO         OUTPUT CONTROL VARIABLES
                 IPRNT          1  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
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QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

124 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC 0.00 INITIAL CONDITION
X 0.00 WORKING R AND D COEFFICIENT

125 RC NORMAL DEPTH CHANNEL
ANL 0.050 LEFT OVERBANK N-VALUE
ANCH 0.030 MAIN CHANNEL N-VALUE
ANR 0.050 RIGHT OVERBANK N-VALUE
RLNTH 700. REACH LENGTH
SEL 0.0150 ENERGY SLOPE
ELMAX 0.0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA
--- LEFT OVERBANK --- + ----- MAIN CHANNEL ------- + --- RIGHT OVERBANK ---

127 RY	ELEVATION	2062.30	2060.00	2058.00	2058.00	2058.00	2058.50	2062.00	2070.00
126 RX	DISTANCE	0.00	191.00	273.00	310.00	321.00	387.00	728.00	735.00

***

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.04	3.03	5.91	9.77	14.79	20.96	28.14	35.54	42.94
OUTFLOW	0.00	223.27	978.02	2293.39	4209.06	6891.50	10448.70	15286.25	21487.19	28581.83
ELEVATION	2058.00	2058.63	2059.26	2059.89	2060.53	2061.16	2061.79	2062.42	2063.05	2063.68

STORAGE	50.35	57.76	65.18	72.60	80.03	87.46	94.90	102.35	109.80	117.26
OUTFLOW	36513.64	45238.42	54720.14	64928.60	75837.95	87425.64	99671.79	112558.63	126070.16	140191.89
ELEVATION	2064.32	2064.95	2065.58	2066.21	2066.84	2067.47	2068.11	2068.74	2069.37	2070.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 15286. TO 140192.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION RCH4
PLAN 1, RATIO = 0.50

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000	1	0.	0.0	2058.0	*	1	1000	301	1.	0.0	2058.0	*	1	2000	601	1.	0.0	2058.0			
1	0002	2	0.	0.0	2058.0	*	1	1002	302	1.	0.0	2058.0	*	1	2002	602	1.	0.0	2058.0			
1	0004	3	0.	0.0	2058.0	*	1	1004	303	1.	0.0	2058.0	*	1	2004	603	1.	0.0	2058.0			
1	0006	4	0.	0.0	2058.0	*	1	1006	304	1.	0.0	2058.0	*	1	2006	604	1.	0.0	2058.0			
1	0008	5	0.	0.0	2058.0	*	1	1008	305	1.	0.0	2058.0	*	1	2008	605	1.	0.0	2058.0			
1	0010	6	0.	0.0	2058.0	*	1	1010	306	1.	0.0	2058.0	*	1	2010	606	1.	0.0	2058.0			
1	0012	7	0.	0.0	2058.0	*	1	1012	307	1.	0.0	2058.0	*	1	2012	607	1.	0.0	2058.0			
1	0014	8	0.	0.0	2058.0	*	1	1014	308	1.	0.0	2058.0	*	1	2014	608	1.	0.0	2058.0			
1	0016	9	0.	0.0	2058.0	*	1	1016	309	1.	0.0	2058.0	*	1	2016	609	1.	0.0	2058.0			
1	0018	10	0.	0.0	2058.0	*	1	1018	310	1.	0.0	2058.0	*	1	2018	610	1.	0.0	2058.0			

1	0020	11	0.	0.0	2058.0	*	1	1020 311	1.	0.0	2058.0	*	1	2020 611	1.	0.0	2058.0
1	0022	12	0.	0.0	2058.0	*	1	1022 312	1.	0.0	2058.0	*	1	2022 612	1.	0.0	2058.0
1	0024	13	0.	0.0	2058.0	*	1	1024 313	1.	0.0	2058.0	*	1	2024 613	1.	0.0	2058.0
1	0026	14	0.	0.0	2058.0	*	1	1026 314	1.	0.0	2058.0	*	1	2026 614	1.	0.0	2058.0
1	0028	15	0.	0.0	2058.0	*	1	1028 315	1.	0.0	2058.0	*	1	2028 615	1.	0.0	2058.0
1	0030	16	0.	0.0	2058.0	*	1	1030 316	1.	0.0	2058.0	*	1	2030 616	1.	0.0	2058.0
1	0032	17	0.	0.0	2058.0	*	1	1032 317	1.	0.0	2058.0	*	1	2032 617	1.	0.0	2058.0
1	0034	18	0.	0.0	2058.0	*	1	1034 318	1.	0.0	2058.0	*	1	2034 618	1.	0.0	2058.0
1	0036	19	0.	0.0	2058.0	*	1	1036 319	1.	0.0	2058.0	*	1	2036 619	1.	0.0	2058.0
1	0038	20	0.	0.0	2058.0	*	1	1038 320	1.	0.0	2058.0	*	1	2038 620	1.	0.0	2058.0
1	0040	21	0.	0.0	2058.0	*	1	1040 321	1.	0.0	2058.0	*	1	2040 621	1.	0.0	2058.0
1	0042	22	0.	0.0	2058.0	*	1	1042 322	1.	0.0	2058.0	*	1	2042 622	1.	0.0	2058.0
1	0044	23	0.	0.0	2058.0	*	1	1044 323	1.	0.0	2058.0	*	1	2044 623	1.	0.0	2058.0
1	0046	24	0.	0.0	2058.0	*	1	1046 324	1.	0.0	2058.0	*	1	2046 624	1.	0.0	2058.0
1	0048	25	0.	0.0	2058.0	*	1	1048 325	1.	0.0	2058.0	*	1	2048 625	1.	0.0	2058.0
1	0050	26	0.	0.0	2058.0	*	1	1050 326	1.	0.0	2058.0	*	1	2050 626	1.	0.0	2058.0
1	0052	27	0.	0.0	2058.0	*	1	1052 327	1.	0.0	2058.0	*	1	2052 627	1.	0.0	2058.0
1	0054	28	1.	0.0	2058.0	*	1	1054 328	1.	0.0	2058.0	*	1	2054 628	1.	0.0	2058.0
1	0056	29	1.	0.0	2058.0	*	1	1056 329	1.	0.0	2058.0	*	1	2056 629	1.	0.0	2058.0
1	0058	30	1.	0.0	2058.0	*	1	1058 330	1.	0.0	2058.0	*	1	2058 630	1.	0.0	2058.0
1	0100	31	1.	0.0	2058.0	*	1	1100 331	1.	0.0	2058.0	*	1	2100 631	1.	0.0	2058.0
1	0102	32	1.	0.0	2058.0	*	1	1102 332	1.	0.0	2058.0	*	1	2102 632	1.	0.0	2058.0
1	0104	33	1.	0.0	2058.0	*	1	1104 333	1.	0.0	2058.0	*	1	2104 633	1.	0.0	2058.0
1	0106	34	1.	0.0	2058.0	*	1	1106 334	1.	0.0	2058.0	*	1	2106 634	1.	0.0	2058.0
1	0108	35	1.	0.0	2058.0	*	1	1108 335	1.	0.0	2058.0	*	1	2108 635	1.	0.0	2058.0
1	0110	36	1.	0.0	2058.0	*	1	1110 336	1.	0.0	2058.0	*	1	2110 636	1.	0.0	2058.0
1	0112	37	1.	0.0	2058.0	*	1	1112 337	1.	0.0	2058.0	*	1	2112 637	1.	0.0	2058.0
1	0114	38	2.	0.0	2058.0	*	1	1114 338	1.	0.0	2058.0	*	1	2114 638	1.	0.0	2058.0
1	0116	39	2.	0.0	2058.0	*	1	1116 339	1.	0.0	2058.0	*	1	2116 639	1.	0.0	2058.0
1	0118	40	2.	0.0	2058.0	*	1	1118 340	1.	0.0	2058.0	*	1	2118 640	1.	0.0	2058.0
1	0120	41	2.	0.0	2058.0	*	1	1120 341	1.	0.0	2058.0	*	1	2120 641	1.	0.0	2058.0
1	0122	42	2.	0.0	2058.0	*	1	1122 342	1.	0.0	2058.0	*	1	2122 642	1.	0.0	2058.0
1	0124	43	2.	0.0	2058.0	*	1	1124 343	1.	0.0	2058.0	*	1	2124 643	1.	0.0	2058.0
1	0126	44	2.	0.0	2058.0	*	1	1126 344	1.	0.0	2058.0	*	1	2126 644	1.	0.0	2058.0
1	0128	45	3.	0.0	2058.0	*	1	1128 345	1.	0.0	2058.0	*	1	2128 645	1.	0.0	2058.0
1	0130	46	3.	0.0	2058.0	*	1	1130 346	1.	0.0	2058.0	*	1	2130 646	1.	0.0	2058.0
1	0132	47	3.	0.0	2058.0	*	1	1132 347	1.	0.0	2058.0	*	1	2132 647	1.	0.0	2058.0
1	0134	48	3.	0.0	2058.0	*	1	1134 348	1.	0.0	2058.0	*	1	2134 648	1.	0.0	2058.0
1	0136	49	3.	0.0	2058.0	*	1	1136 349	1.	0.0	2058.0	*	1	2136 649	1.	0.0	2058.0
1	0138	50	4.	0.0	2058.0	*	1	1138 350	1.	0.0	2058.0	*	1	2138 650	1.	0.0	2058.0
1	0140	51	4.	0.0	2058.0	*	1	1140 351	1.	0.0	2058.0	*	1	2140 651	1.	0.0	2058.0
1	0142	52	4.	0.0	2058.0	*	1	1142 352	1.	0.0	2058.0	*	1	2142 652	1.	0.0	2058.0
1	0144	53	4.	0.0	2058.0	*	1	1144 353	1.	0.0	2058.0	*	1	2144 653	1.	0.0	2058.0
1	0146	54	4.	0.0	2058.0	*	1	1146 354	1.	0.0	2058.0	*	1	2146 654	1.	0.0	2058.0
1	0148	55	5.	0.0	2058.0	*	1	1148 355	1.	0.0	2058.0	*	1	2148 655	1.	0.0	2058.0
1	0150	56	5.	0.0	2058.0	*	1	1150 356	1.	0.0	2058.0	*	1	2150 656	1.	0.0	2058.0
1	0152	57	5.	0.0	2058.0	*	1	1152 357	1.	0.0	2058.0	*	1	2152 657	1.	0.0	2058.0
1	0154	58	5.	0.0	2058.0	*	1	1154 358	1.	0.0	2058.0	*	1	2154 658	1.	0.0	2058.0
1	0156	59	6.	0.0	2058.0	*	1	1156 359	1.	0.0	2058.0	*	1	2156 659	1.	0.0	2058.0
1	0158	60	6.	0.0	2058.0	*	1	1158 360	1.	0.0	2058.0	*	1	2158 660	1.	0.0	2058.0
1	0200	61	6.	0.0	2058.0	*	1	1200 361	1.	0.0	2058.0	*	1	2200 661	1.	0.0	2058.0
1	0202	62	6.	0.0	2058.0	*	1	1202 362	1.	0.0	2058.0	*	1	2202 662	1.	0.0	2058.0
1	0204	63	7.	0.0	2058.0	*	1	1204 363	1.	0.0	2058.0	*	1	2204 663	1.	0.0	2058.0
1	0206	64	7.	0.0	2058.0	*	1	1206 364	1.	0.0	2058.0	*	1	2206 664	1.	0.0	2058.0
1	0208	65	7.	0.0	2058.0	*	1	1208 365	1.	0.0	2058.0	*	1	2208 665	1.	0.0	2058.0
1	0210	66	8.	0.0	2058.0	*	1	1210 366	1.	0.0	2058.0	*	1	2210 666	1.	0.0	2058.0
1	0212	67	8.	0.0	2058.0	*	1	1212 367	1.	0.0	2058.0	*	1	2212 667	1.	0.0	2058.0
1	0214	68	8.	0.0	2058.0	*	1	1214 368	1.	0.0	2058.0	*	1	2214 668	1.	0.0	2058.0
1	0216	69	8.	0.0	2058.0	*	1	1216 369	1.	0.0	2058.0	*	1	2216 669	1.	0.0	2058.0
1	0218	70	8.	0.0	2058.0	*	1	1218 370	1.	0.0	2058.0	*	1	2218 670	1.	0.0	2058.0
1	0220	71	9.	0.0	2058.0	*	1	1220 371	1.	0.0	2058.0	*	1	2220 671	1.	0.0	2058.0
1	0222	72	9.	0.0	2058.0	*	1	1222 372	1.	0.0	2058.0	*	1	2222 672	1.	0.0	2058.0
1	0224	73	9.	0.0	2058.0	*	1	1224 373	1.	0.0	2058.0	*	1	2224 673	1.	0.0	2058.0
1	0226	74	9.	0.0	2058.0	*	1	1226 374	1.	0.0	2058.0	*	1	2226 674	1.	0.0	2058.0
1	0228	75	9.	0.0	2058.0	*	1	1228 375	1.	0.0	2058.0	*	1	2228 675	1.	0.0	2058.0

1	0230	76	10.	0.0	2058.0	*	1	1230	376	1.	0.0	2058.0	*	1	2230	676	1.	0.0	2058.0
1	0232	77	10.	0.0	2058.0	*	1	1232	377	1.	0.0	2058.0	*	1	2232	677	1.	0.0	2058.0
1	0234	78	10.	0.0	2058.0	*	1	1234	378	1.	0.0	2058.0	*	1	2234	678	1.	0.0	2058.0
1	0236	79	10.	0.0	2058.0	*	1	1236	379	1.	0.0	2058.0	*	1	2236	679	1.	0.0	2058.0
1	0238	80	10.	0.0	2058.0	*	1	1238	380	1.	0.0	2058.0	*	1	2238	680	1.	0.0	2058.0
1	0240	81	10.	0.0	2058.0	*	1	1240	381	1.	0.0	2058.0	*	1	2240	681	1.	0.0	2058.0
1	0242	82	10.	0.0	2058.0	*	1	1242	382	1.	0.0	2058.0	*	1	2242	682	1.	0.0	2058.0
1	0244	83	10.	0.0	2058.0	*	1	1244	383	1.	0.0	2058.0	*	1	2244	683	1.	0.0	2058.0
1	0246	84	11.	0.0	2058.0	*	1	1246	384	1.	0.0	2058.0	*	1	2246	684	1.	0.0	2058.0
1	0248	85	11.	0.0	2058.0	*	1	1248	385	1.	0.0	2058.0	*	1	2248	685	1.	0.0	2058.0
1	0250	86	11.	0.1	2058.0	*	1	1250	386	1.	0.0	2058.0	*	1	2250	686	1.	0.0	2058.0
1	0252	87	11.	0.1	2058.0	*	1	1252	387	1.	0.0	2058.0	*	1	2252	687	1.	0.0	2058.0
1	0254	88	11.	0.1	2058.0	*	1	1254	388	1.	0.0	2058.0	*	1	2254	688	1.	0.0	2058.0
1	0256	89	11.	0.1	2058.0	*	1	1256	389	1.	0.0	2058.0	*	1	2256	689	1.	0.0	2058.0
1	0258	90	12.	0.1	2058.0	*	1	1258	390	1.	0.0	2058.0	*	1	2258	690	1.	0.0	2058.0
1	0300	91	12.	0.1	2058.0	*	1	1300	391	1.	0.0	2058.0	*	1	2300	691	1.	0.0	2058.0
1	0302	92	12.	0.1	2058.0	*	1	1302	392	1.	0.0	2058.0	*	1	2302	692	1.	0.0	2058.0
1	0304	93	12.	0.1	2058.0	*	1	1304	393	1.	0.0	2058.0	*	1	2304	693	1.	0.0	2058.0
1	0306	94	12.	0.1	2058.0	*	1	1306	394	1.	0.0	2058.0	*	1	2306	694	1.	0.0	2058.0
1	0308	95	13.	0.1	2058.0	*	1	1308	395	1.	0.0	2058.0	*	1	2308	695	1.	0.0	2058.0
1	0310	96	13.	0.1	2058.0	*	1	1310	396	1.	0.0	2058.0	*	1	2310	696	1.	0.0	2058.0
1	0312	97	13.	0.1	2058.0	*	1	1312	397	1.	0.0	2058.0	*	1	2312	697	1.	0.0	2058.0
1	0314	98	13.	0.1	2058.0	*	1	1314	398	1.	0.0	2058.0	*	1	2314	698	1.	0.0	2058.0
1	0316	99	13.	0.1	2058.0	*	1	1316	399	1.	0.0	2058.0	*	1	2316	699	1.	0.0	2058.0
1	0318	100	14.	0.1	2058.0	*	1	1318	400	1.	0.0	2058.0	*	1	2318	700	1.	0.0	2058.0
1	0320	101	14.	0.1	2058.0	*	1	1320	401	1.	0.0	2058.0	*	1	2320	701	1.	0.0	2058.0
1	0322	102	14.	0.1	2058.0	*	1	1322	402	1.	0.0	2058.0	*	1	2322	702	1.	0.0	2058.0
1	0324	103	15.	0.1	2058.0	*	1	1324	403	1.	0.0	2058.0	*	1	2324	703	1.	0.0	2058.0
1	0326	104	15.	0.1	2058.0	*	1	1326	404	1.	0.0	2058.0	*	1	2326	704	1.	0.0	2058.0
1	0328	105	16.	0.1	2058.0	*	1	1328	405	1.	0.0	2058.0	*	1	2328	705	1.	0.0	2058.0
1	0330	106	16.	0.1	2058.0	*	1	1330	406	1.	0.0	2058.0	*	1	2330	706	1.	0.0	2058.0
1	0332	107	17.	0.1	2058.0	*	1	1332	407	1.	0.0	2058.0	*	1	2332	707	1.	0.0	2058.0
1	0334	108	18.	0.1	2058.1	*	1	1334	408	1.	0.0	2058.0	*	1	2334	708	1.	0.0	2058.0
1	0336	109	22.	0.1	2058.1	*	1	1336	409	1.	0.0	2058.0	*	1	2336	709	1.	0.0	2058.0
1	0338	110	37.	0.2	2058.1	*	1	1338	410	1.	0.0	2058.0	*	1	2338	710	1.	0.0	2058.0
1	0340	111	83.	0.4	2058.2	*	1	1340	411	1.	0.0	2058.0	*	1	2340	711	1.	0.0	2058.0
1	0342	112	145.	0.7	2058.4	*	1	1342	412	1.	0.0	2058.0	*	1	2342	712	1.	0.0	2058.0
1	0344	113	211.	1.0	2058.6	*	1	1344	413	1.	0.0	2058.0	*	1	2344	713	1.	0.0	2058.0
1	0346	114	311.	1.3	2058.7	*	1	1346	414	1.	0.0	2058.0	*	1	2346	714	1.	0.0	2058.0
1	0348	115	1062.	3.2	2059.3	*	1	1348	415	1.	0.0	2058.0	*	1	2348	715	1.	0.0	2058.0
1	0350	116	3461.	8.3	2060.3	*	1	1350	416	1.	0.0	2058.0	*	1	2350	716	1.	0.0	2058.0
1	0352	117	6388.	13.8	2061.0	*	1	1352	417	1.	0.0	2058.0	*	1	2352	717	1.	0.0	2058.0
1	0354	118	8358.	17.3	2061.4	*	1	1354	418	1.	0.0	2058.0	*	1	2354	718	1.	0.0	2058.0
1	0356	119	9131.	18.7	2061.6	*	1	1356	419	1.	0.0	2058.0	*	1	2356	719	1.	0.0	2058.0
1	0358	120	9065.	18.6	2061.5	*	1	1358	420	1.	0.0	2058.0	*	1	2358	720	1.	0.0	2058.0
1	0400	121	8508.	17.6	2061.4	*	1	1400	421	1.	0.0	2058.0	*	2	0000	721	1.	0.0	2058.0
1	0402	122	7715.	16.2	2061.3	*	1	1402	422	1.	0.0	2058.0	*	2	0002	722	1.	0.0	2058.0
1	0404	123	6872.	14.8	2061.2	*	1	1404	423	1.	0.0	2058.0	*	2	0004	723	1.	0.0	2058.0
1	0406	124	6121.	13.3	2061.0	*	1	1406	424	1.	0.0	2058.0	*	2	0006	724	1.	0.0	2058.0
1	0408	125	5445.	12.1	2060.8	*	1	1408	425	1.	0.0	2058.0	*	2	0008	725	1.	0.0	2058.0
1	0410	126	4871.	11.0	2060.7	*	1	1410	426	1.	0.0	2058.0	*	2	0010	726	1.	0.0	2058.0
1	0412	127	4385.	10.1	2060.6	*	1	1412	427	1.	0.0	2058.0	*	2	0012	727	1.	0.0	2058.0
1	0414	128	3984.	9.3	2060.5	*	1	1414	428	1.	0.0	2058.0	*	2	0014	728	1.	0.0	2058.0
1	0416	129	3642.	8.6	2060.3	*	1	1416	429	1.	0.0	2058.0	*	2	0016	729	1.	0.0	2058.0
1	0418	130	3346.	8.0	2060.2	*	1	1418	430	1.	0.0	2058.0	*	2	0018	730	1.	0.0	2058.0
1	0420	131	3097.	7.5	2060.2	*	1	1420	431	1.	0.0	2058.0	*	2	0020	731	1.	0.0	2058.0
1	0422	132	2886.	7.1	2060.1	*	1	1422	432	1.	0.0	2058.0	*	2	0022	732	1.	0.0	2058.0
1	0424	133	2700.	6.7	2060.0	*	1	1424	433	1.	0.0	2058.0	*	2	0024	733	1.	0.0	2058.0
1	0426	134	2533.	6.4	2060.0	*	1	1426	434	1.	0.0	2058.0	*	2	0026	734	1.	0.0	2058.0
1	0428	135	2380.	6.1	2059.9	*	1	1428	435	1.	0.0	2058.0	*	2	0028	735	1.	0.0	2058.0
1	0430	136	2239.	5.8	2059.9	*	1	1430	436	1.	0.0	2058.0	*	2	0030	736	1.	0.0	2058.0
1	0432	137	2108.	5.5	2059.8	*	1	1432	437	1.	0.0	2058.0	*	2	0032	737	1.	0.0	2058.0
1	0434	138	1981.	5.2	2059.7	*	1	1434	438	1.	0.0	2058.0	*	2	0034	738	1.	0.0	2058.0
1	0436	139	1859.	5.0	2059.7	*	1	1436	439	1.	0.0	2058.0	*	2	0036	739	1.	0.0	2058.0
1	0438	140	1745.	4.7	2059.6	*	1	1438	440	1.	0.0	2058.0	*	2	0038	740	1.	0.0	2058.0

1	0440 141	1637.	4.5	2059.6	*	1	1440 441	1.	0.0	2058.0	*	2	0040 741	1.	0.0 2058.0
1	0442 142	1539.	4.3	2059.5	*	1	1442 442	1.	0.0	2058.0	*	2	0042 742	1.	0.0 2058.0
1	0444 143	1449.	4.1	2059.5	*	1	1444 443	1.	0.0	2058.0	*	2	0044 743	1.	0.0 2058.0
1	0446 144	1367.	3.9	2059.5	*	1	1446 444	1.	0.0	2058.0	*	2	0046 744	1.	0.0 2058.0
1	0448 145	1291.	3.7	2059.4	*	1	1448 445	1.	0.0	2058.0	*	2	0048 745	1.	0.0 2058.0
1	0450 146	1218.	3.6	2059.4	*	1	1450 446	1.	0.0	2058.0	*	2	0050 746	1.	0.0 2058.0
1	0452 147	1149.	3.4	2059.3	*	1	1452 447	1.	0.0	2058.0	*	2	0052 747	1.	0.0 2058.0
1	0454 148	1084.	3.3	2059.3	*	1	1454 448	1.	0.0	2058.0	*	2	0054 748	1.	0.0 2058.0
1	0456 149	1021.	3.1	2059.3	*	1	1456 449	1.	0.0	2058.0	*	2	0056 749	1.	0.0 2058.0
1	0458 150	964.	3.0	2059.3	*	1	1458 450	1.	0.0	2058.0	*	2	0058 750	1.	0.0 2058.0
1	0500 151	913.	2.9	2059.2	*	1	1500 451	1.	0.0	2058.0	*	2	0100 751	1.	0.0 2058.0
1	0502 152	863.	2.7	2059.2	*	1	1502 452	1.	0.0	2058.0	*	2	0102 752	1.	0.0 2058.0
1	0504 153	814.	2.6	2059.1	*	1	1504 453	1.	0.0	2058.0	*	2	0104 753	1.	0.0 2058.0
1	0506 154	769.	2.5	2059.1	*	1	1506 454	1.	0.0	2058.0	*	2	0106 754	1.	0.0 2058.0
1	0508 155	726.	2.4	2059.1	*	1	1508 455	1.	0.0	2058.0	*	2	0108 755	1.	0.0 2058.0
1	0510 156	687.	2.3	2059.0	*	1	1510 456	1.	0.0	2058.0	*	2	0110 756	1.	0.0 2058.0
1	0512 157	651.	2.2	2059.0	*	1	1512 457	1.	0.0	2058.0	*	2	0112 757	1.	0.0 2058.0
1	0514 158	617.	2.1	2059.0	*	1	1514 458	1.	0.0	2058.0	*	2	0114 758	1.	0.0 2058.0
1	0516 159	585.	2.0	2058.9	*	1	1516 459	1.	0.0	2058.0	*	2	0116 759	1.	0.0 2058.0
1	0518 160	553.	1.9	2058.9	*	1	1518 460	1.	0.0	2058.0	*	2	0118 760	1.	0.0 2058.0
1	0520 161	522.	1.8	2058.9	*	1	1520 461	1.	0.0	2058.0	*	2	0120 761	1.	0.0 2058.0
1	0522 162	493.	1.7	2058.9	*	1	1522 462	1.	0.0	2058.0	*	2	0122 762	1.	0.0 2058.0
1	0524 163	465.	1.7	2058.8	*	1	1524 463	1.	0.0	2058.0	*	2	0124 763	1.	0.0 2058.0
1	0526 164	444.	1.6	2058.8	*	1	1526 464	1.	0.0	2058.0	*	2	0126 764	1.	0.0 2058.0
1	0528 165	434.	1.6	2058.8	*	1	1528 465	1.	0.0	2058.0	*	2	0128 765	1.	0.0 2058.0
1	0530 166	430.	1.6	2058.8	*	1	1530 466	1.	0.0	2058.0	*	2	0130 766	1.	0.0 2058.0
1	0532 167	428.	1.6	2058.8	*	1	1532 467	1.	0.0	2058.0	*	2	0132 767	1.	0.0 2058.0
1	0534 168	427.	1.6	2058.8	*	1	1534 468	1.	0.0	2058.0	*	2	0134 768	1.	0.0 2058.0
1	0536 169	425.	1.6	2058.8	*	1	1536 469	1.	0.0	2058.0	*	2	0136 769	1.	0.0 2058.0
1	0538 170	424.	1.6	2058.8	*	1	1538 470	1.	0.0	2058.0	*	2	0138 770	1.	0.0 2058.0
1	0540 171	422.	1.6	2058.8	*	1	1540 471	1.	0.0	2058.0	*	2	0140 771	1.	0.0 2058.0
1	0542 172	421.	1.6	2058.8	*	1	1542 472	1.	0.0	2058.0	*	2	0142 772	1.	0.0 2058.0
1	0544 173	419.	1.6	2058.8	*	1	1544 473	1.	0.0	2058.0	*	2	0144 773	1.	0.0 2058.0
1	0546 174	417.	1.5	2058.8	*	1	1546 474	1.	0.0	2058.0	*	2	0146 774	1.	0.0 2058.0
1	0548 175	415.	1.5	2058.8	*	1	1548 475	1.	0.0	2058.0	*	2	0148 775	1.	0.0 2058.0
1	0550 176	413.	1.5	2058.8	*	1	1550 476	1.	0.0	2058.0	*	2	0150 776	1.	0.0 2058.0
1	0552 177	410.	1.5	2058.8	*	1	1552 477	1.	0.0	2058.0	*	2	0152 777	1.	0.0 2058.0
1	0554 178	408.	1.5	2058.8	*	1	1554 478	1.	0.0	2058.0	*	2	0154 778	1.	0.0 2058.0
1	0556 179	406.	1.5	2058.8	*	1	1556 479	1.	0.0	2058.0	*	2	0156 779	1.	0.0 2058.0
1	0558 180	403.	1.5	2058.8	*	1	1558 480	1.	0.0	2058.0	*	2	0158 780	1.	0.0 2058.0
1	0600 181	401.	1.5	2058.8	*	1	1600 481	1.	0.0	2058.0	*	2	0200 781	1.	0.0 2058.0
1	0602 182	398.	1.5	2058.8	*	1	1602 482	1.	0.0	2058.0	*	2	0202 782	1.	0.0 2058.0
1	0604 183	396.	1.5	2058.8	*	1	1604 483	1.	0.0	2058.0	*	2	0204 783	1.	0.0 2058.0
1	0606 184	393.	1.5	2058.8	*	1	1606 484	1.	0.0	2058.0	*	2	0206 784	1.	0.0 2058.0
1	0608 185	390.	1.5	2058.8	*	1	1608 485	1.	0.0	2058.0	*	2	0208 785	1.	0.0 2058.0
1	0610 186	388.	1.5	2058.8	*	1	1610 486	1.	0.0	2058.0	*	2	0210 786	1.	0.0 2058.0
1	0612 187	385.	1.5	2058.8	*	1	1612 487	1.	0.0	2058.0	*	2	0212 787	1.	0.0 2058.0
1	0614 188	382.	1.5	2058.8	*	1	1614 488	1.	0.0	2058.0	*	2	0214 788	1.	0.0 2058.0
1	0616 189	379.	1.4	2058.8	*	1	1616 489	1.	0.0	2058.0	*	2	0216 789	1.	0.0 2058.0
1	0618 190	377.	1.4	2058.8	*	1	1618 490	1.	0.0	2058.0	*	2	0218 790	1.	0.0 2058.0
1	0620 191	374.	1.4	2058.8	*	1	1620 491	1.	0.0	2058.0	*	2	0220 791	1.	0.0 2058.0
1	0622 192	371.	1.4	2058.8	*	1	1622 492	1.	0.0	2058.0	*	2	0222 792	1.	0.0 2058.0
1	0624 193	368.	1.4	2058.8	*	1	1624 493	1.	0.0	2058.0	*	2	0224 793	1.	0.0 2058.0
1	0626 194	365.	1.4	2058.8	*	1	1626 494	1.	0.0	2058.0	*	2	0226 794	1.	0.0 2058.0
1	0628 195	362.	1.4	2058.7	*	1	1628 495	1.	0.0	2058.0	*	2	0228 795	1.	0.0 2058.0
1	0630 196	360.	1.4	2058.7	*	1	1630 496	1.	0.0	2058.0	*	2	0230 796	1.	0.0 2058.0
1	0632 197	357.	1.4	2058.7	*	1	1632 497	1.	0.0	2058.0	*	2	0232 797	1.	0.0 2058.0
1	0634 198	354.	1.4	2058.7	*	1	1634 498	1.	0.0	2058.0	*	2	0234 798	1.	0.0 2058.0
1	0636 199	351.	1.4	2058.7	*	1	1636 499	1.	0.0	2058.0	*	2	0236 799	1.	0.0 2058.0
1	0638 200	348.	1.4	2058.7	*	1	1638 500	1.	0.0	2058.0	*	2	0238 800	1.	0.0 2058.0
1	0640 201	345.	1.4	2058.7	*	1	1640 501	1.	0.0	2058.0	*	2	0240 801	1.	0.0 2058.0
1	0642 202	342.	1.4	2058.7	*	1	1642 502	1.	0.0	2058.0	*	2	0242 802	1.	0.0 2058.0
1	0644 203	336.	1.3	2058.7	*	1	1644 503	1.	0.0	2058.0	*	2	0244 803	1.	0.0 2058.0
1	0646 204	328.	1.3	2058.7	*	1	1646 504	1.	0.0	2058.0	*	2	0246 804	1.	0.0 2058.0
1	0648 205	320.	1.3	2058.7	*	1	1648 505	1.	0.0	2058.0	*	2	0248 805	1.	0.0 2058.0

1	0650 206	311.	1.3	2058.7	*	1	1650 506	1.	0.0	2058.0	*	2	0250 806	1.	0.0 2058.0
1	0652 207	303.	1.2	2058.7	*	1	1652 507	1.	0.0	2058.0	*	2	0252 807	1.	0.0 2058.0
1	0654 208	294.	1.2	2058.7	*	1	1654 508	1.	0.0	2058.0	*	2	0254 808	1.	0.0 2058.0
1	0656 209	286.	1.2	2058.7	*	1	1656 509	1.	0.0	2058.0	*	2	0256 809	1.	0.0 2058.0
1	0658 210	278.	1.2	2058.7	*	1	1658 510	1.	0.0	2058.0	*	2	0258 810	1.	0.0 2058.0
1	0700 211	270.	1.2	2058.7	*	1	1700 511	1.	0.0	2058.0	*	2	0300 811	1.	0.0 2058.0
1	0702 212	263.	1.1	2058.7	*	1	1702 512	1.	0.0	2058.0	*	2	0302 812	1.	0.0 2058.0
1	0704 213	255.	1.1	2058.7	*	1	1704 513	1.	0.0	2058.0	*	2	0304 813	1.	0.0 2058.0
1	0706 214	248.	1.1	2058.7	*	1	1706 514	1.	0.0	2058.0	*	2	0306 814	1.	0.0 2058.0
1	0708 215	241.	1.1	2058.6	*	1	1708 515	1.	0.0	2058.0	*	2	0308 815	1.	0.0 2058.0
1	0710 216	234.	1.1	2058.6	*	1	1710 516	1.	0.0	2058.0	*	2	0310 816	1.	0.0 2058.0
1	0712 217	228.	1.0	2058.6	*	1	1712 517	1.	0.0	2058.0	*	2	0312 817	1.	0.0 2058.0
1	0714 218	222.	1.0	2058.6	*	1	1714 518	1.	0.0	2058.0	*	2	0314 818	1.	0.0 2058.0
1	0716 219	217.	1.0	2058.6	*	1	1716 519	1.	0.0	2058.0	*	2	0316 819	1.	0.0 2058.0
1	0718 220	212.	1.0	2058.6	*	1	1718 520	1.	0.0	2058.0	*	2	0318 820	1.	0.0 2058.0
1	0720 221	203.	0.9	2058.6	*	1	1720 521	1.	0.0	2058.0	*	2	0320 821	1.	0.0 2058.0
1	0722 222	187.	0.9	2058.5	*	1	1722 522	1.	0.0	2058.0	*	2	0322 822	1.	0.0 2058.0
1	0724 223	165.	0.8	2058.5	*	1	1724 523	1.	0.0	2058.0	*	2	0324 823	1.	0.0 2058.0
1	0726 224	144.	0.7	2058.4	*	1	1726 524	1.	0.0	2058.0	*	2	0326 824	1.	0.0 2058.0
1	0728 225	123.	0.6	2058.3	*	1	1728 525	1.	0.0	2058.0	*	2	0328 825	1.	0.0 2058.0
1	0730 226	105.	0.5	2058.3	*	1	1730 526	1.	0.0	2058.0	*	2	0330 826	1.	0.0 2058.0
1	0732 227	90.	0.4	2058.3	*	1	1732 527	1.	0.0	2058.0	*	2	0332 827	1.	0.0 2058.0
1	0734 228	76.	0.4	2058.2	*	1	1734 528	1.	0.0	2058.0	*	2	0334 828	1.	0.0 2058.0
1	0736 229	65.	0.3	2058.2	*	1	1736 529	1.	0.0	2058.0	*	2	0336 829	1.	0.0 2058.0
1	0738 230	56.	0.3	2058.2	*	1	1738 530	1.	0.0	2058.0	*	2	0338 830	1.	0.0 2058.0
1	0740 231	48.	0.2	2058.1	*	1	1740 531	1.	0.0	2058.0	*	2	0340 831	1.	0.0 2058.0
1	0742 232	42.	0.2	2058.1	*	1	1742 532	1.	0.0	2058.0	*	2	0342 832	1.	0.0 2058.0
1	0744 233	36.	0.2	2058.1	*	1	1744 533	1.	0.0	2058.0	*	2	0344 833	1.	0.0 2058.0
1	0746 234	32.	0.1	2058.1	*	1	1746 534	1.	0.0	2058.0	*	2	0346 834	1.	0.0 2058.0
1	0748 235	28.	0.1	2058.1	*	1	1748 535	1.	0.0	2058.0	*	2	0348 835	1.	0.0 2058.0
1	0750 236	25.	0.1	2058.1	*	1	1750 536	1.	0.0	2058.0	*	2	0350 836	1.	0.0 2058.0
1	0752 237	22.	0.1	2058.1	*	1	1752 537	1.	0.0	2058.0	*	2	0352 837	1.	0.0 2058.0
1	0754 238	20.	0.1	2058.1	*	1	1754 538	1.	0.0	2058.0	*	2	0354 838	1.	0.0 2058.0
1	0756 239	18.	0.1	2058.1	*	1	1756 539	1.	0.0	2058.0	*	2	0356 839	1.	0.0 2058.0
1	0758 240	16.	0.1	2058.0	*	1	1758 540	1.	0.0	2058.0	*	2	0358 840	1.	0.0 2058.0
1	0800 241	15.	0.1	2058.0	*	1	1800 541	1.	0.0	2058.0	*	2	0400 841	1.	0.0 2058.0
1	0802 242	13.	0.1	2058.0	*	1	1802 542	1.	0.0	2058.0	*	2	0402 842	1.	0.0 2058.0
1	0804 243	12.	0.1	2058.0	*	1	1804 543	1.	0.0	2058.0	*	2	0404 843	1.	0.0 2058.0
1	0806 244	11.	0.1	2058.0	*	1	1806 544	1.	0.0	2058.0	*	2	0406 844	1.	0.0 2058.0
1	0808 245	10.	0.0	2058.0	*	1	1808 545	1.	0.0	2058.0	*	2	0408 845	1.	0.0 2058.0
1	0810 246	10.	0.0	2058.0	*	1	1810 546	1.	0.0	2058.0	*	2	0410 846	1.	0.0 2058.0
1	0812 247	9.	0.0	2058.0	*	1	1812 547	1.	0.0	2058.0	*	2	0412 847	1.	0.0 2058.0
1	0814 248	8.	0.0	2058.0	*	1	1814 548	1.	0.0	2058.0	*	2	0414 848	1.	0.0 2058.0
1	0816 249	7.	0.0	2058.0	*	1	1816 549	1.	0.0	2058.0	*	2	0416 849	1.	0.0 2058.0
1	0818 250	7.	0.0	2058.0	*	1	1818 550	1.	0.0	2058.0	*	2	0418 850	1.	0.0 2058.0
1	0820 251	6.	0.0	2058.0	*	1	1820 551	1.	0.0	2058.0	*	2	0420 851	1.	0.0 2058.0
1	0822 252	6.	0.0	2058.0	*	1	1822 552	1.	0.0	2058.0	*	2	0422 852	1.	0.0 2058.0
1	0824 253	6.	0.0	2058.0	*	1	1824 553	1.	0.0	2058.0	*	2	0424 853	1.	0.0 2058.0
1	0826 254	5.	0.0	2058.0	*	1	1826 554	1.	0.0	2058.0	*	2	0426 854	1.	0.0 2058.0
1	0828 255	5.	0.0	2058.0	*	1	1828 555	1.	0.0	2058.0	*	2	0428 855	1.	0.0 2058.0
1	0830 256	5.	0.0	2058.0	*	1	1830 556	1.	0.0	2058.0	*	2	0430 856	1.	0.0 2058.0
1	0832 257	4.	0.0	2058.0	*	1	1832 557	1.	0.0	2058.0	*	2	0432 857	1.	0.0 2058.0
1	0834 258	4.	0.0	2058.0	*	1	1834 558	1.	0.0	2058.0	*	2	0434 858	1.	0.0 2058.0
1	0836 259	4.	0.0	2058.0	*	1	1836 559	1.	0.0	2058.0	*	2	0436 859	1.	0.0 2058.0
1	0838 260	4.	0.0	2058.0	*	1	1838 560	1.	0.0	2058.0	*	2	0438 860	1.	0.0 2058.0
1	0840 261	3.	0.0	2058.0	*	1	1840 561	1.	0.0	2058.0	*	2	0440 861	1.	0.0 2058.0
1	0842 262	3.	0.0	2058.0	*	1	1842 562	1.	0.0	2058.0	*	2	0442 862	1.	0.0 2058.0
1	0844 263	3.	0.0	2058.0	*	1	1844 563	1.	0.0	2058.0	*	2	0444 863	1.	0.0 2058.0
1	0846 264	3.	0.0	2058.0	*	1	1846 564	1.	0.0	2058.0	*	2	0446 864	1.	0.0 2058.0
1	0848 265	3.	0.0	2058.0	*	1	1848 565	1.	0.0	2058.0	*	2	0448 865	1.	0.0 2058.0
1	0850 266	3.	0.0	2058.0	*	1	1850 566	1.	0.0	2058.0	*	2	0450 866	1.	0.0 2058.0
1	0852 267	3.	0.0	2058.0	*	1	1852 567	1.	0.0	2058.0	*	2	0452 867	1.	0.0 2058.0
1	0854 268	2.	0.0	2058.0	*	1	1854 568	1.	0.0	2058.0	*	2	0454 868	1.	0.0 2058.0
1	0856 269	2.	0.0	2058.0	*	1	1856 569	1.	0.0	2058.0	*	2	0456 869	1.	0.0 2058.0
1	0858 270	2.	0.0	2058.0	*	1	1858 570	1.	0.0	2058.0	*	2	0458 870	1.	0.0 2058.0

1	0900 271	2.	0.0	2058.0	*	1	1900 571	1.	0.0	2058.0	*	2	0500 871	1.	0.0	2058.0
1	0902 272	2.	0.0	2058.0	*	1	1902 572	1.	0.0	2058.0	*	2	0502 872	1.	0.0	2058.0
1	0904 273	2.	0.0	2058.0	*	1	1904 573	1.	0.0	2058.0	*	2	0504 873	1.	0.0	2058.0
1	0906 274	2.	0.0	2058.0	*	1	1906 574	1.	0.0	2058.0	*	2	0506 874	1.	0.0	2058.0
1	0908 275	2.	0.0	2058.0	*	1	1908 575	1.	0.0	2058.0	*	2	0508 875	1.	0.0	2058.0
1	0910 276	2.	0.0	2058.0	*	1	1910 576	1.	0.0	2058.0	*	2	0510 876	1.	0.0	2058.0
1	0912 277	2.	0.0	2058.0	*	1	1912 577	1.	0.0	2058.0	*	2	0512 877	1.	0.0	2058.0
1	0914 278	2.	0.0	2058.0	*	1	1914 578	1.	0.0	2058.0	*	2	0514 878	1.	0.0	2058.0
1	0916 279	1.	0.0	2058.0	*	1	1916 579	1.	0.0	2058.0	*	2	0516 879	1.	0.0	2058.0
1	0918 280	1.	0.0	2058.0	*	1	1918 580	1.	0.0	2058.0	*	2	0518 880	1.	0.0	2058.0
1	0920 281	1.	0.0	2058.0	*	1	1920 581	1.	0.0	2058.0	*	2	0520 881	1.	0.0	2058.0
1	0922 282	1.	0.0	2058.0	*	1	1922 582	1.	0.0	2058.0	*	2	0522 882	1.	0.0	2058.0
1	0924 283	1.	0.0	2058.0	*	1	1924 583	1.	0.0	2058.0	*	2	0524 883	1.	0.0	2058.0
1	0926 284	1.	0.0	2058.0	*	1	1926 584	1.	0.0	2058.0	*	2	0526 884	1.	0.0	2058.0
1	0928 285	1.	0.0	2058.0	*	1	1928 585	1.	0.0	2058.0	*	2	0528 885	1.	0.0	2058.0
1	0930 286	1.	0.0	2058.0	*	1	1930 586	1.	0.0	2058.0	*	2	0530 886	1.	0.0	2058.0
1	0932 287	1.	0.0	2058.0	*	1	1932 587	1.	0.0	2058.0	*	2	0532 887	1.	0.0	2058.0
1	0934 288	1.	0.0	2058.0	*	1	1934 588	1.	0.0	2058.0	*	2	0534 888	1.	0.0	2058.0
1	0936 289	1.	0.0	2058.0	*	1	1936 589	1.	0.0	2058.0	*	2	0536 889	1.	0.0	2058.0
1	0938 290	1.	0.0	2058.0	*	1	1938 590	1.	0.0	2058.0	*	2	0538 890	1.	0.0	2058.0
1	0940 291	1.	0.0	2058.0	*	1	1940 591	1.	0.0	2058.0	*	2	0540 891	1.	0.0	2058.0
1	0942 292	1.	0.0	2058.0	*	1	1942 592	1.	0.0	2058.0	*	2	0542 892	1.	0.0	2058.0
1	0944 293	1.	0.0	2058.0	*	1	1944 593	1.	0.0	2058.0	*	2	0544 893	1.	0.0	2058.0
1	0946 294	1.	0.0	2058.0	*	1	1946 594	1.	0.0	2058.0	*	2	0546 894	1.	0.0	2058.0
1	0948 295	1.	0.0	2058.0	*	1	1948 595	1.	0.0	2058.0	*	2	0548 895	1.	0.0	2058.0
1	0950 296	1.	0.0	2058.0	*	1	1950 596	1.	0.0	2058.0	*	2	0550 896	1.	0.0	2058.0
1	0952 297	1.	0.0	2058.0	*	1	1952 597	1.	0.0	2058.0	*	2	0552 897	1.	0.0	2058.0
1	0954 298	1.	0.0	2058.0	*	1	1954 598	1.	0.0	2058.0	*	2	0554 898	1.	0.0	2058.0
1	0956 299	1.	0.0	2058.0	*	1	1956 599	1.	0.0	2058.0	*	2	0556 899	1.	0.0	2058.0
1	0958 300	1.	0.0	2058.0	*	1	1958 600	1.	0.0	2058.0	*	2	0558 900	1.	0.0	2058.0
				*						*						

****
****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW					
			6-HR	24-HR	72-HR	29.97-HR	(CFS)	(HR)
		(CFS)	9131.	3.93	891.	223.	179.	179.
		(INCHES)	6.678	6.701	6.705	6.705		
		(AC-FT)	442.	443.	443.	443.		

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE					
		6-HR	24-HR	72-HR	29.97-HR	(AC-FT)	(HR)
19.	3.93	2.	1.	0.	0.		

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE					
		6-HR	24-HR	72-HR	29.97-HR	(FEET)	(HR)
2061.56	3.93	2058.79	2058.20	2058.16	2058.16		

CUMULATIVE AREA = 1.24 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

128 KP PLAN 2 FOR STATION RCH4 Route breach hydrograph downstream

129 KO OUTPUT CONTROL VARIABLES
IPRNT 3 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

124 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES

```
              ITYP      STOR  TYPE OF INITIAL CONDITION
             RSVRIC      0.00  INITIAL CONDITION
                X       0.00 WORKING R AND D COEFFICIENT

125 RC       NORMAL DEPTH CHANNEL
               ANL      0.050  LEFT OVERBANK N-VALUE
              ANCH      0.030  MAIN CHANNEL N-VALUE
               ANR      0.050  RIGHT OVERBANK N-VALUE
             RLNTH       700.  REACH LENGTH
               SEL     0.0150  ENERGY SLOPE
             ELMAX     2070.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                          CROSS-SECTION DATA
                 --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
127 RY     ELEVATION  2062.30  2060.00  2058.00  2058.00  2058.00  2058.50  2062.00  2070.00
126 RX     DISTANCE      0.00   191.00   273.00   310.00   321.00   387.00   728.00   735.00

                                      ***

                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

      STORAGE      0.00     1.04     3.03     5.91     9.77    14.79    20.96    28.14    35.54    42.94
      OUTFLOW      0.00   223.27   978.02  2293.39  4209.06  6891.50 10448.70 15286.25 21487.19 28581.83
    ELEVATION   2058.00  2058.63  2059.26  2059.89  2060.53  2061.16  2061.79  2062.42  2063.05  2063.68

      STORAGE     50.35    57.76    65.18    72.60    80.03    87.46    94.90   102.35   109.80   117.26
      OUTFLOW  36513.64 45238.42 54720.14 64928.60 75837.95 87425.64 99671.79 112558.63 126070.16 140191.89
    ELEVATION   2064.32  2064.95  2065.58  2066.21  2066.84  2067.47  2068.11  2068.74  2069.37  2070.00


*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN    15286. TO
 140192.
          THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK
INFLOWS.
          THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER
REACH.)

   ***        ***        ***        ***        ***

                HYDROGRAPH AT STATION     RCH4
                 FOR PLAN 2, RATIO = 0.50

PEAK FLOW    TIME                  MAXIMUM AVERAGE FLOW
                        6-HR      24-HR      72-HR    29.97-HR  (CFS)      (HR)
              (CFS)    7940.      4.00              891.      224.       179.       179.
            (INCHES)    6.682      6.705      6.709      6.708
            (AC-FT)     442.       443.       444.       444.

PEAK STORAGE  TIME                  MAXIMUM AVERAGE STORAGE
                        6-HR      24-HR      72-HR    29.97-HR  (AC-FT)     (HR)
   17.     4.00          2.         1.         0.         0.

PEAK STAGE   TIME                  MAXIMUM AVERAGE STAGE
                        6-HR      24-HR      72-HR    29.97-HR  (FEET)      (HR)
 2061.34     4.00       2058.79    2058.20    2058.16    2058.16

              CUMULATIVE AREA =    1.24 SQ MI


***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***

130 KP       PLAN  3 FOR STATION     RCH4          Route breach hydrograph downstream

131 KO        OUTPUT CONTROL VARIABLES
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            IPRNT        3  PRINT CONTROL
            IPLOT        0  PLOT CONTROL
            QSCAL        0.  HYDROGRAPH PLOT SCALE

        HYDROGRAPH ROUTING DATA

124 RS      STORAGE ROUTING
              NSTPS        1  NUMBER OF SUBREACHES
              ITYP      STOR  TYPE OF INITIAL CONDITION
             RSVRIC     0.00  INITIAL CONDITION
                X       0.00 WORKING R AND D COEFFICIENT

125 RC      NORMAL DEPTH CHANNEL
               ANL     0.050  LEFT OVERBANK N-VALUE
              ANCH     0.030  MAIN CHANNEL N-VALUE
               ANR     0.050  RIGHT OVERBANK N-VALUE
             RLNTH      700.  REACH LENGTH
               SEL    0.0150  ENERGY SLOPE
             ELMAX    2070.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                          CROSS-SECTION DATA
                 — LEFT OVERBANK — + ------ MAIN CHANNEL ------- + — RIGHT OVERBANK —
127 RY      ELEVATION  2062.30  2060.00  2058.00  2058.00  2058.00  2058.50  2062.00  2070.00
126 RX      DISTANCE      0.00   191.00   273.00   310.00   321.00   387.00   728.00   735.00

                                          ***

                          COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

      STORAGE      0.00     1.04     3.03     5.91     9.77    14.79    20.96    28.14    35.54    42.94
      OUTFLOW      0.00   223.27   978.02  2293.39  4209.06  6891.50 10448.70 15286.25 21487.19 28581.83
    ELEVATION   2058.00  2058.63  2059.26  2059.89  2060.53  2061.16  2061.79  2062.42  2063.05  2063.68

      STORAGE     50.35    57.76    65.18    72.60    80.03    87.46    94.90   102.35   109.80   117.26
      OUTFLOW  36513.64 45238.42 54720.14 64928.60 75837.95 87425.64 99671.79 112558.63 126070.16 140191.89
    ELEVATION   2064.32  2064.95  2065.58  2066.21  2066.84  2067.47  2068.11  2068.74  2069.37  2070.00


*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN    15286. TO
 140192.
          THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK
INFLOWS.
          THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER
REACH.)

   ***        ***        ***        ***        ***

              HYDROGRAPH AT STATION     RCH4
               FOR PLAN 3, RATIO = 0.50

PEAK FLOW    TIME                  MAXIMUM AVERAGE FLOW
                        6-HR      24-HR      72-HR    29.97-HR  (CFS)      (HR)
             (CFS)    5264.      4.60              893.      224.       179.       179.
            (INCHES)   6.695      6.709      6.711      6.711
            (AC-FT)    443.       444.       444.       444.

PEAK STORAGE  TIME                  MAXIMUM AVERAGE STORAGE
                        6-HR      24-HR      72-HR    29.97-HR  (AC-FT)    (HR)
   12.     4.60          2.         1.         0.         0.

PEAK STAGE   TIME                  MAXIMUM AVERAGE STAGE
                        6-HR      24-HR      72-HR    29.97-HR  (FEET)     (HR)
 2060.77     4.60       2058.81    2058.20    2058.16    2058.16

            CUMULATIVE AREA =    1.24 SQ MI
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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

132 KP PLAN 4 FOR STATION RCH4 Route breach hydrograph downstream

133 KO OUTPUT CONTROL VARIABLES
IPRNT 3 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

HYDROGRAPH ROUTING DATA

124 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC 0.00 INITIAL CONDITION
X 0.00 WORKING R AND D COEFFICIENT

125 RC NORMAL DEPTH CHANNEL
ANL 0.050 LEFT OVERBANK N-VALUE
ANCH 0.030 MAIN CHANNEL N-VALUE
ANR 0.050 RIGHT OVERBANK N-VALUE
RLNTH 700. REACH LENGTH
SEL 0.0150 ENERGY SLOPE
ELMAX 2070.0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		— LEFT OVERBANK — +	----- MAIN CHANNEL ------ +	— RIGHT OVERBANK —				
127 RY	ELEVATION	2062.30	2060.00	2058.00	2058.00	2058.00	2058.50	2062.00	2070.00
126 RX	DISTANCE	0.00	191.00	273.00	310.00	321.00	387.00	728.00	735.00

***

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	1.04	3.03	5.91	9.77	14.79	20.96	28.14	35.54	42.94
OUTFLOW	0.00	223.27	978.02	2293.39	4209.06	6891.50	10448.70	15286.25	21487.19	28581.83
ELEVATION	2058.00	2058.63	2059.26	2059.89	2060.53	2061.16	2061.79	2062.42	2063.05	2063.68

STORAGE	50.35	57.76	65.18	72.60	80.03	87.46	94.90	102.35	109.80	117.26
OUTFLOW	36513.64	45238.42	54720.14	64928.60	75837.95	87425.64	99671.79	112558.63	126070.16	140191.89
ELEVATION	2064.32	2064.95	2065.58	2066.21	2066.84	2067.47	2068.11	2068.74	2069.37	2070.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 15286. TO 140192.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*** *** *** *** ***

HYDROGRAPH AT STATION RCH4
FOR PLAN 4, RATIO = 0.50

PEAK FLOW	TIME	6-HR	24-HR	72-HR	29.97-HR	MAXIMUM AVERAGE FLOW (CFS)	(HR)
	(CFS)	4959.	3.77	890.	224.	180.	180.
	(INCHES)	6.672	6.718	6.722	6.722		
	(AC-FT)	441.	444.	445.	445.		

PEAK STORAGE	TIME	6-HR	24-HR	72-HR	29.97-HR	MAXIMUM AVERAGE STORAGE (AC-FT)	(HR)

11.	3.77	2.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE				
		6-HR	24-HR	72-HR	29.97-HR	(FEET)	(HR)
2060.70	3.77	2058.92	2058.23	2058.19	2058.19		

CUMULATIVE AREA = 1.24 SQ MI

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN 0.50	RATIOS APPLIED TO FLOWS RATIO 1		
HYDROGRAPH AT		SAC230	0.72	1	FLOW	3312.
			TIME		3.47	
		2	FLOW		3312.	
			TIME		3.47	
		3	FLOW		3312.	
			TIME		3.47	
		4	FLOW		3312.	
			TIME		3.47	
HYDROGRAPH AT		SAC235	0.38	1	FLOW	1545.
			TIME		3.47	
		2	FLOW		1545.	
			TIME		3.47	
		3	FLOW		1545.	
			TIME		3.47	
		4	FLOW		1545.	
			TIME		3.47	
2 COMBINED AT		ADD	1.10	1	FLOW	4856.
			TIME		3.47	
		2	FLOW		4856.	
			TIME		3.47	
		3	FLOW		4856.	
			TIME		3.47	
		4	FLOW		4856.	
			TIME		3.47	
ROUTED TO		ROUTE	1.10	1	FLOW	4753.
			TIME		3.53	
		2	FLOW		4753.	
			TIME		3.53	
		3	FLOW		4753.	
			TIME		3.53	
		4	FLOW		4753.	
			TIME		3.53	
		** PEAK STAGES IN FEET **				
		1	STAGE		15.50	
			TIME		3.53	
		2	STAGE		15.50	
			TIME		3.53	
		3	STAGE		15.50	
			TIME		3.53	
		4	STAGE		15.50	
			TIME		3.53	
HYDROGRAPH AT		CAS240	0.14	1	FLOW	895.
			TIME		3.33	
		2	FLOW		895.	
			TIME		3.33	
		3	FLOW		895.	
			TIME		3.33	
		4	FLOW		895.	
			TIME		3.33	

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2 COMBINED AT          ADD     1.24    1   FLOW      5411.
                     TIME      3.50
                   2 FLOW      5411.
                     TIME      3.50
                   3 FLOW      5411.
                     TIME      3.50
                   4 FLOW      5411.
                     TIME      3.50

ROUTED TO          DAMOUT    1.24    1   FLOW      15331.
                     TIME      3.77
                   2 FLOW      11424.
                     TIME      3.80
                   3 FLOW      5536.
                     TIME      4.43
                   4 FLOW      5389.
                     TIME      3.53

                   ** PEAK STAGES IN FEET **
                   1 STAGE    2158.37
                     TIME      3.66
                   2 STAGE    2158.60
                     TIME      3.67
                   3 STAGE    2160.03
                     TIME      3.82
                   4 STAGE    2137.60
                     TIME      3.53

ROUTED TO          RCH1      1.24    1   FLOW      14176.
                     TIME      3.80
                   2 FLOW      10645.
                     TIME      3.83
                   3 FLOW      5502.
                     TIME      4.47
                   4 FLOW      5334.
                     TIME      3.57

                   ** PEAK STAGES IN FEET **
                   1 STAGE    2112.04
                     TIME      3.80
                   2 STAGE    2111.34
                     TIME      3.83
                   3 STAGE    2110.03
                     TIME      4.47
                   4 STAGE    2109.99
                     TIME      3.57

ROUTED TO          RCH2      1.24    1   FLOW      11864.
                     TIME      3.83
                   2 FLOW      9485.
                     TIME      3.87
                   3 FLOW      5433.
                     TIME      4.53
                   4 FLOW      5206.
                     TIME      3.63

                   ** PEAK STAGES IN FEET **
                   1 STAGE    2078.90
                     TIME      3.83
                   2 STAGE    2078.29
                     TIME      3.87
                   3 STAGE    2076.99
                     TIME      4.53
                   4 STAGE    2076.90
                     TIME      3.63
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ROUTED TO          ATSF    1.24    1  FLOW      9290.
                     TIME       3.93
                   2  FLOW       8036.
                     TIME       3.97
                   3  FLOW       5287.
                     TIME       4.57
                   4  FLOW       4980.
                     TIME       3.73

                   ** PEAK STAGES IN FEET **
                   1  STAGE    2071.88
                     TIME       3.93
                   2  STAGE    2071.61
                     TIME       3.97
                   3  STAGE    2071.03
                     TIME       4.57
                   4  STAGE    2070.97
                     TIME       3.73

ROUTED TO          RCH4    1.24    1  FLOW      9131.
                     TIME       3.93
                   2  FLOW       7940.
                     TIME       4.00
                   3  FLOW       5264.
                     TIME       4.60
                   4  FLOW       4959.
                     TIME       3.77

                   ** PEAK STAGES IN FEET **
                   1  STAGE    2061.56
                     TIME       3.93
                   2  STAGE    2061.34
                     TIME       4.00
                   3  STAGE    2060.77
                     TIME       4.60
                   4  STAGE    2060.70
                     TIME       3.77
```

SUMMARY OF DAM OVERTOPPING/BREACH ANALYSIS FOR STATION DAMOUT

(PEAKS SHOWN ARE FOR INTERNAL TIME STEP USED DURING BREACH FORMATION)

PLAN 1 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	2134.00	2163.50	2163.50
STORAGE	0.	247.	247.
OUTFLOW	0.	7636.	7636.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
0.50	2158.37	0.00	181.	16423.	0.00	3.78	3.53

PLAN 2 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	2134.00	2163.50	2163.50
STORAGE	0.	247.	247.
OUTFLOW	0.	7636.	7636.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
0.50	2158.60	0.00	184.	12217.	0.00	3.79	3.53

PLAN 3 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	2134.00	2163.50	2163.50
STORAGE	0.	247.	247.
OUTFLOW	0.	7636.	7636.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
0.50	2160.03	0.00	201.	5545.	0.00	4.45	3.53

PLAN 4 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	2134.00	2163.50	2163.50
STORAGE	0.	247.	247.
OUTFLOW	0.	7636.	7636.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
0.50	2137.60	0.00	9.	5389.	0.00	3.53	0.30

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

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CAS-ATSF
VERSION 3
09-26-1994
     0.000   1000.000.   100.000      1.000
  2.   1.
  100.0000 2061.5000  154.0000 2060.8000    0.0000    0.0000
  100.0000 2061.5000  154.0000 2060.8000
 2061.5000 2060.8000   54.0045    0.0130
    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
   2.   1.   0.   1.   1.   0.   0.   0.
    8.0000    6.0000    0.0120    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
    0.0000    0.0000    0.0000
    0.0000    0.0000    0.0000    0.0000    0.0000
N
N
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
        0.00000000        0.00000000        0.00000000
 4
CAS-ATSF
        0.00000000        0.00000000        0.00000000        0.00000000        0.00000000
      0.000    2058.000       0.000       0.000       0.000
    100.000    2058.452       3.573       0.423       0.937
    200.000    2058.642       4.515       0.601       0.993
    300.000    2058.787       5.170       0.736       1.027
    400.000    2058.908       5.690       0.850       1.052
    500.000    2059.014       6.125       0.949       1.072
    600.000    2059.110       6.505       1.039       1.088
    700.000    2059.196       6.835       1.119       1.101
```

800.000	2059.276	7.135	1.194	1.113
900.000	2059.350	7.410	1.263	1.124
1000.000	2059.420	7.663	1.329	1.133

2. 7. 40.

0.000000

G

0.00000	2075.00000
119.00000	2074.00000
235.00000	2073.00000
350.00000	2072.00000
510.00000	2071.00000
670.00000	2070.00000
2500.00000	2080.00000
0.00000	0.00000
0.00000	0.00000
0.00000	0.00000
0.00000	0.00000
0.00000	0.00000
0.00000	0.00000
0.00000	0.00000
0.00000	0.00000

CAS-ATSF
09-26-1994
0.00
40000.00
0.0150
2
4.
5.
8.
2070.00
2063.50
2060.00
2058.00
2058.00
2058.50
2062.00
2070.00
0.00
0.01
191.00
273.00
321.00
387.00
728.00
735.00
0.050000
0.030000
0.050000

CAS-ATSF
09-26-1994

2061.5	0
2072.352	4000
2073.193	8000
2073.796	12000
2074.287	16000
2074.709	20000
2075.084	24000
2075.425	28000
2075.739	32000
2076.032	36000
2076.311	40000

Y
1

2061.5	0	0	0	0	0	0	0	0	1
2072.352	4000	595.8599	0	0	0	0	0	3396.602	13
2073.193	8000	634.9044	0	0	0	0	0	7358.281	3
2073.796	12000	661.3425	0	0	0	0	0	11313.99	3
2074.287	16000	682.1656	0	0	0	0	0	15288.4	3
2074.709	20000	699.4107	0	0	0	0	0	19270.32	3
2075.084	24000	714.4343	0	0	0	0	0	23256.97	3
2075.425	28000	727.6709	0	0	0	0	0	27250.5	3
2075.739	32000	739.7468	0	0	0	0	0	31242.6	3
2076.032	36000	750.8567	0	0	0	0	0	35244.58	3
2076.311	40000	761.1248	0	0	0	0	0	39232.54	3

2061.5	0	0	0	0
2072.352	-1.953125E-03	4000	7.538574	.1884644
2073.193	-1.220703E-03	8000	6.814453	8.518066E-02
2073.796	-3.173828E-03	12000	24.66992	.2055827
2074.287	-3.173828E-03	16000	29.43652	.1839783
2074.709	-2.685547E-03	20000	30.26563	.1513281
2075.084	-2.441406E-03	24000	28.5918	.1191325
2075.425	-1.708984E-03	28000	21.82813	7.795759E-02
2075.739	-1.220703E-03	32000	17.6543	5.516968E-02

2076.032	-2.441406E-04	36000	4.566406	1.268446E-02
2076.311	-4.882813E-04	40000	6.335938	1.583984E-02

1

0	2061.50	2058.00	0.00	-0.70	0.00	2061.50	0.00	0.00	0.00
596	2072.34	2060.70	10.84	8.94	0.00	0.00	0.00	16.51	4.51
635	2073.18	2061.65	11.68	9.58	0.00	0.00	0.00	16.79	4.73
661	2073.79	2062.31	12.29	10.03	0.00	0.00	0.00	16.97	4.87
682	2074.28	2062.82	12.78	10.35	0.00	0.00	0.00	17.11	4.98
699	2074.70	2063.27	13.20	10.61	0.00	0.00	0.00	17.23	5.07
714	2075.08	2063.68	13.58	10.84	0.00	0.00	0.00	17.36	5.14
728	2075.42	2064.04	13.92	11.05	0.00	0.00	0.00	17.48	5.20
740	2075.73	2064.38	14.23	11.24	0.00	0.00	0.00	17.59	5.26
751	2076.02	2064.70	14.52	11.42	0.00	0.00	0.00	17.71	5.30
761	2076.30	2065.01	14.80	11.59	0.00	0.00	0.00	17.81	5.34

```
* FINAL 1/2 PMF RUN  FINALHPM.HC1                                    *
001
* Dam Breach Scenarios   9/94                                  *          001

*                                                            *          001

*DIAGRAM                                                        *DIAGRAM      002

*                                                            *          001

ID Casandro Wash Detention Dam  CH2M Hill                          ID         036
ID HEC-1, revised dam location and basin grading                   ID         036
* 1/2 PMF Run - routed                                        *          001

*                                                            *          001

IT    2                 900                                    IT         040
IO    5                                                        IO         039
JP    4                                                        JP         042

*                                                            *          001

JR  FLOW      .5                                                JR         043

*                                                            *          001

KKSAC230                                                       KK         045
KM SUB-BASIN SAC230                                                KM         046
KM 6-HOUR RAINFALL, PATTERN NO. 1.53 WAS USED TO FIND TC & R FOR THIS
BASIN     KM            046
KM THIS BASIN USED RAINFALL REDUCTION FACTOR OF .985
KM            046
KM BASIN FROM WICKENBERG ADMS                                          KM
     046
BA  .720                                                       BA         008
IN    15                                                       IN         038
PB    15                                                       PB         069
KM THE FOLLOWING PI RECORD USES A 6-HOUR STORM -  HMR#5 DISTRIBUTION
        KM            046
PI 0.075   0.075   0.075   0.075   0.125   0.125   0.125   0.125    0.4    0.4PI         073

PI   0.4     0.4     8.4     1.7     0.7     0.7     0.2     0.2     0.2    0.2PI         073

PI 0.075   0.075   0.075   0.075                                   PI         073

LG  .100    .250   5.200    .240  35.000                           LG         052
```

```
UC  .446   .367                                                    UC          111
UA    0     5    16    30    65    77    84    90    94    97UA          110
UA  100                                                            UA          110
*                                                                  *           001

KKSAC235                                                           KK          045
KM SUB-BASIN sac235                                                KM          046
KM 6-HOUR RAINFALL, PATTERN NO. 1.53 WAS USED TO FIND TC & R FOR THIS
BASIN     KM          046
KM THIS BASIN USED RAINFALL REDUCTION FACTOR OF .985
KM          046
KM BASIN FROM WICKENBERG ADMS                                      KM
    046
BA  .380                                                           BA          008
LG  .100   .230  6.200   .150  36.000                              LG          052
UC  .450   .461                                                    UC          111
UA    0     5    16    30    65    77    84    90    94    97UA          110
UA  100                                                            UA          110
*                                                                  *           001

KK   ADD                                                           KK          045

KM ADD SAC230 & SAC235                                             KM          046

HC    2                                                            HC          030

*                                                                  *           001

KK ROUTE                                                           KK          045

KM ROUTE COMBINED HYDROGRAPH TO DAM LOCATION
  KM          046
RS    1   FLOW     -1                                              RS          092

RC  .045    .03   .045   4200  .0175                               RC          086

RX 463.5  467.5  477.5  487.5  512.5  522.5  532.5  536.5         RX          094

RY  16.5   12.5   12.5   10.0   10.0   12.5   12.5   16.5         RY          095

*                                                                  *           001

KKCAS240                                                           KK          045
KM SUB-BASIN cas240                                                KM          046
KM 6-HOUR RAINFALL, PATTERN NO. 1.53 WAS USED TO FIND TC & R FOR THIS
BASIN     KM          046
```

```
KM THIS BASIN USED RAINFALL REDUCTION FACTOR OF .985
KM          046
KM BASIN MODIFIED FROM WICKENBERG ADMS TO REFLECT DAM LOCATION
          KM        046
BA  .140                                                  BA          008
LG  .100   .210  6.400   .140  21.000                        LG          052
UC  .258   .232                                            UC          111
UA    0     5     16     30     65     77     84     90     94    97UA          110
UA  100                                                    UA          110
*                                                          *          001

KK   ADD                                                   KK          045

KM ADD ROUTED HYDROGRAPH TO CAS240                                          KM
        046
HC    2                                                    HC          030

*                                                          *          001

KKDAMOUT                                                     KK          045

KM  Route Hydrograph Through Dam.                              KM          046

KM                                                         KM          046

KP    1                                                    KP          048

KO    1                                                    KO          047

RS    1   STOR      0                                      RS          092

*                                                          *          001

SA  1.90   2.32   5.80   6.77   9.06  10.20  10.96  11.34  11.61  11.88SA          096

SA 12.09  12.31  12.81  13.31  13.81                          SA          096

SE  2134   2136   2140   2144   2150   2153   2155   2156   2157   2158SE
099
SE  2159   2160   2161   2162   2163                          SE          099

SQ    0    9.5   13.5   19.1   23.3   28.6   30.9    295    823   1539SQ          104

SQ  2423   3450   4577   5773   7015                          SQ          104

ST2163.5    300   3.08    1.5                                ST          106
```

```
SB  2134    40    2    .25   2155                          SB        097
*                                                       *        001
KP    2                                                 KP        048
KO    1                                                 KO        047
SB  2134    40    0    .25   2155                          SB        097
*                                                       *        001
KP    3                                                 KP        048
KO    1                                                 KO        047
SB  2134    40    0     1    2155                          SB        097
*                                                       *        001
KP    4                                                 KP        048
KO    1                                                 KO        047
SB  2134   250    2    .25 2134.01                        SB        097
*                                                       *        001
KK  RCH1  Route breach hydrograph downstream                    KK        045
KM  Reach 1, Dam to d/s Cucuracha St. - Confined Floodplain          KM
046
KP    1                                                 KP        048
KO    1                                                 KO        047
RS    1   STOR    0                                     RS        092
RC  .045   .035   .045   1500   .014                     RC        086
RX  100    150    183    191    215    250    435    614        RX        094
RY  2130   2112   2108  2104.5 2104.5 2108.8   2108   2130        RY
095
KP    2                                                 KP        048
```

```
KO    3                                                    KO        047
KP    3                                                    KP        048
KO    3                                                    KO        047
KP    4                                                    KP        048
KO    3                                                    KO        047
*                                                          *         001
KK  RCH2  Route breach hydrograph downstream                KK        045
KM  Reach 1, D/s Cucuracha St. to ATSF Railroad Crossing - Broad Floodplain    KM
    046
KP    1                                                    KP        048
KO    1                                                    KO        047
RS    1   STOR     0                                       RS        092
RC   .08   .025   .08   2350   .013                        RC        086
RX   100   160   210   226   246   283   391   498        RX        094
RY2074.5  2074  2074  2072  2072  2077  2078  2090        RY        095
KP    2                                                    KP        048
KO    3                                                    KO        047
KP    3                                                    KP        048
KO    3                                                    KO        047
KP    4                                                    KP        048
KO    3                                                    KO        047
*                                                          *         001
KK  ATSFRoute breach hydrograph thru ATSF Culvert Crossing, Ponding Area    KK
    045
KM  Rating Curve for outlet from HY-8, "CAS-ATSF.INP"       KM
```

```
046
KP    1                                                    KP        048
KO    1                                                    KO        047
RS    1   STOR     0                                       RS        092
SA    0    .12    3.1    9.2   15.2   40.0                 SA        096
SE2061.5   2064   2066   2068   2070   2075                 SE        099
SQ    0     10    200    340    430  24000                 SQ        104
KP    2                                                    KP        048
KO    3                                                    KO        047
KP    3                                                    KP        048
KO    3                                                    KO        047
KP    4                                                    KP        048
KO    3                                                    KO        047
*                                                          *         001
KK  RCH4  Route breach hydrograph downstream                KK        045
KM  Reach 1, ATSF Railroad Crossing to Sols Wash Confluence - Broad Floodplain  KM
      046
KP    1                                                    KP        048
KO    1                                                    KO        047
RS    1   STOR     0                                       RS        092
RC   .05    .03    .05    700   .015                       RC        086
RX    0    191    273    310    321    387    728    735  RX        094
RY2062.3   2060   2058   2058   2058  2058.5   2062   2070 RY        095
KP    2                                                    KP        048
KO    3                                                    KO        047
```

KP	3
KO	3
KP	4
KO	3
*	
ZZ	

KP	048
KO	047
KP	048
KO	047
*	001
ZZ	127

HEC1 S/N: 0134300922 HMVersion: 6.33 Data File: dambrk.hc1

```
****************************************                    ****************************************
*                                      *                    *                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                    *  U.S. ARMY CORPS OF ENGINEERS        *
*                                      *                    *                                      *
*          MAY  1991                   *                    *  HYDROLOGIC ENGINEERING CENTER       *
*        VERSION 4.0.1E                *                    *        609 SECOND STREET             *
*                                      *                    *     DAVIS, CALIFORNIA 95616          *
* RUN DATE 09/27/1994 TIME 09:54:49    *                    *          (916) 756-1104              *
*                                      *                    *                                      *
****************************************                    ****************************************


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


::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::
:::                                  :::
:::  Full Microcomputer Implementation  :::
:::              by                  :::
:::       Haestad Methods, Inc.      :::
:::                                  :::
::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

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

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.

THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION

NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE, SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,

DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION

KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          * FINAL 1/2 PMF RUN  FINALHPM.HC1
          * Dam Breach Scenarios  9/94
          *
          *DIAGRAM
          *
    1     ID   Casandro Wash Detention Dam  CH2M Hill
    2     ID   HEC-1, revised dam location and basin grading
          * 1/2 PMF Run - routed
          *
    3     IT    2                900
    4     IO    5
    5     JP    4
          *
    6     JR   FLOW    .5
          *

    7     KK  SAC230
    8     KM   SUB-BASIN SAC230
    9     KM   6-HOUR RAINFALL, PATTERN NO. 1.53 WAS USED TO FIND TC & R FOR THIS BASIN
   10     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .985
   11     KM   BASIN FROM WICKENBERG ADMS
   12     BA   .720
   13     IN    15
   14     PB    15
   15     KM   THE FOLLOWING PI RECORD USES A 6-HOUR STORM -  HMR#5 DISTRIBUTION
   16     PI  0.075  0.075  0.075  0.075  0.125  0.125  0.125  0.125   0.4    0.4
   17     PI   0.4    0.4    8.4    1.7    0.7    0.7    0.2    0.2    0.2    0.2
   18     PI  0.075  0.075  0.075  0.075
   19     LG   .100   .250  5.200   .240  35.000
   20     UC   .446   .367
   21     UA    0     5     16     30     65     77     84     90     94     97
   22     UA   100
          *

   23     KK  SAC235
   24     KM   SUB-BASIN sac235
   25     KM   6-HOUR RAINFALL, PATTERN NO. 1.53 WAS USED TO FIND TC & R FOR THIS BASIN
   26     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .985
   27     KM   BASIN FROM WICKENBERG ADMS
   28     BA   .380
   29     LG   .100   .230  6.200   .150  36.000
   30     UC   .450   .461
   31     UA    0     5     16     30     65     77     84     90     94     97
   32     UA   100
          *

   33     KK    ADD
   34     KM   ADD SAC230 & SAC235
   35     HC    2
          *
```

```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 36       KK  ROUTE
 37       KM  ROUTE COMBINED HYDROGRAPH TO DAM LOCATION
 38       RS    1   FLOW    -1
 39       RC   .045   .03   .045   4200  .0175
 40       RX  463.5  467.5  477.5  487.5  512.5  522.5  532.5  536.5
 41       RY   16.5   12.5   12.5   10.0   10.0   12.5   12.5   16.5
          *

 42       KK  CAS240
 43       KM  SUB-BASIN cas240
 44       KM  6-HOUR RAINFALL, PATTERN NO. 1.53 WAS USED TO FIND TC & R FOR THIS BASIN
 45       KM  THIS BASIN USED RAINFALL REDUCTION FACTOR OF .985
 46       KM  BASIN MODIFIED FROM WICKENBERG ADMS TO REFLECT DAM LOCATION
 47       BA  .140
 48       LG  .100   .210  6.400   .140  21.000
 49       UC  .258   .232
 50       UA    0     5    16     30     65     77     84     90     94     97
 51       UA  100
          *

 52       KK   ADD
 53       KM  ADD ROUTED HYDROGRAPH TO CAS240
 54       HC    2
          *

 55       KK  DAMOUT
 56       KM   Route Hydrograph Through Dam.
 57       KM
 58       KP    1
 59       KO    1
 60       RS    1   STOR     0
          *
 61       SA  1.90   2.32   5.80   6.77   9.06  10.20  10.96  11.34  11.61  11.88
 62       SA 12.09  12.31  12.81  13.31  13.81
 63       SE  2134   2136   2140   2144   2150   2153   2155   2156   2157   2158
 64       SE  2159   2160   2161   2162   2163
 65       SQ     0    9.5   13.5   19.1   23.3   28.6   30.9    295    823   1539
 66       SQ  2423   3450   4577   5773   7015
 67       ST 2163.5   300   3.08    1.5
 68       SB  2134    40      2    .25   2155
          *
 69       KP    2
 70       KO    1
 71       SB  2134    40      0    .25   2155
          *
 72       KP    3
 73       KO    1
 74       SB  2134    40      0      1   2155
          *
 75       KP    4
 76       KO    1
 77       SB  2134   250      2    .25 2134.01
          *
```

```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 78         KK   RCH1  Route breach hydrograph downstream
 79         KM   Reach 1, Dam to d/s Cucuracha St. - Confined Floodplain
 80         KP     1
 81         KO     1
 82         RS     1   STOR     0
 83         RC   .045   .035   .045   1500   .014
 84         RX   100    150    183    191    215    250    435    614
 85         RY   2130   2112   2108   2104.5 2104.5 2108.8 2108   2130
 86         KP     2
 87         KO     3
 88         KP     3
 89         KO     3
 90         KP     4
 91         KO     3
            *

 92         KK   RCH2  Route breach hydrograph downstream
 93         KM   Reach 1, D/s Cucuracha St. to ATSF Railroad Crossing - Broad Floodplain
 94         KP     1
 95         KO     1
 96         RS     1   STOR     0
 97         RC   .08    .025   .08    2350   .013
 98         RX   100    160    210    226    246    283    391    498
 99         RY   2074.5 2074   2074   2072   2072   2077   2078   2090
100         KP     2
101         KO     3
102         KP     3
103         KO     3
104         KP     4
105         KO     3
            *

106         KK   ATSFRoute breach hydrograph thru ATSF Culvert Crossing, Ponding Area
107         KM   Rating Curve for outlet from HY-8, "CAS-ATSF.INP"
108         KP     1
109         KO     1
110         RS     1   STOR     0
111         SA     0   .12    3.1    9.2    15.2   40.0
112         SE   2061.5 2064   2066   2068   2070   2075
113         SQ     0    10     200    340    430    24000
114         KP     2
115         KO     3
116         KP     3
117         KO     3
118         KP     4
119         KO     3
            *

120         KK   RCH4  Route breach hydrograph downstream
121         KM   Reach 1, ATSF Railroad Crossing to Sols Wash Confluence - Broad Floodplain
122         KP     1
123         KO     1
124         RS     1   STOR     0
125         RC   .05    .03    .05    700    .015
```

```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 126      RX     0   191   273   310   321   387   728   735
 127      RY  2062.3 .2060  2058  2058  2058 2058.5  2062  2070
 128      KP     2
 129      KO     3
 130      KP     3
 131      KO     3
 132      KP     4
 133      KO     3
          *
 134      ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE    (V) ROUTING        (—>) DIVERSION OR PUMP FLOW

 NO.     (.) CONNECTOR      (<—) RETURN OF DIVERTED OR PUMPED FLOW

  7    SAC230
          .
          .
 23        .     SAC235
          .         .
          .         .
 33      ADD............
          V
          V
 36     ROUTE
          .
          .
 42        .     CAS240
          .         .
          .         .
 52      ADD............
          V
          V
 55    DAMOUT
          V
          V
 78     RCH1
          V
          V
 92     RCH2
          V
          V
106     ATSF
          V
          V
120     RCH4
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

HEC1 S/N: 0134300922 HMVersion: 6.33 Data File: dambrk.hc1

```
****************************************                    ****************************************
*                                      *                    *                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                    *   U.S. ARMY CORPS OF ENGINEERS
*                                      *                    *                                      *
*          MAY  1991                   *                    *  HYDROLOGIC ENGINEERING CENTER       *
*        VERSION 4.0.1E                *                    *        609 SECOND STREET             *
*                                      *                    *     DAVIS, CALIFORNIA 95616          *
* RUN DATE  09/27/1994  TIME  09:54:49 *                    *          (916) 756-1104              *
*                                      *                    *                                      *
****************************************                    ****************************************
```

Casandro Wash Detention Dam CH2M Hill
HEC-1, revised dam location and basin grading

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

  IT         HYDROGRAPH TIME DATA
                NMIN           2  MINUTES IN COMPUTATION INTERVAL
                IDATE      1   0  STARTING DATE
                ITIME       0000  STARTING TIME
                  NQ        900  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      2   0  ENDING DATE
               NDTIME       0558  ENDING TIME
               ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                TOTAL TIME BASE   29.97 HOURS

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

  JP         MULTI-PLAN OPTION
                NPLAN          4  NUMBER OF PLANS

  JR         MULTI-RATIO OPTION
               RATIOS OF RUNOFF
              0.50


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
***

       **************
       *            *
 55 KK   *   DAMOUT  *
       *            *
       **************
```