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TOWN OF WICKENBURG, CELLA BARR ASSOCIATES STUDY
********BACKWATER ANALYSIS*********

Q VALUES FOR SOLS WASH (CONFLUENCE WITH HASSAYAMPA RIVER TO RIVER MILE 9.25)

CROSS SECTION	10-YEAR Q	50-YEAR Q	100-YEAR Q	500-YEAR Q
.03*	7019	12453	15045	20836
.60**	6748	11964	14459	20005
.69	6725	11927	14413	19986
2.06	5784	10433	12945	18691
2.78	5100	10212	12817	18518
3.27	4906	9954	12464	18037
4.31	4798	9767	12244	17749
4.98	4736	9661	12118	17583
5.35	4081	8274	10370	15075
8.48	3867	7861	9862	14378
8.76	3696	7504	9419	13760
8.86	3258	6626	8325	12252
9.25 (END OF STUDY)				

* FIRST SROSS SECTION FROM THE CONFLUENCE.
** CONFLUENCE OF BRAIDED CHANNELS.

07. 0-00-1-00/86

Floodplain, Reach #1

Cross Sec .030-2.060

User: P4091501 -at DEC

<CRA>PHOENIX>P40915>HYDRO>SOLS.REACH1.HLT.OUT

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WWWW  W     WWW   WWW   W  WWWWW  WWW   W
  W W  W  W  W W  W  WW  W    W  W  WW
 W  W W  W  W W  W  W  WWWW  W  W  W
WWWW  WWWWW W W W  WWWW  W     W W W W  W
      W  W  W    W  W     W W  W  W
      W  W  W   W  W  W  W W  W  W
W     W   WWW  WWW   WWW  WWW   WWW

WWW   WWW  W     WWW      WWWW  WWWWW  WWW   WWW  W  W  W      W  W W    WWWWW      WWW  W  W WWWWW
 W  W W  W W    W  W     W  W W    W  W W  W W  W WW      WW WW W     W      W  W W  W  W
W    W  W W    W        W  W W    W  W W    W  W  W      W W W W     W      W  W W  W  W
WWW  W  W W     WWW     WWWW  WWWW  WWWWW W   WWWWW  W      W W W W     W      W  W W  W  W
  W W  W W       W     W W  W    W  W W    W  W  W      W  W W     W      W  W W  W  W
W  W W  W W    W  W  WW W  W W    W  W W  W W  W  W   WW W  W W     W   WW W  W W  W  W
WWW   WWW  WWWWW  WWW   WW W  W WWWWW W  W  WWW  W  W  WWW   WW W  W WWWWW  W   WW  WWW   WWW   W

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[Spooler rev 20.2 (c) Prime Computer, Inc., 1985]

Label: PRT001 -form

Pathname: <CRA>PHOENIX>P40915>HYDRO>SOLS.REACH1.HLT.OUT
File last modified: 87-06-01.16:27:44.Mon

Spooled: 87-06-04.07:37:00.Thu
Started: 87-06-04.07:37:20.Thu on: AMLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  DATE MON, JUN 01 1987 TIME 16:24:36              *
*****************************************************
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*****************************************************
*  U.S. ARMY CORPS OF ENGINEERS                     *
*  THE HYDROLOGIC ENGINEERING CENTER                *
*  609 SECOND STREET, SUITE D                       *
*  DAVIS, CALIFORNIA 95616                          *
*  (916) 440-2105 (FTS) 448-2105                    *
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X     X  XXXXXXX   XXXXX             XXXXX
X     X  X       X     X           X     X
X     X  X       X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X       X                 X
X     X  X       X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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THIS RUN EXECUTED MON, JUN 01 1987 16:25:02

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HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 SOLS WASH REACH 1 FLOOD INSURANCE RATE ANALYSIS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	0.004000	0.00	0.0	0.	2038.000	0.000
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRACE
	1.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	15.000
J3	VARIABLE CODES FOR SUMMARY PRINTOUT									
	38.000	1.000	8.000	3.000	26.000	42.000	39.000	4.000	53.000	54.000
	13.000	14.000	15.000	202.000	-56.000	79.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	4.000	1.000	9476.000	0.065	10104.000	0.025	10340.000	0.065	10722.000	0.000
	4.000	7019.000	12453.000	15045.000	20836.000	0.000	0.000	0.000	0.000	0.000
	RIVER MILE 0.0 - PROFILE BASE LINE FOR MASSAYAMPA									
X1	0.030	21.000	10104.000	10340.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2044.500	8635.000	2044.400	8730.000	2043.700	8842.000	2043.300	8943.000	2042.600	9054.000
GR	2041.800	9168.000	2041.300	9308.000	2040.700	9395.000	2040.000	9476.000	2039.500	9661.000
GR	2038.700	9840.000	2038.200	10000.000	2038.100	10104.000	2037.400	10183.000	2037.100	10258.000
GR	2036.200	10340.000	2036.200	10440.000	2034.800	10571.000	2033.500	10593.000	2032.300	10682.000
GR	2047.500	10722.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	1.000	9438.000	0.065	9963.000	0.025	10044.000	0.065	10935.000	0.000
	0.130	42.000	9963.000	10044.000	500.000	560.000	505.000	0.000	0.000	0.000
GR	2048.000	8515.000	2046.200	8945.000	2045.200	9041.000	2044.300	9141.000	2043.700	9240.000
GR	2044.500	9284.000	2044.800	9293.000	2046.300	9299.000	2046.600	9312.000	2043.800	9326.000
GR	2042.700	9402.000	2044.300	9419.000	2042.800	9438.000	2045.000	9459.000	2044.400	9519.000
GR	2044.300	9587.000	2043.500	9635.000	2044.000	9692.000	2043.700	9724.000	2042.700	9748.000
GR	2043.100	9813.000	2043.400	9869.000	2042.900	9928.000	2040.000	9963.000	2040.000	10000.000
GR	2040.000	10026.000	2046.400	10044.000	2047.600	10064.000	2047.600	10126.000	2047.400	10200.000
GR	2049.200	10225.000	2049.800	10307.000	2049.400	10380.000	2047.500	10442.000	2047.500	10486.000
GR	2051.300	10519.000	2052.400	10579.000	2052.900	10643.000	2052.000	10712.000	2050.700	10770.000
GR	2049.600	10831.000	2048.300	10935.000	0.000	0.000	0.000	0.000	0.000	0.000

REV. 6/87

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NH     3.000     0.065  9963.000     0.025 10037.000     0.065 10788.000     0.000     0.000     0.000
X1     0.220    27.000  9899.000 10019.000   465.000   515.000   500.000     0.000     0.000     0.000
GR  2050.500  9433.000  2049.600  9473.000  2049.700  9508.000  2050.400  9516.000  2050.400  9590.000
GR  2050.400  9669.000  2051.500  9726.000  2051.300  9799.000  2051.000  9899.000  2044.600  9938.000
GR  2043.000  9963.000  2043.000 10000.000  2043.000 10019.000  2058.400 10037.000  2059.300 10170.000
GR  2060.600 10292.000  2061.600 10331.000  2061.400 10381.000  2057.800 10430.000  2056.900 10485.000
GR  2056.400 10541.000  2058.500 10573.000  2060.400 10625.000  2063.400 10628.000  2063.400 10671.000
GR  2062.000 10732.000  2061.700 10788.000     0.000     0.000     0.000     0.000     0.000     0.000

NC     0.000     0.000     0.000     0.300     0.500     0.000     0.000     0.000     0.000     0.000
NH     4.000     1.000  9538.000     0.065  9905.000     0.025 10101.000     0.065 10414.000     0.000
X1     0.360    23.000  9969.000 10046.000   615.000   785.000   770.000     0.000     0.000     0.000
GR  2055.200  9433.000  2055.800  9497.000  2055.700  9533.000  2056.500  9538.000  2056.400  9594.000
GR  2056.100  9667.000  2056.800  9752.000  2056.800  9866.000  2057.500  9905.000  2058.300  9942.000
GR  2049.200  9969.000  2048.400  9996.000  2048.400 10000.000  2049.400 10046.000  2054.000 10061.000
GR  2060.900 10101.000  2066.000 10136.000  2065.800 10149.000  2066.800 10235.000  2066.600 10290.000
GR  2066.300 10356.000  2066.200 10387.000  2072.800 10411.000     0.000     0.000     0.000     0.000

NC     0.065     0.065     0.025     0.000     0.000     0.000     0.000     0.000     0.000     0.000
            U.S. HIGHWAY 89 BRIDGE CROSSING
X1     0.400    17.000  9910.000 10110.000   250.000   105.000   170.000     0.707     0.000     0.000
GR  2062.800  9546.000  2063.900  9577.000  2064.100  9661.000  2063.200  9675.000  2062.100  9718.000
GR  2064.700  9749.000  2064.700  9838.000  2064.700  9872.000  2051.800  9910.000  2051.700  9948.000
GR  2051.600 10000.000  2050.600 10110.000  2058.200 10134.000  2065.200 10162.000  2065.200 10216.000
GR  2065.800 10291.000  2066.400 10342.000     0.000     0.000     0.000     0.000     0.000     0.000

SB     0.900     1.560     2.630     0.000   157.000    10.000  1720.000     0.000     0.000     0.000
X1     0.420    17.000  9933.000 10161.000   135.000   135.000   135.000     0.707     0.000     0.000
X2     0.000     0.000     1.000  2061.700  2065.000     0.000     0.000     1.330     0.707     0.000
GR  2063.500  9428.000  2064.200  9453.000  2064.200  9541.000  2064.200  9645.000  2064.700  9736.000
GR  2064.000  9886.000  2052.300  9933.000  2052.500 10000.000  2052.500 10060.000  2053.300 10090.000
GR  2052.300 10130.000  2051.400 10161.000  2062.200 10208.000  2063.600 10289.000  2064.900 10366.000
GR  2066.400 10432.000  2066.500 10525.000     0.000     0.000     0.000     0.000     0.000     0.000
BT     2.000  9910.000  2065.000  2061.700 10130.000  2065.000  2061.700     0.000     0.000     0.000

X1     0.470    22.000  9921.000 10038.000   190.000   260.000   230.000     0.000     0.000     0.000
GR  2063.500  9738.000  2064.000  9790.000  2063.300  9856.000  2062.300  9921.000  2054.900  9941.000
GR  2053.400  9961.000  2053.600 10000.000  2053.600 10024.000  2059.900 10038.000  2060.200 10145.000
GR  2059.700 10268.000  2054.300 10325.000  2054.700 10334.000  2057.900 10363.000  2058.600 10470.000
GR  2058.900 10536.000  2058.900 10574.000  2059.800 10597.000  2060.100 10664.000  2060.100 10711.000
GR  2064.000 10724.000  2078.400 10770.000     0.000     0.000     0.000     0.000     0.000     0.000

NC     0.065     0.065     0.025     0.100     0.300     0.000     0.000     0.000     0.000     0.000
X1     0.500    32.000  9919.000 10041.000   200.000   220.000   200.000     0.000     0.000     0.000
GR  2064.000  9600.000  2063.200  9622.000  2062.600  9628.000  2062.400  9665.000  2062.900  9694.000
GR  2062.200  9740.000  2061.900  9800.000  2062.500  9843.000  2062.200  9919.000  2055.500  9958.000
GR  2055.500 10000.000  2055.500 10041.000  2059.100 10058.000  2059.200 10079.000  2062.800 10114.000
GR  2062.800 10129.000  2062.000 10146.000  2062.900 10204.000  2062.600 10253.000  2061.300 10316.000
GR  2060.400 10373.000  2059.800 10426.000  2058.100 10444.000  2058.300 10457.000  2060.700 10470.000
GR  2061.300 10505.000  2060.600 10530.000  2060.900 10569.000  2061.800 10634.000  2062.200 10663.000
GR  2067.500 10671.000  2073.600 10705.000     0.000     0.000     0.000     0.000     0.000     0.000
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	4.000	6748.000	11964.000	14459.000	20005.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	1.000	9446.000	0.065	9928.000	0.025	10075.000	0.065	10575.000	0.000
	CONFLUENCE OF BRAIDED CHANNELS									
	0.600	48.000	9928.000	10075.000	515.000	505.000	505.000	0.000	0.000	0.000
GR	2070.300	8792.000	2069.000	8819.000	2070.000	8838.000	2065.600	8862.000	2063.800	8891.000
GR	2064.800	8917.000	2065.400	8930.000	2064.900	9013.000	2064.300	9064.000	2065.000	9104.000
	2065.200	9168.000	2065.400	9230.000	2064.800	9320.000	2064.200	9403.000	2065.000	9446.000
	2065.100	9486.000	2064.300	9503.000	2065.300	9548.000	2066.100	9615.000	2066.800	9671.000
GR	2066.900	9736.000	2066.200	9798.000	2066.100	9809.000	2066.100	9842.000	2066.400	9859.000
	2065.800	9928.000	2059.700	9954.000	2059.900	10000.000	2059.900	10052.000	2066.400	10075.000
	2067.100	10097.000	2066.800	10124.000	2067.900	10141.000	2067.000	10154.000	2065.500	10178.000
GR	2066.800	10195.000	2067.000	10225.000	2066.400	10257.000	2067.100	10334.000	2066.400	10403.000
	2063.900	10431.000	2064.800	10476.000	2065.100	10494.000	2062.700	10520.000	2063.100	10532.000
	2069.700	10552.000	2070.400	10561.000	2069.700	10575.000	0.000	0.000	0.000	0.000
NH	6.000	1.000	9332.000	0.065	9720.000	0.025	9760.000	0.065	9973.000	0.025
	10050.000	0.065	10300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	4.000	6725.000	11927.000	14413.000	19986.000	0.000	0.000	0.000	0.000	0.000
X1	0.690	46.000	9973.000	10050.000	495.000	490.000	510.000	0.000	0.000	0.000
	2074.700	8940.000	2072.300	8966.000	2069.300	9004.000	2069.300	9025.000	2068.700	9034.000
	2069.000	9080.000	2069.400	9145.000	2069.700	9209.000	2069.800	9269.000	2069.600	9332.000
GR	2069.400	9369.000	2069.900	9423.000	2069.900	9472.000	2064.800	9494.000	2064.900	9509.000
	2070.200	9543.000	2070.300	9609.000	2070.500	9663.000	2070.500	9702.000	2065.200	9720.000
	2064.600	9745.000	2064.700	9758.000	2070.500	9775.000	2071.000	9808.000	2070.200	9868.000
GR	2069.800	9918.000	2067.600	9950.000	2064.500	9973.000	2064.200	10000.000	2064.200	10034.000
GR	5.800	10050.000	2064.400	10063.000	2065.100	10071.000	2067.300	10088.000	2067.600	10100.000
	2065.400	10118.000	2066.900	10124.000	2065.300	10135.000	2070.300	10152.000	2070.200	10184.000
	2068.600	10222.000	2068.600	10241.000	2068.200	10264.000	2072.100	10288.000	2072.800	10297.000
GR	2072.800	10300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	4.000	0.065	9550.000	0.025	9590.000	0.065	9959.000	0.025	10075.000	0.000
X1	0.790	35.000	9959.000	10040.000	485.000	495.000	500.000	0.000	0.000	0.000
	2080.600	8960.000	2078.300	8976.000	2077.700	9002.000	2074.700	9041.000	2068.400	9080.000
	2068.500	9088.000	2073.400	9126.000	2073.200	9135.000	2073.200	9149.000	2074.300	9214.000
GR	2074.000	9245.000	2074.500	9274.000	2074.100	9343.000	2074.400	9404.000	2074.600	9472.000
	2074.300	9518.000	2068.200	9557.000	2067.700	9585.000	2074.400	9598.000	2073.600	9644.000
	2068.600	9666.000	2073.700	9685.000	2073.900	9699.000	2072.600	9712.000	2074.200	9741.000
	2074.600	9794.000	2075.200	9883.000	2073.900	9911.000	2070.300	9940.000	2068.900	9959.000
GR	2068.900	10000.000	2068.900	10040.000	2077.100	10059.000	2078.000	10067.000	2078.200	10075.000
	6.000	1.000	8769.000	0.065	9475.000	0.025	9520.000	0.065	9958.000	0.025
NH	10045.000	0.065	10080.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.900	43.000	9958.000	10060.000	540.000	575.000	565.000	0.000	0.000	0.000
	2090.800	8508.000	2083.300	8563.000	2084.600	8590.000	2084.200	8614.000	2083.600	8638.000
GR	2079.100	8672.000	2079.100	8719.000	2077.500	8769.000	2075.400	8800.000	2072.800	8815.000
	2072.800	8824.000	2077.000	8849.000	2077.200	8878.000	2077.400	8966.000	2077.500	9029.000
	2077.800	9093.000	2078.300	9156.000	2078.600	9229.000	2078.700	9290.000	2078.400	9365.000
	2078.300	9435.000	2075.200	9457.000	2074.300	9474.000	2071.100	9500.000	2071.100	9520.000
GR	2075.700	9540.000	2077.800	9562.000	2078.600	9595.000	2077.900	9615.000	2078.400	9640.000
	2077.700	9668.000	2078.500	9688.000	2078.000	9793.000	2077.200	9808.000	2074.500	9828.000
	2077.000	9843.000	2078.600	9917.000	2077.700	9958.000	2073.500	9976.000	2073.100	10000.000
GR	73.100	10050.000	2078.000	10060.000	2083.000	10080.000	0.000	0.000	0.000	0.000

NH	6.000	1.000	8603.000	0.065	9274.000	0.025	9310.000	0.065	9944.000	0.025
NH	10050.000	0.065	10075.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	1.000	49.000	9944.000	10050.000	570.000	565.000	560.000	0.000	0.000	0.000
GR	2097.200	8262.000	2089.400	8292.000	2086.600	8319.000	2084.000	8354.000	2083.000	8410.000
GR	2082.800	8469.000	2083.300	8481.000	2082.600	8516.000	2081.700	8539.000	2082.300	8544.000
GR	2081.700	8574.000	2082.500	8603.000	2082.700	8648.000	2082.100	8671.000	2082.800	8710.000
GR	2083.100	8757.000	2083.500	8837.000	2083.900	8898.000	2084.100	8967.000	2083.600	9018.000
GR	2083.400	9059.000	2082.800	9113.000	2082.200	9135.000	2082.200	9154.000	2082.900	9174.000
GR	2082.500	9214.000	2083.200	9234.000	2077.800	9257.000	2076.600	9274.000	2076.600	9302.000
GR	2078.600	9314.000	2079.000	9340.000	2082.700	9371.000	2083.000	9387.000	2083.400	9429.000
GR	2083.100	9586.000	2083.100	9682.000	2083.400	9776.000	2082.700	9814.000	2083.600	9831.000
GR	2083.200	9884.000	2081.600	9916.000	2078.900	9944.000	2078.300	9957.000	2078.100	10000.000
GR	2078.100	10033.000	2082.100	10050.000	2082.600	10059.000	2087.100	10075.000	0.000	0.000
NH	5.000	0.060	9331.000	0.025	9392.000	0.060	9949.000	0.025	10062.000	0.060
NH	10205.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	1.120	24.000	9949.000	10062.000	615.000	630.000	620.000	0.000	0.000	0.000
GR	2092.500	9227.000	2092.600	9301.000	2083.300	9331.000	2082.200	9392.000	2087.500	9437.000
GR	2088.000	9549.000	2087.700	9693.000	2087.200	9798.000	2086.600	9872.000	2086.400	9897.000
GR	2087.300	9926.000	2083.400	9949.000	2082.300	9970.000	2082.500	10000.000	2083.400	10035.000
GR	2084.900	10062.000	2086.400	10084.000	2086.100	10118.000	2086.600	10129.000	2086.600	10157.000
GR	2086.200	10164.000	2085.100	10180.000	2085.100	10185.000	2091.900	10205.000	0.000	0.000
NH	6.000	0.060	9272.000	0.025	9303.000	0.045	9550.000	0.065	9923.000	0.025
NH	10079.000	0.050	10530.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	1.300	40.000	9923.000	10079.000	935.000	885.000	935.000	0.000	0.000	0.000
GR	2112.500	9183.000	2098.600	9217.000	2094.100	9260.000	2091.300	9272.000	2091.300	9303.000
GR	2094.200	9322.000	2095.400	9341.000	2097.800	9398.000	2096.700	9458.000	2095.700	9543.000
GR	2097.100	9565.000	2096.400	9593.000	2097.400	9614.000	2096.800	9653.000	2096.800	9723.000
GR	2097.100	9777.000	2096.500	9816.000	2096.700	9882.000	2096.900	9923.000	2092.200	9930.000
GR	2092.200	9967.000	2092.900	10000.000	2093.400	10035.000	2095.300	10079.000	2095.800	10098.000
GR	2094.600	10116.000	2094.200	10161.000	2095.000	10175.000	2094.000	10228.000	2092.600	10268.000
GR	2092.300	10311.000	2095.000	10324.000	2095.200	10338.000	2094.200	10355.000	2096.800	10382.000
GR	2098.300	10424.000	2098.100	10493.000	2101.100	10511.000	2101.300	10521.000	2101.300	10530.000
NH	8.000	0.060	9145.000	0.025	9168.000	0.060	9200.000	0.025	9280.000	0.045
NH	9500.000	0.055	9902.000	0.025	10091.000	0.050	10470.000	0.000	0.000	0.000
X1	1.400	46.000	9902.000	10091.000	500.000	435.000	500.000	0.000	0.000	0.000
GR	2120.000	9030.000	2110.600	9060.000	2106.400	9096.000	2097.200	9139.000	2095.300	9151.000
GR	2095.500	9168.000	2100.000	9181.000	2097.200	9200.000	2098.800	9219.000	2098.700	9228.000
GR	2098.000	9277.000	2101.300	9298.000	2101.500	9343.000	2100.100	9415.000	2101.000	9433.000
GR	2100.700	9477.000	2100.100	9520.000	2100.900	9563.000	2100.500	9611.000	2100.700	9669.000
GR	2100.800	9760.000	2100.300	9812.000	2099.100	9866.000	2100.500	9902.000	2096.900	9935.000
GR	2096.900	9965.000	2098.000	9992.000	2098.000	10000.000	2097.800	10065.000	2098.000	10091.000
GR	2099.700	10116.000	2096.700	10147.000	2098.900	10162.000	2099.400	10190.000	2099.300	10217.000
GR	2099.800	10248.000	2098.700	10271.000	2099.300	10288.000	2097.800	10301.000	2097.400	10340.000
GR	2099.900	10352.000	2101.000	10384.000	2101.100	10406.000	2101.700	10442.000	2105.100	10460.000
GR	2106.100	10470.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	8.000	0.060	9028.000	0.025	9100.000	0.050	9350.000	0.055	9746.000	0.025
NH	762.000	0.050	9930.000	0.025	10059.000	0.050	10530.000	0.000	0.000	0.000
	1.490	49.000	9930.000	10059.000	500.000	490.000	500.000	0.000	0.000	0.000
	2120.500	8960.000	2112.000	8998.000	2102.100	9020.000	2102.200	9097.000	2104.600	9114.000
GR	2106.100	9156.000	2105.300	9202.000	2106.000	9264.000	2106.100	9350.000	2104.600	9416.000
GR	2105.700	9448.000	2105.900	9505.000	2104.900	9538.000	2104.400	9564.000	2105.300	9586.000
	2104.500	9621.000	2103.800	9658.000	2105.500	9688.000	2104.500	9714.000	2103.300	9736.000
GR	2101.500	9746.000	2101.600	9762.000	2104.000	9774.000	2104.500	9790.000	2103.500	9812.000
GR	2104.400	9820.000	2103.700	9857.000	2104.200	9891.000	2103.400	9930.000	2102.200	9941.000
	2101.800	9975.000	2102.300	10000.000	2102.800	10043.000	2103.700	10059.000	2104.300	10110.000
	2103.400	10159.000	2104.100	10205.000	2104.700	10247.000	2105.700	10265.000	2103.700	10292.000
GR	2104.300	10359.000	2104.500	10396.000	2104.300	10411.000	2104.900	10421.000	2102.400	10464.000
	2104.900	10486.000	2111.000	10508.000	2112.000	10519.000	2112.000	10530.000	0.000	0.000
NH	7.000	0.060	9158.000	0.025	9220.000	0.050	9740.000	0.040	9850.000	0.065
NH	9943.000	0.025	10033.000	0.050	10370.000	0.000	0.000	0.000	0.000	0.000
	1.590	44.000	9943.000	10033.000	490.000	540.000	490.000	0.000	0.000	0.000
GR	2130.500	8975.000	2109.600	9042.000	2107.200	9061.000	2107.200	9065.000	2109.700	9085.000
GR	2109.900	9109.000	2109.100	9125.000	2109.800	9142.000	2107.300	9158.000	2107.300	9220.000
	2109.500	9240.000	2110.500	9262.000	2110.500	9326.000	2110.000	9381.000	2109.700	9425.000
	2109.600	9482.000	2109.300	9561.000	2108.500	9625.000	2108.400	9665.000	2109.100	9697.000
GR	2108.600	9705.000	2109.100	9714.000	2107.900	9725.000	2108.600	9733.000	2107.800	9756.000
	2107.700	9788.000	2108.500	9811.000	2108.500	9836.000	2107.900	9849.000	2109.200	9888.000
	2109.600	9929.000	2107.200	9943.000	2107.200	10000.000	2107.200	10033.000	2109.900	10051.000
GR	2110.000	10110.000	2109.400	10158.000	2110.700	10178.000	2111.400	10218.000	2113.000	10249.000
GR	4.500	10275.000	2118.000	10300.000	2120.000	10345.000	2122.800	10370.000	0.000	0.000
NH	8.000	0.065	9314.000	0.025	9380.000	0.050	9828.000	0.025	9850.000	0.065
NH	9936.000	0.025	10064.000	0.050	10340.000	0.065	10523.000	0.000	0.000	0.000
	1.680	42.000	9936.000	10064.000	495.000	490.000	490.000	0.000	0.000	0.000
	2123.900	9020.000	2121.700	9071.000	2119.900	9123.000	2117.400	9191.000	2115.300	9255.000
GR	2113.400	9307.000	2112.000	9314.000	2112.400	9361.000	2112.800	9377.000	2114.300	9400.000
	2114.400	9475.000	2114.700	9538.000	2114.300	9559.000	2114.700	9578.000	2114.000	9619.000
	2114.100	9688.000	2114.100	9753.000	2114.400	9819.000	2112.200	9828.000	2113.000	9861.000
GR	2114.300	9879.000	2114.100	9898.000	2114.200	9906.000	2114.800	9925.000	2114.100	9936.000
GR	2113.100	9945.000	2112.900	10000.000	2113.000	10064.000	2115.100	10083.000	2115.000	10111.000
	2114.600	10165.000	2114.500	10226.000	2114.100	10248.000	2111.800	10259.000	2112.100	10267.000
GR	2114.100	10280.000	2112.900	10302.000	2112.800	10328.000	2114.400	10340.000	2116.000	10460.000
GR	2120.000	10478.000	2130.000	10523.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	8.000	0.065	9475.000	0.045	9580.000	0.050	9645.000	0.025	9740.000	0.035
NH	9920.000	0.025	10080.000	0.035	10265.000	0.055	10325.000	0.000	0.000	0.000
	1.820	25.000	9920.000	10080.000	715.000	650.000	695.000	0.000	0.000	0.000
	2130.000	9280.000	2140.000	9320.000	2130.000	9360.000	2124.000	9380.000	2122.000	9410.000
GR	2121.000	9475.000	2120.000	9570.000	2119.000	9580.000	2120.000	9590.000	2121.000	9645.000
GR	2120.000	9655.000	2120.000	9670.000	2120.500	9700.000	2120.000	9720.000	2120.000	9740.000
	2120.700	9815.000	2120.000	9920.000	2119.000	10000.000	2120.000	10080.000	2120.000	10215.000
GR	2122.000	10265.000	2124.000	10280.000	2126.000	10295.000	2128.000	10310.000	2130.000	10325.000

NC	0.050	0.055	0.025	0.100	0.300	0.000	0.000	0.000	0.000	0.000
X1	1.870	33.000	9809.000	10071.000	330.000	305.000	305.000	0.000	0.000	0.000
GR	2145.100	9420.000	2136.500	9448.000	2124.200	9479.000	2122.900	9496.000	2123.500	9505.000
GR	2123.600	9520.000	2124.400	9531.000	2123.800	9549.000	2124.200	9554.000	2123.600	9565.000
GR	2123.300	9570.000	2124.300	9579.000	2124.200	9594.000	2123.400	9626.000	2123.800	9636.000
GR	2123.800	9683.000	2124.400	9739.000	2125.400	9775.000	2124.200	9809.000	2123.400	9831.000
GR	2123.400	9903.000	2123.500	9951.000	2122.400	9988.000	2122.000	10000.000	2122.000	10071.000
GR	2125.400	10090.000	2124.600	10151.000	2123.100	10229.000	2124.700	10261.000	2125.900	10305.000
GR	2128.000	10349.000	2127.500	10393.000	2136.200	10445.000	0.000	0.000	0.000	0.000
X1	1.970	43.000	9879.000	10126.000	480.000	500.000	495.000	0.000	0.000	0.000
GR	2144.800	9360.000	2136.500	9380.000	2128.400	9407.000	2127.200	9446.000	2127.800	9455.000
GR	2128.000	9469.000	2127.600	9473.000	2127.600	9487.000	2128.100	9493.000	2127.700	9499.000
GR	2128.100	9512.000	2128.100	9533.000	2127.200	9541.000	2127.800	9549.000	2127.600	9562.000
GR	2128.100	9571.000	2127.400	9609.000	2128.200	9631.000	2128.200	9648.000	2127.900	9664.000
GR	2128.300	9687.000	2128.000	9707.000	2128.700	9761.000	2129.100	9795.000	2128.600	9810.000
GR	2128.800	9822.000	2128.500	9841.000	2128.400	9861.000	2126.800	9879.000	2126.600	9928.000
GR	2128.000	9938.000	2128.000	9949.000	2127.500	9958.000	2126.900	9972.000	2126.600	10000.000
GR	2127.100	10126.000	2140.900	10155.000	2141.800	10172.000	2140.500	10203.000	2138.600	10232.000
GR	2139.800	10256.000	2142.500	10271.000	2144.800	10285.000	0.000	0.000	0.000	0.000
QT	4.000	5784.000	10433.000	12945.000	18691.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9905.000	0.025	10083.000	0.055	10408.000	0.000	0.000	0.000
X1	2.060	38.000	9905.000	10083.000	470.000	515.000	500.000	0.000	0.000	0.000
GR	2146.500	9340.000	2143.700	9365.000	2134.200	9413.000	2135.000	9426.000	2135.000	9430.000
GR	2134.500	9460.000	2133.700	9491.000	2133.000	9538.000	2133.400	9560.000	2132.500	9617.000
GR	2132.800	9628.000	2132.500	9643.000	2132.700	9656.000	2131.400	9679.000	2132.600	9687.000
GR	2133.100	9732.000	2133.500	9780.000	2134.200	9833.000	2134.300	9871.000	2133.700	9905.000
GR	2131.200	9919.000	2131.600	9952.000	2131.800	9960.000	2131.300	9990.000	2131.500	10002.000
GR	2131.700	10006.000	2131.200	10083.000	2132.900	10093.000	2132.400	10108.000	2131.800	10112.000
GR	2132.300	10117.000	2132.300	10137.000	2131.700	10304.000	2133.900	10319.000	2134.200	10339.000
GR	2133.700	10364.000	2134.000	10380.000	2141.700	10408.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROR     ALOR     ACH      AROR     VOL      TWA   LEFT/RIGHT
 T        VLOB     VCH      VROR     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

*PROF 1

CHV=   0.100 CEHV=   0.300
1490 NH CARD USED
SECNO 0.030
          RIVER MILE 0.0 - PROFILE BASE LINE FOR HASSAYAMPA
    0.03     6.46  2038.76     0.00  2038.00  2039.02     0.26     0.00     0.00  2038.10
   7019.     100.    1847.    5072.     114.     367.    1362.       0.       0.   2036.20
    0.00     0.87     5.04     3.72    0.065    0.025    0.065    0.000  2032.30  9825.94
 0.003990      0.       0.       0.        0        0        5     0.00   873.07 10699.01

FLOW DISTRIBUTION FOR SECNO=      0.03          CWSEL=   2038.76

STA=    9826.   10000.   10104.   10340.   10440.   10571.   10593.   10682.   10699.
 PER Q=     0.5      0.9     26.3      9.9     19.3      3.8     34.9      2.4
  AREA=    50.5     63.7    366.7    256.3    427.4    101.5    521.8     55.0
   VEL=     0.7      1.0      5.0      2.7      3.2      4.0      4.7      3.0

1490 NH CARD USED
*SEC   .130

*265 DIVIDED FLOW

*685 20 TRIALS ATTEMPTED WSEL,CWSEL
*693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.13     6.44  2046.44  2046.44     0.00  2047.00     0.56     1.37     0.09  2040.00
   7019.    3253.    3766.       0.    2496.     464.       0.      29.      12.   2046.40
    0.03     1.30     8.11     0.01    0.096    0.025    0.065    0.000  2040.00  8886.79
 0.001848     500.     305.     560.       20        9        0     0.00  1150.37 10044.73

FLOW DISTRIBUTION FOR SECNO=      0.13          CWSEL=   2046.44

STA=    8887.    9519.    9587.    9635.    9692.    9748.    9813.    9869.    9928.    9963.   10044.
 PER Q=     5.1      3.3      3.2      4.2      4.6      7.5      5.4      6.0      7.1     53.7
  AREA=  1138.9    142.4    122.1    153.5    160.8    230.3    178.8    194.3    174.8    464.3
   VEL=     0.3      1.6      1.8      1.9      2.0      2.3      2.1      2.2      2.9      8.1

1490 NH CARD USED
SECNO 0.220
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     AREA     ACH      AROB     VOL      TWA   LEFT/RIGHT
   Time     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.22     6.15  2049.15  2049.15     0.00  2051.58     2.44     1.62     0.56  2051.00
    7019.       0.     6821.     198.       0.     541.      22.      48.      19.  2043.00
     0.04     0.00     12.61     8.99    0.000    0.029    0.025    0.000  2043.00  9910.30
 0.007381     465.     500.     513.       20       12        0     0.00   115.88 10026.18

FLOW DISTRIBUTION FOR SECNO=      0.22          CWSEL=   2049.15

STA=    9910.   10019.   10026.
  PER Q=     97.2      2.8
   AREA=    540.7     22.1
    VEL=     12.6      9.0

CCHV=   0.300 CEHV=   0.500
1490    CARD USED
*SECNO 0.360
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.36     6.31  2054.71  2054.71     0.00  2057.00     2.29     4.25     0.06  2049.20
    7019.     863.     5793.     363.     102.     432.      47.      58.      21.  2049.40
     0.06     8.44     12.81     7.78    0.025    0.025    0.025    0.000  2048.40  9929.55
 0.004381     615.     770.     785.        2        8        0     0.00   135.59 10065.13

FLOW DISTRIBUTION FOR SECNO=      0.36          CWSEL=   2054.71

STA=    9930.    9942.    9969.   10046.   10061.   10065.
  PER Q=      0.4     11.9     82.5      5.1      0.0
   AREA=      8.8     93.5    452.3     45.2      1.5
    VEL=      3.1      8.9     12.8      8.0      2.0

*SECNO 0.400

3301 HV CHANGED MORE THAN HVINS

          U.S. HIGHWAY 89 BRIDGE CROSSING
     0.40     5.92  2056.52     0.00     0.00  2057.88     1.36     0.60     0.28  2051.80
    7019.      47.     6880.      92.      23.     729.      39.      61.      21.  2050.60
     0.06     2.01      9.43     2.36    0.065    0.025    0.065    0.000  2050.60  9793.51
 0.002828      250.     170.     105.        6        0        0     0.00   164.46  9957.97
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SECNO	DEPTH	CWSEL	CRTWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
T...	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 0.40 CWSEL= 2056.52

STA= 9794. 9803. 9945. 9958.
PER Q= 0.7 98.0 1.3
AREA= 23.2 729.2 39.2
VEL= 2.0 9.4 2.4

PECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED

XK	XKOR	COEQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
0.90	1.56	2.63	0.00	157.00	10.00	1720.00	0.00	2050.60	2050.60

SECNO 0.420
LASS A LOW FLOW

420 BRIDGE W.S.= 2056.32 BRIDGE VELOCITY=, 8.35 CALCULATED CHANNEL AREA=, 841.

EGPRS	EGLWC	H3	OWEIR	QLOW	BAREA	TRAPEZOID AREA	ELLC	ELTRD
0.00	2058.30	0.40	0.	7019.	1720.	1632.	2061.70	2065.00

0.42	5.53	2056.93	0.00	0.00	2058.30	1.38	0.42	0.00	2052.30
7019.	70.	6828.	122.	30.	716.	47.	63.	22.	2051.40
0.07	2.29	9.54	2.59	0.065	0.025	0.065	0.000	2051.40	9771.89
0.003529	135.	135.	135.	0	0	0	0.00	191.35	9963.24

FLOW DISTRIBUTION FOR SECNO= 0.42 CWSEL= 2056.93

STA= 9772. 9785. 9946. 9963.
PER Q= 1.0 97.3 1.7
AREA= 30.4 715.8 47.0
VEL= 2.3 9.5 2.6

SECNO 0.470

3265 DIVIDED FLOW

685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

0.47	5.96	2059.36	2059.36	0.00	2060.99	1.63	0.90	0.13	2062.30
7019.	0.	5935.	1084.	0.	535.	446.	68.	24.	2059.90
0.07	0.00	11.10	2.43	0.000	0.025	0.065	0.000	2053.40	9928.95
0.004235	190.	230.	260.	20	8	0	0.00	421.96	10585.72

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


FLOW DISTRIBUTION FOR SECNO=      0.47          CWSEL=   2059.36

STA=    9929.   10038.   10325.   10334.   10363.   10470.   10536.   10574.   10586.
  PER Q=     84.6      5.3      2.7      3.9      2.7      0.6      0.2      0.0
   AREA=    534.5    135.0     43.7     88.7    110.6     40.2     17.4      2.7
    VEL=     11.1      2.8      4.3      3.1      1.6      1.1      0.9      0.6

CCHV=   0.100 CEHV=   0.300
*SECNO 0.500

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.50     5.77  2061.27  2061.27     0.00  2062.88     1.61     0.83     0.00  2062.20
    7019.       0.    6219.     800.       0.     576.     366.      73.      26.  2055.50
     0.08     0.00    10.80     2.19    0.000    0.025    0.065    0.000  2055.50  9924.42
 0.003951     200.     200.     220.       20        8        0     0.00   449.40 10595.63


FLOW DISTRIBUTION FOR SECNO=      0.50          CWSEL=   2061.27

STA=    9924.   10041.   10058.   10426.   10457.   10596.
  PER Q=     88.6      3.4      3.6      3.2      1.1
   AREA=    575.6     67.5    151.1     81.6     65.5
    VEL=     10.8      3.5      1.7      2.8      1.2

1490 NH CARD USED
*SECNO 0.600

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          CONFLUENCE OF BRAIDED CHANNELS
     0.60     6.85  2066.55  2066.55     0.00  2067.24     0.69     1.14     0.09  2065.80
    6748.     362.    5930.     456.    1272.     833.     316.      92.      36.  2066.40
     0.10     0.28     7.12     1.44    0.269    0.025    0.065    0.000  2059.70  8856.84
 0.001442     515.     505.     505.       20       19        0     0.00  1314.14 10542.44
```

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

FLOW DISTRIBUTION FOR SECNO=      0.60          CWSEL=   2066.55

STA=    8857.    9548.    9928.   10075.   10494.   10532.   10542.
 PER Q=     4.3      1.1     87.9      3.4      3.0      0.3
 AREA=   1147.3    124.8   832.7    185.7    112.5     18.0
  VEL=      0.2      0.6      7.1      1.2      1.8      1.2

490 NH CARD USED
SECNO 0.690

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    0.69     4.24  2068.44  2068.44     0.00  2069.93     1.49     1.34     0.24  2064.50
   6725.    2261.    3748.     717.     359.     310.     216.     111.      46.  2065.80
      2     6.29    12.09     3.31    0.037    0.025    0.065    0.000  2064.20  9478.28
0.000476     495.     510.     490.       20       14        0     0.00   336.87 10265.50


LOW DISTRIBUTION FOR SECNO=      0.69          CWSEL=   2068.44

STA=    9478.    9509.    9745.    9758.    9973.   10050.   10071.   10118.   10265.
 PER Q=     4.6     16.9      8.5      3.6     55.7      4.6      3.6      2.5
 AREA=    82.5    146.7     49.3     80.8    309.9     73.0     83.0     58.2
  VEL=      3.8      7.7     11.6      3.0     12.1      4.2      2.8      2.9

490 NH CARD USED
*SECNO 0.790

265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    0.79     4.65  2072.35  2072.35     0.00  2073.89     1.54     3.56     0.01  2068.90
   6725.    3222.    3403.     100.     462.     279.      14.     120.      49.  2068.90
    0.13     6.97    12.18     7.25    0.037    0.025    0.025    0.000  2067.70  9055.55
0.008061     485.     500.     495.        2        8        0     0.00   280.79 10047.99
```

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

FLOW DISTRIBUTION FOR SECNO= 0.79 CWSEL= 2072.35

STA=	9056.	9088.	9557.	9585.	9680.	9959.	10040.	10048.
PER Q=	4.7	9.7	26.2	3.6	3.6	50.6	1.5	
AREA=	79.5	112.5	123.2	78.1	69.1	279.3	13.8	
VEL=	3.9	5.8	14.3	3.1	3.5	12.2	7.2	

1490 NH CARD USED
*SECNO 0.900

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

0.90	6.23	2077.33	0.00	0.00	2078.21	0.89	4.76	0.07	2077.70
6725.	5316.	1409.	0.	644.	358.	0.	131.	54.	2078.00
0.15	8.26	3.94	0.00	0.036	0.076	0.000	0.000	2071.10	8771.56
0.007476	540.	565.	575.	2	0	0	0.00	436.05	10058.62

FLOW DISTRIBUTION FOR SECNO= 0.90 CWSEL= 2077.33

STA=	8772.	8815.	8824.	8849.	9474.	9500.	9520.	9540.	9858.	10060.
PER Q=	3.9	3.3	3.2	3.0	25.4	32.2	5.6	2.4	21.0	
AREA=	75.8	40.7	60.7	73.7	120.3	124.5	78.5	69.6	357.6	
VEL=	3.4	5.4	3.5	2.8	14.2	17.4	4.8	2.3	3.9	

1490 NH CARD USED
*SECNO 1.000

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

1.00	5.62	2082.22	2082.22	0.00	2083.16	0.93	3.10	0.01	2078.90
6725.	3129.	3596.	0.	549.	392.	0.	144.	59.	2082.10
0.17	5.69	9.16	0.23	0.041	0.025	0.065	0.000	2076.60	8525.61
0.004176	570.	560.	565.	20	18	0	0.00	372.77	10052.23

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

FLOW DISTRIBUTION FOR SECNO=      1.00          CWSEL=   2082.22

STA=    8526.    9274.    9302.    9314.    9340.    9944.   10050.   10052.
 PER Q=     7.0     28.4      3.4      4.4      3.3     53.5      0.0
 AREA=    144.8    157.5     55.5     89.0    102.7    392.4      0.1
  VEL=      3.3     12.1      4.1      3.4      2.1      9.2      0.2

1490 NH CARD USED
SECNO 1.120

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

4185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.12     4.12  2086.32  2086.32     0.00  2087.78     1.46     3.20     0.16  2083.40
   6725.    2788.    3879.       39.     330.     367.      37.     136.      64.  2084.90
    0.19     8.46    10.57     1.58    0.029    0.025    0.060    0.000  2082.20  9321.26
0.[illegible]79     615.     620.     630.       10       14        0     0.00   313.20 10188.59

FLOW DISTRIBUTION FOR SECNO=      1.12          CWSEL=   2086.32

STA=    9321.    9392.    9427.    9949.   10062.   10189.
 PER Q=    37.0      3.5      1.0     57.7      0.9
 AREA=    232.5     72.0     23.1    367.0     37.2
  VEL=     10.7      3.2      2.6     10.6      1.6

1490 NH CARD USED
SECNO 1.300

3265 DIVIDED FLOW

4185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.30     4.12  2095.42  2095.42     0.00  2096.43     1.01     6.26     0.04  2096.90
   6725.    2030.    1294.    1381.     231.     372.     371.     174.      72.  2095.30
    0.22     8.87     8.85     3.72    0.030    0.025    0.050    0.000  2091.30  9247.39
0.006891     935.     935.     885.       14        5        0     0.00   516.42 10367.67
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
  [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
  [illegible]  VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      1.30          CWSEL=   2095.42

STA=    9247.    9303.    9322.    9341.   10079.   10228.   10268.   10311.   10368.
  PER Q=     26.2      3.9      0.3     49.0      3.9      5.1      9.7      1.9
   AREA=    168.7     50.7     11.8    372.1    111.4     84.8    127.7     47.4
    VEL=     10.4      5.2      2.0      8.9      2.3      4.1      5.1      2.6

1490 NH CARD USED
*SECNO 1.400

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.40     4.59  2099.89  2099.89     0.00  2100.72     0.83     3.33     0.02  2100.50
    6725.    2572.    3176.     977.     344.     393.     307.     185.      79.  2098.00
     0.24     7.47     8.09     3.19    0.028    0.025    0.050    0.000  2095.30  9126.43
 0.006727     500.     500.     433.        3        8        0     0.00   661.62 10351.95


FLOW DISTRIBUTION FOR SECNO=      1.40          CWSEL=   2099.89

STA=    9126.    9131.    9168.    9219.    9277.    9886.   10091.   10147.   10271.   10340.   10352.
  PER Q=      8.0     15.1      6.2      8.1      0.8     47.2      3.6      3.4      6.9      0.6
   AREA=     60.6     76.3     88.2     85.6     33.3    392.5     78.3     91.8    121.8     14.9
    VEL=      8.9     13.3      4.7      6.4      1.7      8.1      3.1      2.5      3.8      2.8

1490 NH CARD USED
*SECNO 1.490

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.49     3.42  2104.92  2104.92     0.00  2105.63     0.70     3.21     0.01  2103.40
    6725.    3106.    2707.     832.     566.     323.     361.     198.      88.  2103.70
     0.26     5.49     8.62     2.30    0.032    0.025    0.050    0.000  2101.50  9019.45
 0.006182     500.     500.     490.       13       19        0     0.00  1000.63 10486.08


FLOW DISTRIBUTION FOR SECNO=      1.49          CWSEL=   2104.92

STA=    9019.    9097.    9736.    9762.    9857.    9930.   10059.   10159.   10359.   10486.
  PER Q=     26.7      3.2      9.9      3.7      2.8     41.4      3.5      4.9      4.0
   AREA=    203.4    110.1     79.2     96.6     76.9    323.4     99.6    148.3    113.2
    VEL=      8.8      1.9      8.4      2.6      2.4      8.6      2.3      2.2      2.4
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      THA   LEFT/RIGHT
 [illegible]  VLOB     VCH      VROB     XNI      XNCH     XNR      WTR      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST

1490 NH CARD USED
SECNO 1.590

3265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.59     2.84  2110.04  2110.04     0.00  2110.76     0.72     3.16     0.00  2107.20
   6725.    4129.    2486.     110.     966.     256.      52.     213.     100.  2107.20
    0.29     4.28     9.73     2.12    0.039    0.025    0.050    0.000  2107.20  9040.59
0.006656     490.     490.     540.       11       15        0     0.00  1002.62 10167.85

FLOW DISTRIBUTION FOR SECNO=      1.59          CWSEL=   2110.04

STA=    9041.    9085.    9220.    9561.    9665.    9725.    9756.    9788.    9811.    9849.    9943.   10033.   10168.
 PER Q=     3.3     25.4      3.4      6.0      3.4      3.6      5.7      3.1      3.9      3.5     37.0      1.6
  AREA=    74.6    218.2    113.4    136.6     78.5     56.7     73.3     44.6     62.4    107.3    255.6     51.7
   VEL=     3.0      7.8      2.0      3.0      2.9      4.3      5.3      4.7      4.2      2.2      9.7      2.1

149[illegible] CARD USED
SECNO 1.680

3265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.68     3.22  2115.02  2115.02     0.00  2115.67     0.65     3.83     0.01  2114.10
   6725.    3412.    2327.     986.     724.     257.     270.     227.     112.  2113.00
    0.31     4.71     9.06     3.66    0.039    0.025    0.050    0.000  2111.80  9262.56
0.009191     495.     490.     490.       11        8        0     0.00  1102.06 10386.76

FLOW DISTRIBUTION FOR SECNO=      1.68          CWSEL=   2115.02

STA=    9263.    9361.    9377.    9473.    9688.    9819.    9861.    9936.   10044.   10259.   10280.   10328.   10387.
 PER Q=    24.4      5.9      3.5      5.0      4.2      5.6      2.0     34.6      3.8      3.8      5.9      1.1
  AREA=   185.0     38.8     84.1    145.5    111.1     93.5     63.6    254.8     28.3     49.6     90.0     31.7
   VEL=     8.9     10.3      2.8      2.3      2.6      4.0      2.1      9.1      2.6      5.2      4.4      2.4

1490 NH CARD USED
SECNO 1.820
185 MINIMUM SPECIFIC ENERGY
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST


3720 CRITICAL DEPTH ASSUMED
     1.82     2.60  2121.60  2121.60     0.00  2122.29     0.69     5.91     0.01  2120.00
    6725.    2592.    2912.    1221.     580.     337.     249.     246.     127.  2120.00
     0.34     4.47     8.65     4.91    0.035    0.025    0.035    0.000  2119.00  9435.74
 0.007855     715.     695.     650.        4       15        0     0.00   819.36 10255.10


FLOW DISTRIBUTION FOR SECNO=      1.82          CWSEL=   2121.60

STA=    9436.    9570.    9645.    9670.    9700.    9740.    9815.    9920.   10080.   10215.   10255.
  PER Q=     5.0      5.4      3.5      3.9      6.0      6.1      8.6     43.3     16.6      1.6
   AREA=   116.7    102.8     35.1     40.6     39.2     94.0    131.7    336.6    216.5     32.2
    VEL=     2.9      3.5      6.7      6.4      6.9      4.4      4.4      8.6      5.2      3.2

CCHV=   0.100 CEHV=   0.300
*SECNO 1.870

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.87     3.26  2125.26  2125.26     0.00  2126.10     0.84     2.21     0.05  2124.20
    6725.    1144.    5057.     525.     323.     606.     205.     255.     133.  2122.00
     0.35     2.91     8.35     2.56    0.050    0.025    0.055    0.000  2122.00  9476.33
 0.006447     330.     305.     305.        4       11        0     0.00   784.26 10281.43


FLOW DISTRIBUTION FOR SECNO=      1.87          CWSEL=   2125.26

STA=    9476.    9520.    9579.    9636.    9683.    9809.   10071.   10229.   10281.
  PER Q=     3.9      3.4      3.5      3.1      3.2     75.2      6.0      1.8
   AREA=    74.6     78.0     78.3     68.5     93.9    605.9    155.9     49.1
    VEL=     3.5      2.9      3.0      3.1      2.3      8.3      2.6      2.5

*SECNO 1.970
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.97     2.76  2129.36  2129.36     0.00  2130.20     0.84     3.08     0.00  2126.80
    6725.    1697.    3017.      11.     594.     599.       5.     268.     141.  2127.10
     0.37     2.85     8.37     2.14    0.050    0.025    0.055    0.000  2126.60  9403.81
 0.006090     480.     495.     500.        3       15        0     0.00   726.93 10130.74
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       HLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

FLOW DISTRIBUTION FOR SECNO=      1.97          CWSEL=   2129.36

STA=    9404.    9455.    9499.    9549.    9609.    9664.    9761.    9879.   10126.   10131.
 PER Q=     3.7      3.2      3.3      4.5      3.2      4.0      3.2     74.6      0.2
 AREA=     79.0     69.0     73.8     96.2     74.8    107.4     94.2    599.2      5.4
  VEL=      3.2      3.1      3.0      3.2      2.9      2.5      2.3      8.4      2.1

490 NH CARD USED
SECNO 2.060

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.06     2.71  2133.91  2133.91     0.00  2134.70     0.79     3.17     0.00  2133.70
   5784.     741.    3646.    1396.     290.     420.     424.     282.     150.  2131.20
    0.39     2.56     8.68     3.29    0.050    0.025    0.055    0.000  2131.20  9482.92
0.006787     470.     500.     515.       10        5        0     0.00   775.98 10375.13

FLOW DISTRIBUTION FOR SECNO=      2.06          CWSEL=   2133.91

STA=    9483.    9617.    9679.    9732.    9905.   10083.   10137.   10304.   10375.
 PER Q=     3.5      5.2      3.1      1.0     63.0      4.6     18.9      0.7
 AREA=     97.3     92.5     62.9     36.8    420.3     86.2    318.8     18.9
  VEL=      2.1      3.3      2.8      1.6      8.7      3.1      3.4      2.1
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THIS RUN EXECUTED MON, JUN 01 1987 16:25:43

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 50 YEAR PROFILE - R1

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.004000	0.00	0.0	0.	2039.000	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	15.000

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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
          VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

*PROF 2

CEHV=   0.100 CEHV=   0.300
1490 NH CARD USED
SECNO 0.030
          RIVER MILE 0.0 - PROFILE BASE LINE FOR HASSAYAMPA
    0.03     7.47  2039.77     0.00  2039.00  2040.21     0.43     0.00     0.00  2038.10
  12453.     846.    4262.    7345.     515.     605.    1726.       0.       0.   2036.20
    0.00     1.64     7.04     4.26    0.063    0.025    0.063    0.000  2032.30  9559.72
 0.003998       0.       0.       0.        0        0        5     0.00  1141.94 10701.67

FLOW DISTRIBUTION FOR SECNO=      0.03          CWSEL=   2039.77

TA=    9560.   10000.   10104.   10340.   10440.   10571.   10693.   10682.   10702.
 PER Q=      4.1      2.7     34.2      9.7     17.1      4.5     25.7      2.0
  AREA=    346.3    168.9    605.3    357.4    559.9    123.7    611.8     73.5
   VEL=      1.5      2.0      7.0      3.4      3.8      4.6      5.2      3.3

1490 NH CARD USED
SEC  .130

3501 HV CHANGED MORE THAN HVINS

485 20 TRIALS ATTEMPTED WSEL,CWSEL
493 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.13     6.64  2046.64  2046.64     0.00  2048.18     1.54     2.31     0.33  2040.00
  12453.    5928.    6525.       0.    2715.     480.       0.      36.      14.   2046.40
    0.02     2.18    13.58     0.39    0.098    0.025    0.065    0.000  2040.00  8839.15
 0.004948     500.     505.     560.       20       15        0     0.00  1208.90 10048.05

FLOW DISTRIBUTION FOR SECNO=      0.13          CWSEL=   2046.64

TA=    8839.    9459.    9587.    9635.    9692.    9748.    9813.    9869.    9928.    9963.   10044.   10048.
 PER Q=      3.1      5.8      3.3      4.3      4.7      7.6      5.5      6.1      7.0     52.4      0.0
  AREA=   1152.5    272.5    131.7    164.9    172.0    243.3    190.0    206.1    181.8    480.5      0.5
   VEL=      0.3      2.7      3.2      3.3      3.4      3.9      3.6      3.7      4.8     13.6      0.4

1490 NH CARD USED
SECNO 0.220
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA   LEFT/RIGHT
            VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3280 CROSS SECTION      0.22 EXTENDED      1.73 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSFL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.22     9.23  2052.23  2052.23     0.00  2054.07     1.80     2.21     0.09  2051.00
   12453.    1487.   10527.     439.     716.     900.      50.      62.      23.  2043.00
     0.03     2.08    11.69     8.81    0.065    0.031    0.025    0.000  2043.00  9433.00
 0.004125     465.     500.     315.       20       11        0     0.00   596.79 10029.79


FLOW DISTRIBUTION FOR SECNO=      0.22          CWSEL=   2052.23

STA=    9433.    9508.    9669.    9899.   10019.   10030.
  PER Q=      3.7      5.3      3.0     84.5      3.5
   AREA=    177.4    297.3    241.3    900.3     49.8
    VEL=      2.6      2.2      1.5     11.7      8.8

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SEC[illegible].360
3280 CROSS SECTION      0.36 EXTENDED      2.33 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.36     9.13  2057.53  2057.53     0.00  2059.55     2.03     2.48     0.09  2049.20
   12453.    2626.    8809.    1019.     793.     669.     124.      89.      33.  2049.40
     0.05     3.31    13.16     8.25    0.040    0.025    0.025    0.000  2048.40  9433.00
 0.002746     613.     770.     785.        3        5        0     0.00   648.46 10081.46


FLOW DISTRIBUTION FOR SECNO=      0.36          CWSFL=   2057.53

STA=    9433.    9866.    9942.    9969.   10046.   10061.   10081.
  PER Q=      3.4      3.3     14.3     70.7      6.9      1.3
   AREA=    529.8     93.6    169.5    669.2     87.4     36.1
    VEL=      0.8      4.4     10.5     13.2      9.8      4.5

*SECNO 0.400

3301 HV CHANGED MORE THAN HVINS

          U.S. HIGHWAY 89 BRIDGE CROSSING
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROR     VOL      TWA   LEFT/RIGHT
          VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST

   0.40     7.17  2057.77     0.00     0.00  2060.50     2.73     0.59     0.35  2051.80
 12453.     108.  12156.     189.      37.     906.      57.      94.      35.  2050.60
   0.05     2.90    13.42     3.30    0.065    0.023    0.065    0.000  2050.60  9790.91
0.004283    250.     170.     105.        2        0        0     0.00   169.85  9960.76

FLOW DISTRIBUTION FOR SECNO=      0.40          CWSEL=   2057.77

STA=    9791.    9803.    9945.    9961.
 PER Q=      0.9     97.6      1.5
 AREA=      37.2    905.9     57.4
  VEL=       2.9     13.4      3.3

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5827 DOWNSTREAM ELEV IS   2055.36 ,NOT   2057.77 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    [illegible]0     1.56      2.63      0.00    157.00     10.00   1720.00      0.00   2050.60   2050.60

*SECNO 0.420
CLASS B LOW FLOW

0.420 BRIDGE W.S.=   2056.66 BRIDGE VELOCITY=,     13.97     CALCULATED CHANNEL AREA=,      891.

EGPRS     EGLWC      H3       QWEIR     QLOW      BAREA   TRAPEZOID     ELLC      ELTRD
                                                           AREA
    0.00  2060.79     0.00        0.   12453.     1720.     1632.     2061.70   2065.00

   0.42     6.93  2058.33     0.00     0.00  2060.79     2.47     0.29     0.00  2052.30
 12453.     157.  12048.     248.      52.     941.      74.      97.      35.  2051.40
   0.06     3.05    12.80     3.36    0.065    0.025    0.065    0.000  2051.40  9767.91
0.004410    135.     135.     135.        0        0        0     0.00   199.63  9967.54

FLOW DISTRIBUTION FOR SECNO=      0.42          CWSEL=   2058.33

STA=    9768.    9785.    9946.    9968.
 PER Q=      1.3     96.7      2.0
 AREA=      51.6    941.4     73.8
  VEL=       3.0     12.8      3.4
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   [illegible]  VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 0.470

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.47     7.77  2061.17  2061.17     0.00  2062.72     1.55     0.90     0.27  2062.30
   12453.       0.     8707.     3746.       0.     736.     1443.     106.      38.   2059.90
     0.06     0.00    11.83     2.60    0.000    0.025    0.065    0.000  2053.40  9924.05
 0.003388     190.     230.     260.       20        8        0     0.00   790.51 10714.56


FLOW DISTRIBUTION FOR SECNO=      0.47          CWSEL=   2061.17

STA=    9924.   10038.   10268.   10325.   10363.   10470.   10536.   10664.   10715.
  PER Q=     69.9      3.2      6.6      6.6      6.8      3.1      3.3      0.6
   AREA=    736.2    269.7    237.7    201.2    312.4    159.7    209.8     52.2
    VEL=     11.8      1.5      3.4      4.1      2.7      2.4      1.9      1.4

CCHV=   0.100 CEHV=   0.300
*SECNO 0.500
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.50     7.64  2063.14  2063.14     0.00  2064.64     1.50     0.66     0.00  2062.20
   12433.     258.     9137.     3039.     232.     801.     1261.     117.      43.   2055.50
     0.07     1.11    11.40     2.42    0.065    0.025    0.065    0.000  2055.50  9622.60
 0.003008     200.     200.     220.       20        5        0     0.00  1041.82 10664.42


FLOW DISTRIBUTION FOR SECNO=      0.50          CWSEL=   2063.14

STA=    9623.    9919.   10041.   10058.   10114.   10373.   10426.   10457.   10530.   10634.   10664.
  PER Q=      2.1     73.4      3.2      3.4      3.7      3.4      3.8      3.3      3.4      0.4
   AREA=    232.4    801.4     99.3    138.7    282.4    161.1    139.6    177.0    209.6     33.7
    VEL=      1.1     11.4      4.0      2.6      1.6      2.6      3.4      2.3      2.0      1.4

1490 NH CARD USED
*SECNO 0.600

3265 DIVIDED FLOW
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
 [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 [illegible]  VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          CONFLUENCE OF BRAIDED CHANNELS
    0.60     7.47  2067.17  2067.17     0.00  2068.62     1.45     1.47     0.01  2065.80
  11964.    1088.    9829.    1048.    1917.     925.     527.     150.      59.  2066.40
    0.09     0.57    10.63     1.99    0.225    0.025    0.065    0.000  2059.70  8853.42
0.002791     515.     505.     303.       20        8        0     0.00  1669.20 10544.34

FLOW DISTRIBUTION FOR SECNO=      0.60          CWSEL=   2067.17

STA=    8853.    9503.    9615.    9928.   10075.   10476.   10532.   10544.
 PER Q=     3.7      3.2      2.1     82.2      4.4      3.9      0.4
 AREA=   1473.2    205.5    236.6    924.9    325.1    176.4     25.1
  VEL=      0.3      1.9      1.1     10.6      1.6      2.7      1.9

3490 NH CARD USED
*SECNO 0.690

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.69     5.93  2070.13  2070.13     0.00  2071.67     1.54     1.85     0.03  2064.50
  11927.    4262.    5923.    1742.     959.     440.     489.     181.      74.  2065.80
    0.10     4.44    13.47     3.57    0.045    0.025    0.065    0.000  2064.20  8993.50
0.003039     493.     510.     190.       20       12        0     0.00   984.39 10275.87

FLOW DISTRIBUTION FOR SECNO=      0.69          CWSEL=   2070.13

STA=    8993.    9509.    9720.    9745.    9758.    9973.   10050.   10071.   10100.   10135.   10276.
 PER Q=     5.6      3.2     13.9      7.8      5.2     49.7      4.2      3.1      4.4      2.7
 AREA=   438.6    128.9    130.7     71.2    189.5    439.7    108.4     98.9    133.5    147.7
  VEL=      1.5      3.0     12.7     13.1      3.2     13.5      4.8      3.7      3.9      2.2

3490 NH CARD USED
*SECNO 0.790

3265 DIVIDED FLOW
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
            VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.79     6.46  2074.16  2074.16     0.00  2075.81     1.65     2.61     0.03  2068.90
   11927.     5960.    5712.     256.     970.     426.      32.     199.      82.  2068.90
     0.12     6.14    13.40     7.97    0.041    0.025    0.025    0.000  2067.70  9044.33
 0.003550     485.     300.     495.        3        8        0     0.00   565.49 10052.19


FLOW DISTRIBUTION FOR SECNO=      0.79          CWSEL=   2074.16

STA=    9044.    9088.    9126.    9357.    9385.    9666.    9940.    9959.   10040.   10052.
  PER Q=     5.0      3.8      9.2     21.8      3.2      3.5      3.4     47.9      2.1
   AREA=   148.5    122.1    165.1    173.9    117.0    156.9     86.7    426.3     32.1
    VEL=     4.0      3.7      6.6     15.0      3.3      2.7      4.7     13.4      8.0

1490 NH CARD USED
*SECNO 0.900

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

     0.90     7.39  2078.49     0.00     0.00  2079.17     0.68     3.26     0.10  2077.70
   11927.     8201.    3726.       0.    1379.     476.       0.     220.      93.  2078.00
     0.14     5.95     7.83     0.70    0.041    0.042    0.065    0.000  2071.10  8738.04
 0.006330     540.     565.     575.        4        0        0     0.00  1164.24 10061.96


FLOW DISTRIBUTION FOR SECNO=      0.90          CWSEL=   2078.49

STA=    8738.    8816.    8849.    9029.    9474.    9500.    9520.    9540.    9828.    9958.   10060.   10062.
  PER Q=     4.2      5.7      3.7      4.2     19.2     22.2      4.5      3.1      2.0     31.2      0.0
   AREA=   144.5    141.0    214.7    198.8    130.6    147.8    101.8    173.3    106.7    475.6      0.5
    VEL=     3.5      4.8      2.1      2.5     15.2     17.9      5.3      2.1      2.2      7.8      0.7

1490 NH CARD USED
*SECNO 1.000

3265 DIVIDED FLOW
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 T...     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


01 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
    1.00     6.87  2083.47  2083.47     0.00  2084.76     1.29     3.10     0.18  2078.90
  11927.    5635.    6253.      18.    1357.     524.      11.     244.     110.   2082.10
    0.16     4.17    11.92     1.61    0.048    0.025    0.065    0.000  2076.60  8383.67
0.004801     570.     560.     565.       20       11        0     0.00  1445.20 10062.09


OW DISTRIBUTION FOR SECNO=      1.00          CWSFL=   2083.47

A=    8384.    9214.    9274.    9302.    9314.    9340.    9916.    9944.   10050.   10062.
PER Q=      3.2      6.8     24.0      3.0      4.5      3.4      2.6     52.4      0.2
  AREA=    441.6    187.3    192.4     70.4    121.4    253.9     90.2    524.4     11.4
   VEL=      0.9      4.3     14.9      5.1      4.4      1.6      3.4     11.9      1.6

1490 NH CARD USED
*SEC  .120
85 MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
    1.12     5.80  2088.00  2088.00     0.00  2089.31     1.31     2.83     0.01  2083.40
  11927.    4967.    6339.     621.     820.     537.     245.     269.     127.   2084.90
    0.18     6.06    11.38     2.54    0.033    0.025    0.060    0.000  2082.20  9315.83
0.004370     615.     620.     630.        2       15        0     0.00   877.71 10193.54


FLOW DISTRIBUTION FOR SECNO=      1.12          CWSFL=   2088.00

A=    9316.    9392.    9437.    9926.    9949.   10062.   10157.   10194.
PER Q=     32.7      4.2      3.2      1.6     53.1      3.5      1.7
  AREA=    356.1    141.9    260.8     61.0    537.1    168.8     75.8
   VEL=     11.0      3.5      1.4      3.1     11.4      2.5      2.7

1490 NH CARD USED
SECNO 1.300

3265 DIVIDED FLOW

85 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL.      TWA     LEFT/RIGHT
   V         VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3720 CRITICAL DEPTH ASSUMED
     1.30      5.18  2096.48  2096.48      0.00  2097.70      1.22      4.83      0.01  2096.90
    11927.     3164.     5734.     3029.      380.      535.      678.      303.      143.   2095.30
     0.21      8.34     10.71      4.47     0.032     0.025     0.050     0.000  2091.30  9237.29
 0.006312      935.      935.      885.        20        11         0      0.00   667.06 10378.64


FLOW DISTRIBUTION FOR SECNO=      1.30          CWSEL=   2096.48

STA=    9237.    9303.    9322.    9395.   10079.   10161.   10228.   10268.   10311.   10379.
  PER Q=     21.3      3.7      1.5     48.1      3.9      4.1      5.4      8.7      3.4
   AREA=    232.8     70.8     76.1    535.4    134.0    131.0    127.0    173.1    113.1
    VEL=     10.9      6.3      2.4     10.7      3.4      3.7      5.1      6.0      3.5

1490 NH CARD USED
*SECNO 1.400

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.40      5.50  2100.80  2100.80      0.00  2101.74      0.94      3.00      0.03  2100.50
    11927.     4366.     6382.     2179.      652.      563.      556.      321.      153.   2098.00
     0.23      6.69      9.56      3.92     0.030     0.025     0.050     0.000  2095.30  9122.18
 0.006051      500.      500.      435.         4         8         0      0.00  1118.90 10378.13


FLOW DISTRIBUTION FOR SECNO=      1.40          CWSEL=   2100.80

STA=    9122.    9151.    9168.    9219.    9277.    9902.   10091.   10147.   10190.   10288.   10340.   10378.
  PER Q=      6.5     10.9      6.5      9.6      3.1     45.1      4.4      3.0      3.6      6.2      1.0
   AREA=     84.8     91.8    134.6    138.4    202.7    562.8    129.2     91.1    144.0    154.0     37.5
    VEL=      9.1     14.2      5.8      8.3      1.8      9.6      4.1      4.0      3.0      4.8      3.0

1490 NH CARD USED
*SECNO 1.490

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.49      4.11  2105.61  2105.61      0.00  2106.50      0.89      3.17      0.00  2103.40
    11927.     5428.     4347.     2152.      952.      412.      647.      343.      166.   2103.70
     0.25      5.70     10.54      3.33     0.035     0.025     0.050     0.000  2101.50  9017.36
 0.006689      500.      500.      490.        11        19         0      0.00  1215.91 10488.57
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
          VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

FLOW DISTRIBUTION FOR SECNO=      1.49          CWSEL=   2105.61

STA=    9017.    9097.    9621.    9736.    9762.    9820.    9891.    9930.   10059.   10159.   10247.   10359.   10464.
 PER Q=     22.7      3.1      3.0      8.0      3.3      3.2      2.1     36.4      4.9      3.8      3.6      4.4
 AREA=    257.6    171.6    136.6     97.1    104.3    114.3     70.7    412.3    168.6    136.6    140.2    157.6
  VEL=     10.5      2.2      2.6      9.9      3.7      3.3      3.6     10.5      3.4      3.3      3.1      3.3
STA=   10464.   10489.
 PER Q=      1.4
 AREA=     44.1
  VEL=      3.7

1490 NH CARD USED
*SECNO 1.590
7185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    1.59     3.55  2110.75  2110.75     0.00  2111.67     0.91     3.41     0.03  2107.20
   11927.    7774.    3725.     428.    1367.     320.     152.     366.     180.  2107.20
    0.27     4.96    11.64     2.82    0.042    0.025    0.050    0.000  2107.20  9038.30
0.007075     490.     490.     540.        9       15        0     0.00  1142.80 10181.10

LOW DISTRIBUTION FOR SECNO=      1.59          CWSEL=   2110.75

STA=    9038.    9085.    9220.    9425.    9561.    9625.    9663.    9714.    9736.    9788.    9811.    9849.    9929.
 PER Q=      3.4     22.8      3.3      4.0      3.8      3.4      3.2      4.5      5.2      3.1      4.2      3.4
 AREA=    107.2    314.6    147.5    166.0    118.7     92.2     96.5    103.6     96.1     61.0     89.6    141.5
  VEL=      3.8      8.6      2.7      2.9      3.8      4.4      3.9      5.2      6.5      6.0      5.5      2.9
STA=    9929.    9943.   10033.   10158.   10181.
 PER Q=      0.9     31.2      3.4      0.2
 AREA=     33.0    319.9    137.8     14.2
  VEL=      3.4     11.6      2.9      2.0

1490 NH CARD USED
*SECNO 1.680
185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    1.68     3.84  2115.64  2115.64     0.00  2116.52     0.88     4.06     0.00  2114.10
   11927.    6202.    3735.    1990.    1144.     336.     482.     389.     193.  2113.00
    0.29     5.42    11.13     4.13    0.041    0.025    0.051    0.000  2111.80  9244.66
0.009700     495.     490.     490.        5        8        0     0.00  1188.28 10432.94
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   T        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      1.68         CWSEL=   2115.64

STA=    9245.    9361.    9377.    9475.    9578.    9688.    9753.    9828.    9861.    9936.   10064.   10226.   10267.
  PER Q=     20.4      5.0      4.7      3.0      5.2      3.3      3.7      4.0      2.7     31.3      4.0      4.0
   AREA=   251.0     48.6    144.8    114.2    162.5    100.0    112.7    100.3    109.8    335.6    158.4     88.6
    VEL=     9.7     12.3      3.9      3.1      3.8      3.9      3.9      4.7      3.0     11.1      3.0      5.4
STA=   10267.   10302.   10328.   10433.
  PER Q=      3.4      3.5      1.8
   AREA=     80.1     72.5     82.1
    VEL=      5.1      5.8      2.5

1490 NH CARD USED
*SECNO 1.820
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.82     3.25  2122.25  2122.25     0.00  2123.21     0.97     6.10     0.02  2120.00
   11927.    5122.    4561.    2241.     903.     439.     366.     418.     209.  2120.00
     0.31     5.67    10.39     6.13    0.035    0.025    0.035    0.000  2119.00  9406.31
 0.007942     715.     695.     650.        3       15        0     0.00   860.54 10266.85


FLOW DISTRIBUTION FOR SECNO=      1.82         CWSEL=   2122.25

STA=    9406.    9570.    9645.    9670.    9700.    9740.    9813.    9920.   10080.   10215.   10267.
  PER Q=      6.6      5.6      3.7      4.2      6.2      6.9      9.7     38.3     16.5      2.3
   AREA=    214.8    151.0     51.2     59.9     84.8    142.2    199.1    439.4    303.2     62.5
    VEL=      3.7      4.4      8.6      8.4      8.8      5.8      5.8     10.4      6.5      4.4

CCHV=   0.100 CEHV=   0.300
*SECNO 1.870
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.87     4.06  2126.06  2126.06     0.00  2127.19     1.13     2.20     0.05  2124.20
   11927.    2513.    8173.    1239.     659.     815.     384.     431.     215.  2122.00
     0.32     3.81    10.03     3.23    0.050    0.025    0.055    0.000  2122.00  9474.32
 0.006265     330.     305.     305.       20       11        0     0.00   833.95 10308.27


FLOW DISTRIBUTION FOR SECNO=      1.87         CWSEL=   2126.06

STA=    9474.    9520.    9570.    9626.    9683.    9739.    9809.   10071.   10229.   10308.
  PER Q=      4.0      3.4      3.9      4.5      3.4      1.9     68.5      7.8      2.6
   AREA=    110.2    104.9    119.6    130.6    109.6     84.3    815.2    281.3    102.5
    VEL=      4.3      3.9      3.9      4.1      3.7      2.7     10.0      3.3      3.0
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 T...     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


XSECNO 1.970
185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.97     3.54  2130.14  2130.14     0.00  2131.34     1.19     3.09     0.02  2126.80
   11927.    3750.    8151.      26.     968.     793.      10.     452.     224.  2127.10
    0.34     3.87    10.28     2.65    0.050    0.025    0.055    0.000  2126.60  9401.19
0.006317     480.     495.     500.        3       15        0     0.00   731.20 10132.39


FLOW DISTRIBUTION FOR SECNO=      1.97          CWSEL=   2130.14

TA=    9401.    9446.    9487.    9533.    9571.    9609.    9664.    9761.    9861.    9879.   10126.   10132.
 PER Q=     3.3      3.6      3.3      3.4      3.2      3.9      5.6      3.5      1.7     68.3      0.2
  AREA=    96.4    100.1     99.2     93.4     90.9    118.0    183.5    141.1     45.8    793.0      9.7
   VEL=     4.1      4.3      3.9      4.3      4.2      3.9      3.6      3.0      4.4     10.3      2.7

1490 NH CARD USED
SECNO 2.060

3265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.06     3.52  2134.72  2134.72     0.00  2135.71     1.00     3.14     0.02  2133.70
   10433.    2055.    5783.    2595.     627.     565.     660.     472.     233.  2131.20
    0.36     3.28    10.24     3.93    0.050    0.025    0.055    0.000  2131.20  9410.37
0.006380     470.     500.     515.        2        5        0     0.00   946.87 10382.62


FLOW DISTRIBUTION FOR SECNO=      2.06          CWSEL=   2134.72

TA=    9410.    9560.    9617.    9656.    9687.    9780.    9905.   10083.   10117.   10304.   10383.
 PER Q=     3.2      3.4      3.0      3.6      4.9      1.6     55.4      3.0     20.1      1.7
  AREA=   121.3    100.9     81.4     83.2    152.3     88.4    564.6     81.6    502.6     76.3
   VEL=     2.7      3.5      3.9      4.6      3.3      1.9     10.2      3.9      4.2      2.4
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THIS RUN EXECUTED MON, JUN 01 1987 16:26:17

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*****************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH
T2 REACH 1
T3 100 YEAR PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.004000	0.00	0.0	0.	2040.140	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLOC	IRW	CHNIM	ITRACE
	3.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 V        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELHIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

*PROF 3

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 0.030
          RIVER MILE 0.0 - PROFILE BASE LINE FOR HASSAYAMPA
    0.03     7.84  2040.14     0.00  2040.14  2040.65     0.51     0.00     0.00  2038.10
  15045.    1369.    5362.    8314.     737.     692.    1859.       0.       0.  2036.20
    0.00     1.86     7.75     4.47    0.065    0.025    0.065    0.000  2032.30  9459.81
 0.004054      0.       0.       0.        0        0        0     0.00  1242.82 10702.63

1490 NH CARD USED
*SECNO 0.130

3501 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    [illegible]     7.07  2047.07  2047.07     0.00  2048.77     1.70     2.38     0.36  2040.00
  15[illegible].    7514.    7528.       3.    3211.     515.       4.      42.      15.  2046.40
    0.02     2.34    14.62     0.79    0.100    0.025    0.065    0.000  2040.00  8738.13
 0.005236     500.     505.     560.       20       11        0     0.00  1316.96 10055.10

1490 NH CARD USED
*SECNO 0.220
3280 CROSS SECTION      0.22 EXTENDED      2.31 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.22     9.81  2052.81  2052.81     0.00  2054.77     1.96     2.31     0.08  2051.00
  15045.    2510.   12008.     527.     986.     770.      56.      73.      25.  2043.00
    0.03     2.55    12.38     9.37    0.065    0.032    0.025    0.000  2043.00  9433.00
 0.004298     465.     500.     515.       20       18        0     0.00   597.46 10030.46

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 0.360
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   [illegible]  VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3280 CROSS SECTION      0.36 EXTENDED      3.02 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSFL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.36     9.82  2058.22  2058.22     0.00  2060.31     2.09     2.49     0.06  2049.20
   15045.     3799.    9958.    1288.    1165.     723.     150.     105.      35.  2049.40
     0.05     3.26    13.78     8.61    0.046    0.025    0.025    0.000  2048.40  9433.00
 0.002716     615.     770.     785.       20        5        0     0.00   652.48 10085.48


*SECNO 0.400

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          U.S. HIGHWAY 89 BRIDGE CROSSING
     0.40     7.72  2058.32  2058.32     0.00  2061.69     3.37     0.62     0.64  2051.80
   15045.     143.   14657.     245.      44.     983.      66.     112.      37.  2050.60
     [illegible]5     3.23    14.92     3.68    0.065    0.025    0.065    0.000  2050.60  9789.78
 0.004747     250.     170.     105.        3       15        0     0.00   172.27  9962.04


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2056.00 ,NOT   2058.32 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDIER    BWC      BWP      BARFA    SS       ELCHU    ELCHD
    0.90     1.56     2.63     0.00   137.00    10.00  1720.00     0.00  2050.60  2050.60

*SECNO 0.420

3301 HV CHANGED MORE THAN HVINS

CLASS B LOW FLOW

3420 BRIDGE W.S.=   2057.48 BRIDGE VELOCITY=,     14.88     CALCULATED CHANNEL AREA=,     1011.
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 T        VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELKIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


GPRS      EGLWC      H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC     ELTRD
                                                            AREA
 2060.17   2061.93     0.00        0.    15045.     1720.     1632.     2061.70   2065.00


   0.42     7.97  2059.37     0.00     0.00  2061.93     2.56     0.24     0.00  2052.30
 15045.      220.  14495.      330.      71.     1109.      98.      116.      37.  2051.40
   0.06     3.10    13.07     3.38    0.065    0.025    0.065    0.000  2051.40  9764.97
 0.003700    135.     135.     135.        0        0        0     0.00   205.77  9970.74


ECNO 0.470

01 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   0.47     8.23  2061.63  2061.63     0.00  2063.32     1.69     0.86     0.26  2062.30
 1          0.     9974.    5071.       0.     789.     1752.     126.      40.  2059.90
   0.06     0.00    12.65     2.89    0.000    0.025    0.065    0.000  2053.40  9922.82
 0.003589    190.     230.     260.       20        8        0     0.00   793.27 10716.09


HV=   0.100 CEHV=   0.300
*SECNO 0.500
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   0.50     8.12  2063.62  2063.62     0.00  2065.20     1.58     0.68     0.01  2062.20
 15045.      563.  10354.    4128.      377.     860.     1561.     139.      45.  2055.50
   0.07     1.49    12.04     2.65    0.065    0.025    0.065    0.000  2055.50  9610.46
 0.003055    200.     200.     220.       20        5        0     0.00  1054.68 10665.14


1490 NH CARD USED
SECNO 0.600

3265 DIVIDED FLOW

85 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
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   SECNO     DEPTH     CWSEL     CRTWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TWL       VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       STA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3720 CRITICAL DEPTH ASSUMED
          CONFLUENCE OF BRAIDED CHANNELS
     0.60      7.98  2067.68  2067.68      0.00  2069.17      1.48      1.47      0.01  2065.80
   14459.      1764.    11114.    1581.    2467.     1000.     760.      180.      61.   2066.40
     0.08      0.71     11.11     2.08    0.201     0.025    0.065     0.000  2059.70  8850.63
 0.002751      513.      505.     503.       20         8        0      0.00  1688.82 10545.89


1490 NH CARD USED
*SECNO 0.690

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.69      6.54  2070.74  2070.74      0.00  2072.24      1.49      1.77      0.00  2064.50
   14413.      5415.     6727.    2271.    1481.      487.     624.      219.      77.   2065.80
     0.10      3.66     13.81     3.64    0.053     0.025    0.065     0.000  2064.20  8985.72
 0.004625      493.      510.     490.       20        12        0      0.00  1257.71 10279.65


1490 NH CARD USED
*SECNO 0.790

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.79      7.19  2074.89  2074.89      0.00  2076.36      1.48      2.28      0.00  2068.90
   14413.      7613.     6470.     330.    1493.      485.      41.      245.      90.   2068.90
     0.12      5.10     13.35     7.94    0.043     0.025    0.025     0.000  2067.70  9038.59
 0.004638      485.      300.     493.       20         8        0      0.00   961.78 10053.87


1490 NH CARD USED
*SECNO 0.900

3301 HV CHANGED MORE THAN HVINS

     0.90      7.72  2078.82     0.00      0.00  2079.52      0.70      3.08      0.08  2077.70
   14413.     10053.     4359.       1.    1752.      508.       1.      272.     104.   2078.00
     0.14      5.74      8.58     1.02    0.043     0.042    0.065     0.000  2071.10  8728.08
 0.006895      540.      365.     575.        4         0        0      0.00  1335.16 10063.24
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 T...     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
SECNO 1.000

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.00     7.36  2083.96  2083.96     0.00  2085.23     1.27     3.14     0.17  2078.90
  14413.    7254.    7124.      34.    2057.     576.      18.     304.     124.   2082.10
    0.16     3.53    12.36     1.94    0.053    0.025    0.065    0.000  2076.60  8356.32
 0.004554     570.     560.     565.        7       11        0     0.00  1644.25 10063.83


1490 NH CARD USED
SECNO 1.120
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.12     6.18  2088.38  2088.38     0.00  2089.82     1.44     2.84     0.05  2083.40
  14413.    6172.    7381.     860.    1038.     600.     294.     337.     141.   2084.90
    0.18     5.84    12.31     2.92    0.035    0.025    0.060    0.000  2082.20  9314.62
 0.004640     615.     620.     630.       20       15        0     0.00   880.02 10194.64


1490 NH CARD USED
SECNO 1.300

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    1.30     5.74  2097.04  2097.04     0.00  2098.14     1.10     4.58     0.03  2096.90
  14413.    3797.    6733.    3083.     602.     624.     850.     379.     162.   2095.30
    0.21     6.31    10.80     4.57    0.034    0.025    0.050    0.000  2091.30  9231.88
 0.005269     935.     935.     885.       20       10        0     0.00  1049.55 10388.79


1490 NH CARD USED
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
             QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TAME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


*SECNO 1.400

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.40      5.77   2101.07   2101.07      0.00   2102.09      1.02      2.79      0.01   2100.50
   14413.      5341.     6358.     2714.     840.      614.      636.      402.      174.   2098.00
     0.23      6.35     10.35      4.27     0.032     0.025     0.050     0.000   2095.30   9120.90
 0.006302     500.      500.      433.        3         5         0      0.00   1210.40  10399.78


1490 NH CARD USED
*SECNO 1.490

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.49      4.42   2105.92   2105.92      0.00   2106.83      0.91      3.17      0.01   2103.40
   [illegible]  6590.     4976.     2847.    1178.      453.      781.      428.      189.   2103.70
     0.25      5.59     11.00      3.64     0.036     0.025     0.050     0.000   2101.50   9016.41
 0.006427     500.      500.      490.        7        16         0      0.00   1357.82  10489.69


1490 NH CARD USED
*SECNO 1.590
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.59      3.82   2111.02   2111.02      0.00   2112.02      1.00      3.40      0.03   2107.20
   14413.      9534.     4264.     615.     1805.      343.      193.      433.      204.   2107.20
     0.27      5.28     12.41      3.19     0.042     0.025     0.050     0.000   2107.20   9037.46
 0.007314     490.      490.      540.       10        15         0      0.00   1158.63  10196.09


1490 NH CARD USED
*SECNO 1.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.68      4.09   2115.89   2115.89      0.00   2116.87      0.98      4.14      0.00   2114.10
   14413.      7540.     4358.     2513.    1317.      367.      576.      481.      217.   2113.00
     0.29      5.73     11.86      4.37     0.042     0.025     0.051     0.000   2111.80   9237.07
 0.009760     495.      490.      490.        3         8         0      0.00   1214.54  10451.61
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```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA    LEFT/RIGHT
 T...     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
ECNO 1.820
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   1.82     3.50  2122.50  2122.50     0.00  2123.59     1.09     6.16     0.03  2120.00
 14413.    6352.    3321.    2741.    1033.     480.     413.     515.     234.  2120.00
   0.31     6.15    11.09     6.63    0.036    0.025    0.035    0.000  2119.00  9402.52
.008052     715.     695.     650.        3       15        0     0.00   866.22 10268.74


CCHV=   0.100 CEHV=   0.300
ECNO 1.870
685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   1.87     4.36  2126.36  2126.36     0.00  2127.63     1.27     2.23     0.05  2124.20
 14413.    3189.    9604.    1620.     762.     896.     458.     329.     240.  2122.00
   0.32     4.18    10.72     3.54    0.050    0.025    0.055    0.000  2127.00  9473.54
.006314     330.     305.     305.       20       11        0     0.00   841.18 10314.73


ECN .970
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   1.97     3.86  2130.46  2130.46     0.00  2131.81     1.35     3.12     0.02  2126.80
 14413.    4781.    9598.      34.    1121.     872.      12.     552.     249.  2127.10
   0.34     4.26    11.01     2.85    0.050    0.025    0.055    0.000  2126.60  9400.13
.006385     480.     475.     500.        3       15        0     0.00   732.93 10133.06


1490 NH CARD USED
ECNO 2.060
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   2.06     3.85  2135.05  2135.05     0.00  2136.16     1.11     3.16     0.02  2133.70
 12945.    2859.    6853.    3233.     789.     624.     761.     576.     258.  2131.20
   0.35     3.62    10.98     4.25    0.050    0.025    0.055    0.000  2131.20  9408.69
.006417     470.     500.     515.        7        5        0     0.00   975.14 10383.83
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THIS RUN EXECUTED MON, JUN 01 1987 16:26:51

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*************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*************************************************
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T1 SOLS WASH
T2 REACH 1
T3 500 YEAR PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	5.	0.	0.	0.004000	0.00	0.0	0.	2041.000	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNOK	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
 [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 [illegible]  VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

*PROF 4

CEHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 0.030
          RIVER MILE 0.0 - PROFILE BASE LINE FOR HASSAYAMPA
    0.03     8.59  2040.89     0.00  2041.00  2041.54     0.65     0.00     0.00  2038.10
   20836.    2841.    7762.   10233.    1254.     869.    2132.       0.       0.   2036.20
    0.00     2.27     8.93     4.80    0.066    0.025    0.065    0.000  2032.30  9367.24
 0.003970      0.       0.       0.        0        0        4     0.00  1337.37 10704.61

1490 NH CARD USED
*SECNO 0.130

265 DIVIDED FLOW

3280 CROSS SECTION      0.13 EXTENDED      0.05 FEET

3301 CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.13     8.05  2048.05  2048.05     0.00  2049.90     1.85     2.33     0.36  2040.00
   20836.   11209.    9486.     141.    4535.     595.     123.      56.      18.   2046.40
    0.02     2.47    15.95     1.14    0.107    0.025    0.065    0.000  2040.00  8515.00
 0.005141     500.     505.     560.       20       11        0     0.00  1760.85 10490.79

1490 NH CARD USED
*SECNO 0.220
3280 CROSS SECTION      0.22 EXTENDED      3.36 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.22    10.86  2053.86  2053.86     0.00  2056.09     2.24     2.39     0.12  2051.00
   20836.    5026.   13088.     722.    1474.    1095.      69.      99.      31.   2043.00
    0.03     3.41    13.77    10.48    0.065    0.032    0.025    0.000  2043.00  9433.00
 0.004701     465.     500.     515.       20        8        0     0.00   598.69 10031.69
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 0.360
3280 CROSS SECTION      0.36 EXTENDED      4.20 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.36    11.00  2059.40  2059.40     0.00  2061.73     2.33     2.61     0.05  2049.20
   20836.    6557.   12383.    1897.    1796.     813.     200.     141.      40.  2049.40
    0.05     3.65    15.23     9.48    0.051    0.025    0.025    0.000  2048.40  9433.00
 0.002832    615.     770.     785.       20        5        0     0.00   659.31 10092.31


*SECNO 0.400

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          U.S. HIGHWAY 89 BRIDGE CROSSING
    0.40     9.35  2059.95  2059.95     0.00  2064.10     4.15     0.63     0.91  2051.80
   20836.     251.   20136.     429.      69.    1214.      99.     151.      42.  2050.60
    0.05     3.63    16.60     4.35    0.065    0.025    0.065    0.000  2050.60  9786.36
 0.004433    250.     170.     103.       20       15        0     0.00   180.31  9966.68


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2057.31 ,HUT   2059.95 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BARLA    SS       ELCHU    ELCHD
    0.90     1.56     2.63     0.00   157.00    10.00  1720.00     0.00  2050.60  2050.60

*SECNO 0.420

3301 HV CHANGED MORE THAN HVINS

CLASS B LOW FLOW
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 V        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

3420 BRIDGE W.S.=   2059.14 BRIDGE VELOCITY=,     16.59     CALCULATED CHANNEL AREA=,     1256.

EGPRS     EGLWC      H3       QWFIR      QLOW      BARFA   TRAPEZOID      ELLC     ELTRD
                                                            AREA
 2063.51   2064.29     0.00        0,    20836.     1720.     1632.     2061.70   2065.00


   0.42     10.09  2061.49     0.00     0.00  2064.29     2.80     0.19     0.00  2052.30
 20836.      389.  19904.      543.     120.     1451.     157.     156.      43.  2051.40
   0.05      3.24    13.71     3.47    0.065    0.025    0.065    0.000  2051.40  9758.93
0.002843     135.     135.     135.        0        0        0     0.00   218.35  9977.28

*SECNO 0.470
280 CROSS SECTION      0.47 EXTENDED      1.05 FEET


3301 HV CHANGED MORE THAN HVINS

   0.47     11.15  2064.55  2062.45     0.00  2065.33     0.78     0.44     0.61  2062.30
 2[illegible]      211.  10780.    9844.     216.     1131.    3752.     175.      46.  2059.90
   [illegible]06     0.98     9.54     2.62    0.065    0.025    0.065    0.000  2053.40  9738.00
0.001289     190.     230.     260.       10       15        0     0.00   987.77 10725.77

CHV=   0.100 CEHV=   0.300
*SECNO 0.500
280 CROSS SECTION      0.50 EXTENDED      0.60 FEET


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   0.50      9.10  2064.60  2064.60     0.00  2066.25     1.64     0.39     0.26  2062.70
 20836.     1461.  12709.    6667.     689.     980.    2175.     197.      51.  2055.50
   0.07      2.12    12.97     3.07    0.065    0.025    0.065    0.000  2055.50  9600.00
0.002978     200.     200.     220.       20       14        0     0.00  1066.63 10666.63


490 NH CARD USED
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
             QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TAME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


*SECNO 0.600
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          CONFLUENCE OF BRAIDED CHANNELS
     0.60      8.77  2068.47  2068.47      0.00  2070.17      1.71      1.52      0.02  2065.80
   20005.      3248.    13935.     2822.     3310.     1115.     1128.      252.       68.   2066.40
     0.09      0.98     12.50      2.50     0.181     0.025     0.065     0.000  2059.70  8846.37
 0.003011      515.      505.      505.        20        11         0      0.00  1701.89 10548.26


1490 NH CARD USED
*SECNO 0.690
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.69      7.37  2071.57  2071.57      0.00  2073.25      1.68      1.90      0.00  2064.50
   19986.      8151.     8473.     3361.     2296.      551.      816.      303.       85.   2065.80
     0.10      3.55     15.39      4.12     0.061     0.025     0.065     0.000  2064.20  8975.25
 0.004873      495.      510.      490.        20        15         0      0.00  1309.48 10284.73


1490 NH CARD USED
*SECNO 0.790
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.79      8.01  2075.71  2075.71      0.00  2077.34      1.63      2.37      0.01  2068.90
   19986.     11378.     8137.     4/2.     2248.      552.       54.      341.       98.   2068.90
     0.12      5.06     14.75      8.78     0.046     0.025     0.025     0.000  2067.70  9027.87
 0.004770      485.      500.      495.        20         8         0      0.00  1027.90 10055.78


1490 NH CARD USED
*SECNO 0.900

3301 HV CHANGED MORE THAN HVINS

     0.90      8.62  2079.72      0.00      0.00  2080.34      0.62      2.90      0.10  2077.70
   19986.     14602.     5374.        9.     2911.      601.        6.      381.      113.   2078.00
     0.14      5.02      8.94      1.55     0.048     0.041     0.065     0.000  2071.10  8667.31
 0.003883      340.      565.      575.         4         0         0      0.00  1399.58 10066.88
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

1490 NH CARD USED
ECNO 1.000

3301 HV CHANGED MORE THAN HVINS

685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   1.00     8.21  2084.81  2084.81     0.00  2086.06     1.26     2.80     0.19  2078.90
  19986.   11191.    8722.      73.    3404.     666.      31.     431.     133.  2082.10
   0.16     3.29    13.10     2.37    0.059    0.025    0.065    0.000  2076.60  8343.15
.004212     570.     560.     565.       20       10        0     0.00  1723.69 10066.84

490 NH CARD USED
SECNO 1.120
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   1.12     6.92  2089.12  2089.12     0.00  2090.81     1.69     2.82     0.13  2083.40
 1[illegible]  9063.    9502.    1421.    1528.     683.     393.     478.     152.  2084.90
   0.18     5.93    13.91     3.61    0.038    0.025    0.060    0.000  2082.20  9312.23
0.004973     615.     620.     630.       20       15        0     0.00   884.59 10196.82

490 NH CARD USED
*SECNO 1.300

265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   1.30     6.24  2097.54  2097.54     0.00  2098.96     1.42     5.18     0.03  2096.90
  19986.    5504.    8979.    5503.     922.     701.    1008.     534.     173.  2095.30
   0.21     5.97    12.80     5.46    0.037    0.025    0.050    0.000  2091.30  9227.17
.006633     935.     935.     885.       12       15        0     0.00  1155.37 10402.75

490 NH CARD USED
*SECNO 1.400
7185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   1.40     6.32  2101.62  2101.62     0.00  2102.79     1.17     3.10     0.02  2100.50
  19986.    7731.    8340.    3915.    1251.     718.     817.     563.     187.  2098.00
   0.23     6.18    11.61     4.79    0.034    0.025    0.050    0.000  2095.30  9118.33
.006442     500.     500.     435.        3        5        0     0.00  1318.95 10437.28
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
             QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
             VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 1.490
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.49      4.88   2106.38   2106.38      0.00   2107.47      1.09      3.35      0.01   2103.40
   19986.     9316.     6383.     4286.     1584.      512.      979.      597.      203.   2103.70
     0.24      5.88     12.48      4.38     0.038     0.025     0.050     0.000   2101.50   9015.02
 0.007030      500.      500.      490.         2        19         0      0.00   1476.32  10491.34


1490 NH CARD USED
*SECNO 1.590
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.59      4.32   2111.52   2111.52      0.00   2112.72      1.19      3.66      0.03   2107.20
   19986.    13496.     5402.     1088.     2265.      389.      283.      631.      218.   2107.20
     0.26      5.96     13.88      3.85     0.043     0.025     0.050     0.000   2107.20   9035.83
 0.007743      490.      490.      540.         3        15         0      0.00   1184.57  10220.40


1490 NH CARD USED
*SECNO 1.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.68      4.56   2116.36   2116.36      0.00   2117.55      1.18      4.32      0.00   2114.10
   19986.    10322.     5698.     3766.     1654.      428.      764.      664.      232.   2113.00
     0.28      6.36     13.30      4.93     0.043     0.025     0.051     0.000   2111.80   9222.54
 0.010001      495.      490.      490.         3         8         0      0.00   1239.10  10461.64


1490 NH CARD USED
*SECNO 1.820
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.82      4.02   2123.02   2123.02      0.00   2124.37      1.34      6.22      0.05   2120.00
   19986.     9136.     6958.     3872.     1307.      564.      513.      706.      249.   2120.00
     0.30      7.00     12.34      7.54     0.036     0.025     0.035     0.000   2119.00   9394.63
 0.008035      715.      695.      650.         3        15         0      0.00    878.05  10272.68


CCHV=   0.100 CEHV=   0.300
*SECNO 1.870
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TWL      VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

3693 PROBABLE MINIMUM SPECIFIC ENERGY
 20 CRITICAL DEPTH ASSUMED
   1.87     4.99  2126.99  2126.99     0.00  2128.53     1.54     2.23     0.06  2124.20
  19986.    4739.   12717.    2530.     973.    1060.     615.     724.     255.  2122.00
   0.31     4.87    12.00     4.12    0.050    0.025    0.055    0.000  2122.00  9471.96
 .006317    330.     305.     305.       20       11        0     0.00   855.90 10327.86

ECNO 1.970
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   1.97     4.52  2131.12  2131.12     0.00  2132.77     1.64     3.11     0.03  2126.80
  19986.    7172.   12759.      55.    1439.    1036.      17.     753.     264.  2127.10
   0.32     4.98    12.32     3.21    0.050    0.025    0.055    0.000  2126.60  9397.92
 .006357    480.     495.     500.        3       11        0     0.00   736.54 10134.46

4490 NH CARD USED
ECNO 2.060
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   2.06     4.48  2135.68  2135.68     0.00  2137.05     1.37     3.21     0.03  2133.70
  18691.    4813.    9202.    4676.    1100.     733.     950.     782.     274.  2131.20
   0.34     4.37    12.51     4.92    0.050    0.025    0.055    0.000  2131.20  9405.53
 .006696    470.     500.     515.        7        5        0     0.00   980.58 10386.11
```

THIS RUN EXECUTED MON, JUN 01 1987 16:27:33

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*************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*************************************************
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

OLS WASH REACH 1

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	0.030	2038.76	6.46	2039.02	5.04	2032.30	0.00	874.07	9825.94	10699.01	99.76	1847.10	5072.[illegible]
	0.030	2039.77	7.47	2040.21	7.04	2032.30	0.00	1141.94	9559.72	10701.67	845.59	4262.39	7345.[illegible]
	0.030	2040.14	7.84	2040.65	7.75	2032.30	0.00	1242.82	9459.81	10702.63	1369.19	5361.70	8314.11
	0.030	2040.89	8.59	2041.54	8.93	2032.30	0.00	1337.37	9367.24	10704.61	2841.18	7762.22	10232.[illegible]
*	0.130	2046.44	6.44	2047.00	8.11	2040.00	505.00	1130.37	8886.79	10044.73	3252.78	3766.22	0.00
*	.130	2046.64	6.64	2048.18	13.58	2040.00	505.00	1208.90	8839.15	10048.05	5928.03	6524.77	0.[illegible]
*	0.130	2047.07	7.07	2048.77	14.62	2040.00	505.00	1316.96	8738.13	10055.10	7514.33	7527.73	2.[illegible]
*	0.130	2048.05	8.05	2049.90	15.95	2040.00	505.00	1760.85	8515.00	10490.79	11208.87	9486.04	141.[illegible]
*	0.220	2049.15	6.15	2051.58	12.61	2043.00	500.00	115.88	9910.30	10026.18	0.00	6820.67	198.[illegible]
*	0.220	2052.23	9.23	2054.07	11.69	2043.00	500.00	596.79	9433.00	10029.79	1486.97	10527.45	438.[illegible]
*	0.220	2052.81	9.81	2054.77	12.38	2043.00	500.00	597.46	9433.00	10030.46	2510.35	12007.94	526.71
*	0.220	2053.86	10.86	2056.09	13.77	2043.00	500.00	598.69	9433.00	10031.69	5025.84	15088.38	721.[illegible]
*	0.360	2054.71	6.31	2057.00	12.81	2048.40	770.00	135.39	9929.53	10065.13	863.15	5792.89	362.[illegible]
*	0.360	2057.53	9.13	2059.55	13.16	2048.40	770.00	648.46	9433.00	10081.46	2625.76	8808.50	1018.74
*	0.360	2058.22	9.82	2060.31	13.78	2048.40	770.00	652.48	9433.00	10085.48	3799.27	9957.66	1288.[illegible]
*	0.360	2059.40	11.00	2061.73	15.23	2048.40	770.00	659.31	9433.00	10092.31	6556.71	12382.71	1896.[illegible]
	0.400	2056.52	5.92	2057.88	9.43	2050.60	170.00	164.46	9793.51	9957.97	46.77	6879.83	92.[illegible]
	0.400	2057.77	7.17	2060.50	13.42	2050.60	170.00	169.85	9790.91	9960.76	107.61	12155.94	189.[illegible]
*	0.400	2058.32	7.72	2061.69	14.92	2050.60	170.00	172.27	9789.78	9962.04	142.88	14657.42	244.71
*	0.400	2059.95	9.35	2064.10	16.60	2050.60	170.00	180.31	9786.36	9966.68	251.08	20155.68	429.[illegible]
	0.420	2056.93	5.33	2058.30	9.54	2051.40	135.00	191.35	9771.89	9963.24	69.54	6827.83	121.63
*	0.420	2058.33	6.93	2060.79	12.80	2051.40	135.00	199.63	9767.91	9967.54	157.18	12047.70	248.12
*	0.420	2059.37	7.97	2061.93	13.07	2051.40	135.00	203.77	9764.97	9970.74	219.94	14495.26	329.[illegible]
*	0.420	2061.49	10.09	2064.29	13.71	2051.40	135.00	218.35	9758.93	9977.28	388.78	19903.98	543.[illegible]
*	0.470	2059.36	5.96	2060.99	11.10	2053.40	230.00	421.96	9928.95	10585.72	0.00	5934.93	1084.[illegible]
*	0.470	2061.17	7.77	2062.72	11.83	2053.40	230.00	790.51	9924.05	10714.56	0.00	8707.08	3745.[illegible]
*	0.470	2061.63	8.23	2063.32	12.65	2053.40	230.00	793.27	9922.82	10716.09	0.00	9973.71	5071.29
	0.470	2064.55	11.15	2065.33	9.54	2053.40	230.00	987.77	9738.00	10725.77	211.46	10780.15	9844.[illegible]

SECND	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
0.500	2061.27	5.77	2062.88	10.80	2055.50	200.00	449.40	9924.42	10595.63	0.00	6219.18	799.82
0.500	2063.14	7.64	2064.64	11.40	2055.50	200.00	1041.82	9622.60	10664.42	257.70	9136.66	3058.64
0.500	2063.62	8.12	2065.20	12.04	2055.50	200.00	1054.68	9610.46	10665.14	562.80	10354.42	4127.78
0.500	2064.60	9.10	2066.25	12.97	2055.50	200.00	1066.63	9600.00	10666.63	1460.52	12708.55	6666.93
0.600	2066.55	6.85	2067.24	7.12	2059.70	505.00	1314.14	8856.84	10542.44	361.80	5929.96	456.23
0.600	2067.17	7.47	2068.62	10.63	2059.70	505.00	1669.20	8853.42	10544.34	1087.67	9828.61	1047.71
0.600	2067.68	7.98	2069.17	11.11	2059.70	505.00	1688.82	8850.63	10545.89	1763.70	11114.37	1580.93
0.600	2068.47	8.77	2070.17	12.50	2059.70	505.00	1701.89	8846.37	10548.26	3247.57	13935.18	2822.24
0.690	2068.44	4.24	2069.93	12.09	2064.20	510.00	336.87	9478.28	10265.50	2260.70	3747.75	716.55
0.690	2070.13	5.93	2071.67	13.47	2064.20	510.00	984.39	8993.50	10275.87	4261.96	5922.82	1742.22
0.690	2070.74	6.54	2072.24	13.81	2064.20	510.00	1257.71	8985.72	10279.65	5415.23	6727.25	2270.52
0.690	2071.57	7.37	2073.25	15.39	2064.20	510.00	1309.48	8975.25	10284.73	8151.13	8473.42	3361.45
0.790	2072.35	4.65	2073.89	12.18	2067.70	500.00	280.79	9055.55	10047.99	3222.06	3403.06	99.88
0.790	2074.16	6.46	2075.81	13.40	2067.70	500.00	565.49	9044.33	10052.19	5959.53	5711.65	255.82
0.790	2074.89	7.19	2076.36	13.35	2067.70	500.00	961.78	9038.59	10053.87	7613.33	6470.09	329.58
0.790	2075.71	8.01	2077.34	14.75	2067.70	500.00	1027.90	9027.87	10055.78	11377.62	8136.81	471.57
0.900	2077.33	6.23	2078.21	3.91	2071.10	565.00	436.05	8771.56	10058.62	5315.97	1409.03	0.00
0.900	2078.49	7.39	2079.17	7.83	2071.10	565.00	1164.24	8738.04	10061.96	8200.86	3725.81	0.34
0.900	2078.82	7.72	2079.52	8.58	2071.10	565.00	1335.16	8728.08	10063.24	10052.97	4358.69	1.33
0.900	2079.72	8.62	2080.34	8.94	2071.10	565.00	1399.58	8667.31	10066.88	14602.34	5374.44	9.21
1.000	2082.22	5.62	2083.16	9.16	2076.60	560.00	372.77	8525.61	10052.23	3129.27	3595.69	0.03
1.000	2083.47	6.87	2084.76	11.92	2076.60	560.00	1445.20	8383.67	10062.09	5655.33	6253.26	18.40
1.000	2083.96	7.36	2085.23	12.36	2076.60	560.00	1644.25	8356.32	10063.83	7254.28	7124.29	34.44
1.000	2084.81	8.21	2086.06	13.10	2076.60	560.00	1723.69	8343.15	10066.84	11190.98	8722.04	72.97
1.120	2086.32	4.12	2087.78	10.57	2082.20	620.00	313.20	9321.26	10188.59	2787.53	3878.84	58.63
1.120	2088.00	5.80	2089.31	11.38	2082.20	620.00	877.71	9315.83	10193.54	4966.88	6339.19	620.93
1.120	2088.38	6.18	2089.82	12.31	2082.20	620.00	880.02	9314.62	10194.64	6171.72	7381.47	859.80
1.120	2089.12	6.92	2090.81	13.91	2082.20	620.00	884.59	9312.23	10196.82	9063.30	9502.15	1420.54
1.300	2095.42	4.12	2096.43	8.85	2091.30	935.00	516.42	9247.39	10367.67	2050.14	3293.63	1381.22
1.300	2096.48	5.18	2097.70	10.71	2091.30	935.00	667.06	9237.29	10378.64	3164.33	5733.72	3028.95
1.300	2097.04	5.74	2098.14	10.80	2091.30	935.00	1049.55	9231.88	10388.79	3797.00	6733.47	3882.52
1.300	2097.54	6.24	2098.96	12.80	2091.30	935.00	1155.37	9227.12	10402.75	5504.16	8979.29	5502.55
1.400	2099.89	4.59	2100.72	8.09	2095.30	500.00	661.62	9124.43	10351.95	2571.56	3176.17	977.27
1.400	2100.80	5.50	2101.74	9.56	2095.30	500.00	1118.90	9122.18	10378.13	4366.22	5381.56	2179.21
1.400	2101.07	5.77	2102.09	10.35	2095.30	500.00	1210.40	9120.90	10399.78	5341.29	6357.73	2713.99
1.400	2101.62	6.32	2102.79	11.61	2095.30	500.00	1318.95	9118.33	10437.28	7730.52	8340.47	3915.00
1.490	2104.92	3.42	2105.63	8.62	2101.50	500.00	1000.63	9019.45	10486.08	3105.75	2787.24	832.01
1.490	2105.61	4.11	2106.50	10.54	2101.50	500.00	1215.91	9017.36	10488.57	5428.24	4346.90	2151.87
1.490	2105.92	4.42	2106.83	11.00	2101.50	500.00	1357.82	9016.41	10489.69	6389.95	4976.44	2846.61
1.490	2106.38	4.88	2107.47	12.48	2101.50	500.00	1476.32	9015.02	10491.34	9315.61	6384.67	4205.72

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QRO[illegible]
*	1.590	2110.04	2.84	2110.76	9.73	2107.20	490.00	1002.62	9040.59	10167.85	4128.93	2486.30	109.77
*	1.590	2110.75	3.55	2111.67	11.64	2107.20	490.00	1142.80	9038.30	10181.10	7773.80	3724.89	428.[illegible]
*	1.590	2111.02	3.82	2112.02	12.41	2107.20	490.00	1158.63	9037.46	10196.09	9534.23	4264.23	614.[illegible]
*	1.590	2111.52	4.32	2112.72	13.88	2107.20	490.00	1184.57	9035.83	10220.40	13496.25	5402.08	1087.[illegible]
*	1.680	2115.02	3.22	2115.67	9.06	2111.80	490.00	1102.06	9262.56	10386.76	3411.76	2327.17	986.[illegible]
*	1.680	2115.64	3.84	2116.52	11.13	2111.80	490.00	1188.28	9244.66	10432.94	6202.02	3735.00	1989.[illegible]
*	1.680	2115.89	4.09	2116.87	11.86	2111.80	490.00	1214.54	9237.07	10451.61	7540.32	4358.12	2314.56
*	1.680	2116.36	4.56	2117.55	13.30	2111.80	490.00	1239.10	9222.54	10461.64	10521.96	5698.25	3765.[illegible]
*	1.820	2121.60	2.60	2122.29	8.65	2119.00	695.00	819.36	9433.74	10253.10	2592.19	2911.87	1220.94
*	1.820	2122.25	3.25	2123.21	10.39	2119.00	695.00	860.54	9406.31	10266.85	5122.27	4564.00	2240.[illegible]
*	1.820	2122.50	3.50	2123.59	11.09	2119.00	695.00	866.22	9402.52	10268.74	6331.51	5320.83	2740.[illegible]
*	1.820	2123.02	4.02	2124.37	12.34	2119.00	695.00	878.05	9394.63	10272.68	9155.68	6958.24	3872.07
*	1.870	2125.26	3.26	2126.10	8.33	2122.00	305.00	784.26	9474.33	10281.43	1143.72	5056.50	524.[illegible]
*	1.870	2126.06	4.06	2127.19	10.03	2122.00	305.00	833.95	9474.32	10308.27	2514.53	8173.15	1239.[illegible]
*	1.870	2126.36	4.36	2127.63	10.72	2122.00	305.00	841.18	9473.54	10314.73	3189.18	9603.80	1620.02
*	1.870	2126.99	4.99	2128.53	12.00	2122.00	305.00	855.90	9471.96	10327.86	4738.54	12717.27	2530.[illegible]
*	1.970	2129.36	2.76	2130.20	8.37	2126.60	495.00	726.94	9403.81	10130.74	1696.86	3016.71	11.42
*	1.970	2130.14	3.54	2131.34	10.78	2126.60	495.00	731.20	9401.19	10132.39	3750.39	8150.82	25.78
*	1.970	2130.46	3.86	2131.81	11.01	2126.60	495.00	732.93	9400.13	10133.06	4781.28	9597.88	33[illegible]
*	1.970	2131.12	4.52	2132.77	12.32	2126.60	495.00	736.54	9397.92	10134.46	7172.25	12759.19	54.[illegible]
*	2.060	2133.91	2.71	2134.70	8.68	2131.20	500.00	775.98	9482.92	10373.13	741.44	3646.16	1396.[illegible]
*	2.060	2134.72	3.52	2135.71	10.24	2131.20	500.00	946.87	9410.37	10382.62	2055.21	5782.54	2595.[illegible]
*	2.060	2135.05	3.85	2136.16	10.98	2131.20	500.00	973.14	9408.69	10383.83	2858.84	6852.68	3233.48
*	2.060	2135.68	4.48	2137.05	12.51	2131.20	500.00	980.58	9405.53	10386.11	4812.99	9202.28	4675.[illegible]

SUMMARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    0.130  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.130  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.130  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.130  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.130  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.130  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.130  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.130  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.130  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.130  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.130  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.130  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.220  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.220  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.220  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.220  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.220  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.220  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.220  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.220  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.220  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.220  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.220  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.220  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.360  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.360  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.360  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.360  PROFILE= 2  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.360  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.360  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.360  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.360  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.360  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.360  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.400  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.400  PROFILE= 3  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.400  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.400  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.400  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.420  PROFILE= 2  HYDRAULIC JUMP D.S.
CAUTION  SECNO=    0.420  PROFILE= 3  HYDRAULIC JUMP D.S.
CAUTION  SECNO=    0.420  PROFILE= 4  HYDRAULIC JUMP D.S.

CAUTION  SECNO=    0.470  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.470  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.470  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.470  PROFILE= 2  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    0.470  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.470  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.470  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.470  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.470  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.500  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.500  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.500  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.500  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.500  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.500  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.500  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.500  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.500  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.500  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.500  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.500  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

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CAUTION  SECNO=    0.600  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.600  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.600  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.600  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.600  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.600  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.600  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.600  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.600  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.600  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.600  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.690  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.690  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.690  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.690  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.690  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.690  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.690  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.690  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.690  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.690  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.690  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    0.690  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    0.790  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    0.790  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    0.790  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    0.790  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
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UTION  SECNO=    1.000  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
UTION  SECNO=    1.000  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   1.000  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
UTION  SECNO=    1.000  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
UTION  SECNO=    1.000  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   1.000  PROFILE= 3  MINIMUM SPECIFIC ENERGY
UTION  SECNO=    1.000  PROFILE= 4  CRITICAL DEPTH ASSUMED
UTION  SECNO=    1.000  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   1.000  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

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CAUTION SECNO=   1.120  PROFILE= 2  CRITICAL DEPTH ASSUMED
UTION  SECNO=    1.120  PROFILE= 2  MINIMUM SPECIFIC ENERGY
UTION  SECNO=    1.120  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   1.120  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
UTION  SECNO=    1.120  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
UTION  SECNO=    1.120  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   1.120  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   1.120  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

UTION  SECNO=    1.300  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUT   SECNO=    1.300  PROFILE= 1  MINIMUM SPECIFIC ENERGY
UT     SECNO=    1.300  PROFILE= 2  CRITICAL DEPTH ASSUMED
UTION  SECNO=    1.300  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   1.300  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
UTION  SECNO=    1.300  PROFILE= 3  CRITICAL DEPTH ASSUMED
UTION  SECNO=    1.300  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   1.300  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=   1.300  PROFILE= 4  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=   1.400  PROFILE= 1  CRITICAL DEPTH ASSUMED
UTION  SECNO=    1.400  PROFILE= 1  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=   1.400  PROFILE= 2  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=   1.490  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   1.490  PROFILE= 1  MINIMUM SPECIFIC ENERGY
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UTION  SECNO=    1.490  PROFILE= 2  MINIMUM SPECIFIC ENERGY
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UTION  SECNO=    1.490  PROFILE= 3  MINIMUM SPECIFIC ENERGY
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CAU    SECNO=    1.490  PROFILE= 4  MINIMUM SPECIFIC ENERGY
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CAUTION  SECNO=    2.060  PROFILE= 3  MINIMUM SPECIFIC ENERGY
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U      SECNO=     2.060  PROFILE= 4  MINIMUM SPECIFIC ENERGY
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FLOOD INSURANCE ZONE DATA FOR OLS WASH REACH 1

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
0.030	0.	-1.38	-0.37	0.75
0.130	505.	-0.62	-0.42	0.99
0.220	1005.	-3.66	-0.58	1.05
0.360	1775.	-3.51	-0.69	1.18
0.400	1945.	-1.79	-0.55	1.64
0.420	2080.	-2.44	-1.04	2.12
0.470	2310.	-2.27	-0.46	2.92
0.500	2510.	-2.35	-0.48	0.98
0.600	3015.	-1.14	-0.51	0.78
0.690	3525.	-2.30	-0.61	0.83
0.790	4025.	-2.54	-0.72	0.82
0.900	4590.	-1.49	-0.33	0.90
1.000	5150.	-1.73	-0.49	0.85
1.120	5770.	-2.06	-0.38	0.74
1.300	6705.	-1.62	-0.57	0.50
1.400	7205.	-1.18	-0.27	0.55
[illegible]90	7705.	-1.00	-0.31	0.46
1.590	8195.	-0.98	-0.26	0.51
1.680	8685.	-0.86	-0.25	0.48
1.820	9380.	-0.89	-0.25	0.53
1.870	9685.	-1.11	-0.31	0.63
1.970	10180.	-1.10	-0.32	0.66
2.060	10680.	-1.15	-0.33	0.63
WEIGHTED AVG FOR REACH		-1.70	-0.44	0.82

FHF FOR THE REACH = 015 WITH 45.2 PERCENT OF THF RFACH WITHIN 0.5 FEET
ZONE FOR THE REACH = A 3

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	WEIGHTED AVG DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
56	7560.	-2.00	-0.51	0.93

F FOR REACH 1 = 020 WITH 86. PERCENT OF THE REACH WITHIN 1.0 FEET
ONE THE REACH = A 4

---

9 10635. -1.00 -0.29 0.55

EHF FOR REACH 2 = 010 WITH 100. PERCENT OF THE REACH WITHIN 0.5 FEET
NE FOR THE REACH = A 2

THIS RUN EXECUTED MON, JUN 01 1987 16:27:45

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**************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
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Floodplain, Reach #2

Cross Section 2.06 - 3.270

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SDLS.REACH2.MLT.OUT

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

WWWW  W     WWW  WWW   W  WWWWW  WWW   W
W   W W  W  W  W W  W  W  WW  W    W  W  WW
W   W W  W  W  W W  W  W  W  WWWW  W  W  W
WWWW  WWWWW W W W  WWWW  W      W W W W  W
W      W  W  W    W  W      W W  W  W
W      W  W  W   W  W  W  W W  W  W
W      W  WWW  WWW   WWW  WWW  WWW  WWW


WW  WWW  W     WWW      WWWW  WWWWW  WWW  WWW  W  W  WWW      W  W W    WWWWW      WWW  W  W WWWWW
W  W W  W W    W  W     W  W W    W  W W  W W  W W  W     WW WW W     W       W  W W  W  W
W    W  W W    W        W  W W    W  W W    W  W    W     W W W W     W       W  W W  W  W
WW  W  W W     WWW      WWWW  WWWW  WWWWW W   WWWWW  W     W W W W     W       W  W W  W  W
  W W  W W       W     W W  W    W  W W    W  W  W      W  W W     W       W  W W  W  W
W  W W  W W    W  W  WW W  W W    W  W W  W W  W W    WW W  W W     W    WW W  W W  W  W
WWW  WWW  WWWWW  WWW   WW W  W WWWWW W  W  WWW  W  W WWWWW  WW W  W WWWWW  W    WW  WWW  WWW  W

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

[Spooler rev 20.2 (c) Prime Computer, Inc., 1983]

Label: PRT002 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SDLS.REACH2.MLT.OUT
File last modified: 87-06 01.16:40:40.Mon

Spooled:  87-06-04.07:41:48.Thu
Started:  87-06-04.07:56:08.Thu   on: AHLC     by: DEC
```

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  [ DATE MON, JUN 01 1987 TIME 16:38:35            *
*****************************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  THE HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616              *
*  (916) 440-2105 (FTS) 448-2105        *
*****************************************
```


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X     X  XXXXXXX   XXXXX            XXXXX
X     X  X        X     X          X     X
X     X  X        X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXXXXXX
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THIS RUN EXECUTED MON, JUN 01 1987 16:38:42

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**********************************************
 HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
 ERROR CORR -  01,02,03,04,05,06
 MODIFICATION -  50,51,52,53,54,55,56
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```

T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 SOLS WASH REACH 2 FLOOD INSURANCE RATE ANALYSIS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	0.000000	0.00	0.0	0.	2133.900	0.000
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTM	ITRACE
	1.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38.000	1.000	8.000	3.000	26.000	42.000	39.000	4.000	53.000	54.000
13.000	14.000	15.000	201.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9905.000	0.025	10083.000	0.055	10408.000	0.000	0.000	0.000
NT	4.000	5784.000	10433.000	12945.000	18691.000	0.000	0.000	0.000	0.000	0.000
X1	2.060	38.000	9905.000	10083.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2146.500	9340.000	2143.700	9365.000	2134.200	9413.000	2135.000	9426.000	2135.000	9430.000
GR	2134.500	9460.000	2133.700	9491.000	2133.000	9538.000	2133.400	9560.000	2132.500	9617.000
GR	2132.800	9628.000	2132.500	9643.000	2132.700	9656.000	2131.400	9679.000	2132.600	9687.000
GR	2133.100	9732.000	2133.500	9780.000	2134.200	9833.000	2134.300	9871.000	2133.700	9905.000
GR	2131.200	9919.000	2131.600	9952.000	2131.800	9960.000	2131.300	9990.000	2131.500	10002.000
GR	2131.700	10006.000	2131.200	10083.000	2132.900	10093.000	2132.400	10108.000	2131.800	10112.000
GR	2132.300	10117.000	2132.300	10137.000	2131.700	10304.000	2133.900	10319.000	2134.200	10339.000
GR	2133.700	10364.000	2134.000	10380.000	2141.000	10408.000	0.000	0.000	0.000	0.000
NH	6.000	1.000	9660.000	0.050	9882.000	0.065	9936.000	0.025	10065.000	0.065
NH	10119.000	0.050	10246.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	2.170	22.000	9936.000	10065.000	520.000	610.000	575.000	0.000	0.000	0.000
GR	2147.400	9490.000	2144.300	9513.000	2137.200	9546.000	2136.400	9603.000	2136.600	9615.000
GR	2137.300	9646.000	2136.300	9705.000	2136.500	9715.000	2137.000	9727.000	2137.500	9767.000
GR	2138.100	9832.000	2138.700	9882.000	2139.000	9914.000	2136.700	9936.000	2136.400	10000.000
GR	2135.800	10065.000	2137.400	10076.000	2138.300	10119.000	2138.900	10161.000	2139.500	10199.000
GR	2137.300	10234.000	2142.600	10246.000	0.000	0.000	0.000	0.000	0.000	0.000

REV. 6/87

NH	[illegible]6.000	1.000	9854.000	0.030	9881.000	0.065	9941.000	0.025	10065.000	0.065
NH	10132.000	0.050	10213.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	2.250	19.000	9941.000	10065.000	430.000	440.000	430.000	0.000	0.000	0.000
GR	2150.000	9684.000	2144.000	9709.000	2140.000	9754.000	2139.200	9769.000	2140.000	9784.000
GR	2146.100	9854.000	2143.800	9881.000	2140.800	9933.000	2139.000	9941.000	2139.500	10000.000
GR	2139.500	10065.000	2141.400	10080.000	2142.000	10102.000	2142.100	10132.000	2143.300	10158.000
GR	2141.800	10175.000	2143.600	10205.000	2145.700	10213.000	2146.000	10214.000	0.000	0.000
NH	5.000	1.000	9935.000	0.065	9945.000	0.025	10060.000	0.050	10226.000	0.030
NH	10275.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	2.370	20.000	9945.000	10060.000	615.000	610.000	615.000	0.000	0.000	0.000
GR	2161.300	9810.000	2158.800	9839.000	2156.300	9853.000	2150.400	9877.000	2147.400	9896.000
GR	2147.400	9931.000	2144.000	9945.000	2144.000	10000.000	2144.700	10012.000	2144.900	10060.000
GR	2146.500	10074.000	2147.400	10113.000	2147.600	10148.000	2147.400	10183.000	2146.500	10210.000
GR	2145.400	10226.000	2145.200	10261.000	2146.000	10266.000	2150.400	10275.000	2151.200	10285.000
NH	8.000	0.050	9753.000	0.035	9805.000	0.030	9932.000	0.025	10034.000	0.065
NH	10081.000	0.025	10121.000	0.050	10219.000	0.030	10260.000	0.000	0.000	0.000
X1	2.460	36.000	9952.000	10121.000	455.000	445.000	470.000	0.000	0.000	0.000
GR	2177.400	9615.000	2181.400	9645.000	2188.900	9655.000	2190.400	9670.000	2188.000	9696.000
GR	2185.600	9706.000	2164.800	9729.000	2149.000	9753.000	2149.300	9761.000	2150.400	9771.000
GR	2150.100	9780.000	2150.000	9788.000	2150.300	9795.000	2151.000	9805.000	2150.800	9819.000
GR	2150.100	9825.000	2150.800	9835.000	2151.100	9883.000	2150.600	9916.000	2149.000	9932.000
GR	2148.700	9952.000	2148.200	10016.000	2150.300	10034.000	2151.100	10049.000	2148.500	10081.000
GR	2148.500	10107.000	2149.000	10121.000	2149.700	10140.000	2150.600	10151.000	2151.400	10172.000
GR	[illegible]0.000	10192.000	2148.200	10219.000	2147.800	10233.000	2147.800	10240.000	2153.200	10251.000
GR	2154.800	10260.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	9.000	1.000	9425.000	0.050	9606.000	0.030	9620.000	0.050	9680.000	0.030
NH	9710.000	0.045	9901.000	0.065	9952.000	0.025	10054.000	0.065	10178.000	0.000
X1	2.580	48.000	9952.000	10054.000	625.000	670.000	655.000	0.000	0.000	0.000
GR	2169.700	9280.000	2166.200	9313.000	2163.100	9349.000	2163.500	9356.000	2162.200	9369.000
GR	2161.100	9394.000	2161.100	9425.000	2156.100	9449.000	2156.600	9455.000	2157.700	9501.000
GR	2157.900	9512.000	2156.400	9579.000	2156.600	9594.000	2154.500	9606.000	2154.700	9620.000
GR	2156.600	9631.000	2156.300	9651.000	2154.300	9662.000	2154.400	9671.000	2155.300	9681.000
GR	2154.500	9693.000	2154.800	9697.000	2155.400	9702.000	2155.200	9707.000	2156.600	9719.000
GR	2157.000	9768.000	2156.600	9782.000	2155.500	9793.000	2155.500	9798.000	2156.600	9814.000
GR	2156.800	9835.000	2156.200	9872.000	2155.800	9901.000	2156.300	9931.000	2154.100	9952.000
GR	2153.700	9967.000	2152.000	9972.000	2152.400	10000.000	2152.400	10021.000	2153.200	10029.000
GR	2153.400	10037.000	2155.800	10054.000	2155.700	10071.000	2155.300	10087.000	2155.400	10098.000
GR	2156.400	10115.000	2157.800	10153.000	2160.900	10178.000	0.000	0.000	0.000	0.000
NH	6.000	1.000	9390.000	0.030	9678.000	0.025	9730.000	0.045	9940.000	0.025
NH	10055.000	0.050	10318.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	2.690	44.000	9940.000	10055.000	475.000	575.000	550.000	0.000	0.000	0.000
GR	2170.000	9300.000	2162.400	9338.000	2163.400	9351.000	2163.300	9390.000	2161.200	9397.000
GR	2160.500	9448.000	2161.100	9464.000	2161.500	9521.000	2161.300	9553.000	2161.700	9582.000
GR	2161.300	9652.000	2160.700	9678.000	2158.900	9690.000	2158.900	9730.000	2160.100	9739.000
GR	2159.500	9746.000	2159.800	9753.000	2160.800	9766.000	2161.000	9781.000	2161.400	9808.000
GR	2160.900	9824.000	2160.900	9842.000	2160.500	9857.000	2161.800	9873.000	2161.900	9914.000
GR	2158.200	9940.000	2157.600	9970.000	2156.700	9979.000	2157.100	10000.000	2157.700	10021.000
GR	[illegible]59.100	10032.000	2158.500	10055.000	2159.500	10069.000	2159.700	10082.000	2158.900	10092.000
GR	2159.200	10099.000	2159.800	10102.000	2159.800	10127.000	2162.100	10161.000	2162.000	10187.000

	2161.800	10239.000	2162.300	10264.000	2162.800	10293.000	2168.100	10318.000	0.000	0.000
NH	3.000	0.045	9877.000	0.025	10134.000	0.050	10421.000	0.000	0.000	0.000
	VULTURE MINE ROAD									
	2.730	14.000	9877.000	10134.000	340.000	160.000	240.000	0.880	0.000	0.000
GR	2172.800	9525.000	2169.600	9571.000	2164.800	9668.000	2163.900	9735.000	2163.000	9877.000
GR	2162.900	9919.000	2162.400	10000.000	2162.100	10069.000	2162.400	10134.000	2164.200	10198.000
	2165.900	10258.000	2167.300	10312.000	2168.900	10397.000	2169.000	10421.000	0.000	0.000
NH	3.000	0.045	9937.000	0.025	10048.000	0.050	10547.000	0.000	0.000	0.000
	4.000	5100.000	10242.000	12817.000	18518.000	0.000	0.000	0.000	0.000	0.000
	2.780	37.000	9937.000	10048.000	150.000	310.000	260.000	0.000	0.000	0.000
GR	2176.000	9585.000	2176.500	9597.000	2173.100	9640.000	2166.800	9692.000	2163.800	9729.000
	2164.900	9740.000	2165.100	9749.000	2166.800	9765.000	2166.400	9818.000	2166.100	9826.000
	2166.000	9840.000	2165.500	9917.000	2164.100	9937.000	2163.800	9961.000	2163.700	9964.000
GR	2163.700	10000.000	2163.700	10048.000	2166.100	10069.000	2165.900	10098.000	2165.900	10123.000
GR	2164.300	10202.000	2164.300	10219.000	2165.000	10238.000	2165.000	10303.000	2163.900	10318.000
	2164.900	10332.000	2164.800	10345.000	2164.100	10353.000	2165.200	10366.000	2165.200	10413.000
GR	2165.100	10460.000	2164.000	10471.000	2163.900	10476.000	2163.000	10492.000	2163.400	10518.000
GR	2163.700	10522.000	2170.000	10547.000	0.000	0.000	0.000	0.000	0.000	0.000
H	3.000	0.050	9944.000	0.025	10064.000	0.050	10768.000	0.000	0.000	0.000
X1	2.880	29.000	9944.000	10064.000	500.000	480.000	495.000	0.000	0.000	0.000
GR	2180.000	9840.000	2176.000	9878.000	2172.500	9912.000	2167.000	9944.000	2167.000	10000.000
	2167.000	10064.000	2167.600	10074.000	2169.300	10098.000	2169.600	10128.000	2169.300	10205.000
GR	2160.500	10238.000	2169.000	10254.000	2168.100	10287.000	2168.500	10304.000	2168.300	10328.000
GR	3.100	10350.000	2168.500	10374.000	2169.400	10439.000	2170.800	10509.000	2170.300	10524.000
	2170.700	10538.000	2170.300	10594.000	2171.700	10669.000	2171.200	10681.000	2168.100	10705.000
GR	2170.200	10726.000	2178.800	10750.000	2180.000	10763.000	2180.000	10768.000	0.000	0.000
H	4.000	0.050	9928.000	0.025	10086.000	0.065	10200.000	0.050	10831.000	0.000
X1	2.970	33.000	9928.000	10086.000	510.000	400.000	500.000	0.000	0.000	0.000
GR	2202.800	9910.000	2171.100	9928.000	2171.700	9975.000	2171.800	10000.000	2171.100	10014.000
	2171.100	10086.000	2173.400	10100.000	2172.500	10147.000	2174.100	10179.000	2172.800	10203.000
	2171.800	10211.000	2172.000	10226.000	2172.600	10238.000	2172.900	10278.000	2173.600	10367.000
GR	2174.100	10410.000	2174.000	10458.000	2174.000	10506.000	2174.400	10544.000	2174.300	10554.000
GR	2174.600	10565.000	2174.800	10630.000	2176.100	10672.000	2175.400	10700.000	2175.000	10707.000
	2174.800	10724.000	2175.900	10742.000	2174.800	10752.000	2174.400	10761.000	2173.200	10773.000
GR	2173.200	10778.000	2175.800	10807.000	2183.500	10831.000	0.000	0.000	0.000	0.000
H	3.000	0.050	9956.000	0.025	10160.000	0.050	10826.000	0.000	0.000	0.000
	3.070	39.000	9956.000	10160.000	313.000	360.000	500.000	0.000	0.000	0.000
GR	2210.000	9910.000	2194.500	9938.000	2176.200	9956.000	2176.200	9994.000	2177.100	9998.000
	2177.100	10000.000	2177.000	10008.000	2176.400	10013.000	2176.300	10019.000	2175.400	10027.000
	2174.900	10116.000	2175.200	10132.000	2175.900	10141.000	2175.300	10160.000	2176.800	10173.000
GR	2177.900	10212.000	2179.800	10217.000	2177.800	10229.000	2178.200	10267.000	2179.100	10288.000
GR	2178.800	10312.000	2179.800	10346.000	2179.800	10380.000	2179.400	10400.000	2179.400	10438.000
	2179.500	10461.000	2178.100	10497.000	2179.000	10513.000	2178.800	10536.000	2178.700	10555.000
GR	2179.000	10633.000	2179.700	10669.000	2180.300	10712.000	2180.500	10734.000	2179.800	10744.000
GR	2179.700	10754.000	2178.300	10771.000	2179.000	10797.000	2186.100	10826.000	0.000	0.000

NH	8.000	1.000	9540.000	0.050	9731.000	0.065	9769.000	0.025	9873.000	0.055
NH	52.000	0.025	10041.000	0.050	10115.000	1.000	10530.000	0.000	0.000	0.000
X1	3.180	40.000	9900.000	10056.000	555.000	610.000	620.000	0.000	0.000	0.000
GR	2194.200	9435.000	2188.400	9471.000	2185.000	9498.000	2183.500	9527.000	2180.400	9546.000
GR	2180.100	9564.000	2179.500	9569.000	2179.600	9577.000	2180.000	9583.000	2180.000	9616.000
GR	2179.800	9625.000	2180.300	9636.000	2180.300	9661.000	2180.700	9722.000	2181.600	9805.000
GR	2180.900	9815.000	2181.300	9827.000	2181.300	9863.000	2180.700	9900.000	2180.100	9926.000
GR	2179.700	10000.000	2179.700	10056.000	2182.800	10075.000	2184.900	10097.000	2184.800	10111.000
GR	2182.900	10124.000	2183.600	10161.000	2184.400	10197.000	2185.100	10264.000	2184.800	10328.000
GR	2185.900	10347.000	2185.400	10366.000	2185.700	10430.000	2190.400	10453.000	2194.200	10469.000
GR	2194.000	10482.000	2191.900	10495.000	2190.600	10510.000	2190.500	10521.000	2192.000	10530.000
QT	4.000	4906.000	9954.000	12464.000	18037.000	0.000	0.000	0.000	0.000	0.000
NH	7.000	1.000	9150.000	0.050	9731.000	0.065	9769.000	0.025	9873.000	0.055
NH	9952.000	0.025	10041.000	0.050	10115.000	0.000	0.000	0.000	0.000	0.000
X1	3.270	37.000	9952.000	10041.000	485.000	435.000	460.000	0.000	0.000	0.000
GR	2193.900	8950.000	2191.700	9000.000	2188.800	9090.000	2186.900	9155.000	2186.500	9167.000
GR	2185.800	9186.000	2185.400	9194.000	2185.000	9219.000	2184.600	9223.000	2184.300	9246.000
GR	2183.900	9249.000	2183.300	9287.000	2184.900	9303.000	2184.500	9350.000	2184.200	9369.000
GR	2184.500	9383.000	2183.500	9437.000	2183.900	9483.000	2184.300	9517.000	2184.700	9560.000
GR	2184.500	9590.000	2185.300	9637.000	2186.300	9731.000	2184.300	9769.000	2184.000	9817.000
GR	2182.800	9853.000	2182.800	9873.000	2184.900	9888.000	2183.800	9910.000	2184.900	9928.000
GR	2184.900	9943.000	2183.900	9952.000	2183.700	10000.000	2184.200	10041.000	2191.700	10071.000
GR	2198.800	10093.000	2200.400	10115.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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 SECND    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
          VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELKOR       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

*PROF 1

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECND 2.060

3265 DIVIDED FLOW

3720 CRITICAL DEPTH ASSUMED
    2.06     2.73  2133.93  2133.93  2133.90  2134.70     0.77     0.00     0.00  2133.70
   5784.      751.    3635.    1398.     296.     423.     428.       0.       0.  2131.20
    0.00     2.54     8.58     3.26    0.050    0.025    0.055    0.000  2131.20  9482.22
0.006377       0.       0.       0.        0        4        0     0.00   782.14 10376.09

1490 NH CARD USED
*SECND 2.170
3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.17     3.49  2139.29  2139.29     0.00  2140.27     0.98     3.64     0.06  2136.70
      .     1736.    3724.     304.     735.     383.     126.      13.       9.  2135.80
    0.02     2.39     9.72     2.42    0.080    0.025    0.062    0.000  2135.80  9536.27
0.006257     520.     573.     610.        5       11        0     0.00   649.68 10185.95

1490 NH CARD USED
*SECND 2.250

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.25     4.37  2143.37  2143.37     0.00  2144.87     1.50     2.36     0.16  2139.00
   5784.      254.    5143.     388.     327.     494.     172.      26.      14.  2139.50
    0.03     0.78    10.40     2.26    0.238    0.025    0.062    0.000  2139.00  9716.12
0.004847     430.     430.     440.       20       11        0     0.00   419.14 10201.12
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   (         QLOB      QCH       QROB      ALOB      ACH       AROB      VOI       TWA    LLFT/RIGHT
   Time      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 2.370
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.37      4.13   2148.13   2148.13      0.00   2149.41      1.28      3.02      0.02   2144.00
   5784.       100.     4390.     1294.       61.      433.      308.       39.       20.   2144.90
    0.05      1.62     10.15      4.21     0.086     0.025     0.038     0.000   2144.00   9891.36
 0.004980      615.      615.      610.         4        11         0      0.00    379.00  10270.36


1490 NH CARD USED
*SECNO 2.460

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.46      3.57   2151.37   2151.37      0.00   2152.28      0.92      2.78      0.04   2148.70
   5784.      1000.     3508.     1276.      207.      396.      219.       48.       25.   2149.00
    0.07      4.82      8.85      5.82     0.033     0.025     0.038     0.000   2147.80   9749.40
 0.0[illegible]5      455.      470.      445.         3        15         0      0.00    496.58  10247.27


1490 NH CARD USED
*SECNO 2.580

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.58      5.29   2157.29   2157.29      0.00   2158.30      1.01      3.30      0.03   2154.10
   5784.      1507.     4074.      203.      516.      432.      110.       62.       33.   2155.80
    0.10      2.92      9.44      1.84     0.042     0.025     0.065     0.000   2152.00   9443.29
 0.003707      625.      655.      670.         2        14         0      0.00    622.54  10139.12


1490 NH CARD USED
*SECNO 2.690

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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 SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA   LEFT/RIGHT
 V        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

3720 CRITICAL DEPTH ASSUMED
    2.69     4.81  2161.51  2161.51     0.00  2162.47     0.97     2.12     0.00  2158.20
   5784.    1337.     3943.     504.     354.     427.     170.     74.      40.   2158.50
    0.12     3.78     9.23     2.97    0.032    0.025    0.050    0.000  2156.70  9395.97
 0.004203    495.     550.     575.       20       11        0     0.00   661.63 10152.26

1490 NH CARD USED
SECNO 2.730
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          VULTURE MINE ROAD
    2.73     2.80  2164.90  2164.90     0.00  2165.80     0.91     1.30     0.01  2163.00
   5784.     679.     4302.     603.     213.     544.      98.     79.      44.   2162.40
    0.13     3.18     8.27     6.18    0.045    0.026    0.025    0.000  2162.10  9649.09
 0.006602    340.     240.     160.       20       14        0     0.00   489.82 10138.91

1490 NH CARD USED
SEC[illegible].780

3265 DIVIDED FLOW

    2.78     3.68  2166.68     0.00     0.00  2167.10     0.42     1.25     0.05  2164.10
   5100.     374.     2312.     2414.     183.     325.     875.     86.      48.   2163.70
    0.14     2.04     7.11     2.76    0.045    0.025    0.050    0.000  2163.00  9496.32
 0.003421    150.     260.     310.        2        0        0     0.00   820.95 10533.84

1490 NH CARD USED
SECNO 2.880

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.88     3.22  2170.22  2170.22     0.00  2171.10     0.88     1.96     0.14  2167.00
   5100.      84.     3461.     1555.      30.     387.     384.     99.      56.   2167.00
    0.16     2.79     8.94     2.66    0.050    0.025    0.050    0.000  2167.00  9925.24
 0.004754    500.     495.     480.       20       15        0     0.00   592.48 10726.07
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST

1490 NH CARD USED
*SECNO 2.970

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.97      3.26   2174.36   2174.36      0.00   2175.25      0.88      2.20      0.00   2171.10
    5100.        5.     4038.     1057.        3.      480.      475.      109.       62.   2171.10
     0.18      1.73      8.40      2.22     0.050     0.025     0.054     0.000   2171.10   9926.15
 0.004538      310.      500.      400.        20         5         0      0.00    652.89  10790.98

1490 NH CARD USED
*SECNO 3.070

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720    TICAL DEPTH ASSUMED
     3.07      3.39   2178.29   2178.29      0.00   2179.49      1.20      2.54      0.10   2176.20
    5100.        4.     4886.      210.        2.      544.       79.      117.       66.   2175.30
     0.19      1.90      8.97      2.68     0.050     0.025     0.050     0.000   2174.90   9953.94
 0.006168      315.      500.      360.        10         8         0      0.00    310.35  10500.37

1490 NH CARD USED
*SECNO 3.180

3301 HV CHANGED MORE THAN HVINS

     3.18      3.03   2182.53      0.00      0.00   2182.90      0.38      3.33      0.08   2180.70
    5100.     2645.     2390.        64.      667.      408.       25.      129.       72.   2179.70
     0.23      3.96      5.86      2.62     0.041     0.036     0.050     0.000   2179.50   9532.96
 0.004975      555.      620.      610.         4         0         0      0.00    540.37  10073.33

1490 NH CARD USED
*SECNO 3.270

3265 DIVIDED FLOW
```

SECND	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	CLOSS	BANK ELEV
[illegible]	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	JTRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
3.27	2.72	2185.52	0.00	0.00	2185.98	0.46	3.05	0.02	2183.90
4906.	3770.	1129.	7.	827.	146.	3.	141.	79.	2184.20
0.25	4.56	7.72	2.03	0.039	0.025	0.050	0.000	2182.80	9191.72
0.008684	485.	460.	455.	3	0	0	0.00	765.68	10046.25

THIS RUN EXECUTED MON, JUN 01 1987 16:39:10

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 50 YEAR PROFILE - R2

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2134.700	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIK	ITRACE
	2.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELHTN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAD    TOPWID     ENDST

*PROF 2

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 2.060

3265 DIVIDED FLOW

720 CRITICAL DEPTH ASSUMED
    2.06     3.53  2134.73  2134.73  2134.70  2135.71     0.98     0.00     0.00  2133.70
  10433.     2064.    5773.    2596.     633.     567.     664.       0.       0.  2131.20
    0.00     3.26    10.19     3.91    0.050    0.025    0.055    0.000  2131.20  9410.31
 0.006280      0.       0.       0.        0        4        0     0.00   948.13 10382.93

490 NH CARD USED
*SECNO 2.170
185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    2.17     4.47  2140.27  2140.27     0.00  2141.56     1.29     3.55     0.09  2136.70
  1[illegible].     3545.    5978.     910.    1126.     509.     287.      24.      11.  2135.80
    0.02     3.15    11.75     3.17    0.077    0.025    0.058    0.000  2135.80  9531.75
 0.006275     320.     575.     610.        6       11        0     0.00   705.77 10237.51

490 NH CARD USED
*SECNO 2.250

265 DIVIDED FLOW

301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    2.25     5.88  2144.88  2144.88     0.00  2146.84     1.96     2.27     0.20  2139.00
  10433.     668.     8452.    1313.     606.     681.     386.      42.      16.  2139.50
    0.03     1.10    12.40     3.41    0.203    0.025    0.059    0.000  2139.00  9705.35
 0.004490     430.     430.     440.       20       11        0     0.00   476.11 10209.86
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```
   SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
   Q        QLOB     QCH      QROB     AL OB    ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VRUB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 2.370
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.37     5.38  2149.38  2149.38     0.00  2151.15     1.78     2.93     0.02  2144.00
   10433.     209.     7156.     3068.     153.     376.     572.     63.     23.  2144.90
    0.05     1.57     12.42     5.37    0.122    0.025    0.040    0.000  2144.00  9883.46
 0.005099     615.     615.     610.       20       11        0     0.00   389.45 10272.91


1490 NH CARD USED
*SECNO 2.460

3301 HV CHANGED MORE THAN HVINS

    2.46     4.85  2152.65     0.00     0.00  2153.61     0.96     2.37     0.08  2148.70
   10433.    2461.     3717.     2255.     469.     613.     383.     77.     27.  2149.00
    0.06     5.25     9.32     5.89    0.037    0.027    0.040    0.000  2147.80  9747.45
 0.005185     455.     470.     445.        3        0        0     0.00   502.43 10249.88


1490 NH CARD USED
*SECNO 2.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.58     6.34  2158.34  2158.34     0.00  2159.57     1.23     2.91     0.08  2154.10
   10433.    3834.     6067.     532.    1023.     539.     212.     101.     36.  2155.80
    0.09     3.75     11.26     2.51    0.043    0.025    0.065    0.000  2152.00  9438.27
 0.003931     625.     655.     670.       20       11        0     0.00   719.06 10157.33


1490 NH CARD USED
*SECNO 2.690

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.69     5.83  2162.53  2162.53     0.00  2163.62     1.09     2.13     0.01  2158.20
   10433.    3505.     5822.     1105.     890.     544.     333.     123.     46.  2158.50
    0.11     3.94     10.70     3.32    0.037    0.025    0.050    0.000  2156.70  9337.36
 0.004086     493.     530.     575.       20       15        0     0.00   886.92 10277.20
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```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

1490 NH CARD USED
*SECNO 2.730
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.73     3.69  2165.79  2165.79     0.00  2167.05     1.26     1.29     0.05  2163.00
   10433.    1667.    7458.    1308.     386.     746.     179.     132.      50.  2162.40
    0.11     4.32     9.99     7.29    0.045    0.026    0.027    0.000  2162.10  9633.23
 0.006436    340.     240.     160.       20       14        0     0.00   533.39 10166.62

1490 NH CARD USED
*SECNO 2.780

3301 HV CHANGED MORE THAN HVINS

    2.78     4.74  2167.74     0.00     0.00  2168.31     0.57     1.19     0.07  2164.10
   10242.    1336.    3884.    5022.     447.     443.    1396.     143.      54.  2163.70
    0.13     2.99     8.76     3.60    0.045    0.025    0.050    0.000  2163.00  9684.16
 0.003429    150.     260.     310.        2        0        0     0.00   853.90 10538.07

1490 NH CARD USED
*SECNO 2.880

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    2.88     4.33  2171.33  2171.33     0.00  2172.48     1.15     1.98     0.17  2167.00
   10242.     188.    5737.    4317.      55.     320.    1203.     163.      63.  2167.00
    0.14     3.44    11.04     3.59    0.050    0.025    0.050    0.000  2167.00  9918.79
 0.004881    300.     475.     480.       20       11        0     0.00   778.52 10729.16

1490 NH CARD USED
*SECNO 2.970
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   V         VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELHIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IBC       ICONT     CORAR     TOPWID      ENDST


3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.97      4.40   2175.50   2175.50      0.00   2176.62      1.12      2.14      0.00   2171.10
   10242.       11.      6758.     3472.        5.      660.     1146.      183.       71.   2171.10
     0.16      2.09     10.24      3.03     0.050     0.025     0.053     0.000   2171.10   9925.50
 0.004415      510.       500.      400.        20         5         0      0.00    824.54  10803.65


1490 NH CARD USED
*SECNO 3.070

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     [illegible]7      5.08   2179.98   2179.98      0.00   2181.23      1.25      1.89      0.04   2176.20
   10242.       15.      8638.     1589.        7.      890.      657.      200.       78.   2175.30
     0.18      2.20      9.71      2.42     0.050     0.025     0.050     0.000   2174.90   9952.28
 0.003750      513.       500.      360.        20         8         0      0.00    796.54  10801.01


1490 NH CARD USED
*SECNO 3.180

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

     3.18      3.92   2183.42      0.00      0.00   2184.12      0.70      2.83      0.05   2180.70
   10242.     5779.      4302.      161.      997.      547.       51.      221.       88.   2179.70
     0.20      5.80      7.86      3.15     0.040     0.034     0.052     0.000   2179.50   9527.50
 0.006102      553.       620.      610.         2         0         0      0.00    584.90  10151.38


1490 NH CARD USED
*SECNO 3.270
     3.27      3.72   2186.52      0.00      0.00   2187.10      0.57      2.97      0.01   2183.90
    7954.     7784.      2142.        28.     1371.      236.       11.      240.       96.   2184.20
     0.22      4.95      9.08      2.56     0.041     0.025     0.050     0.000   2182.80   9161.65
 0.006360      485.       460.      455.         3         0         0      0.00    888.63  10050.28
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THIS RUN EXECUTED MON, JUN 01 1987 16:39:38

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*****************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
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1 SOLS WASH
2 REACH 2
T3 100 YEAR PROFILE

	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.000000	0.00	0.0	0.	2135.050	0.000
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA    LEFT/RIGHT
   TAU      VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


#PROF 3

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 2.060
3720 CRITICAL DEPTH ASSUMED
     2.06     3.86  2135.06  2135.06  2135.05  2136.16     1.10     0.00     0.00  2133.70
   12945.    2862.     6849.     3234.     790.     625.     762.       0.       0.  2131.20
     0.00     3.62     10.96     4.24    0.050    0.025    0.055    0.000  2131.20  9408.67
 0.006391       0.       0.       0.        0        4        0     0.00   975.56 10384.23


1490 NH CARD USED
*SECNO 2.170
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.17     4.88  2140.68  2140.68     0.00  2142.15     1.47     3.62     0.11  2136.70
   12945.    4312.     7136.     1298.    1292.     562.     338.      28.      11.  2135.80
     0.02     3.49     12.70     3.62    0.076    0.025    0.058    0.000  2135.80  9529.83
 0.006420     520.      573.      610.        7       11        0     0.00   709.18 10239.01


1490 NH CARD USED
*SECNO 2.250

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.25     6.53  2145.53  2145.53     0.00  2147.72     2.19     2.20     0.22  2139.00
   12945.     933.    10143.    1870.     748.     762.     481.      49.      17.  2139.50
     0.03     1.25     13.30     3.89    0.193    0.025    0.058    0.000  2139.00  9702.63
 0.004447     430.      430.      440.       20       11        0     0.00   496.47 10212.35


1490 NH CARD USED
*SECNO 2.370
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TAPE     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAS    TOPWID     ENDST

3720 CRITICAL DEPTH ASSUMED
   2.37     5.93  2149.93  2149.93     0.00  2151.96     2.03     2.94     0.02  2144.00
  12945.     270.     8582.     4093.     168.     640.     690.     74.     23.   2144.90
   0.04     1.61    13.41     5.93    0.135    0.025    0.041    0.000  2144.00  9879.95
 .005164     615.     613.     610.       20       11        0     0.00   394.10 10274.05

1490 NH CARD USED
ECNO 2.460

3301 HV CHANGED MORE THAN HVINS

   2.46     5.50  2153.30     0.00     0.00  2154.28     0.98     2.21     0.10  2148.70
  12945.    3304.     6847.     2794.     601.     722.     466.     91.     28.   2149.00
   0.06     5.50     9.48     5.99    0.038    0.028    0.040    0.000  2147.80  9746.47
 .004467     455.     470.     445.        3        0        0     0.00   505.06 10251.53

90 NH CARD USED
*SECNO 2.580
3685 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   2.58     6.72  2158.72  2158.72     0.00  2160.11     1.39     2.82     0.12  2154.10
  12945.    3142.     7085.     719.    1220.     578.     252.     119.     37.   2155.80
   0.08     4.21    12.26     2.85    0.044    0.025    0.065    0.000  2152.00  9436.42
 0.004243     625.     635.     670.       20       11        0     0.00   724.00 10160.42

1490 NH CARD USED
*SECNO 2.690

3265 DIVIDED FLOW

85 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   2.69     6.31  2163.01  2163.01     0.00  2164.09     1.08     2.13     0.03  2158.20
  12945.    4819.     6603.     1521.    1159.     300.     447.     145.     46.   2158.50
   0.10     4.16    11.01     3.41    0.039    0.025    0.050    0.000  2156.70  9334.94
 0.003798     495.     530.     575.       20       10        0     0.00   914.06 10294.00
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TAUC      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 2.730
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.73      4.11   2166.21   2166.21      0.00   2167.61      1.41      1.24      0.10   2163.00
   12945.      2243.     8971.     1731.      471.      840.      226.      156.       51.   2162.40
     0.11      4.76     10.68      7.65     0.045     0.027     0.027     0.000   2162.10   9625.84
 0.006300      340.      240.      160.        20        14         0      0.00    354.57  10180.41


1490 NH CARD USED
*SECNO 2.780

3301 HV CHANGED MORE THAN HVINS

     2.78      5.22   2168.22      0.00      0.00   2168.84      0.62      1.15      0.08   2164.10
   12817.      1906.     4396.     6315.      567.      496.     1628.      169.       55.   2163.70
     0.12      3.36      9.27      3.88     0.045     0.025     0.050     0.000   2163.00   9680.26
 0.003305      130.      260.      310.         3         0         0      0.00    859.69  10539.95


1490 NH CARD USED
*SECNO 2.880

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.88      4.74   2171.74   2171.74      0.00   2173.01      1.27      1.96      0.19   2167.00
   12817.      242.     6732.     5823.       65.      569.     1469.      195.       64.   2167.00
     0.14      3.70     11.87      3.96     0.050     0.025     0.050     0.000   2167.00   9916.41
 0.005002      500.      195.      180.        20        15         0      0.00    813.89  10730.30


1490 NH CARD USED
*SECNO 2.970

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST

720 CRITICAL DEPTH ASSUMED
   2.97     4.81  2175.91  2175.91     0.00  2177.15     1.24     2.17     0.00  2171.10
  12817.      15.     7979.     4823.      7.     725.     1431.     217.      72.  2171.10
   0.15     2.23    11.00     3.37    0.050    0.025    0.053    0.000  2171.10  9925.77
.004487     510.     500.     400.       20        5        0     0.00   868.68 10807.36

490 NH CARD USED
SECNO 3.070

265 DIVIDED FLOW

685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   3.07     5.57  2180.47  2180.47     0.00  2181.81     1.33     1.86     0.03  2176.20
  12817.      21.    10192.     2604.      9.     990.     957.     236.      80.  2175.30
   0.17     2.35    10.30     2.72    0.050    0.025    0.050    0.000  2174.90  9951.80
.003660     515.     500.     360.       20        8        0     0.00   847.82 10803.01

490 NH CARD USED
*SECNO 3.180

265 DIVIDED FLOW

801 HV CHANGED MORE THAN HVINS

   3.18     4.33  2183.83     0.00     0.00  2184.66     0.83     2.80     0.05  2180.70
  12817.    7400.     5194.      223.     1151.     611.      80.     262.      90.  2179.70
   0.19     6.43     8.50     2.79    0.039    0.034    0.058    0.000  2179.50  9520.64
 0.006160     555.     620.     610.        2        0        0     0.00   618.77 10171.29

490 NH CARD USED
*SECNO 3.270
   3.27     4.12  2186.92     0.00     0.00  2187.55     0.63     2.88     0.07  2183.90
  12464.    9811.     2613.      41.     1891.     272.      15.     203.      99.  2184.20
   0.21     5.19     9.61     2.75    0.042    0.025    0.050    0.000  2182.80  9154.21
 0.003904     485.     460.     465.        3        0        0     0.00   897.68 10051.89
```

THIS RUN EXECUTED MON, JUN 01 1987 16:40:05

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
```

T1 SOLS WASH
T2 REACH 2
T3 500 YEAR PROFILE

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	5.	0.	0.	0.000000	0.00	0.0	0.	2135.700	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IRW	CHNTM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA   LEFT/RIGHT
 TW       VLOB     VCH      VROB     XHL      XNCH     XNR      WTN      ELHIN     SSTA
 SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST

*PROF 4

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 2.060
    2.06     4.50  2135.70  2135.68  2135.70  2137.05     1.35     0.00     0.00  2133.70
   18691.    4832.    9182.    4676.    1111.     739.     956.       0.       0.  2131.20
    0.00     4.35    12.42     4.89    0.050    0.025    0.055    0.000  2131.20  9405.42
 0.006555      0.       0.       0.        0        4        0     0.00   981.38 10386.80

490 NH CARD USED
*SECNO 2.170
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    2.17     5.70  2141.50  2141.50     0.00  2143.33     1.82     3.72     0.14  2136.70
   18691.    6740.    9684.    2267.    1629.     668.     503.      36.      11.  2135.80
    0.02     4.14    14.49     4.51    0.075    0.025    0.056    0.000  2135.80  9525.99
 0.006629     520.     573.     610.       20       11        0     0.00   716.02 10242.01

1490 NH CARD USED
*SECNO 2.250
80 CROSS SECTION      2.25 EXTENDED      0.81 FEET

01 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    2.25     7.81  2146.81  2146.81     0.00  2149.48     2.66     2.31     0.25  2139.00
   18691.    1627.   13851.    3213.    1053.     922.     672.      63.      17.  2139.50
    0.03     1.54    15.03     4.78    0.182    0.025    0.058    0.000  2139.00  9697.28
 0.004408     430.     430.     440.       20       11        0     0.00   516.72 10214.00

490 NH CARD USED
*SECNO 2.370
185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    2.37     7.09  2151.09  2151.09     0.00  2153.59     2.50     2.92     0.02  2144.00
   18691.     413.   11714.    6564.     247.     773.     941.      95.      23.  2144.90
    0.04     1.67    15.16     6.97    0.156    0.025    0.041    0.000  2144.00  9074.20
 0.005133     615.     615.     610.        2       11        0     0.00   409.41 10283.61
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   T         VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 2.460

3301 HV CHANGED MORE THAN HVINS

     2.46      6.83   2154.63      0.00      0.00   2155.68      1.05      1.95      0.15   2148.70
    18691.     5238.     9368.     4065.     876.      947.     645.      119.       28.   2149.00
     0.06      6.00      9.89      6.30     0.039     0.028    0.041     0.000   2147.80   9744.45
 0.003536      455.      470.      445.         3         0        0      0.00    514.59  10259.04


1490 NH CARD USED
*SECNO 2.580

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.58      7.54   2159.54   2159.54      0.00   2161.20      1.65      2.58      0.18   2154.10
    1[illegible]      8340.     9172.     1179.    1646.      662.     342.      154.       37.   2155.80
     0.08      5.07     13.86      3.45     0.044     0.025    0.065     0.000   2152.00   9432.48
 0.004526      625.      655.      670.        20         8        0      0.00    734.58  10167.05


1490 NH CARD USED
*SECNO 2.690
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.69      6.88   2163.58   2163.58      0.00   2165.02      1.43      2.43      0.02   2158.20
    18691.     7555.     8707.     2429.    1490.      665.     584.      189.       48.   2158.50
     0.09      5.07     13.09      4.16     0.040     0.025    0.050     0.000   2156.70   9332.09
 0.004673      495.      530.      575.        20        15        0      0.00    964.59  10296.69


1490 NH CARD USED
*SECNO 2.730
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.73      4.92   2167.02   2167.02      0.00   2168.75      1.73      1.38      0.09   2163.00
    18691.     3610.    12318.     2763.     647.     1024.     334.      203.       52.   2162.40
     0.10      5.58     12.03      8.26     0.045     0.027    0.029     0.000   2162.10   9611.41
 0.006188      340.      240.      160.        20        19        0      0.00    596.55  10207.96
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 T        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

1490 NH CARD USED
ECNO 2.780

3301 HV CHANGED MORE THAN HVINS

   2.78     6.21  2169.21     0.00     0.00  2169.91     0.70     1.06     0.10  2164.10
  18518.    3273.    6084.    9161.     826.     606.    2117.     219.      57.  2163.70
   0.11     3.97    10.05     4.33    0.045    0.025    0.050    0.000  2163.00  9672.09
.002973     150.     260.     310.        3        0        0     0.00   871.78 10543.87

90 NH CARD USED
SECNO 2.880

01 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   2.88     5.48  2172.48  2172.48     0.00  2174.01     1.53     1.90     0.25  2167.00
  1[illegible]     368.     8867.    9283.     87.     658.    1963.     254.      66.  2167.00
   0.13     4.20    13.48     4.73    0.050    0.025    0.050    0.000  2167.00  9912.11
0.005321     500.     495.     480.       20       15        0     0.00   820.26 10732.37

90 NH CARD USED
SECNO 2.970
85 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   2.97     5.55  2176.65  2176.65     0.00  2178.14     1.49     2.28     0.00  2171.10
  18518.      22.    10519.    7977.      9.     842.    1964.     282.      74.  2171.10
   0.14     2.53    12.49     4.06    0.050    0.025    0.052    0.000  2171.10  9924.85
0.004740     510.     500.     400.       20        5        0     0.00   884.82 10809.66

1490 NH CARD USED
ECNO 3.070
85 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   3.07     6.40  2181.30  2181.30     0.00  2182.86     1.56     1.90     0.07  2176.20
  18518.      34.    13428.    3056.     13.    1138.    1489.     307.      82.  2175.30
   0.15     2.69    11.59     3.40    0.050    0.025    0.050    0.000  2174.90  9950.98
.003762     515.     500.     360.       20        8        0     0.00   855.40 10806.39
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     BANK ELEV
   [illegible]  QLOB      QCH       QROB      ALOB      ACH       AROB      VOI       TWA    LEFT/RIGHT
   [illegible]  VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       USTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CONSR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 3.180

3265 DIVIDED FLOW

     3.18      5.16   2184.66      0.00      0.00   2185.73      1.06      2.82      0.05   2180.70
   18518.     11029.     7101.      388.     1475.      741.      173.      342.       93.   2179.70
     0.17      7.48      9.58      2.24     0.039     0.034     0.077     0.000   2179.50   9504.48
 0.006053      553.      620.      610.         3         0         0      0.00    700.49  10222.35


1490 NH CARD USED
*SECNO 3.270
     3.27      4.91   2187.71      0.00      0.00   2188.46      0.75      2.70      0.03   2183.90
   18037.     14334.     3627.       76.     2531.      342.       25.      371.      102.   2184.20
     0.19      5.66     10.61      3.08     0.042     0.025     0.050     0.000   2182.80   9127.24
 0.005292      485.      460.      455.         2         0         0      0.00    927.81  10055.04
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THIS RUN EXECUTED MON, JUN 01 1987 16:40:37

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*****************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
 ERROR CORR -  01,02,03,04,05,06
 MODIFICATION -  50,51,52,53,54,55,56
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

SOLS WASH REACH 2

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	2.060	2133.93	2.73	2134.70	8.58	2131.20	0.00	782.14	9482.22	10376.09	751.14	3635.08	1397.78
	2.060	2134.73	3.53	2135.71	10.19	2131.20	0.00	948.13	9410.31	10382.93	2064.50	5772.64	2595.87
*	2.060	2135.06	3.86	2136.16	10.96	2131.20	0.00	975.56	9408.67	10384.23	2861.75	6849.47	3233.77
	2.060	2135.70	4.50	2137.05	12.42	2131.20	0.00	981.38	9405.42	10386.80	4832.39	9182.14	4676.47
	2.170	2139.29	3.49	2140.27	9.72	2135.80	575.00	649.68	9536.27	10185.95	1756.25	3723.63	304.12
*	2.170	2140.27	4.47	2141.56	11.75	2135.80	575.00	705.77	9531.75	10237.51	3544.60	5978.46	909.94
	2.170	2140.68	4.88	2142.15	12.70	2135.80	575.00	709.18	9529.83	10239.01	4311.83	7135.51	1297.66
*	2.170	2141.50	5.70	2143.33	14.49	2135.80	575.00	716.02	9525.99	10242.01	6740.47	9683.86	2266.67
	2.250	2143.37	4.37	2144.87	10.40	2139.00	430.00	419.14	9716.12	10201.12	253.87	5142.62	387.51
	2.250	2144.88	5.88	2146.84	12.40	2139.00	430.00	476.11	9705.35	10209.86	667.53	8452.08	1313.39
*	2.250	2145.53	6.53	2147.72	13.30	2139.00	430.00	496.47	9702.63	10212.35	932.68	10142.80	1869.51
	2.250	2146.81	7.81	2149.48	15.03	2139.00	430.00	516.72	9697.28	10214.00	1626.52	13851.22	3213.26
*	2.370	2148.13	4.13	2149.41	10.15	2144.00	615.00	379.00	9891.36	10270.36	99.79	4389.74	1294.47
*	2.370	2149.38	5.38	2151.15	12.42	2144.00	615.00	389.45	9883.46	10272.91	209.48	7155.78	3067.75
	2.370	2149.93	5.93	2151.96	13.41	2144.00	615.00	394.10	9879.95	10274.05	270.25	8581.65	4093.10
	2.370	2151.09	7.09	2153.59	15.16	2144.00	615.00	409.41	9874.20	10283.61	412.94	11714.46	6563.58
	2.460	2151.37	3.57	2152.28	8.85	2147.80	470.00	496.58	9749.40	10247.27	999.91	3508.46	1275.63
	2.460	2152.65	4.85	2153.61	9.32	2147.80	470.00	502.43	9747.45	10249.88	2460.65	5716.90	2255.45
	2.460	2153.30	5.50	2154.28	9.48	2147.80	470.00	505.06	9746.47	10251.53	3303.96	6846.91	2794.13
	2.460	2154.63	6.83	2155.68	9.89	2147.80	470.00	514.59	9744.45	10259.04	5257.89	9368.35	4064.77
*	2.580	2157.29	5.29	2158.30	9.44	2152.00	655.00	622.54	9443.29	10139.12	1506.68	4074.43	202.89
*	2.580	2158.34	6.34	2159.57	11.26	2152.00	655.00	719.06	9438.27	10157.33	3833.72	6066.87	542.40
	2.580	2158.72	6.72	2160.11	12.26	2152.00	655.00	724.00	9436.42	10160.42	5141.86	7084.54	718.59
*	2.580	2159.54	7.54	2161.20	13.86	2152.00	655.00	734.58	9432.48	10167.05	8339.57	9172.25	1179.18
	2.690	2161.51	4.81	2162.47	9.23	2156.70	550.00	661.63	9393.97	10152.26	1337.43	3942.58	503.99
	2.690	2162.53	5.83	2163.62	10.70	2156.70	550.00	886.92	9337.36	10277.20	3505.19	5822.46	1105.35
*	2.690	2163.01	6.31	2164.09	11.01	2156.70	550.00	914.06	9334.94	10294.00	4818.99	6604.67	1521.33
*	2.690	2163.58	6.88	2165.02	13.09	2156.70	550.00	964.59	9332.09	10296.69	7554.98	8707.02	2428.99

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
*	2.730	2164.90	2.80	2165.80	8.27	2162.10	240.00	489.82	9649.09	10138.91	679.44	4301.68	602.89
*	2.730	2165.79	3.69	2167.05	9.99	2162.10	240.00	533.39	9633.23	10166.62	1666.76	7457.84	1308.[illegible]
*	2.730	2166.21	4.11	2167.61	10.68	2162.10	240.00	554.57	9625.84	10180.41	2243.37	8970.68	1730.9[illegible]
*	2.730	2167.02	4.92	2168.75	12.03	2162.10	240.00	596.55	9611.41	10207.96	3610.39	12317.98	2762.63
	2.780	2166.68	3.68	2167.10	7.11	2163.00	260.00	820.95	9696.32	10533.84	373.71	2311.90	2414.3[illegible]
	2.780	2167.74	4.74	2168.31	8.76	2163.00	260.00	853.90	9684.16	10538.07	1335.83	3883.82	5022.3[illegible]
	2.780	2168.22	5.22	2168.84	9.27	2163.00	260.00	859.69	9680.26	10539.95	1906.13	4595.78	6315.09
	2.780	2169.21	6.21	2169.91	10.05	2163.00	260.00	871.78	9672.09	10543.87	3273.48	6083.81	9160.7[illegible]
*	2.880	2170.22	3.22	2171.10	8.94	2167.00	495.00	592.48	9926.24	10726.07	84.38	3460.74	1554.87
*	2.880	2171.33	4.33	2172.48	11.04	2167.00	495.00	778.52	9918.79	10729.16	187.93	5736.80	4317.[illegible]
*	2.880	2171.74	4.74	2173.01	11.87	2167.00	495.00	813.89	9916.41	10730.30	242.12	6751.88	5823.0[illegible]
*	2.880	2172.48	5.48	2174.01	13.48	2167.00	495.00	820.26	9912.11	10732.37	367.55	8867.02	9283.43
*	2.970	2174.36	3.26	2175.25	8.40	2171.10	500.00	652.89	9926.15	10790.98	5.24	4038.25	1056.[illegible]
*	2.970	2175.50	4.40	2176.62	10.24	2171.10	500.00	824.34	9925.50	10803.65	11.40	6758.15	3472.37
*	2.970	2175.91	4.81	2177.15	11.00	2171.10	500.00	868.68	9925.27	10807.36	14.71	7979.12	4823.17
*	2.970	2176.65	5.55	2178.14	12.49	2171.10	500.00	884.82	9924.85	10809.66	22.12	10518.84	7977.[illegible]
*	3.070	2178.29	3.39	2179.49	8.97	2174.90	500.00	310.35	9953.94	10500.37	4.08	4885.62	210.30
*	3.070	2179.98	5.08	2181.23	9.71	2174.90	500.00	796.54	9952.28	10801.01	15.46	8637.57	1588.[illegible]
*	3.070	2180.47	5.57	2181.81	10.30	2174.90	500.00	847.82	9951.80	10803.01	21.14	10192.28	2603.[illegible]
*	3.070	2181.30	6.40	2182.86	11.59	2174.90	500.00	855.40	9950.98	10806.39	34.33	13427.98	5055.69
	3.180	2182.53	3.03	2182.90	5.86	2179.50	620.00	540.37	9532.96	10073.33	2645.50	2390.35	64.[illegible]
	3.180	2183.42	3.92	2184.12	7.86	2179.50	620.00	584.90	9527.50	10151.38	5778.98	4301.73	161.27
	3.180	2183.83	4.33	2184.66	8.50	2179.50	620.00	618.77	9520.64	10171.29	7399.55	5194.17	223.28
	3.180	2184.66	5.16	2185.73	9.58	2179.50	620.00	700.49	9504.48	10222.35	11028.57	7101.11	388.4[illegible]
	3.270	2185.52	2.72	2185.98	7.72	2182.80	460.00	763.68	9191.72	10046.25	3769.60	1129.32	7.08
	3.270	2186.52	3.72	2187.10	9.08	2182.80	460.00	888.63	9161.65	10050.28	7784.39	2142.01	27.[illegible]
	3.270	2186.92	4.12	2187.55	9.61	2182.80	460.00	897.68	9154.21	10051.89	9810.58	2612.66	40.[illegible]
	3.270	2187.71	4.91	2188.46	10.61	2182.80	460.00	927.81	9127.24	10055.04	14333.69	3627.27	76.03

SUM... OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    2.060  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.060  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.060  PROFILE= 3  CRITICAL DEPTH ASSUMED

CAUTION  SECNO=    2.170  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.170  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.170  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.170  PROFILE= 2  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.170  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.170  PROFILE= 3  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.170  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.170  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.170  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.250  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.250  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.250  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.250  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.250  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.250  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.250  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.250  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.250  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.250  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.250  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.250  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.370  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.370  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.370  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.370  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.370  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.370  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.370  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.370  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.370  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.370  PROFILE= 4  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    2.460  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.460  PROFILE= 1  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    2.580  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.580  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.580  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.580  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.580  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.580  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.580  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.580  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.580  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.580  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
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CAUTION  SECNO=    2.580  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.690  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.690  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.690  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.690  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.690  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.690  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    2.690  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.690  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.690  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.690  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.730  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    2.730  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.730  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.730  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.730  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.730  PROFILE= 3  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    2.730  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.730  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.730  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUT     SECNO=    2.730  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.880  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    2.880  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    2.880  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.880  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.880  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.880  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.880  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.880  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.880  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.880  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.970  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.970  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.970  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    2.970  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    2.970  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.970  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.970  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.970  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAU      SECNO=    2.970  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    3.070  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.070  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.070  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.070  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.070  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.070  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.070  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.070  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.070  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.070  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL
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FLOOD INSURANCE ZONE DATA FOR SOLS WASH REACH 2

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
2.060	0.	-1.13	-0.33	0.64
2.170	575.	-1.38	-0.41	0.83
2.250	1005.	-2.16	-0.65	1.28
2.370	1620.	-1.80	-0.56	1.15
2.460	2090.	-1.93	-0.64	1.33
2.580	2745.	-1.43	-0.38	0.82
2.690	3295.	-1.50	-0.48	0.57
2.730	3535.	-1.31	-0.42	0.81
2.780	3795.	-1.54	-0.48	0.99
2.880	4290.	-1.52	-0.41	0.74
2.970	4790.	-1.55	-0.42	0.74
3.070	5290.	-2.18	-0.49	0.83
3.180	5910.	-1.30	-0.41	0.83
3.270	6370.	-1.40	-0.40	0.79
WEIGHTED AVG FOR REACH		-1.63	-0.47	0.91

FHF FOR THE REACH = 015 WITH 100.0 PERCENT OF THE REACH WITHIN 0.5 FEET
ZONE FOR THE REACH = A 3

THIS RUN EXECUTED MON, JUN 01 1987 16:40:43

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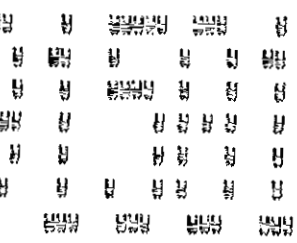
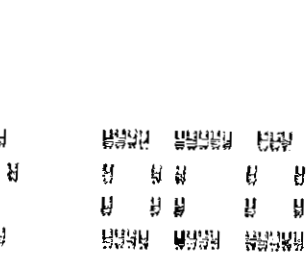
**************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
**************************************************
```

Floodplain Reach #3
Cross Sec. 3.27 - 5.350

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH3.MLT.OUT





(Spooler rev 20.2 (c) Prime Computer Inc., 1983)

Stcl: PRT001 -fors

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH3.MLT.OUT
File last modified: 87 06 01.17:02:16.Mon

Spooled: 87-06-04.08:41:24.Thu
Started: 87-06-04.08:42:08.Thu on: ANL.C by: DEC

, JUN 01 1987 15:16:23

THIS RUN EXECUTED MON, JUN 01 1987 15:16:23

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**********************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
**********************************************
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SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

T3 SOLS WASH REACH 3 FLOOD INSURANCE RATE ANALYSIS

	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	0.000000	0.00	0.0	0.	2185.500	0.000

	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNTH	ITRACE
J2	1.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	38.000	1.000	8.000	3.000	26.000	42.000	39.000	4.000	53.000	54.000
	13.000	14.000	15.000	203.000	-69.000	75.000	109.000	0.000	0.000	0.000

	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
T	1.000	6906.000	9954.000	12464.000	18037.000	0.000	0.000	0.000	0.000	0.000
NH	7.000	1.000	9150.000	0.050	9731.000	0.065	9769.000	0.025	9873.000	0.055
NH	9952.000	0.025	10041.000	0.050	10115.000	0.000	0.000	0.000	0.000	0.000
X1	3.270	37.000	9952.000	10041.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2193.900	8950.000	2191.700	9000.000	2188.800	9090.000	2186.900	9155.000	2186.500	9162.000
GR	2185.800	9186.000	2185.400	9194.000	2185.000	9219.000	2184.600	9223.000	2184.300	9246.000
GR	2183.900	9249.000	2183.300	9287.000	2184.900	9403.000	2184.500	9330.000	2184.200	9369.000
GR	2184.500	9383.000	2183.500	9437.000	2183.900	9484.000	2184.300	9517.000	2184.700	9560.000
GR	2184.300	9570.000	2185.300	9637.000	2186.300	9731.000	2184.300	9769.000	2184.000	9817.000
GR	2182.800	9853.000	2182.800	9873.000	2184.900	9888.000	2183.800	9910.000	2184.900	9928.000
GR	2184.900	9944.000	2183.900	9952.000	2183.700	10000.000	2184.200	10041.000	2191.700	10071.000
GR	2198.800	10093.000	2200.400	10115.000	0.000	0.000	0.000	0.000	0.000	0.000

NH	7.000	1.000	9050.000	0.050	9622.000	0.065	9672.000	0.025	9736.000	0.055
NH	9937.000	0.025	10020.000	0.050	10039.000	0.000	0.000	0.000	0.000	0.000
X1	3.350	40.000	9937.000	10020.000	370.000	425.000	430.000	0.000	0.000	0.000
GR	2193.500	8950.000	2191.600	8996.000	2189.400	9060.000	2188.700	9097.000	2188.200	9104.000
GR	2187.900	9127.000	2187.400	9130.000	2187.000	9154.000	2187.800	9168.000	2187.000	9200.000
GR	2187.400	9320.000	2187.900	9400.000	2188.100	9441.000	2187.400	9457.000	2187.700	9491.000
GR	2187.900	9514.000	2187.400	9533.000	2186.600	9576.000	2188.900	9602.000	2188.900	9622.000
GR	2189.900	9635.000	2189.500	9659.000	2186.200	9677.000	2186.200	9702.000	2186.500	9736.000
GR	2187.900	9765.000	2189.100	9807.000	2189.200	9824.000	2189.400	9837.000	2189.800	9848.000
GR	2188.800	9881.000	2188.600	9906.000	2187.700	9923.000	2188.100	9937.000	2187.800	9972.000
GR	2187.000	9982.000	2187.000	10000.000	2187.000	10020.000	2193.600	10032.000	2194.400	10039.000

REV. 6/87

	1.000	0.045	9943.000	0.025	10057.000	0.055	10130.000	0.000	10545.000	0.000
X1	4.070	23.000	9943.000	10057.000	770.000	725.000	770.000	0.000	0.000	0.000
	2232.300	9915.000	2215.000	9943.000	2215.500	10000.000	2216.300	10057.000	2217.300	10086.000
	2220.200	10131.000	2221.000	10172.000	2220.500	10210.000	2221.100	10233.000	2220.600	10294.000
GR	2220.500	10346.000	2219.600	10356.000	2220.400	10367.000	2220.200	10375.000	2219.700	10387.000
	2220.400	10390.000	2219.900	10397.000	2221.300	10412.000	2221.600	10442.000	2221.100	10469.000
	2220.600	10479.000	2227.900	10517.000	2234.500	10545.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.800	0.000	0.000	0.000	0.000	0.000
	7.000	0.045	9793.000	0.035	9833.000	0.025	9885.000	0.065	9955.000	0.025
	10057.000	0.065	10110.000	0.065	10690.000	0.000	0.000	0.000	0.000	0.000
X1	4.160	34.000	9948.000	10063.000	440.000	310.000	430.000	0.000	0.000	0.000
	2237.300	9750.000	2218.600	9793.000	2220.100	9799.000	2219.200	9833.000	2218.600	9842.000
	2218.500	9885.000	2221.200	9898.000	2221.900	9912.000	2222.900	9922.000	2222.700	9932.000
GR	2221.700	9948.000	2220.300	9955.000	2220.300	10000.000	2220.300	10063.000	2223.600	10083.000
	2225.300	10123.000	2224.600	10178.000	2225.600	10198.000	2225.000	10217.000	2225.800	10737.000
	2225.300	10288.000	2224.800	10339.000	2224.400	10406.000	2223.800	10426.000	2224.800	10452.000
GR	2223.700	10472.000	2224.600	10480.000	2224.500	10506.000	2222.600	10561.000	2224.100	10576.000
GR	2224.100	10584.000	2230.500	10608.000	2235.800	10641.000	2238.400	10690.000	0.000	0.000
NH	8.000	0.070	9680.000	0.025	9734.000	0.040	9771.000	0.040	9888.000	0.035
NH	10077.000	0.065	10101.000	0.030	10128.000	0.030	10395.000	0.000	0.000	0.000
	4.200	31.000	9888.000	10023.000	330.000	215.000	250.000	0.000	0.000	0.000
	2243.500	9410.000	2233.700	9454.000	2232.600	9485.000	2230.400	9558.000	2228.900	9634.000
GR	2223.300	9661.000	2223.400	9693.000	2223.300	9734.000	2225.300	9771.000	2225.800	9802.000
	2223.300	9830.000	2223.500	9888.000	2223.400	9954.000	2223.500	9996.000	2224.100	10000.000
	2224.400	10011.000	2223.300	10023.000	2223.700	10064.000	2225.400	10077.000	2225.400	10101.000
GR	2223.000	10111.000	2223.000	10128.000	2227.600	10155.000	2228.100	10173.000	2228.100	10197.000
GR	2228.300	10209.000	2227.800	10224.000	2227.800	10269.000	2227.300	10307.000	2225.500	10369.000
	2230.900	10395.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	4.000	4798.000	9767.000	12244.000	17749.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.400	0.500	0.000	0.000	0.000	0.000	0.000
	3.000	0.100	9863.000	0.025	10063.000	0.050	10110.000	0.000	0.000	0.000
X1	4.310	25.000	9863.000	10063.000	715.000	410.000	560.000	0.000	0.000	0.000
	2236.000	9025.000	2234.000	9085.000	2233.500	9175.000	2232.400	9251.000	2231.900	9311.000
	2231.800	9355.000	2233.000	9391.000	2232.700	9467.000	2232.300	9511.000	2232.300	9577.000
GR	2232.000	9646.000	2232.200	9710.000	2232.200	9749.000	2232.400	9788.000	2232.400	9830.000
GR	2231.700	9848.000	2228.600	9863.000	2229.200	9919.000	2228.300	9933.000	2228.000	9981.000
	2228.000	10000.000	2226.900	10008.000	2227.400	10063.000	2234.700	10074.000	2234.900	10110.000
NC	0.050	0.050	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	4.338	15.000	9885.000	10135.000	165.000	185.000	170.000	0.000	0.000	0.000
	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2230.000	2229.600	0.000
GR	2241.300	9245.000	2239.300	9345.000	2239.100	9445.000	2238.100	9545.000	2236.900	9645.000
	2237.400	9745.000	2235.700	9845.000	2230.000	9885.000	2230.000	9945.000	2230.000	10000.000
	2230.000	10015.000	2228.600	10115.000	2228.600	10135.000	2234.000	10140.000	2236.500	10215.000

X1	4.870	24.000	9927.000	10108.000	410.000	450.000	415.000	0.000	0.000	0.000
GR	2267.000	9850.000	2265.800	9888.000	2251.100	9927.000	2251.000	10000.000	2251.000	10057.000
R	2251.800	10070.000	2252.400	10108.000	2253.400	10150.000	2251.800	10163.000	2252.900	10174.000
R	2252.100	10184.000	2252.100	10195.000	2252.800	10229.000	2253.000	10263.000	2253.800	10287.000
GR	2254.700	10299.000	2255.600	10348.000	2255.800	10404.000	2256.800	10472.000	2256.600	10524.000
R	2257.000	10547.000	2258.300	10601.000	2259.700	10672.000	2263.600	10735.000	0.000	0.000
DT	4.000	4736.000	9661.000	12118.000	1758.1.000	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.065	9941.000	0.025	10040.000	0.065	10082.000	0.025	10190.000	0.035
	10332.000	0.045	10820.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	4.980	35.000	9941.000	10190.000	585.000	525.000	580.000	0.000	0.000	0.000
GR	2265.600	9800.000	2261.400	9844.000	2259.200	9916.000	2255.400	9941.000	2255.400	9972.000
R	2255.500	10000.000	2256.200	10040.000	2255.900	10082.000	2256.500	10092.000	2256.000	10103.000
R	2255.700	10190.000	2259.100	10220.000	2258.400	10256.000	2257.200	10266.000	2257.900	10278.000
GR	2257.900	10317.000	2258.700	10332.000	2258.400	10349.000	2256.700	10362.000	2256.700	10378.000
R	2258.500	10389.000	2259.000	10432.000	2259.700	10473.000	2261.400	10537.000	2262.100	10590.000
R	2261.500	10604.000	2262.600	10614.000	2262.600	10640.000	2262.000	10654.000	2262.700	10679.000
GR	2263.100	10701.000	2262.600	10746.000	2262.600	10761.000	2263.400	10772.000	2268.700	10820.000
NH	4.000	0.055	9891.000	0.025	10109.000	0.065	10160.000	0.045	10930.000	0.000
X1	5.080	25.000	9891.000	10109.000	515.000	660.000	505.000	0.000	0.000	0.000
GR	2276.400	9795.000	2259.200	9836.000	2259.000	9867.000	2258.400	9891.000	2258.900	9931.000
R	2260.000	9965.000	2260.000	10000.000	2259.300	10057.000	2258.300	10109.000	2261.900	10127.000
R	2262.100	10141.000	2262.300	10207.000	2261.900	10268.000	2261.800	10331.000	2259.900	10457.000
GR	2261.300	10472.000	2261.300	10507.000	2262.200	10539.000	2263.200	10595.000	2264.500	10643.000
R	5.800	10704.000	2267.300	10768.000	2267.600	10824.000	2268.400	10888.000	2269.200	10930.000
NC	0.000	0.000	0.000	0.300	0.300	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.065	9765.000	0.025	9849.000	0.060	9888.000	0.025	10093.000	0.065
	10153.000	0.045	10675.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	5.170	39.000	9765.000	10093.000	510.000	480.000	495.000	0.000	0.000	0.000
GR	2279.700	9630.000	2278.700	9644.000	2265.100	9684.000	2269.500	9712.000	2268.600	9746.000
R	2263.300	9765.000	2263.300	9817.000	2262.900	9848.000	2264.300	9861.000	2265.100	9881.000
R	2264.300	9888.000	2264.300	9949.000	2264.600	10000.000	2264.100	10064.000	2264.900	10079.000
GR	2265.300	10093.000	2265.100	10121.000	2264.700	10131.000	2264.700	10155.000	2265.400	10166.000
R	2265.400	10179.000	2265.100	10193.000	2265.800	10206.000	2266.800	10242.000	2266.300	10280.000
R	2265.900	10299.000	2266.400	10305.000	2267.400	10363.000	2267.300	10398.000	2266.600	10431.000
GR	2264.700	10439.000	2266.300	10465.000	2265.500	10473.000	2266.400	10501.000	2265.800	10548.000
R	2268.000	10568.000	2268.900	10593.000	2268.300	10622.000	2269.500	10675.000	0.000	0.000
NH	5.000	0.050	9842.000	0.065	9940.000	0.025	10071.000	0.065	10132.000	1.000
NH	10193.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	5.270	17.000	9940.000	10071.000	615.000	430.000	505.000	0.000	0.000	0.000
GR	2276.000	9080.000	2273.900	9380.000	2272.600	9513.000	2271.300	9649.000	2269.800	9741.000
GR	2269.600	9818.000	2272.900	9842.000	2272.900	9869.000	2271.600	9907.000	2266.900	9940.000
R	2266.800	10000.000	2266.800	10024.000	2268.000	10035.000	2268.100	10071.000	2276.600	10114.000
GR	2277.000	10132.000	2277.300	10193.000	0.000	0.000	0.000	0.000	0.000	0.000

```
 SECNO    DEPTH    CHSEL    CRIWS    WSELK    EG       HV       HM       DLOSS   WANK ELEV
 Q        DLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSIA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICCNT    CORAR    TOPWID     ENDST

*PROF 1

LCNV=   0.100 CENV=   0.300
1490 NH CARD USED
SECNO 3.270

3265 DIVIDED FLOW

   3.27     2.70  2185.50     0.00  2185.50  2185.97     0.47     0.00     0.00  2183.90
   4906.    3747.    1130.       7.     818.     145.       3.       0.       0.  2184.20
   0.00     4.61     7.79     2.07    0.039    0.025    0.050    0.000  2182.80  9192.00
0.008942       0.       0.       0.        0        0        0     0.00   763.83 10046.20

1490 NH CARD USED
SECNO 3.350

3265 DIVIDED FLOW

   3.35     2.68  2188.88     0.00     0.00  2189.26     0.38     3.28     0.01  2188.10
   4082.    4082.     816.       8.     907.     119.       3.       9.       7.  2187.00
   0.02     4.50     6.86     2.37    0.040    0.025    0.050    0.000  2186.20  9087.39
0.008254     370.     430.     425.        3        0        0     0.00   795.73 10023.42

1490 NH CARD USED
*SECNO 3.460
   3.46     2.90  2193.10     0.00     0.00  2193.65     0.54     4.34     0.05  2190.90
   4906.    3309.    1588.       9.     685.     206.       3.      20.      15.  2191.20
   0.05     4.83     7.73     2.53    0.043    0.025    0.030    0.000  2190.20  9465.21
0.009283     480.     545.     545.        3        0        0     0.00   601.32 10046.53

1490 NH CARD USED
SECNO 3.560
   3.56     4.19  2197.59     0.00     0.00  2198.40     0.80     4.67     0.08  2196.40
   4906.    4906.    2445.       0.     994.     330.       0.      33.      23.  2199.40
   0.06     4.93     7.41     0.00    0.044    0.025    0.000    0.000  2193.40  9328.60
0.008545     525.     525.     490.        2        0        0     0.00   720.99 10049.59

1490 NH CARD USED
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CONAR    TOPWID     ENDST

CHV=   0.300 CEHV=   0.800
[illegible]0 NH CARD USED
*SECNO 4.160

[illegible]65 DIVIDED FLOW

[illegible]01 HV CHANGED MORE THAN HVINS

    4.16     4.22  2222.72     0.00     0.00  2223.57     0.84     2.39     0.24  2221.70
    4906.    3508.    1364.      34.     430.     274.      18.      86.      48.  2220.30
    0.16     8.15     4.97     1.88    0.030    0.039    0.065    0.000  2218.50  9783.51
0.005473     440.     430.     310.        3        0        0     0.00   294.98 10562.27

[illegible]90 NH CARD USED
*SECNO 4.200

[illegible]65 DIVIDED FLOW

[illegible]85 [illegible]IMUM SPECIFIC ENERGY
[illegible]20 CRITICAL DEPTH ASSUMED
    4.20     2.47  2225.47  2225.47     0.00  2226.25     0.78     2.15     0.02  2223.30
    4906.    2065.    1718.    1124.     273.     257.     167.      91.      50.  2223.30
    0.17     7.58     6.68     6.74    0.028    0.035    0.034    0.000  2223.00  9650.55
0.010477     330.     250.     215.        5       14        0     0.00   452.63 10142.48

[illegible]CHV=   0.300 CEHV=   0.500
1490 NH CARD USED
[illegible]SECNO 4.310

3301 HV CHANGED MORE THAN HVINS

[illegible]185 MINIMUM SPECIFIC ENERGY
[illegible]720 CRITICAL DEPTH ASSUMED
    4.31     3.77  2230.67  2230.67     0.00  2231.98     1.31     4.80     0.26  2228.60
    4798.      13.     4761.      24.      10.     517.      8.      79.      55.  2227.40
    0.19     1.23     9.21     3.01    0.100    0.025    0.050    0.000  2226.90  9552.99
0.006777     715.     540.     410.        4       14        0     0.00   214.94 10067.92
```

```
 SECND    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       BLOSS   BANK ELEV
 (        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


CEHV=   0.100 CEHV=   0.300
90 NH CARD USED
SECND 4.330

01 HV CHANGED MORE THAN HVINS

    4.53     3.29  2240.18     0.00     0.00  2240.71     0.52     2.32     0.10  2238.40
   4798.      24.     4597.     177.      15.     780.      58.     117.      65.  2236.90
    0.24     1.62     5.90     3.04    0.050    0.025    0.040    0.000  2236.90  9802.46
0.003473     560.     610.     690.        3        0        0     0.00   409.09 10211.55


1490 NH CARD USED
SECND 4.600
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.60     4.47  2245.27  2245.27     0.00  2245.42     0.15     0.40     0.04  2240.80
   4798.      67.     4731.      0.      43.    1519.      0.     128.      69.  2245.20
    0.28     1.57     3.11     0.00    0.045    0.025    0.000    0.000  2240.80  9766.79
0.0     5     315.     390.     525.       20       19        0     0.00   429.52 10196.30


SECND 4.700

301 HV CHANGED MORE THAN HVINS

685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.70     2.98  2247.18  2247.18     0.00  2248.10     0.92     0.67     0.23  2245.40
   4798.       6.     4452.     439.       3.     561.      97.     142.      74.  2244.20
    0.29     2.44     7.94     3.50    0.045    0.025    0.050    0.000  2244.20  9365.00
0.007827     500.     533.     570.       20       19        0     0.00   377.79 10242.79


SECND 4.790

265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    4.79     3.82  2251.32  2251.32     0.00  2252.59     1.27     3.32     0.10  2249.90
   4798.       6.     4664.     128.       3.     509.      44.     148.      77.  2247.50
    0.31     2.02     9.16     2.93    0.045    0.025    0.050    0.000  2247.50  9909.06
0.004387     455.     470.     495.        2       11        0     0.00   260.48 10291.77
```

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

1490 NH CARD USED
SECNO 5.270

3265 DIVIDED FLOW

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

5.27	3.81	2270.61	2270.61	0.00	2271.89	1.28	3.03	0.23	2266.90
4734.	455.	4251.	30.	189.	445.	16.	188.	100.	2268.10
0.40	2.41	9.56	1.87	0.054	0.025	0.065	0.000	2266.80	9691.23
0.005074	615.	505.	430.	2	11	0	0.00	307.76	10083.70

1490 NH CARD USED
SECNO 5.350

3265 DIVIDED FLOW

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

[illegible]5	3.98	2273.68	2273.68	0.00	2274.62	0.94	2.03	0.10	2269.70
4081.	1766.	2277.	38.	363.	227.	12.	195.	104.	2269.70
0.42	3.14	10.04	3.12	0.043	0.075	0.045	0.000	2269.70	9480.79
0.004518	390.	435.	440.	3	8	0	0.00	521.76	10058.12

```
 SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       GLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 Time     VLOB     VCH      VROB     XWL      XWCH     XWR      UTW      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


#PROF 2

CONV=   0.100 CEHV=   0.300
1490 NH CARD USED
#SECNO 3.270
   3.27     3.70  2186.50     0.00  2186.50  2187.08     0.58     0.00     0.00  2183.90
   9954.    7782.    2145.      27.    1556.     234.      11.      0.       0.   2184.20
   0.00     5.00     9.16     2.59    0.041    0.025    0.050    0.000  2182.80  9162.00
 0.006541     0.       0.       0.        0        0        0     0.00   888.20 10050.20


490 NH CARD USED
#SECNO 3.350

165 DIVIDED FLOW

   3.35     3.33  2189.53     0.00     0.00  2190.22     0.69     3.11     0.03  2188.10
   9954.    8214.    1721.      19.    1425.     174.      6.      15.       8.   2187.00
   0.02     5.76     9.91     3.25    0.042    0.025    0.050    0.000  2186.20  9035.88
 0.010387    370.     430.     425.        2        0        0     0.00   926.95 10024.62


490 NH CARD USED
#SECNO 3.460
   3.46     3.89  2194.09     0.00     0.00  2194.98     0.89     4.70     0.06  2190.90
   9954.    6481.    3448.      25.    1158.     334.      8.      32.      17.   2191.20
   0.04     5.59    10.31     3.25    0.047    0.025    0.050    0.000  2190.20  9417.02
 0.008648    480.     545.     545.        3        0        0     0.00   631.33 10048.35


1490 NH CARD USED
#SECNO 3.560

3301 HV CHANGED MORE THAN HVINS

185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   3.56     6.02  2199.42  2199.42     0.00  2199.75     0.34     1.65     0.03  2196.40
   9954.    6412.    3542.       0.    2122.     529.      0.      57.      25.   2199.40
   0.07     3.02     6.69     0.01    0.046    0.025    0.000    0.000  2193.40  9318.81
 0.001607    525.     525.     490.        2       40        0     0.00   734.37 10053.18
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 SECND    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

7220 CRITICAL DEPTH ASSUMED
    4.07     6.76  2221.76  2221.76     0.00  2223.41     1.64     2.63     0.03  2215.00
   9954.      140.     6021.     1792.      37.      705.      643.      155.      60.  2216.30
    0.15     3.79    11.37     2.79    0.045    0.025    0.052    0.000  2215.00  9932.05
 0.003222    770.      770.      725.       20        8        0     0.00   553.00 10485.05

CHV=   0.300 CEHV=   0.800
490 NM CARD USED
*SECND 4.160

265 DIVIDED FLOW

    4.16     5.53  2224.03     0.00     0.00  2225.39     1.36     1.90     0.08  2221.70
   9954.     6645.     4120.      189.      646.      424.       87.      167.      64.  2220.30
    0.16    10.28     7.36     2.18    0.031    0.040    0.065    0.000  2218.50  9780.51
 0.006771     440.      430.      310.        5        0        0     0.00   390.84 10575.29

1490 NM CARD USED
*SEC  .200

3265 DIVIDED FLOW

    4.20     3.67  2226.67     0.00     0.00  2227.57     0.90     2.04     0.14  2223.50
   9954.     4431.     3251.     2271.      556.      420.      342.      175.      67.  2223.30
    0.18     7.96     7.73     6.63    0.030    0.035    0.035    0.000  2223.00  9644.73
 0.007304     330.      250.      215.        3        0        0     0.00   550.98 10374.66

CCHV=   0.300 CEHV=   0.500
490 NM CARD USED
*SECND 4.310

265 DIVIDED FLOW

301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
7220 CRITICAL DEPTH ASSUMED
    4.31     5.59  2232.49  2232.49     0.00  2234.29     1.80     3.33     0.45  2228.60
   9767.      129.     9573.       65.      168.      881.       20.      191.      76.  2227.40
    0.19     0.77    10.87     3.34    0.100    0.025    0.050    0.000  2226.90  9244.83
 0.004633     715.      560.      410.        2       14        0     0.00   706.32 10070.67
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 SECNO    DEPTH    CWSEL    CRIWS    WSELX    EG       HV       HL       QLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTH      ELWTH      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

CSHV=   0.100 CEHV=   0.300
90 NH CARD USED
XSECNO 4.530

65 DIVIDED FLOW

    4.53     4.33  2241.23     0.00     0.00  2242.19     0.96     2.08     0.03  2238.40
   9767.      86.    9279.     402.      37.    1154.     126.     233.      92.  2236.90
    0.23     2.32     8.04     3.19    0.050    0.025    0.041    0.000  2234.90  9785.76
0.003833     560.     610.     690.        2        0        0     0.00   556.43 10534.00

1490 NH CARD USED
XSECNO 4.600
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.60     4.43  2245.23  2245.23     0.00  2245.86     0.63     1.09     0.03  2240.80
   9767.     137.    9630.       0.      42.    1500.       0.     246.      97.  2245.20
    0.25     3.24     6.42     0.00    0.045    0.025    0.000    0.000  2240.80  9766.84
0.0[illegible]6     315.     390.     525.       20       17        0     0.00   428.04 10194.88

XSECNO 4.700

3265 DIVIDED FLOW

301 HV CHANGED MORE THAN WVINS

685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.70     4.11  2248.31  2248.31     0.00  2249.71     1.40     1.81     0.23  2245.40
   9767.      22.    8913.     832.       7.     905.     206.     262.     102.  2244.20
    0.26     3.06     9.85     4.04    0.045    0.025    0.030    0.000  2244.20  9863.08
0.006361     500.     535.     570.       20       11        0     0.00   444.71 10326.52

XSECNO 4.790
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST

   5.17     4.09  2266.99  2266.99     0.00  2268.07     1.08     2.75     0.01  2263.30
  9661.      90.     8415.     1156.      41.     947.     420.     336.     135.   2265.30
   0.34     2.21     8.88     2.75    0.065    0.026    0.051    0.000  2262.90  9678.46
0.005912    510.     495.     480.       12       11        0     0.00   746.61 10368.78

1490 NH CARD USED
SECNO 5.270

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   5.27     5.53  2272.33  2272.33     0.00  2273.94     1.61     2.52     0.27  2266.90
  9661.     1944.     7608.      108.     607.     669.      45.     352.     142.   2268.10
   0.36     3.20    11.37     2.40    0.052    0.025    0.065    0.000  2266.80  9541.70
0.0[illegible]9     615.     505.     430.       20       11        0     0.00   503.69 10092.37

1490 NH CARD USED
SECNO 5.350

3265 DIVIDED FLOW

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   5.35     5.15  2274.85  2274.85     0.00  2276.12     1.27     1.92     0.10  2269.70
  8274.     4444.     3749.      81.    1156.     293.      20.     365.     147.   2269.70
   0.37     3.85    12.77     3.97    0.051    0.025    0.065    0.000  2269.70  9416.36
0.003193    390.     435.     440.        3       11        0     0.00   624.85 10059.92
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```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA      LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XWL      XWCH     XWR      WTN      FLWTN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

ERROF 3

CCHV=   0.100 CENV=   0.300
1490 NH CARD USED
SECNO 3.270
   3.27     4.12  2186.92     0.00  2186.92  2187.55     0.63     0.00     0.00  2183.90
  12464.    9810.    2613.      41.    1889.     272.      15.       0.       0.  2184.20
   0.00     5.19     9.62     2.75    0.042    0.025    0.050    0.000  2182.80  9154.31
 0.005925      0.       0.       0.        0        0        0     0.00   897.56 10051.88

490 NH CARD USED
SECNO 3.350

265 DIVIDED FLOW

   3.35     3.60  2189.80     0.00     0.00  2190.63     0.83     3.02     0.06  2188.10
  12464.   10282.    2157.      26.    1647.     195.       7.      17.       8.  2187.00
   0.01     6.24    11.05     3.58    0.043    0.025    0.050    0.000  2186.20  9048.39
 0.011075     370.     430.     425.        2        0        0     0.00   969.29 10025.09

1490 NH CARD USED
SECNO 3.460
   3.46     4.28  2194.48     0.00     0.00  2195.53     1.05     4.84     0.07  2190.90
  12464.    8071.    4338.      35.    1352.     385.      10.      38.      17.  2191.20
   0.03     5.97    11.32     3.52    0.047    0.025    0.050    0.000  2190.20  9408.66
 0.008624     480.     545.     545.        3        0        0     0.00   640.41 10049.07

490 NH CARD USED
SECNO 3.560

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   3.56     6.07  2199.47  2199.47     0.00  2199.98     0.52     2.17     0.05  2196.40
  12464.    8044.    4420.       0.    2154.     533.       0.      64.      25.  2199.40
   0.06     3.73     8.26     0.01    0.046    0.025    0.050    0.000  2193.40  9318.55
 0.002415     525.     525.     490.       20       17        0     0.00   735.20 10053.75
```

```
 SECND    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       WLOSS    BANK ELEV
 D        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 Time     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CONAR    TOPWID     ENDST

3720 CRITICAL DEPTH ASSUMED
    4.07     7.41  2222.41  2227.41     0.00  2224.16     1.75     2.65     0.01  2215.00
   12464.     178.     9412.     2874.     44.     779.     919.     179.     61.  2216.30
    0.14     4.01    12.09     3.13    0.045    0.025    0.051    0.000  2215.00  9931.01
 0.003190     770.     770.     725.     20       8        0     0.00   557.39 10488.40

CCHV=   0.300 CEHV=   0.800
490 NN CARD USED
8SECND 4.160

3265 DIVIDED FLOW

    4.16     6.04  2224.54  2224.36     0.00  2226.12     1.58     1.91     0.05  2221.70
   12464.    8116.     3974.     374.     732.     483.     166.     193.     66.  2220.30
    0.15    11.09     8.23     2.26    0.032    0.040    0.065    0.000  2218.50  9779.34
 0.007139     440.     430.     310.      7       15        0     0.00   500.92 10584.72

1490 NN CARD USED
8SEC[illegible]200

3265 DIVIDED FLOW

301 HV CHANGED MORE THAN HVINS

    4.20     4.31  2227.31     0.00     0.00  2228.18     0.88     1.93     0.21  2223.50
   12464.    5636.     3936.     2892.     713.     506.     462.     203.     69.  2223.30
    0.16     7.91     7.77     6.26    0.030    0.035    0.036    0.000  2223.00  9641.65
 0.005753     330.     250.     215.      3        0        0     0.00   583.37 10377.73

CCHV=   0.300 CEHV=   0.500
490 NN CARD USED
SECND 4.310

301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.31     6.43  2233.33  2233.33     0.00  2235.08     1.75     2.67     0.44  2228.60
   12244.     672.     11484.     88.     675.     1048.     26.     227.     80.  2227.40
    0.18     1.00    10.96     3.32    0.100    0.025    0.030    0.000  2226.90  9187.08
 0.003736     715.     560.     410.     20       14        0     0.00   884.85 10071.93
```

```
 SECND    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 C        QLOB     QCH      QROB     QLOB     QCH      QROB     VOL      TWA   LEFT/RIGHT
 Time     VLOB     VCH      VROB     XHL      XHCH     XHR      STN      FLHIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   JDC      ICONT    CONAR    TOPWID     ENDST


CCHV=   0.100 CEHV=   0.300
190 NH CARD USED
SECND 4.530

165 DIVIDED FLOW

    4.53     4.83  2241.73     0.00     0.00  2242.82     1.09     2.06     0.04  2230.40
  12244.      153.  11483.      607.      64.   1333.      228.      278.      97.  2236.90
    0.22     2.38     8.62     2.66    0.050    0.025    0.044    0.000  2236.90  9757.54
 0.003628     560.     610.     690.        3        0        0     0.00   669.69 10541.81

190 NH CARD USED
*SECND 4.600
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.60     4.42  2245.22  2245.22     0.00  2246.22     1.00     1.36     0.01  2240.80
  12244.      171.  12073.       0.       42.   1497.       0.      293.     102.  2245.20
    0.23     4.08     8.07     0.00    0.045    0.025    0.000    0.000  2240.00  9766.85
 0.0[illegible]0      315.     390.     525.       20       18        0     0.00   427.76 10194.61

*SECND 4.700

301 HV CHANGED MORE THAN HVINS

685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.70     4.59  2248.79  2248.79     0.00  2250.37     1.58     2.34     0.17  2245.40
  12244.       32.  11053.     1159.       10.   1050.      279.      310.     108.  2244.20
    0.24     3.28    10.53     4.15    0.045    0.025    0.050    0.000  2244.20  9862.27
 0.005961     500.     535.     570.       20        8        0     0.00   466.44 10328.70

*SECND 4.790
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.79     6.03  2253.53  2253.53     0.00  2255.08     1.54     2.30     0.00  2249.90
  12244.       55.  10117.     2073.       18.    929.      696.      327.     114.  2247.50
    0.26     3.00    10.89     2.98    0.045    0.025    0.050    0.000  2247.50  9902.93
 0.004042     455.     470.     495.       20       11        0     0.00   615.92 10518.85
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 SECNO    DEPTH    CHSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XWL      XWCH     XWR      WTN      FLMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   JDC      ICONT    DGRAR    TOPWID     ENDST

1490 NH CARD USED
ECNO 5.270
3385 20 TRIALS ATTEMPTED WSEL,CHSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   5.27     6.23  2273.03  2273.03     0.00  2274.67     1.64     2.35     0.24  2266.90
  12118.    2993.    8970.     155.     891.     761.      61.     420.     151.  2268.10
   0.33     3.36    11.78     2.53    0.052    0.025    0.065    0.000  2266.80  9469.13
.003762     615.     505.     430.       20       11        0     0.00   626.80 10095.93

490 NH CARD USED
SECNO 5.350
7185 MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   5.35     5.60  2275.30  2275.30     0.00  2276.71     1.42     1.84     0.07  2269.70
  10370.    5856.    4410.     104.    1415.     319.      24.     436.     157.  2269.70
   0.35     4.14    13.82     4.30    0.053    0.025    0.045    0.000  2269.70  9404.42
.005443     390.     435.     440.        3       15        0     0.00   656.19 10060.61
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 SECNO    DEPTH    CHSEL    CRIWS    WSELK    EG       HV       HL       ELOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TAME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

8PROF 4

DCHV=   0.100 DEHV=   0.300
1490 NH CARD USED
8SECNO 3.270
    3.27     4.90  2187.70     0.00  2187.70  2188.45     0.75     0.00     0.00  2183.90
   18037.   14332.    3629.      76.    2522.     341.      24.      0.       0.   2184.20
    0.00     5.68    10.64     3.09    0.042    0.025    0.050    0.000  2187.80  9127.62
 0.005349      0.       0.       0.        0        0        0     0.00   927.38 10055.00

1490 NH CARD USED
8SECNO 3.350
    3.35     4.15  2190.35     0.00     0.00  2191.41     1.06     2.86     0.09  2188.10
   18037.   14902.    3094.      42.    2141.     241.      10.     23.       8.   2187.00
    0.01     6.96    12.84     4.08    0.044    0.025    0.050    0.000  2186.20  9032.34
 0.011285     370.     430.     425.        2        0        0     0.00   993.75 10026.09

1490 NH CARD USED
8SEC[illegible].460
    3.46     4.95  2195.15     0.00     0.00  2196.61     1.47     5.08     0.12  2190.90
   18037.   11617.    6360.      60.    1691.     472.      14.     69.      18.   2191.20
    0.03     6.87    13.47     4.14    0.048    0.025    0.050    0.000  2190.20  9394.30
 0.009302     480.     545.     545.        3        0        0     0.00   656.00 10050.30

1490 NH CARD USED
8SECNO 3.560
3685 20 TRIALS ATTEMPTED WSEL,CHSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    3.56     6.06  2199.46  2199.46     0.00  2200.54     1.09     3.54     0.04  2196.40
   18037.   11636.    6401.       0.    2147.     533.       0.     78.      26.   2199.40
    0.05     5.42    12.00     0.02    0.046    0.025    0.050    0.000  2193.40  9318.61
 0.005109     525.     525.     490.       20       13        0     0.00   735.00 10053.61

1490 NH CARD USED
8SECNO 3.660

3301 HV CHANGED MORE THAN HVINS
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       BLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOU      TWA      LEFT/RIGHT
          VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IRC      ICONT    CORAR    TOPWID      ENDST

CCHV=   0.300 CEHV=   0.800
490 NH CARD USED
*SECNO 4.160

3301 HV CHANGED MORE THAN HVINS

    4.16     7.53  2226.03     0.00     0.00  2227.42     1.39     1.67     0.20  2221.70
   18037.   10329.     5570.    1938.     986.     634.     791.     243.      68.  2220.30
    0.13    10.68     8.51     2.45    0.033    0.040    0.065    0.000  2218.50  9775.91
0.003115     440.     430.     310.        6        0        0     0.00   814.63 10590.54

490 NH CARD USED
*SECNO 4.200

3265 DIVIDED FLOW

    4.20     4.90  2227.90     0.00     0.00  2229.16     1.26     1.69     0.04  2223.50
   18037.    8194.     5526.    4317.     839.     586.     602.     257.      73.  2223.30
    0.14     9.54     9.43     7.17    0.031    0.035    0.037    0.000  2223.00  9638.80
0.[illegible]16     330.     250.     215.        4        0        0     0.00   686.77 10380.57

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 4.310

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.31     7.54  2234.44  2234.44     0.00  2236.44     2.00     2.84     0.37  2228.60
   17749.    2182.    15432.     135.    1507.    1271.      37.     291.      85.  2227.40
    0.16     1.45    12.14     3.63    0.100    0.025    0.050    0.000  2226.90  9071.77
0.003545     715.     560.     410.       20       14        0     0.00  1001.84 10073.61

*SECNO 4.330

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
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 SECNO    DEPTH    CWSEL    CRINS    WSELX    EG       HV       HL       QLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 V        VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      STA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORRAR   TOPWID     ENDST

CCHV=   0.100 CRIV=   0.300
490 NH CARD USED
*SECNO 4.530

301 HV CHANGED MORE THAN HVINS

    4.53     5.92  2242.82     0.00     0.00  2243.99     1.37     1.97     0.07  2238.40
   17749.     387.   15773.    1589.      146.    1723.     622.     361.     104.   2236.90
    0.19     2.65     9.16     2.56    0.050    0.025    0.049    0.000  2236.90  9732.99
 0.002910     560.     610.     690.        3        0        0     0.00   825.81 10558.80

490 NH CARD USED
*SECNO 4.600

301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    [illegible]0     4.59  2245.39  2245.39     0.00  2247.31     1.92     1.60     0.23  2240.80
   17749.     250.   17499.       0.      44.    1566.       1.     380.     110.   2245.20
    0.20     5.63    11.18     0.02    0.045    0.025    1.000    0.000  2240.80  9766.66
 0.006001     315.     390.     525.       20       19        0     0.00   433.19 10199.84

*SECNO 4.700
3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.70     5.49  2249.69  2249.69     0.00  2251.67     1.98     3.11     0.02  2245.40
   17749.      58.   15704.    1987.      16.    1321.     423.     401.     116.   2244.20
    0.22     3.72    11.89     4.69    0.045    0.025    0.030    0.000  2244.20  9860.75
 0.005589     300.     535.     570.        3       11        0     0.00   472.04 10332.79

*SECNO 4.790
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.79     6.97  2254.47  2254.47     0.00  2256.29     1.82     2.23     0.07  2249.90
   17749.     101.   13543.    4105.      29.    1108.    1111.     423.     122.   2247.50
    0.23     3.49    12.22     3.69    0.045    0.025    0.030    0.000  2247.50  9900.32
 0.004025     435.     470.     495.       20       11        0     0.00   661.62 10561.94
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       GLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 T...     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    TTRIAL   IDC      ICONT    COMAR    TOPWID     ENDST

1490 NH CARD USED
ECNO 5.270
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   5.27     7.34  2274.14  2274.14     0.00  2275.94     1.80     2.20     0.18  2266.90
  17583.    5599.   11724.     261.    1482.     908.      72.     331.     163.  2268.10
   0.30     3.78     12.92     2.82    0.052    0.025    0.065    0.000  2266.80  9345.05
.003578     615.     505.     430.       20       11        0     0.00   736.52 10101.58

490 NH CARD USED
SECNO 5.350

265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   5.35     6.45  2276.15  2276.15     0.00  2277.85     1.70     1.83     0.03  2269.70
  15075.    9123.    5795.     158.    1927.     368.      33.     573.     170.  2269.70
   [illegible]  4.73    15.76     4.74    0.056    0.025    0.045    0.000  2269.70  9390.51
0.00[illegible]52     390.     435.     440.        3       15        0     0.00   688.07 10085.02
```

SECNO	CHSEL	DEPTH	EG	VCH	ELMIN	XLCN	TOPWID	SSTA	ENDST	BLDR	BCH	GRDN
4.070	2219.28	4.28	2220.93	10.72	2215.00	770.00	180.39	9936.08	10116.67	54.80	4522.42	328.69
4.070	2221.76	6.76	2223.41	11.37	2215.00	770.00	553.00	9932.05	10485.05	140.34	8021.32	1792.36
4.070	2222.41	7.41	2224.16	12.09	2215.00	770.00	557.39	9931.01	10488.40	177.93	9412.01	2874.05
4.070	2223.49	8.49	2225.53	13.68	2215.00	770.00	564.75	9929.27	10494.02	262.42	12333.47	5441.11
4.160	2222.72	4.22	2223.57	4.97	2218.50	430.00	274.78	9783.51	10562.27	3507.66	1344.21	34.13
4.160	2224.03	5.53	2225.39	7.36	2218.50	430.00	390.84	9780.51	10574.29	6644.66	3120.16	189.17
4.160	2224.54	6.04	2226.12	8.23	2218.50	430.00	500.92	9779.34	10584.72	8115.93	3973.81	374.26
4.160	2226.03	7.53	2227.42	8.51	2218.50	430.00	814.63	9775.91	10590.54	10528.70	5570.16	1938.14
4.200	2225.47	2.47	2226.25	6.68	2223.00	250.00	452.63	9630.53	10182.98	2044.99	1717.80	1123.21
4.200	2226.67	3.67	2227.57	7.73	2223.00	250.00	550.98	9644.73	10374.66	4431.19	3251.42	2271.39
4.200	2227.31	4.31	2228.18	7.77	2223.00	250.00	583.37	9641.65	10377.73	5645.55	3936.23	2892.21
4.200	2227.90	4.90	2229.16	9.43	2223.00	250.00	686.77	9638.80	10380.57	8194.18	5525.81	4317.01
4.310	2230.67	3.77	2231.98	9.21	2226.90	560.00	214.94	9852.99	10067.92	12.78	4761.03	24.19
4.310	2232.49	5.59	2234.29	10.87	2226.90	560.00	706.32	9244.83	10070.67	178.91	9572.96	65.14
4.310	2233.33	6.43	2235.08	10.96	2226.90	560.00	884.85	9187.08	10071.93	672.09	11484.16	87.76
4.310	2234.44	7.54	2236.44	12.14	2226.90	560.00	1001.84	9071.77	10073.61	2181.74	15431.86	135.40
4.338	2232.20	3.60	2233.03	7.33	2228.60	170.00	268.72	9849.61	10138.33	34.79	4749.89	13.32
4.338	2233.88	5.28	2235.12	9.00	2228.60	170.00	282.07	9857.81	10139.88	139.01	9595.51	32.48
4.338	2233.99	5.39	2235.83	10.96	2228.60	170.00	283.03	9856.96	10139.99	180.47	12072.26	41.26
4.338	2234.94	6.34	2237.51	13.00	2228.60	170.00	317.84	9850.34	10168.18	330.97	17330.17	87.91
4.344	2232.55	3.65	2233.39	7.36	2228.90	40.00	280.55	9849.38	10129.93	0.00	4798.00	0.00
4.344	2234.41	5.51	2235.47	8.28	2228.90	40.00	288.15	9844.29	10132.44	0.00	9767.00	0.00
4.344	2235.07	6.17	2236.31	8.92	2228.90	40.00	290.87	9842.47	10133.34	0.00	12244.00	0.00
4.344	2235.70	6.81	2237.72	11.40	2228.90	40.00	293.46	9840.74	10134.20	0.00	17749.00	0.00
4.410	2236.75	4.55	2238.28	10.37	2232.20	370.00	495.14	9218.40	10041.69	380.73	4390.87	26.39
4.410	2238.65	6.45	2240.07	11.33	2232.20	370.00	845.48	9198.69	10044.17	2843.62	6863.66	39.71
4.410	2239.19	6.99	2240.72	12.16	2232.20	370.00	851.80	9193.08	10044.88	4169.86	7998.43	75.70
4.410	2240.07	7.87	2241.95	14.12	2232.20	370.00	862.12	9183.92	10046.03	7152.18	10484.49	112.33
4.530	2240.18	3.29	2240.71	5.90	2236.90	610.00	409.09	9802.46	10211.55	23.81	4597.02	177.17
4.530	2241.23	4.33	2242.19	8.04	2236.90	610.00	556.43	9785.76	10334.00	86.41	9278.88	401.71
4.530	2241.73	4.83	2242.82	8.62	2236.90	610.00	669.69	9757.54	10341.01	153.47	11483.34	607.18
4.530	2242.82	5.92	2243.99	9.16	2236.90	610.00	825.81	9732.99	10358.80	387.07	15772.68	1589.25
4.600	2245.27	4.47	2245.42	3.11	2240.80	390.00	429.52	9766.79	10196.30	67.24	4730.76	0.00
4.600	2245.23	4.43	2245.86	6.42	2240.80	390.00	428.04	9766.84	10196.88	136.39	9630.40	0.00
4.600	2245.22	4.42	2246.22	8.07	2240.80	390.00	427.76	9766.83	10194.61	171.17	12072.83	0.00
4.600	2245.39	4.59	2247.31	11.18	2240.80	390.00	433.19	9766.66	10199.84	249.99	17499.00	0.91
4.700	2247.18	2.98	2248.10	7.94	2244.20	535.00	377.79	9865.00	10242.79	6.50	4452.04	339.47
4.700	2248.31	4.11	2249.71	9.85	2244.20	535.00	444.71	9863.08	10326.52	21.97	8912.87	832.16
4.700	2248.79	4.59	2250.37	10.53	2244.20	535.00	466.44	9862.27	10328.70	31.94	11053.37	1158.70
4.700	2249.69	5.49	2251.67	11.89	2244.20	535.00	472.04	9860.75	10332.79	57.86	15704.16	1986.98

SUM..... OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    3.560  PROFILE= 2  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.560  PROFILE= 3  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.560  PROFILE= 3  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.560  PROFILE= 3  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.560  PROFILE= 4  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.560  PROFILE= 4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.560  PROFILE= 4  20 TRIALS ATTEMPTED TO BALANCE WSEL

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LOOD INSURANCE ZONE DATA FOR SOLS WASH REACH 3

LOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
3.270	0.	-1.42	-0.42	0.78
3.350	430.	-0.92	-0.27	0.55
3.460	975.	-1.38	-0.39	0.67
3.560	1500.	-1.87	-0.65	-0.01
3.660	2070.	-1.63	-0.46	0.88
3.790	2745.	-2.34	-0.51	0.87
3.930	3465.	-2.45	-0.54	1.02
4.070	4235.	-3.13	-0.64	1.08
4.160	4665.	1.82	-0.51	1.49
4.200	4915.	-1.84	-0.63	0.59
4.310	5475.	-2.66	-0.84	1.12
4.338	5645.	-1.80	-0.11	0.94
4.344	5685.	-2.52	-0.67	0.63
4.410	6055.	-2.44	-0.54	0.88
4.530	6665.	-1.55	-0.50	1.09
4.600	7055.	0.05	0.01	0.17
[illegible]00	7590.	-1.62	-0.48	0.90
4.790	8060.	-2.21	-0.52	0.94
4.870	8475.	-1.91	-0.61	1.14
4.980	9055.	-1.79	-0.48	0.90
5.080	9560.	-1.51	-0.41	0.73
5.170	10055.	-1.45	-0.40	0.70
5.270	10560.	-2.42	-0.70	1.12
5.350	10995.	-1.62	-0.45	0.85
WEIGHTED AVG FOR REACH		-1.87	-0.47	0.83

FHF FOR THE REACH = 020 WITH 61.9 PERCENT OF THE REACH WITHIN 0.5 FEET
ZONE FOR THE REACH = A 4

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	WEIGHTED AVG DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
6[illegible]	6900.	-2.00	-0.48	0.82

THIS RUN EXECUTED MON, JUN 01 1987 15:18:11

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*****************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
```

Floodplain, Reach #4
Cross Sec. 5.35 - 7.300

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH4.HLT.OUT

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

WWW  W     WWW  WWW   W  WWWWW WWW   W
  W W  W  W  W W  W  WW  W    W  W  WW
W  W W  W  W  W W  W  W  WWWW W  W  W
WWW  WWWWW W W W WWWW  W     W W W W  W
      W  W  W    W  W     W W  W  W
      W  W  W   W  W  W  W W  W  W
W     W  WWW WWW  WWW  WWW  WWW  WWW

WWW  WWW  W    WWW      WWWW WWWWW WWW  WWW  W  W W        W  W W    WWWWW     WWW  W  W WWWWW
W  W W  W W    W  W     W  W W    W  W W  W W W  W W  W      WW WW W     W       W  W W  W  W
W   W  W W    W         W  W W    W  W W   W  W W  W      W W W W     W       W  W W  W  W
WWW  W  W W    WWW      WWWW WWWW WWWWW W   WWWWW WWWWW    W W W W     W       W  W W  W  W
  W W  W W      W      W W  W    W  W W   W  W   W      W  W W     W       W  W W  W  W
W  W W  W W    W  W  WW W W  W    W  W W  W W W   W   WW W  W W WWWWW  W   WW  WWW  WWW   W
WWW  WWW WWWWW WWW  WW W  W WWWWW W  W WWW W  W   W   WW W  W W WWWWW  W   WW  WWW  WWW   W

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*****************************************************************************************************************
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[Spooler rev 20.2 (c) Prime Computer, Inc., 1985]

Label: PRT002 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH4.HLT.OUT
File last modified: 87-06-01.17:08:32.Mon

Spooled: 87-06-04.08:40:28.Thu
Started: 87-06-04.08:54:08.Thu on: AMLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*     DATE MON, JUN 01 1987 TIME 15:24:36           *
*****************************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  THE HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616              *
*  (916) 440-2105 (FTS) 448-2105        *
*****************************************
```

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X     X  XXXXXXX   XXXXX            XXXXX
X     X  X       X     X          X     X
X     X  X       X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X       X                X
X     X  X       X     X          X
X     X  XXXXXXX   XXXXX           XXXXXXX
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THIS RUN EXECUTED MON, JUN 01 1987 15:24:43

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*****************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
*****************************************************
```

SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

T3 SOLS WASH REACH 4 FLOOD INSURANCE RATE ANALYSIS

	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	0.000000	0.00	0.0	0.	2273.700	0.000

	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
J2	1.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	38.000	1.000	8.000	3.000	26.000	42.000	39.000	4.000	53.000	54.000
	13.000	14.000	15.000	201.000	0.000	0.000	0.000	0.000	0.000	0.000

N	4.000	4081.000	8274.000	10370.000	15075.000	0.000	0.000	0.000	0.000	0.000
C	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
NH	5.000	0.100	9824.000	0.025	9844.000	0.040	9995.000	0.025	10052.000	0.045
NH	10365.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	5.350	32.000	9995.000	10052.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2281.000	9285.000	2278.800	9336.000	2275.300	9399.000	2274.600	9423.000	2275.100	9436.000
GR	2274.400	9470.000	2273.200	9488.000	2272.600	9551.000	2272.300	9565.000	2272.700	9574.000
GR	2272.800	9647.000	2273.200	9673.000	2272.700	9700.000	2273.200	9726.000	2274.200	9760.000
GR	2274.300	9788.000	2273.300	9804.000	2270.400	9824.000	2270.200	9844.000	2271.900	9864.000
GR	2272.700	9894.000	2271.700	9934.000	2272.300	9954.000	2272.700	9983.000	2269.700	9995.000
GR	2269.700	10000.000	2269.700	10052.000	2276.200	10067.000	2276.200	10063.000	2276.000	10085.000
GR	2776.000	10165.000	2778.000	10365.000	0.000	0.000	0.000	0.000	0.000	0.000
C	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.045	9963.000	0.025	10041.000	0.065	10073.000	0.045	10215.000	0.000
X1	5.470	34.000	9963.000	10041.000	450.000	620.000	610.000	0.000	0.000	0.000
GR	2281.900	9400.000	2275.800	9436.000	2275.900	9448.000	2276.600	9462.000	2276.600	9483.000
GR	2275.400	9494.000	2276.800	9501.000	2277.200	9533.000	2275.400	9583.000	2276.900	9607.000
GR	2276.700	9642.000	2276.800	9658.000	2277.000	9680.000	2277.800	9699.000	2278.300	9733.000
GR	2278.000	9771.000	2277.800	9817.000	2278.100	9850.000	2278.700	9875.000	2277.900	9892.000
GR	2273.700	9929.000	2274.000	9932.000	2275.600	9939.000	2275.600	9963.000	2274.100	9972.000
GR	2273.700	10000.000	2273.700	10041.000	2279.300	10059.000	2279.300	10073.000	2278.700	10092.000
GR	2275.100	10106.000	2277.300	10118.000	2280.500	10169.000	2283.800	10215.000	0.000	0.000

REV. 6/87

NC	0.045	0.045	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	5.580	20.000	9947.000	10044.000	485.000	525.000	515.000	0.000	0.000	0.000
GR	2288.300	9436.000	2281.500	9475.000	2279.800	9500.000	2280.100	9533.000	2279.500	9562.000
GR	2280.000	9570.000	2280.300	9615.000	2281.100	9670.000	2281.400	9739.000	2281.100	9789.000
GR	2281.100	9846.000	2280.200	9890.000	2279.200	9923.000	2278.600	9937.000	2278.800	9947.000
GR	2277.400	9969.000	2277.000	10000.000	2277.000	10044.000	2294.000	10065.000	2294.600	10092.000
X1	5.650	28.000	9951.000	10068.000	300.000	340.000	335.000	0.000	0.000	0.000
GR	2288.500	9465.000	2284.900	9486.000	2282.800	9509.000	2282.200	9527.000	2282.800	9539.000
GR	2282.500	9550.000	2282.500	9568.000	2282.100	9577.000	2282.600	9585.000	2283.500	9658.000
GR	2282.200	9695.000	2283.600	9715.000	2283.900	9762.000	2282.200	9800.000	2282.900	9816.000
GR	2281.200	9828.000	2281.600	9839.000	2282.300	9860.000	2282.400	9873.000	2282.500	9891.000
GR	2282.100	9913.000	2282.300	9928.000	2280.100	9951.000	2278.900	10000.000	2278.900	10068.000
GR	2284.100	10084.000	2288.100	10112.000	2293.400	10135.000	0.000	0.000	0.000	0.000
NH	4.000	0.100	9682.000	0.045	9932.000	0.025	10045.000	0.045	10310.000	0.000
X1	5.740	32.000	9932.000	10045.000	430.000	520.000	500.000	0.000	0.000	0.000
GR	2294.200	9210.000	2293.000	9251.000	2290.800	9328.000	2289.400	9390.000	2288.000	9437.000
GR	2287.000	9497.000	2286.500	9568.000	2285.800	9600.000	2286.400	9613.000	2287.100	9682.000
GR	2287.400	9744.000	2287.300	9761.000	2287.500	9780.000	2287.400	9829.000	2287.600	9852.000
GR	2287.900	9872.000	2287.400	9882.000	2285.100	9912.000	2282.500	9932.000	2281.400	10000.000
GR	2281.400	10045.000	2284.300	10057.000	2284.600	10087.000	2286.800	10110.000	2286.800	10123.000
GR	2285.500	10167.000	2284.800	10214.000	2284.400	10227.000	2284.800	10243.000	2290.800	10259.000
GR	2287.900	10284.000	2295.500	10310.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9920.000	0.025	10068.000	0.045	10500.000	0.000	0.000	0.000
X1	5.850	15.000	9920.000	10068.000	575.000	580.000	570.000	0.000	0.000	0.000
GR	2297.600	9880.000	2296.500	9892.000	2284.000	9920.000	2286.200	9948.000	2283.800	10000.000
GR	2284.700	10046.000	2289.600	10068.000	2290.000	10099.000	2289.600	10168.000	2288.800	10245.000
GR	2289.800	10286.000	2289.500	10328.000	2290.600	10352.000	2294.800	10461.000	2300.400	10500.000
NC	0.050	0.045	0.030	0.600	0.800	0.000	0.000	0.000	0.000	0.000
X1	5.920	25.000	9953.000	10075.000	390.000	415.000	400.000	0.000	0.000	0.000
GR	2307.900	9915.000	2304.900	9929.000	2288.000	9953.000	2288.000	10000.000	2288.800	10041.000
GR	2292.100	10075.000	2292.500	10097.000	2294.600	10117.000	2294.100	10147.000	2293.400	10168.000
GR	2294.700	10194.000	2294.300	10229.000	2293.900	10246.000	2294.900	10263.000	2295.300	10280.000
GR	2294.400	10323.000	2295.100	10353.000	2294.700	10384.000	2295.800	10407.000	2295.100	10425.000
GR	2295.400	10443.000	2295.300	10461.000	2295.900	10505.000	2296.500	10525.000	2303.700	10580.000
NH	3.000	0.045	9879.000	0.025	10120.000	0.045	10445.000	0.000	0.000	0.000
X1	6.010	17.000	9954.000	10093.000	560.000	210.000	480.000	0.000	0.000	0.000
GR	2304.000	9843.000	2297.900	9867.000	2292.500	9879.000	2292.300	9913.000	2292.400	9954.000
GR	2293.700	9969.000	2293.500	10000.000	2293.500	10039.000	2293.200	10093.000	2292.700	10120.000
GR	2297.500	10153.000	2297.600	10192.000	2297.900	10232.000	2298.000	10342.000	2298.300	10385.000
GR	2305.700	10416.000	2314.600	10445.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.045	0.045	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	6.090	19.000	9912.000	10037.000	500.000	290.000	430.000	0.000	0.000	0.000
GR	2309.900	9655.000	2307.900	9670.000	2295.300	9710.000	2295.600	9728.000	2299.100	9753.000
GR	2298.000	9778.000	2298.700	9793.000	2299.600	9833.000	2299.100	9850.000	2298.200	9855.000
GR	2299.500	9875.000	2298.500	9912.000	2295.100	9951.000	2295.100	10000.000	2295.000	10037.000
GR	10.500	10049.000	2313.700	10069.000	2314.400	10082.000	2310.000	10085.000	0.000	0.000

	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9953.000	0.025	10037.000	0.045	10075.000	0.000	0.000	0.000
	6.210	21.000	9953.000	10037.000	540.000	640.000	530.000	0.000	0.000	0.000
	2313.700	9401.000	2312.300	9407.000	2311.200	9416.000	2305.400	9425.000	2304.600	9465.000
GR	2303.600	9575.000	2303.100	9634.000	2302.700	9695.000	2303.400	9731.000	2303.000	9767.000
GR	2303.400	9787.000	2303.500	9833.000	2304.000	9886.000	2300.600	9935.000	2300.100	9946.000
	2298.300	9953.000	2298.600	10000.000	2298.000	10019.000	2298.000	10037.000	2327.800	10075.000
	2327.800	10076.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
	3.000	0.045	9895.000	0.025	10041.000	0.045	10100.000	0.000	0.000	0.000
X1	6.310	25.000	9895.000	10041.000	450.000	505.000	500.000	0.000	0.000	0.000
	2315.800	9305.000	2314.600	9311.000	2308.300	9341.000	2307.500	9362.000	2308.400	9379.000
	2309.500	9404.000	2307.800	9454.000	2309.100	9483.000	2309.600	9514.000	2309.000	9553.000
GR	2308.100	9589.000	2307.100	9615.000	2306.000	9639.000	2306.700	9660.000	2306.900	9713.000
	2307.000	9770.000	2306.900	9812.000	2304.300	9838.000	2304.700	9888.000	2304.300	9895.000
	2300.900	9979.000	2301.100	10000.000	2302.700	10041.000	2309.500	10055.000	2324.100	10100.000
NH	3.000	0.045	9949.000	0.025	10081.000	0.045	10220.000	0.000	0.000	0.000
	6.400	28.000	9949.000	10081.000	420.000	320.000	500.000	0.000	0.000	0.000
	2315.000	9439.000	2314.200	9497.000	2312.600	9597.000	2310.500	9638.000	2308.700	9682.000
GR	2310.000	9729.000	2309.200	9764.000	2308.600	9786.000	2309.800	9797.000	2308.900	9816.000
	2306.100	9836.000	2307.300	9851.000	2307.600	9882.000	2306.300	9895.000	2306.500	9911.000
	2307.000	9915.000	2306.300	9947.000	2306.100	9976.000	2305.100	9997.000	2304.500	10000.000
GR	2303.900	10031.000	2305.600	10052.000	2306.900	10064.000	2304.300	10081.000	2304.300	10117.000
	7.300	10136.000	2310.800	10156.000	2318.800	10220.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9952.000	0.025	10058.000	0.045	10500.000	0.000	0.000	0.000
X1	6.500	29.000	9952.000	10058.000	470.000	560.000	500.000	0.000	0.000	0.000
	2321.800	9488.000	2320.900	9501.000	2318.300	9519.000	2316.800	9562.000	2317.700	9587.000
	2319.200	9628.000	2319.800	9658.000	2318.400	9701.000	2317.300	9744.000	2315.700	9806.000
GR	2315.600	9843.000	2314.800	9891.000	2313.700	9927.000	2309.900	9952.000	2309.100	10000.000
	2308.600	10051.000	2311.700	10058.000	2311.900	10069.000	2311.100	10075.000	2311.100	10099.000
	2312.600	10122.000	2314.500	10205.000	2316.300	10271.000	2318.000	10349.000	2317.800	10391.000
GR	2316.300	10419.000	2316.300	10452.000	2320.100	10479.000	2323.300	10500.000	0.000	0.000
H	5.000	0.050	9937.000	0.025	10034.000	0.045	10077.000	0.030	10116.000	0.045
NH	10390.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	6.610	25.000	9937.000	10034.000	570.000	590.000	570.000	0.000	0.000	0.000
	2322.100	9807.000	2322.100	9813.000	2320.800	9822.000	2325.900	9832.000	2324.600	9837.000
	2327.700	9855.000	2323.700	9876.000	2322.100	9904.000	2315.000	9937.000	2312.200	9946.000
GR	2312.700	10000.000	2312.700	10034.000	2315.000	10077.000	2314.100	10116.000	2315.300	10129.000
	2315.200	10149.000	2315.800	10158.000	2315.500	10169.000	2316.500	10202.000	2316.000	10218.000
	2316.000	10225.000	2316.900	10276.000	2318.400	10341.000	2319.400	10366.000	2325.100	10390.000
H	5.000	0.065	9945.000	0.025	10040.000	0.060	10070.000	0.025	10178.000	0.045
H	10310.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	6.690	16.000	9945.000	10178.000	430.000	420.000	425.000	0.000	0.000	0.000
GR	2324.300	9893.000	2324.400	9900.000	2319.600	9917.000	2315.800	9945.000	2315.700	9974.000
	2316.300	10000.000	2317.800	10064.000	2315.700	10122.000	2315.100	10131.000	2315.200	10178.000
	2320.100	10189.000	2320.400	10200.000	2319.400	10217.000	2320.700	10227.000	2320.600	10286.000
GR	26.600	10310.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NH	[illegible]5.000	0.065	9909.000	0.025	10000.000	0.060	10100.000	0.025	10172.000	0.050
NH	10260.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	6.760	15.000	9951.000	10124.000	360.000	385.000	370.000	0.000	0.000	0.000
GR	2326.100	9948.000	2319.900	9874.000	2321.200	9892.000	2318.600	9909.000	2318.900	9951.000
GR	2318.000	9960.000	2317.800	9989.000	2318.400	10000.000	2319.300	10044.000	2319.800	10084.000
GR	2317.300	10124.000	2317.300	10172.000	2322.700	10184.000	2330.600	10231.000	2335.200	10260.000
NH	4.000	0.050	9959.000	0.025	10045.000	0.050	10350.000	1.000	10835.000	0.000
X1	6.880	43.000	9959.000	10045.000	580.000	615.000	620.000	0.000	0.000	0.000
GR	2329.200	9755.000	2328.300	9765.000	2328.600	9768.000	2325.600	9781.000	2325.700	9799.000
GR	2326.200	9804.000	2324.900	9845.000	2322.600	9868.000	2324.700	9890.000	2322.900	9916.000
GR	2323.100	9936.000	2320.500	9959.000	2320.500	10000.000	2320.500	10021.000	2325.200	10045.000
GR	2324.600	10079.000	2324.200	10117.000	2323.100	10138.000	2324.200	10168.000	2324.800	10213.000
GR	2325.000	10253.000	2325.400	10299.000	2327.100	10343.000	2327.300	10412.000	2324.900	10429.000
GR	2326.200	10442.000	2327.500	10475.000	2325.500	10494.000	2325.600	10521.000	2326.900	10532.000
GR	2327.200	10556.000	2326.100	10589.000	2324.700	10629.000	2324.900	10642.000	2327.300	10653.000
GR	2327.000	10691.000	2325.300	10701.000	2325.300	10709.000	2327.300	10720.000	2326.800	10738.000
GR	2327.200	10750.000	2325.500	10780.000	2338.100	10835.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9954.000	0.025	10030.000	0.050	10420.000	0.000	0.000	0.000
X1	6.990	22.000	9954.000	10030.000	595.000	595.000	610.000	0.000	0.000	0.000
GR	2332.600	9912.000	2332.600	9919.000	2329.200	9932.000	2327.600	9954.000	2323.200	9966.000
GR	2322.800	10000.000	2322.800	10022.000	2325.400	10030.000	2325.400	10051.000	2328.300	10065.000
GR	2328.200	10102.000	2328.200	10160.000	2327.900	10191.000	2327.300	10210.000	2327.500	10216.000
GR	[illegible].000	10227.000	2327.600	10235.000	2327.300	10284.000	2325.700	10302.000	2326.500	10313.000
GR	2327.200	10379.000	2334.600	10420.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9967.000	0.025	10041.000	0.050	10390.000	0.000	0.000	0.000
X1	7.130	19.000	9967.000	10041.000	725.000	720.000	725.000	0.000	0.000	0.000
GR	2339.000	9948.000	2327.500	9967.000	2327.300	10000.000	2327.300	10023.000	2331.900	10041.000
GR	2332.200	10058.000	2333.100	10075.000	2332.800	10119.000	2333.600	10131.000	2332.800	10165.000
GR	2333.300	10181.000	2332.600	10200.000	2332.900	10213.000	2331.900	10226.000	2332.600	10241.000
GR	2332.200	10273.000	2335.400	10326.000	2340.500	10373.000	2341.200	10390.000	0.000	0.000
NH	3.000	0.050	9979.000	0.025	10010.000	0.050	10240.000	0.000	0.000	0.000
X1	7.210	12.000	9955.000	10066.000	420.000	410.000	420.000	0.000	0.000	0.000
GR	2340.900	9950.000	2340.500	9955.000	2329.800	9979.000	2329.800	10000.000	2332.100	10010.000
GR	2332.500	10048.000	2331.000	10066.000	2331.000	10079.000	2335.000	10091.000	2335.900	10113.000
GR	2346.000	10183.000	2354.200	10240.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9946.000	0.025	10028.000	0.050	10095.000	0.000	0.000	0.000
X1	7.300	13.000	9946.000	10028.000	505.000	450.000	480.000	0.000	0.000	0.000
GR	2344.300	9816.000	2342.100	9825.000	2336.000	9851.000	2336.200	9864.000	2337.500	9878.000
GR	2337.500	9893.000	2336.400	9913.000	2338.300	9933.000	2338.400	9946.000	2333.300	9967.000
GR	2333.600	10000.000	2334.000	10028.000	2369.900	10095.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 T        VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

*PROF 1

HV=   0.300 CEHV=   0.500
1490 NH CARD USED
ECNO 5.350

3265 DIVIDED FLOW

   5.35     4.00  2273.70  2273.69  2273.70  2274.62     0.92     0.00     0.00  2269.70
  4081.     1775.    2268.      38.     572.     228.      12.       0.       0.  2269.70
   0.00     3.10     9.95     3.09    0.043    0.025    0.045    0.000  2269.70  9480.30
.004409       0.       0.       0.        0        4        0     0.00   523.06 10058.15

HV=   0.100 CEHV=   0.300
90 NH CARD USED
*SECNO 5.470

265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   5.47     3.96  2277.66  2277.66     0.00  2278.59     0.94     2.37     0.00  2275.60
  4081.     1216.    2723.     142.     432.     293.      58.       9.       5.  2273.70
   0.02     2.82     9.30     2.43    0.045    0.025    0.053    0.000  2273.70  9425.03
0.004203     450.     610.     620.        3        5        0     0.00   459.49 10123.72

SECNO 5.580

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   5.58     4.21  2281.21  2281.21     0.00  2282.19     0.98     1.96     0.01  2278.80
  4081.     739.    3312.      30.     323.     378.      11.      18.      11.  2277.00
   0.04     2.29     8.76     2.73    0.045    0.025    0.045    0.000  2277.00  9479.23
0.003539     485.     515.     525.       20        8        0     0.00   495.55 10049.20

SECNO 5.650
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       ULOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   T        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.65     3.85  2282.75  2282.75     0.00  2283.89     1.14     1.26     0.05  2280.10
   4081.      252.     3757.      72.     140.     421.      23.      23.      14.   2278.90
    0.05     1.81     8.92     3.16    0.045    0.025    0.045    0.000  2278.90  9510.45
 0.004081     300.      335.     340.        2        8        0     0.00   395.39 10079.85


1490 NH CARD USED
*SECNO 5.740

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.74     3.84  2285.24  2285.24     0.00  2286.57     1.33     2.21     0.06  2282.50
   4081.       84.     3795.     202.      29.     396.      80.      29.      17.   2281.40
    0.07     2.91     9.58     2.53    0.045    0.025    0.045    0.000  2281.40  9910.20
 0.004070     430.      500.     520.        2        5        0     0.00   243.08 10244.17


1490 NH CARD USED
*SECNO 5.850

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.85     5.00  2289.70  2289.70     0.00  2290.48     0.78     1.95     0.05  2286.00
   4081.       44.     3980.      38.      18.     534.      59.      36.      21.   2289.60
    0.09     2.39     7.19     0.97    0.045    0.025    0.045    0.000  2284.70  9910.14
 0.002328     575.      570.     580.       20       22        0     0.00   328.56 10332.33


CCHV=   0.600 CEHV=   0.800
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
          VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   JDC      ICONT    CORAR    TOPWID     ENDST

*SECNO 5.920

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.92     4.03  2292.03  2292.03     0.00  2293.66     1.63     1.73     0.68  2288.00
   4081.      45.     4036.       0.      12.     392.       0.      41.      23.  2292.10
    0.10     3.95     10.30     0.00    0.050    0.030    0.000    0.000  2288.00  9947.28
0.009073     390.      400.     415.        3       15        0     0.00   126.97 10074.25

1490 NH CARD USED
*SECNO 6.010

3301 HV CHANGED MORE THAN HVINS

    6.01     3.62  2295.82     0.00     0.00  2296.32     0.51     1.99     0.68  2292.40
   4081.     1732.     1732.     616.     270.     334.     125.      47.      25.  2293.20
    0.12     6.41      5.19     4.94    0.025    0.025    0.028    0.000  2292.20  9871.63
0.0[illegible]9     560.      480.     210.        1        0        0     0.00   270.87 10142.51

*SECNO 6.090

4265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.09     3.55  2298.55  2298.55     0.00  2299.88     1.34     1.61     0.66  2298.50
   4081.      488.     3580.      14.     111.     366.       5.      53.      28.  2295.00
    0.14     4.38      9.77     2.80    0.045    0.025    0.045    0.000  2295.00  9659.69
0.006453     500.      430.     290.        3        8        0     0.00   210.18 10039.74

CHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 6.210
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
```

```
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      AN OB     ACH       AROB      VOL       TWA    LEFT/RIGHT
   Time      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST

     6.21      4.38   2302.38   2302.38      0.00   2304.17      1.79      3.12      0.22   2298.30
    4081.      252.      3786.      43.      68.      341.      12.      59.      30.   2298.00
     0.15      3.73     11.09      3.48    0.045     0.025    0.045     0.000   2298.00   9909.28
 0.005363      540.      530.      640.       1        11        0      0.00    133.31  10042.59


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 6.310

3301 HV CHANGED MORE THAN HVINS

     6.31      4.58   2305.48      0.00      0.00   2306.48      1.00      2.23      0.08   2304.30
    4081.      124.      3938.      19.      63.      484.      8.      64.      32.   2302.70
     0.17      1.95      8.14      2.37    0.045     0.025    0.045     0.000   2300.90   9826.12
 0.003799      450.      500.      505.       2         0        0      0.00    220.61  10046.74


1490 NH CARD USED
*SECNO 6.400
     [illegible]      4.00   2307.90      0.00      0.00   2308.75      0.85      2.26      0.01   2306.30
    4081.      332.      2845.      903.      126.      342.      170.      71.      35.   2304.30
     0.19      2.63      8.31      5.31    0.045     0.025    0.045     0.000   2303.90   9823.18
 0.003504      420.      500.      520.       2         0        0      0.00    316.21  10139.39


1490 NH CARD USED
*SECNO 6.500

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.50      4.21   2312.81   2312.81      0.00   2314.22      1.42      2.69      0.17   2309.90
    4081.      84.      3739.      238.      28.      379.      83.      78.      38.   2311.70
     0.20      3.01      9.91      2.87    0.045     0.025    0.045     0.000   2308.60   9932.87
 0.005124      470.      500.      560.      20         8        0      0.00    198.22  10131.09


1490 NH CARD USED
*SECNO 6.610
```

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


35 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   6.61     3.96  2316.16  2316.16     0.00  2317.32     1.16     2.83     0.02  2315.00
  4081.       4.     3264.     813.       3.     343.     220.      85.      41.  2312.70
   0.22     1.41     9.51     3.69    0.030    0.025    0.040    0.000  2312.20  9931.61
.004779     570.     570.     590.        2       11        0     0.00   280.32 10234.05


90 NH CARD USED
SECNO 6.690
   6.69     3.56  2318.66     0.00     0.00  2319.42     0.76     2.06     0.04  2315.80
  4081.      61.     4977.     42.      30.     563.      13.     90.      44.  2315.20
   0.24     2.02     7.06     3.14    0.065    0.027    0.045    0.000  2315.10  9923.87
0.004905    430.     425.     420.        2        0        0     0.00   261.91 10185.78


1490 NH CARD USED
SEC  760

3265 DIVIDED FLOW

   6.76     3.27  2320.57     0.00     0.00  2321.47     0.90     2.00     0.04  2318.90
  4081.     347.     1915.   1619.      93.     321.     169.     95.      46.  2317.30
   0.25     5.87     5.97     9.59    0.027    0.029    0.026    0.000  2317.30  9871.19
0.003939    360.     370.     385.        2        0        0     0.00   295.21 10179.26


1490 NH CARD USED
SECNO 6.880

3265 DIVIDED FLOW

685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   6.88     4.70  2325.20  2325.20     0.00  2326.17     0.97     2.75     0.02  2320.50
  4081.     679.     3105.     297.     228.     348.     176.     103.      51.  2325.20
   0.28     2.98     8.92     1.69    0.050    0.025    0.051    0.000  2320.50  9835.42
0.003515    580.     620.     615.       20       17        0     0.00   474.96 10643.39
```

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XML      XMCH     XMR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV=  0.100 CEHV=  0.300
1490 NH CARD USED
*SECNO 6.990

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.99     5.31  2328.11  2328.11     0.00  2329.37     1.26     2.13     0.09  2327.60
   4081.       1.    3457.     623.       2.     355.     276.     114.      57.  2325.40
    0.29     0.71     9.73     2.26    0.050    0.025    0.050    0.000  2322.80  9946.98
 0.003501     595.     610.     595.        2        8        0     0.00   331.93 10384.04


CCHV=  0.300 CEHV=  0.500
1490 NH CARD USED
*SECNO 7.130

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.13     5.36  2332.66  2332.66     0.00  2334.59     1.93     2.88     0.33  2327.50
   4081.       73.    3971.      36.      22.     352.      33.     123.      61.  2331.90
    0.31     3.40    11.28     1.09    0.050    0.025    0.050    0.000  2327.30  9938.47
 0.004546     725.     723.     720.       20        5        0     0.00   177.13 10280.64


1490 NH CARD USED
*SECNO 7.210

3301 HV CHANGED MORE THAN HVINS

    7.21     6.07  2335.87     0.00     0.00  2336.85     0.98     1.98     0.28  2340.50
   4081.       0.    3552.     529.       0.     427.     107.     127.      63.  2331.00
    0.33     0.00     8.31     4.95    0.000    0.033    0.050    0.000  2329.80  9965.39
 0.004909     420.     420.     410.        4        0        0     0.00   146.77 10112.16
```

SECND	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TA	VLOB	VCH	VROB	XML	XMCH	XMR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
ECND 7.300

3301 HV CHANGED MORE THAN HVINS

85 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

7.30	5.15	2338.45	2338.45	0.00	2340.00	1.55	2.27	0.29	2338.40
4081.	351.	3672.	58.	133.	349.	18.	133.	65.	2334.00
0.34	2.64	10.51	3.14	0.050	0.025	0.050	0.000	2333.30	9840.57
0.004565	305.	480.	450.	2	15	0	0.00	195.72	10036.30

THIS RUN EXECUTED MON, JUN 01 1987 15:25:01

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUTNY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 50 YEAR PROFILE - R4

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2274.800	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 T        VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN       STA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CONAR    TOPWID      ENDST

*PROF 2

CHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 5.350

3265 DIVIDED FLOW

3720 CRITICAL DEPTH ASSUMED
    5.35     5.18  2274.88  2274.88  2274.80  2276.12     1.24     0.00     0.00  2269.70
   8274.    4460.    3733.      81.    1172.     295.      21.       0.       0.  2269.70
    0.00     3.81    12.65     3.94    0.051    0.025    0.045    0.000  2269.70  9415.60
0.003056       0.       0.       0.        0        4        0     0.00   627.76 10059.96

CHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 5.470

3265 DIVIDED FLOW

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.47     5.16  2278.86  2278.86     0.00  2279.93     1.07     2.41     0.02  2275.60
   8274.    3622.    4262.     390.    1002.     387.     129.      17.       7.  2273.70
    0.02     3.61    11.02     3.02    0.045    0.025    0.051    0.000  2273.70  9417.91
0.004071     450.     610.     620.        1        5        0     0.00   702.09 10142.93

*SECNO 5.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.58     5.43  2282.43  2282.43     0.00  2283.63     1.20     1.95     0.04  2278.80
   8274.    2905.    5309.      60.     892.     496.      18.      34.      15.  2277.00
    0.04     3.26    10.70     3.29    0.045    0.025    0.045    0.000  2277.00  9469.68
0.003679     435.     515.     525.       20        8        0     0.00   581.03 10050.71

*SECNO 5.650
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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   SECNO     DEPTH    CWSEL.    CRIWS    WSELK     EG       HV       HL      OLOSS   BANK ELEV
   Q         QLOB     QCH       QROB     ALOB      ACH      AROB     VOL     TWA   LEFT/RIGHT
   TIME      VLOB     VCH       VROB     XNL       XNCH     XNR      WTN     ELMIN      SSTA
   SLOPE     XLOBL    XLCH      XLOBR    ITRIAL    IDC      ICONT    CORAR   TOPWID     ENDST


     5.65      5.34  2284.24   2284.24     0.00  2285.48     1.25     1.15     0.01  2280.10
    8274.     1998.    6116.      160.     709.     595.      44.      44.      19.  2278.90
     0.05      2.82     10.28      3.63    0.045    0.025    0.045    0.000  2278.90  9493.27
 0.003422      300.      335.      340.       20        5        0     0.00   591.68 10084.95


1490 NH CARD USED
*SECNO 5.740

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.74      5.63  2287.03   2287.03     0.00  2288.59     1.56     1.76     0.09  2282.50
    8274.      383.    6641.     1250.     169.     599.     366.      57.      25.  2281.40
     0.06      2.26     11.08      3.41    0.052    0.025    0.045    0.000  2281.40  9495.01
 0.003760      430.      500.      320.       20        8        0     0.00   542.57 10248.96


1490 NH CARD USED
*SECNO 5.850
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.85      6.09  2290.79   2290.79     0.00  2292.25     1.47     2.12     0.01  2286.00
    8274.      103.    7346.      823.      31.     715.     348.      72.      31.  2289.60
     0.08      3.43     10.27      2.36    0.045    0.025    0.045    0.000  2284.70  9907.23
 0.003673      575.      570.      580.       20        8        0     0.00   449.68 10356.90


CCHV=   0.600 CEHV=   0.800
*SECNO 5.920

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.92      6.19  2294.19   2294.19     0.00  2296.38     2.18     1.90     0.57  2288.00
    8274.      120.    7929.      223.      27.     656.      74.      81.      34.  2292.10
     0.09      4.39     12.09      3.05    0.050    0.030    0.045    0.000  2288.00  9944.20
 0.006330      390.      400.      415.        3        5        0     0.00   229.07 10251.01
```

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

1490 NH CARD USED
SECNO 6.010

3301 HV CHANGED MORE THAN HVINS

   6.01     5.77  2297.97     0.00     0.00  2298.57     0.60     1.25     0.95  2292.40
  8274.     3072.    3935.    1267.     453.     634.     278.     92.      37.  2293.20
   0.11     6.78     6.21     4.56    0.026    0.025    0.030    0.000  2292.20  9866.71
 0.001445    560.     480.     210.        3        0        0     0.00   451.66 10318.37

SECNO 6.090

3301 HV CHANGED MORE THAN HVINS

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   6.09     5.29  2300.29  2300.29     0.00  2301.90     1.61     1.04     0.81  2298.50
  8274.     1670.    6571.      33.     419.     584.      11.     104.      41.  2295.00
   0.12     3.99    11.25     3.09    0.045    0.025    0.045    0.000  2295.00  9694.16
 0.0[illegible]      500.     430.     290.        3       11        0     0.00   346.93 10041.09

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
SECNO 6.210
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   6.21     6.91  2304.91  2304.91     0.00  2306.24     1.34     1.83     0.08  2298.30
  8274.     2202.    5971.     101.     814.     553.      30.     118.      47.  2298.00
   0.14     2.71    10.79     3.32    0.045    0.025    0.045    0.000  2298.00  9449.66
 0.002669    540.     330.     640.       20       18        0     0.00   396.14 10045.81

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
SECNO 6.310

3265 DIVIDED FLOW

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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```
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        HLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IRC       ICONT     CORAR     TOPWID      ENDST


     6.31      5.93   2306.83   2306.83      0.00   2308.62      1.79      1.68      0.14   2304.30
    8274.      625.      7590.      59.      184.      679.      18.      131.      52.   2302.70
     0.15      3.40      11.17      3.36    0.045     0.025    0.045     0.000   2300.90   9620.99
 0.004554      450.      500.      505.       2        11        0      0.00    309.07  10049.49


1490 NH CARD USED
*SECNO 6.400

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

     6.40      5.76   2309.66      0.00      0.00   2310.63      0.97      1.93      0.08   2306.30
    8274.      1426.      5327.      1521.      418.      576.      282.      143.      56.   2304.30
     0.17      3.41      9.25      5.39    0.045     0.025    0.045     0.000   2303.90   9658.50
 0.003414      420.      300.      520.       3         0        0      0.00    459.76  10149.49


1490 NH CARD USED
*SECNO 6.500

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.50      6.11   2314.71   2314.71      0.00   2316.49      1.78      1.87      0.24   2309.90
    8274.      331.      6708.      1154.      90.      581.      301.      156.      60.   2311.70
     0.18      3.70      11.68      3.83    0.045     0.025    0.045     0.000   2308.60   9893.83
 0.004026      470.      500.      560.      20         8        0      0.00    319.00  10212.82


1490 NH CARD USED
*SECNO 6.610
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.61      5.44   2317.64   2317.64      0.00   2319.14      1.50      2.42      0.03   2315.00
    8274.      38.      5606.      2630.      16.      486.      570.      170.      65.   2312.70
     0.20      2.34      11.53      4.62    0.050     0.025    0.040     0.000   2312.20   9924.75
 0.004413      570.      570.      590.       3        15        0      0.00    383.12  10307.87
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```
 SECND    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 Time     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST

1490 NH CARD USED
ECND 6.690

3265 DIVIDED FLOW

   6.69     4.80  2319.90     0.00     0.00  2321.23     1.33     2.07     0.02  2315.80
 8274.      175.     7996.     103.      62.     830.      28.     179.      68.  2315.20
   0.21     2.83     9.40     3.71    0.065    0.028    0.045    0.000  2315.10  9915.94
.005449     430.     425.     420.        3        0        0     0.00   284.92 10220.84

90 NH CARD USED
SECND 6.760
   6.76     4.73  2322.03     0.00     0.00  2323.15     1.12     1.90     0.02  2318.90
 8274.     1412.     4147.    2715.     210.     573.     232.     108.      71.  2317.30
   0.23     6.74     7.24    10.79    0.030    0.032    0.026    0.000  2317.30  9065.09
0.004800     360.     370.     385.        2        0        0     0.00   317.41 10182.50

1490 NH CARD USED
SEC 880

265 DIVIDED FLOW

85 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   6.88     5.97  2326.47  2326.47     0.00  2327.76     1.29     2.64     0.05  2320.50
 8274.     1647.     5149.    1478.     427.     457.     654.     206.      78.  2325.20
   0.25     3.85    11.27     2.26    0.050    0.025    0.059    0.000  2320.50  9777.23
0.003903     580.     620.     615.       20       11        0     0.00   737.27 10784.23

CCHV=   0.100 CEHV=   0.300
90 NH CARD USED
SECND 6.990
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   6.99     6.94  2329.74  2329.74     0.00  2331.16     1.42     2.16     0.04  2327.60
 8274.       61.     5307.    2706.      30.     479.     848.     226.      86.  2325.40
   0.27     2.04    11.50     3.19    0.050    0.025    0.050    0.000  2322.80  9929.95
0.003285     595.     610.     595.       20        8        0     0.00   463.11 10393.06
```

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


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 7.130
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.13      7.79   2335.09   2335.09      0.00   2336.85      1.76      2.26      0.17   2327.50
    8274.      169.     6394.     1710.       48.      532.      611.      247.       93.   2331.90
     0.29      3.56     12.02      2.80     0.050     0.025     0.050     0.000   2327.30   9954.46
 0.002982      725.      725.      720.        20         8         0      0.00    366.40  10320.86


1490 NH CARD USED
*SECNO 7.210

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.21      7.20   2337.00   2337.00      0.00   2339.36      2.36      2.05      0.30   2340.50
        .        0.     7048.     1226.        0.      543.      164.      256.       96.   2331.00
     0.30      0.00     12.98      7.47     0.000     0.033     0.050     0.000   2329.80   9962.85
 0.009538      420.      420.      410.         3        11         0      0.00    157.76  10120.61


1490 NH CARD USED
*SECNO 7.300
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.30      7.07   2340.37   2340.37      0.00   2342.60      2.23      2.98      0.04   2338.40
    8274.     1447.     6679.      148.       344.      507.       38.      263.       98.   2334.00
     0.31      4.21     13.17      3.91     0.050     0.025     0.050     0.000   2333.30   9832.37
 0.004365      505.      480.      450.         4         8         0      0.00    207.51  10039.89
```

THIS RUN EXECUTED MON, JUN 01 1987 15:25:15

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*****************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
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SOLS WASH
REACH 4
T3 100 YEAR PROFILE

	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.000000	0.00	0.0	0.	2275.300	0.000
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELX    EG       HV       HL       DLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   Time     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*PROF 3

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 5.350
3720 CRITICAL DEPTH ASSUMED
    5.35     5.61  2275.31  2275.31  2275.30  2276.71     1.40     0.00     0.00  2269.70
   10370.    5864.    4402.     104.    1424.     320.      24.      0.       0.   2269.70
    0.00     4.12    13.76     4.28    0.053    0.025    0.045    0.000  2269.70  9404.04
 0.003377     0.       0.       0.       0        4        0     0.00   656.59 10060.63


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 5.470

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
[illegible]  5.54  2279.24  2279.24     0.00  2280.42     1.19     2.54     0.02  2275.60
   10370.    4876.    4965.     529.    1205.     416.     161.     20.      8.   2273.70
    0.02     4.05    11.94     3.28    0.045    0.025    0.050    0.000  2273.70  9415.72
 0.004343    450.     610.     620.       2        5        0     0.00   717.80 10148.85


*SECNO 5.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.58     5.84  2282.84  2282.84     0.00  2284.18     1.34     2.06     0.04  2278.80
   10370.    4079.    6216.      73.    1091.     536.      21.     40.      15.   2277.00
    0.04     3.74    11.59     3.56    0.045    0.025    0.045    0.000  2277.00  9467.29
 0.003887    485.     515.     525.      20        8        0     0.00   583.93 10051.22


*SECNO 5.650
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.65     5.79  2284.69  2284.69     0.00  2286.05     1.36     1.20     0.01  2280.10
   10370.    3001.    7158.     211.     917.     648.      32.     51.      19.   2278.90
    0.05     3.27    11.05     4.03    0.045    0.025    0.045    0.000  2278.90  9488.33
 0.003529    300.     335.     340.      20        5        0     0.00   599.79 10088.11
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```
 SECNO    DEPTH    CHSEL    CRTWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TI       VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

1490 NH CARD USED
ECNO 5.740

3265 DIVIDED FLOW

35 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   5.74     6.41  2287.81  2287.81     0.00  2289.26     1.45     1.63     0.03  2282.50
 10370.     800.     7627.     1943.     449.     687.     325.     69.     26.   2281.40
   0.06     1.78    11.10     3.70    0.061    0.025    0.045    0.000  2281.40  9448.40
.003145     430.     500.     320.       20        8        0     0.00   794.84 10251.03

90 NH CARD USED
ECNO 5.850
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED
   5.85     6.61  2291.31  2291.31     0.00  2292.93     1.62     1.95     0.05  2286.00
 1        139.     8734.     1477.     38.     793.     503.     89.     35.   2289.60
   0.08     3.69    11.04     2.94    0.045    0.025    0.045    0.000  2284.70  9905.83
0.003702     575.     570.     580.       20        8        0     0.00   464.66 10370.49

CHV=   0.600 CEHV=   0.800
*SECNO 5.920

265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   5.92     7.54  2295.54  2295.54     0.00  2297.24     1.70     1.54     0.06  2288.00
 10370.     160.     9110.     1099.     40.     821.     407.     101.     39.   2292.10
   0.09     3.96    11.10     2.70    0.050    0.030    0.045    0.000  2288.00  9942.29
0.003960     390.     400.     415.        3        8        0     0.00   524.80 10478.97

490 NH CARD USED
*SECNO 6.010

301 HV CHANGED MORE THAN HVINS
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST

     6.01      5.95   2298.15      0.00      0.00   2299.01      0.86      1.26      0.50   2292.40
   10370.     3815.     4937.     1619.      469.      658.      322.      114.       43.   2293.20
     0.11      8.14      7.51      5.03     0.026     0.025     0.030     0.000   2292.20   9866.03
  0.002009     560.      480.      210.         3         0         0      0.00    496.98  10363.01

*SECNO 6.090

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.09      5.82   2300.82   2300.82      0.00   2302.66      1.84      1.29      0.79   2298.50
   10370.     2389.     7938.       44.      534.      650.       13.      127.       47.   2295.00
     0.12      4.47     12.21      3.32     0.045     0.025     0.045     0.000   2295.00   9692.48
  0.004685     300.      430.      290.         2         5         0      0.00    349.02  10041.50

CCHV=   0.300 CEHV=   0.500
1490 HH CARD USED
*SEC[illegible]210
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.21      7.41   2305.41   2305.41      0.00   2306.85      1.44      1.90      0.12   2298.30
   10370.     3344.     6702.      125.     1073.      595.       35.      145.       53.   2298.00
     0.13      3.12     11.59      3.56     0.045     0.025     0.045     0.000   2298.00   9424.99
  0.002792     540.      530.      640.        20        11         0      0.00    621.46  10046.45

CCHV=   0.100 CEHV=   0.300
1490 HH CARD USED
*SECNO 6.310

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.31      6.74   2307.64   2307.64      0.00   2309.39      1.74      1.57      0.09   2304.30
   10370.     1264.     9020.       87.      403.      799.       25.      161.       59.   2302.70
     0.15      3.13     11.29      3.44     0.045     0.025     0.045     0.000   2300.90   9358.24
  0.003749     450.      500.      505.        20        11         0      0.00    456.75  10051.18
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    COGAR    TOPWID     ENDST

490 NH CARD USED
ECNO 6.400

3301 HV CHANGED MORE THAN HVINS

    6.40     6.20  2310.10     0.00     0.00  2311.27     1.17     1.02     0.06  2306.30
  10370.    2021.     6508.    1841.     543.     633.     313.     176.      64.  2304.30
    0.16     3.73     10.28     5.89    0.045    0.025    0.045    0.000  2303.90  9647.84
 0.003709     420.      500.     520.        3        0        0     0.00   504.15 10151.99

90 NH CARD USED
*SECNO 6.300

301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
593 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    6.50     6.83  2315.43  2315.43     0.00  2317.31     1.88     1.90     0.21  2309.90
  1[illegible]      338.     8071.    1760.     145.     657.     421.     192.      69.  2311.70
    0.18     3.72     12.29     4.18    0.045    0.025    0.045    0.000  2308.60  9853.48
 0.003789     470.      500.     560.       20        8        0     0.00   385.45 10238.93

2490 NH CARD USED
*SECNO 6.610
185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    6.61     5.98  2318.18  2318.18     0.00  2319.84     1.66     2.3[illegible]     0.02  2315.00
  10370.      62.     6658.    3650.      23.     539.     724.     209.      74.  2312.70
    0.19     2.65     12.35     5.04    0.050    0.025    0.040    0.000  2312.20  9922.23
 0.001422     570.      570.     590.        3       15        0     0.00   409.10 10331.33

1490 NH CARD USED
*SECNO 6.690

265 DIVIDED FLOW

    6.69     5.25  2320.35     0.00     0.00  2321.99     1.63     2.15     0.00  2315.80
  10370.     247.     9968.     154.      73.     955.      42.     220.      78.  2315.20
    0.21     3.30     10.44     3.69    0.065    0.028    0.045    0.000  2315.10  9914.36
 0.005859     430.      425.     420.        2        0        0     0.00   307.03 10224.28
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```
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   Time      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 6.760
     6.76      5.40   2322.70      0.00      0.00   2323.89      1.19      1.86      0.04   2318.90
   10370.     1884.     5238.     3228.      268.      689.      291.      230.       80.   2317.30
     0.22      7.02      7.63     11.07     0.031     0.032     0.026     0.000   2317.30   9862.27
 0.004313      360.      370.      385.         3         0         0      0.00    321.73  10183.99


1490 NH CARD USED
*SECNO 6.880

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.88      6.44   2326.94   2326.94      0.00   2328.35      1.41      2.55      0.07   2320.50
   10370.     2165.     6038.     2167.      513.      497.      809.      252.       88.   2325.20
     0.24      4.22     12.15      2.44     0.050     0.025     0.062     0.000   2320.50   9775.21
 0.004054      580.      620.      615.        20        11         0      0.00    816.58  10786.27


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 6.990
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.99      7.40   2330.19   2330.19      0.00   2331.84      1.64      2.32      0.07   2327.60
   10370.      106.     6306.     3757.       41.      511.     1013.      276.       97.   2325.40
     0.26      2.57     12.67      3.70     0.050     0.025     0.050     0.000   2322.80   9928.20
 0.003629      595.      610.      595.        20        11         0      0.00    467.40  10395.59


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 7.130
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.13      8.48   2335.78   2335.78      0.00   2337.67      1.89      2.38      0.13   2327.50
   10370.      214.     7479.     2677.       57.      383.      807.      301.      104.   2331.90
     0.28      3.79     12.84      3.32     0.050     0.025     0.050     0.000   2327.30   9953.32
 0.003008      725.      725.      720.        20         8         0      0.00    376.16  10329.48
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 SECNO    DEPTH    CWSEL    CRIWS    WSELX    EG       HV       HL       CLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

1490 NH CARD USED
ECNO 7.210

3301 HV CHANGED MORE THAN HVINS

85 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   7.21     8.02  2337.82  2337.82     0.00  2340.47     2.65     2.05     0.38  2340.50
 10370.       0.     8692.    1678.       0.     628.     211.     312.     107.   2331.00
   0.28     0.00    13.84     7.95    0.000    0.034    0.050    0.000  2329.80  9961.02
0.009397    420.     420.     410.        3       11        0     0.00   165.27 10126.29

1490 NH CARD USED
ECNO 7.300
85 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   7.30     7.83  2341.13  2341.13     0.00  2343.66     2.53     2.96     0.04  2338.40
 10370.    2068.     8102.     200.     432.     370.      47.     322.     109.   2334.00
   0.30     4.79    14.22     4.21    0.050    0.025    0.050    0.000  2333.30  9829.12
0.0[illegible]      505.     480.     450.        4        8        0     0.00   212.20 10041.31
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THIS RUN EXECUTED MON, JUN 01 1987 15:25:28

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
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T1 SOLS WASH
T2 REACH 4
T3 500 YEAR PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	5.	0.	0.	0.000000	0.00	0.0	0.	2276.100	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

*PROF 4

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
SECNO 5.350

3265 DIVIDED FLOW

3720 CRITICAL DEPTH ASSUMED
    5.35     6.47  2276.17  2276.17  2276.10  2277.85     1.67     0.00     0.00  2269.70
  15075.    9136.    5781.     158.    1941.     369.      34.       0.       0.  2269.70
    0.00     4.71    15.66     4.66    0.056    0.025    0.045    0.000  2269.70  9390.21
 0.005754      0.       0.       0.        0        4        0     0.00   690.99 10085.03

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
SECNO 5.470
3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.47     6.24  2279.94  2279.94     0.00  2281.36     1.42     2.72     0.02  2275.60
  15075.    7774.    6394.     908.    1391.     471.     240.      26.       8.  2273.70
    0.02     4.89    13.59     3.79    0.045    0.025    0.050    0.000  2273.70  9411.58
 0.004767     450.     610.     620.        2       11        0     0.00   748.46 10160.04

*SECNO 5.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.58     6.62  2283.62  2283.62     0.00  2285.25     1.63     2.26     0.06  2278.80
  15075.    6839.    8126.     110.    1465.     612.      27.      51.      16.  2277.00
    0.03     4.67    13.28     4.06    0.045    0.025    0.045    0.000  2277.00  9462.84
 0.004288     485.     515.     525.       20        8        0     0.00   589.34 10052.18

*SECNO 5.650
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    5.65     6.61  2285.51  2285.51     0.00  2287.13     1.63     1.29     0.00  2280.10
  15075.    5393.    9352.     340.    1298.     744.      71.      66.      20.  2278.90
    0.04     4.15    12.58     4.64    0.045    0.025    0.045    0.000  2278.90  9482.46
 0.003804     300.     335.     340.       20        5        0     0.00   611.38 10093.84
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS    BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 5.740

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.74     7.38  2288.78  2288.78     0.00  2290.37     1.59     1.68     0.00  2282.50
   15075.     2071.    9782.    3222.     937.     796.     731.     91.      27.   2281.40
     0.06     2.21    12.28     4.41    0.062    0.025    0.045    0.000  2281.40  9410.84
 0.003159     430.     500.     520.       20        8        0     0.00   853.37 10287.01


1490 NH CARD USED
*SECNO 5.850
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.85     7.59  2292.29  2292.29     0.00  2294.22     1.93     1.98     0.10  2286.00
   1[illegible]     220.   11703.    3152.      53.     937.     810.     119.      36.   2289.60
     0.07     4.18    12.49     3.89    0.045    0.025    0.045    0.000  2284.70  9903.23
 0.003790     375.     370.     380.       20        8        0     0.00   492.55 10395.78


CCHV=   0.600 CEHV=   0.800
*SECNO 5.920
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.92     8.74  2296.74  2296.74     0.00  2298.49     1.76     1.51     0.11  2288.00
   15075.     229.   11576.    3270.      54.     966.     924.     136.      41.   2292.10
     0.08     4.23    11.98     3.54    0.050    0.030    0.045    0.000  2288.00  9940.59
 0.003711     390.     400.     415.        3        8        0     0.00   586.22 10526.81


1490 NH CARD USED
*SECNO 6.010

3301 HV CHANGED MORE THAN HVINS

     6.01     6.72  2298.92     0.00     0.00  2300.15     1.23     1.34     0.32  2292.40
   15075.     3291.    7106.    2678.     537.     765.     546.     153.      45.   2293.20
     0.10     9.85     9.29     4.91    0.026    0.025    0.032    0.000  2292.20  9863.00
 0.002519     560.     480.     210.        4        0        0     0.00   524.58 10387.58
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```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWO    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

SECNO 6.090

3301 HV CHANGED MORE THAN HVINS

85 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.09     6.89  2301.89  2301.89     0.00  2304.15     2.26     1.47     0.82  2298.50
  15075.    4165.   10842.      68.     772.     785.      18.     170.      49.   2295.00
    0.11     5.39    13.82     3.71    0.045    0.025    0.045    0.000  2295.00  9689.07
 0.004672     300.     430.     290.        2        8        0     0.00   353.27 10042.34

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
ECNO 6.210

3301 HV CHANGED MORE THAN HVINS

85 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
20    ICAL DEPTH ASSUMED
    6.21     8.27  2306.27  2306.27     0.00  2307.97     1.70     2.03     0.17  2298.30
  15075.    6047.    8831.     177.    1527.     668.      44.     194.      35.   2298.00
    0.12     3.96    13.26     4.06    0.045    0.025    0.045    0.000  2298.00  9423.65
 .003137     540.     530.     640.       20       11        0     0.00   623.89 10047.54

HV=   0.100 CEHV=   0.300
90 NH CARD USED
SECNO 6.310

65 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.31     7.97  2308.87  2308.87     0.00  2310.71     1.84     1.56     0.04  2304.30
  15075.    3076.   11852.     147.     857.     978.      39.     216.      62.   2302.70
    0.14     3.59    12.12     3.74    0.045    0.025    0.045    0.000  2300.90  9338.27
 0.003294     450.     500.     305.       20        8        0     0.00   602.55 10053.71
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  SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
  Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
  TIME      VLOB      VCH       VROB      XHL       XHCH      XHR       WTN       ELMIN       SSTA
  SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 MH CARD USED
*SECNO 6.400
    6.40      7.10  2311.00      0.00      0.00  2312.48      1.47      1.73      0.04  2306.30
   15075.     3646.     8922.     2507.      827.      754.      380.      237.      68.   2304.30
    0.15      4.41     11.84      6.60     0.045     0.025     0.045     0.000  2303.90  9620.04
0.003901      420.      500.      520.         3         0         0      0.00   529.63 10157.68


1490 MH CARD USED
*SECNO 6.500

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.50      8.20  2316.80  2316.80      0.00  2318.73      1.92      1.80      0.14  2309.90
   15075.     1325.    10468.     3282.      360.      802.      717.      259.      74.   2311.70
    0.16      3.68     13.05      4.58     0.045     0.025     0.045     0.000  2308.60  9561.97
0.007067      470.      500.      560.        20         8         0      0.00   572.43 10454.25


1490 MH CARD USED
*SECNO 6.610
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.61      6.99  2319.19  2319.19      0.00  2321.16      1.97      2.18      0.01  2315.00
   15075.      131.     8842.     6102.       41.      638.     1043.      283.      81.   2312.70
    0.18      3.20     13.87      5.85     0.050     0.025     0.041     0.000  2312.20  9917.51
0.004454      570.      570.      590.         3        15         0      0.00   443.33 10360.84


1490 MH CARD USED
*SECNO 6.690
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.69      6.21  2321.31  2321.31      0.00  2323.44      2.14      2.19      0.05  2315.80
   15075.      428.    14195.      452.      106.     1178.      128.      298.      85.   2315.20
    0.19      4.03     12.05      3.53     0.065     0.028     0.045     0.000  2315.10  9910.96
0.006044      430.      425.      420.         2        11         0      0.00   377.87 10288.82
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAD    TOPWID     ENDST

1490 NH CARD USED
SECNO 6.760

3301 HV CHANGED MORE THAN HVINS

    6.76     6.60  2323.90     0.00     0.00  2325.32     1.42     1.81     0.07  2318.90
   15075.    2940.    7718.    4409.     379.     878.     368.     311.      88.  2317.30
    0.20     7.79     8.60    11.98    0.032    0.033    0.026    0.000  2317.30  9857.21
 0.004005     360.     370.     385.        2        0        0     0.00   333.96 10191.16

490 NH CARD USED
*SECNO 6.880
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.88     7.31  2327.81  2327.81     0.00  2329.46     1.65     2.54     0.07  2320.50
   15075.    3347.    7877.    3852.     675.     572.    1495.     342.      97.  2325.20
    0.22     4.96    13.76     2.58    0.050    0.025    0.070    0.000  2320.50  9771.42
 0.004114     580.     620.     615.       20        8        0     0.00  1018.66 10790.08

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
SECNO 6.990
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    6.99     8.42  2331.22  2331.22     0.00  2333.14     1.93     2.45     0.08  2327.60
   15075.     242.    8464.    6370.      70.     591.    1392.     375.     108.  2325.40
    0.24     3.46    14.31     4.57    0.050    0.025    0.050    0.000  2322.80  9924.28
 0.003836     595.     610.     595.       20        8        0     0.00   476.99 10401.27

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 7.130
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.13     9.64  2336.94  2336.94     0.00  2339.23     2.28     2.56     0.18  2327.50
   15075.     318.    9823.    4934.      74.     669.    1149.     408.     115.  2331.90
    0.25     4.31    14.68     4.29    0.050    0.025    0.050    0.000  2327.30  9951.39
 0.003274     725.     725.     720.       20        8        0     0.00   388.84 10340.23
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   SECNO     DEPTH     CMSEL     CRIWS     WSELK     EG        HV        HL        QLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XML       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 7.210

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.21      9.62  2339.42  2339.42      0.00  2342.62      3.21      2.14      0.46  2340.50
   15075.       0.    12266.     2809.       0.     799.      317.      422.      118.   2331.00
    0.26      0.00     15.35      8.87    0.000     0.034     0.050     0.000  2329.00  7957.43
0.009104      420.      420.      410.        0         5         0      0.00   179.96 10137.38


1490 NH CARD USED
*SECNO 7.300
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.30      9.35  2342.65  2342.65      0.00  2345.76      3.10      2.89      0.03  2338.40
   15075.    3579.    11164.      332.      614.      695.       70.      436.      120.   2334.00
    0.27      5.83     16.07      4.74    0.050     0.025     0.050     0.000  2333.30  9822.92
0.0[illegible]7      305.      480.      430.        4         8         0      0.00   221.23 10044.15
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THIS RUN EXECUTED MON, JUN 01 1987 15:25:42

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*****************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

LS WASH REACH 4

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	5.350	2273.70	4.00	2274.62	9.95	2269.70	0.00	323.06	9480.50	10038.15	1775.31	2267.61	38.08
	5.350	2274.88	5.18	2276.12	12.65	2269.70	0.00	627.76	9415.60	10059.96	4460.09	3732.75	81.15
*	5.350	2275.31	5.61	2276.71	13.76	2269.70	0.00	656.59	9404.01	10060.63	5861.41	4401.86	103.70
	5.350	2276.17	6.47	2277.85	15.66	2269.70	0.00	690.99	9390.21	10085.03	9136.38	5780.61	158.00
*	5.470	2277.66	3.96	2278.59	9.30	2273.70	610.00	459.49	9423.03	10123.72	1216.36	2722.61	142.13
	5.470	2278.86	5.16	2279.93	11.02	2273.70	610.00	702.09	9417.91	10142.93	3621.69	4262.29	390.02
	5.470	2279.24	5.54	2280.42	11.94	2273.70	610.00	717.80	9415.72	10148.85	4876.37	4964.99	528.62
*	5.470	2279.94	6.24	2281.36	13.59	2273.70	610.00	748.46	9411.58	10160.04	7773.91	6393.54	907.54
	5.580	2281.21	4.21	2282.19	8.76	2277.00	515.00	495.55	9479.23	10049.20	738.82	3312.27	29.90
	5.580	2282.43	5.43	2283.63	10.70	2277.00	515.00	581.03	9469.68	10050.71	2905.00	5309.04	59.96
*	5.580	2282.84	5.84	2284.18	11.39	2277.00	515.00	583.93	9467.29	10051.22	4079.38	6215.59	75.03
	5.580	2283.62	6.62	2285.25	13.28	2277.00	515.00	589.34	9462.84	10052.18	6838.84	8126.25	109.91
*	5.650	2282.75	3.85	2283.89	8.92	2278.90	335.00	395.39	9510.45	10079.85	251.94	3756.98	72.06
	5.650	2284.24	5.34	2285.48	10.28	2278.90	335.00	591.68	9493.27	10084.95	1998.05	6115.99	159.96
	5.650	2284.69	5.79	2286.05	11.05	2278.90	335.00	599.79	9488.33	10088.11	3001.21	7158.18	210.62
*	5.650	2285.51	6.61	2287.13	12.58	2278.90	335.00	611.38	9482.46	10093.84	5393.26	9352.17	329.57
	5.740	2285.24	3.84	2286.57	9.58	2281.40	500.00	243.08	9910.20	10244.17	84.04	3795.12	201.84
	5.740	2287.03	5.63	2288.59	11.08	2281.40	500.00	542.37	9495.01	10248.96	383.40	6640.73	1249.87
*	5.740	2287.81	6.41	2289.26	11.10	2281.40	500.00	794.84	9448.40	10251.04	799.84	7627.49	1942.66
	5.740	2288.78	7.38	2290.37	12.28	2281.40	500.00	853.37	9410.84	10287.01	2070.63	9782.18	3222.19
*	5.850	2289.70	5.00	2290.48	7.19	2284.70	370.00	328.36	9910.14	10332.33	43.68	3979.67	57.65
	5.850	2290.79	6.09	2292.25	10.27	2284.70	570.00	449.68	9907.23	10356.90	104.85	7346.20	822.94
	5.850	2291.31	6.61	2292.93	11.04	2284.70	570.00	464.66	9905.83	10370.49	138.81	8753.82	1477.36
*	5.850	2292.29	7.59	2294.22	12.49	2284.70	570.00	492.55	9903.23	10395.78	220.08	11702.65	3152.27
	5.920	2292.03	4.03	2293.66	10.30	2288.00	400.00	126.97	9947.28	10074.25	45.18	4035.52	0.00
*	5.920	2294.19	6.19	2296.38	12.09	2288.00	400.00	229.07	9944.20	10251.01	119.74	7929.77	224.99
*	5.920	2295.54	7.54	2297.24	11.10	2288.00	400.00	324.80	9942.29	10478.97	160.20	9110.45	1099.35
	5.920	2296.74	8.74	2298.49	11.98	2288.00	400.00	586.22	9940.59	10526.81	229.35	11575.83	3269.82

	SECND	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	6.010	2295.81	3.62	2296.32	5.19	2292.20	480.00	270.87	9871.63	10142.51	1732.40	1732.44	616.16
	6.010	2297.97	5.77	2298.57	6.21	2292.20	480.00	451.66	9866.71	10318.37	3071.84	3935.25	1266.91
	6.010	2298.15	5.95	2299.01	7.51	2292.20	480.00	496.98	9866.03	10364.01	3814.86	4936.54	1618.6[illegible]
	6.010	2298.92	6.72	2300.15	9.29	2292.20	480.00	524.58	9863.00	10387.58	5291.18	7105.87	2677.9[illegible]
*	6.090	2298.55	3.55	2299.88	9.77	2295.00	430.00	210.18	9699.69	10039.74	487.67	3379.70	13.6[illegible]
*	6.090	2300.29	5.29	2301.90	11.25	2295.00	430.00	346.93	9694.16	10041.09	1670.04	6570.57	33.3[illegible]
*	6.090	2300.82	5.82	2302.66	12.21	2295.00	430.00	349.02	9692.48	10041.50	2388.96	7937.53	43.51
*	6.090	2301.89	6.89	2304.15	13.82	2295.00	430.00	353.27	9689.07	10042.34	4165.01	10841.71	68.2[illegible]
*	6.210	2302.38	4.38	2304.17	11.09	2298.00	530.00	153.31	9909.28	10042.59	252.46	3785.91	42.63
*	6.210	2304.91	6.91	2306.24	10.79	2298.00	530.00	596.14	9449.66	10045.81	2202.29	5970.67	101.04
*	6.210	2305.41	7.41	2306.85	11.59	2298.00	530.00	621.46	9424.99	10046.45	3343.63	6901.74	124.6[illegible]
*	6.210	2306.27	8.27	2307.97	13.26	2298.00	530.00	623.89	9423.65	10047.54	6046.91	8951.16	176.92
	6.310	2305.48	4.58	2306.48	8.14	2300.90	500.00	220.61	9826.12	10046.74	123.65	3938.43	18.9[illegible]
*	6.310	2306.83	5.93	2308.62	11.17	2300.90	500.00	309.07	9620.99	10049.49	624.76	7590.29	58.5[illegible]
*	6.310	2307.64	6.74	2309.39	11.29	2300.90	500.00	436.75	9338.24	10051.18	1263.67	9019.71	86.62
*	6.310	2308.87	7.97	2310.71	12.12	2300.90	500.00	602.55	9338.27	10053.71	3075.77	11852.42	146.8[illegible]
	6.400	2307.90	4.00	2308.75	8.31	2303.90	500.00	316.21	9823.18	10139.39	332.39	2845.42	963.19
	6.400	2309.66	5.76	2310.63	9.25	2303.90	500.00	459.76	9658.50	10149.49	1426.46	5327.00	1520.[illegible]
	6.400	2310.10	6.20	2311.27	10.28	2303.90	500.00	504.15	9647.84	10151.99	2021.24	6507.83	1840.[illegible]
	6.400	2311.00	7.10	2312.48	11.84	2303.90	500.00	529.63	9628.04	10157.68	3646.42	8921.80	2506.7[illegible]
*	6.500	2312.81	4.21	2314.22	9.91	2308.60	500.00	198.22	9932.87	10131.09	83.77	3759.32	237.[illegible]
*	6.500	2314.71	6.11	2316.49	11.68	2308.60	500.00	319.00	9893.83	10212.82	331.32	6788.37	1154.[illegible]
*	6.500	2315.43	6.83	2317.31	12.29	2308.60	500.00	385.45	9653.48	10230.93	538.23	8071.46	1760.31
*	6.500	2316.80	8.20	2318.73	13.05	2308.60	500.00	372.43	9561.97	10434.25	1324.75	10468.45	3281.[illegible]
*	6.610	2316.16	3.96	2317.32	9.51	2312.20	570.00	280.32	9931.61	10234.05	4.40	3263.61	812.99
*	6.610	2317.64	5.44	2319.14	11.33	2312.20	570.00	383.12	9924.75	10307.87	37.73	5606.25	2630.[illegible]
*	6.610	2318.18	5.98	2319.84	12.35	2312.20	570.00	409.10	9922.23	10331.33	62.15	6657.68	3650.[illegible]
*	6.610	2319.19	6.99	2321.16	13.87	2312.20	570.00	443.33	9917.51	10360.84	130.80	8841.81	6102.[illegible]
	6.690	2318.66	3.56	2319.42	7.06	2315.10	425.00	261.91	9923.87	10185.78	61.28	3977.36	42.[illegible]
	6.690	2319.90	4.80	2321.23	9.40	2315.10	425.00	284.92	9915.94	10220.84	174.69	7995.85	103.[illegible]
	6.690	2320.35	5.25	2321.99	10.44	2315.10	425.00	307.03	9914.36	10224.28	247.41	9968.27	154.32
*	6.690	2321.31	6.21	2323.44	12.05	2315.10	425.00	377.87	9910.96	10288.82	427.51	14195.35	452.[illegible]
	6.760	2320.57	3.27	2321.47	5.97	2317.30	370.00	295.21	9871.19	10179.26	546.83	1915.26	1618.91
	6.760	2322.03	4.73	2323.15	7.24	2317.30	370.00	317.41	9865.09	10182.50	1412.28	4146.88	2714.84
	6.760	2322.70	5.40	2323.89	7.63	2317.30	370.00	321.73	9862.27	10183.99	1884.29	5257.86	3227.[illegible]
	6.760	2323.90	6.60	2325.32	8.60	2317.30	370.00	333.96	9857.21	10191.16	2947.58	7718.31	4409.11
*	6.880	2325.20	4.70	2326.17	8.92	2320.50	620.00	474.96	9835.42	10643.39	679.34	3104.78	296.[illegible]
*	6.880	2326.47	5.97	2327.76	11.27	2320.50	620.00	737.27	9777.23	10784.23	1647.02	5149.03	1477.[illegible]
*	6.880	2326.94	6.44	2328.35	12.15	2320.50	620.00	816.58	9775.21	10786.27	2164.77	6038.05	2167.18
*	6.880	2327.81	7.31	2329.46	13.76	2320.50	620.00	1018.46	9771.42	10790.08	3346.44	7876.68	3851.[illegible]

SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	WLOB	QCH	QROB
6.990	2328.11	5.31	2329.37	9.73	2322.80	610.00	331.93	9946.98	10384.04	1.27	3456.60	623.13
6.990	2329.74	6.94	2331.16	11.30	2322.80	610.00	463.11	9929.95	10393.06	61.09	5507.28	2705.62
6.990	2330.19	7.40	2331.84	12.67	2322.80	610.00	467.40	9928.20	10395.59	106.29	6506.31	3757.39
6.990	2331.22	8.42	2333.14	14.31	2322.80	610.00	476.99	9924.28	10401.27	241.36	8463.50	6369.94
7.130	2332.66	5.36	2334.59	11.28	2327.30	725.00	177.13	9958.47	10280.64	74.79	3970.70	35.51
7.130	2335.09	7.79	2336.85	12.02	2327.30	725.00	366.40	9951.46	10320.86	169.35	6394.30	1710.34
7.130	2335.78	8.48	2337.67	12.84	2327.30	725.00	376.16	9953.32	10329.48	214.36	7478.90	2676.74
7.130	2336.94	9.64	2339.23	14.48	2327.30	725.00	388.84	9951.39	10340.23	317.87	9823.13	4933.99
7.210	2335.87	6.07	2336.85	8.31	2329.80	420.00	146.77	9965.39	10112.16	0.00	3552.37	528.62
7.210	2337.00	7.20	2339.36	12.98	2329.80	420.00	157.76	9962.85	10120.61	0.00	7047.56	1226.14
7.210	2337.82	8.02	2340.47	13.84	2329.80	420.00	165.27	9961.02	10124.29	0.00	8691.70	1678.29
7.210	2339.42	9.62	2342.62	15.35	2329.80	420.00	179.96	9957.43	10137.38	0.00	12266.35	2808.65
7.300	2338.45	5.15	2340.00	10.51	2333.30	480.00	195.72	9840.57	10036.30	351.25	3671.74	58.00
7.300	2340.37	7.07	2342.60	13.17	2333.30	480.00	207.51	9832.37	10039.89	1446.87	6679.20	147.93
7.300	2341.13	7.83	2343.66	14.22	2333.30	480.00	212.20	9829.12	10041.31	2067.96	8102.10	199.94
7.300	2342.65	9.35	2345.76	16.07	2333.30	480.00	221.23	9822.92	10044.15	3578.90	11164.44	331.66

SUMMARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    5.580  PROFILE= 2  CRITICAL DEPTH ASSUMED
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FLOOD INSURANCE ZONE DATA FOR SOLS WASH REACH 4

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
5.350	0.	-1.61	-0.43	0.86
5.470	610.	-1.58	-0.37	0.70
5.580	1125.	-1.63	-0.42	0.78
5.650	1460.	-1.94	-0.45	0.82
5.740	1960.	-2.57	-0.78	0.97
5.850	2530.	-1.61	-0.52	0.97
5.920	2930.	-3.52	-1.35	1.19
6.010	3410.	-2.33	-0.18	0.77
6.090	3840.	-2.27	-0.53	1.08
6.210	4370.	-3.02	-0.50	0.86
6.310	4870.	-2.16	-0.82	1.23
6.400	5370.	-2.20	-0.44	0.90
6.500	5870.	-2.62	-0.71	1.38
6.610	6440.	-2.02	-0.54	1.02
6.690	6865.	-1.69	-0.46	0.95
6.760	7235.	-2.13	-0.67	1.20
[illegible]0	7855.	-1.73	-0.47	0.87
6.990	8465.	-2.08	-0.46	1.02
7.130	9190.	-3.12	-0.69	1.17
7.210	9610.	-1.95	-0.82	1.60
7.300	10090.	-2.69	-0.76	1.52
WEIGHTED AVG FOR REACH		-2.22	-0.58	1.03

FHF FOR THE REACH = 020 WITH 100.0 PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 4

THIS RUN EXECUTED MON, JUN 01 1987 15:25:47

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*****************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
*****************************************
```

Floodplain, Reach #5
Cross Sec. 7.30-9.250

User: P4091501 -at DEC

<CRA>PHOENIX>P40915>HYDRO>SOLS.REACH5.HLT.OUT

```
*****************************************************************************************************************
*****************************************************************************************************************

WWW  W     WW   WW   W  WWWW  WW   W
 W W W W  W W  W W  W    W  W W  WW
 W W W W  W W  W W  WWW  W  W  W
WWW  WWWW W W W WWW  W     W W W W  W
      W W  W    W  W     W W  W  W
      W W  W   W  W  W  W W  W  W
W     W  WW WW  WW  WW  WW  WW

WWW  WW W    WW      WWW  WWWW WW  WW W  W WWWW     W  W W   WWWW      WW W  W WWWW
W  W W  W W   W  W   W  W W   W  W W  W W W        WW WW W     W       W  W W  W  W
W   W  W W   W       W  W W   W  W W   W  W WWW2    W W W W     W       W  W W  W  W
WWW W  W W    WW     WWW WWWW WWWW W   WWWW   W     W W W W     W       W  W W  W  W
  W W  W W      W    W W  W   W  W W   W  W W   W   W  W W     W       W  W W  W  W
W  W W  W W   W  W  WW W  W W   W  W W  W W  W W   W  W W     W   WW  W  W W  W  W
WWW  WW WWWW WW   WW W  W WWWW W  W WW W  W WW   WW W  W WWWW  W   WW  WW2  WW   W

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*****************************************************************************************************************
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[Spooler rev 20.2 (c) Prime Computer, Inc., 1983]

Label: PRT001 -form

Pathname: <CRA>PHOENIX>P40915>HYDRO>SOLS.REACH5.HLT.OUT
File last modified: 87-06-01.17:22:24.Mon

Spooled: 87-06-04.11:04:24.Thu
Started: 87-06-04.11:02:12.Thu on: AHLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  DATE MON, JUN 01 1987 TIME 15:42:52              *
*****************************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  THE HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616              *
*  (916) 440-2105 (FTS) 448-2105        *
*****************************************
```


```
X     X  XXXXXXX   XXXXX            XXXXX
X     X  X       X     X          X     X
X     X  X       X                       X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X       X                 X
X     X  X       X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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THIS RUN EXECUTED MON, JUN 01 1987 15:43:02

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HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
**************************************************

T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3      SOLS WASH  REACH 5       FLOOD INSURANCE RATE ANALYSIS

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

     0.       2.       0.       0.   0.000000     0.00     0.0      0.   2338.450   0.000

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

    1.000    0.000   -1.000    0.000    0.000    0.000    0.000    0.000    0.000    15.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

   38.000    1.000    8.000    3.000   26.000   42.000   39.000    4.000   53.000   54.000

   13.000   14.000   15.000  208.000  -19.000   23.000   30.000   47.000   77.000   81.000

   99.000  102.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000

NT      4.000  4081.000  8274.000 10370.000 15075.000     0.000     0.000     0.000     0.000     0.000
NC      0.000     0.000     0.000     0.300     0.500     0.000     0.000     0.000     0.000     0.000
NH      3.000     0.030  9946.000     0.025 10028.000     0.030 10095.000     0.000     0.000     0.000
X1      7.300    13.000  9946.000 10028.000     0.000     0.000     0.000     0.000     0.000     0.000
GR   2344.500  9816.000  2342.100  9825.000  2336.000  9851.000  2336.200  9864.000  2337.300  9878.000
GR   2337.500  9893.000  2336.400  9913.000  2338.300  9933.000  2338.400  9946.000  2333.300  9967.000
GR   2333.600 10000.000  2334.000 10028.000  2369.900 10095.000     0.000     0.000     0.000     0.000

NH      3.000     0.065  9924.000     0.025 10068.000     0.055 10320.000     0.000     0.000     0.000
X1      7.440    28.000  9924.000 10068.000   660.000   800.000   745.000     0.000     0.000     0.000
GR   2349.600  9648.000  2349.600  9650.000  2347.600  9658.000  2342.300  9678.000  2341.500  9697.000
GR   2345.800  9734.000  2343.100  9748.000  2344.200  9773.000  2342.500  9807.000  2343.300  9837.000
GR   2343.000  9905.000  2341.000  9924.000  2340.600  9985.000  2340.500 10000.000  2339.200 10022.000
GR   2338.600 10068.000  2343.800 10080.000  2344.200 10131.000  2343.200 10154.000  2340.800 10177.000
GR   2341.600 10184.000  2340.800 10189.000  2347.800 10201.000  2343.600 10214.000  2343.700 10231.000
GR   2344.600 10240.000  2350.900 10270.000  2354.800 10320.000     0.000     0.000     0.000     0.000

NC      0.000     0.000     0.000     0.600     0.800     0.000     0.000     0.000     0.000     0.000
NH      3.000     0.063  9938.000     0.025 10063.000     0.055 10555.000     0.000     0.000     0.000
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REV. 6/87

X1	7.530	20.000	9961.000	10044.000	465.000	610.000	500.000	0.000	0.000	0.000
GR	52.400	9786.000	2352.200	9796.000	2351.000	9803.000	2342.600	9830.000	2341.600	9855.000
GR	2349.200	9913.000	2346.300	9938.000	2342.700	9961.000	2342.700	10000.000	2342.500	10044.000
GR	2346.500	10063.000	2347.300	10086.000	2347.600	10134.000	2348.300	10182.000	2348.000	10242.000
GR	2347.100	10322.000	2347.400	10378.000	2348.300	10447.000	2349.500	10506.000	2354.000	10555.000
NC	0.065	0.055	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	7.579	6.000	9902.000	10042.000	210.000	295.000	235.000	0.470	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2351.800	2351.500	0.000
GR	2353.600	9900.000	2343.600	9902.000	2343.600	10000.000	2343.600	10042.000	2354.690	10044.000
GR	2356.000	10230.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.050	1.560	2.630	0.000	65.800	4.230	475.080	0.000	0.000	0.000
X1	7.590	6.000	9902.000	10042.000	50.000	50.000	50.000	0.470	0.000	0.000
X2	0.000	0.000	1.000	2350.800	2353.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2351.800	2351.500	0.000
BT	3.000	9900.000	2353.630	2350.630	10044.000	2354.690	2351.690	10230.000	2356.000	2356.000
GR	2353.600	9900.000	2343.600	9902.000	2343.600	10000.000	2343.600	10042.000	2354.690	10044.000
GR	2356.000	10230.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.065	9954.000	0.025	10048.000	0.055	10072.000	0.000	0.000	0.000
X1	7.630	10.000	9931.000	10067.000	255.000	140.000	190.000	0.000	0.000	0.000
GR	2363.600	9735.000	2354.400	9807.000	2352.300	9858.000	2351.000	9904.000	2351.500	9931.000
GR	2347.100	9954.000	2347.000	10000.000	2347.000	10048.000	2356.600	10067.000	2356.800	10072.000
NH	3.000	0.065	9958.000	0.025	10191.000	0.055	10220.000	0.000	0.000	0.000
X1	7.720	18.000	9958.000	10059.000	500.000	505.000	500.000	0.000	0.000	0.000
GR	2363.800	9925.000	2350.500	9958.000	2350.000	10000.000	2350.000	10019.000	2351.100	10031.000
GR	2351.100	10059.000	2352.400	10071.000	2352.900	10087.000	2351.600	10097.000	2351.900	10109.000
GR	2351.900	10115.000	2356.500	10129.000	2351.800	10156.000	2351.500	10170.000	2350.300	10179.000
GR	2352.400	10191.000	2360.300	10213.000	2361.500	10220.000	0.000	0.000	0.000	0.000
NH	3.000	0.065	9933.000	0.025	10082.000	0.055	10247.000	0.000	0.000	0.000
X1	7.820	15.000	9933.000	10082.000	535.000	380.000	500.000	0.000	0.000	0.000
GR	2370.000	9905.000	2354.500	9933.000	2354.500	9947.000	2355.500	9972.000	2353.600	9980.000
GR	2353.600	10000.000	2354.300	10043.000	2355.800	10082.000	2356.400	10100.000	2356.400	10138.000
GR	2361.400	10189.000	2365.400	10222.000	2362.100	10232.000	2363.400	10240.000	2363.400	10247.000
NC	0.065	0.055	0.025	0.600	0.800	0.000	0.000	0.000	0.000	0.000
X1	7.884	12.000	9935.000	10051.000	360.000	145.000	345.000	0.707	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2360.000	2362.700	0.000
GR	2366.000	9735.000	2364.000	9835.000	2360.000	9935.000	2359.600	9945.000	2355.600	9946.000
GR	2355.600	10000.000	2354.600	10045.000	2362.700	10051.000	2363.700	10136.000	2362.900	10236.000
GR	2364.500	10336.000	2365.000	10390.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.050	1.560	2.630	0.000	67.200	6.360	395.900	0.000	0.000	0.000
X1	7.891	12.000	9870.000	10270.000	30.000	30.000	30.000	0.707	0.000	0.000
X2	0.000	0.000	1.000	2359.100	2365.400	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2361.400	2360.100	0.000
BT	6.000	9835.000	2366.700	2366.700	9935.000	2366.300	2366.300	10000.000	2365.800	2365.800
BT	10035.000	2365.800	2365.800	10135.000	2365.400	2365.400	10235.000	2365.800	2365.800	0.000
GR	2369.000	9770.000	2364.000	9870.000	2361.000	9945.000	2355.800	9950.000	2355.800	9970.000
GR	2355.800	10000.000	2355.100	10070.000	2355.100	10100.000	2360.000	10105.000	2360.100	10170.000
GR	2364.700	10270.000	2369.800	10370.000	0.000	0.000	0.000	0.000	0.000	0.000

NH	3.000	0.065	9977.000	0.025	10076.000	0.055	10180.000	0.000	0.000	0.000
X1	7.920	23.000	9937.000	10124.000	150.000	220.000	180.000	0.000	0.000	0.000
GR	2372.000	9707.000	2370.000	9717.000	2360.000	9787.000	2358.000	9817.000	2360.000	9827.000
GR	2369.000	9887.000	2366.600	9891.000	2361.200	9915.000	2357.600	9937.000	2358.200	9958.000
GR	2356.500	9977.000	2355.700	10000.000	2355.700	10023.000	2358.300	10030.000	2357.900	10049.000
GR	2357.800	10076.000	2356.800	10086.000	2357.500	10096.000	2358.300	10110.000	2357.000	10118.000
GR	2357.000	10124.000	2370.000	10160.000	2380.000	10180.000	0.000	0.000	0.000	0.000
NH	4.000	0.050	9930.000	0.065	9967.000	0.025	10094.000	0.050	10275.000	0.000
X1	8.000	35.000	9930.000	10094.000	440.000	420.000	425.000	0.000	0.000	0.000
GR	2372.000	9515.000	2368.000	9565.000	2366.000	9605.000	2364.500	9615.000	2366.000	9635.000
GR	2369.200	9665.000	2367.400	9670.000	2366.300	9675.000	2363.000	9695.000	2362.400	9722.000
GR	2363.100	9754.000	2362.700	9770.000	2362.800	9775.000	2361.300	9831.000	2361.000	9877.000
GR	2360.000	9930.000	2359.000	9960.000	2356.700	9967.000	2357.300	10000.000	2358.500	10016.000
GR	2358.100	10038.000	2357.600	10048.000	2357.700	10061.000	2359.400	10073.000	2359.600	10094.000
GR	2359.600	10106.000	2359.500	10125.000	2358.300	10145.000	2358.300	10157.000	2359.200	10170.000
GR	2359.000	10191.000	2358.000	10200.000	2358.000	10204.000	2373.200	10245.000	2380.000	10275.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	5.000	0.050	9920.000	0.065	9953.000	0.025	10048.000	0.065	10119.000	0.050
NH	10535.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	8.100	37.000	9953.000	10048.000	465.000	535.000	500.000	0.000	0.000	0.000
GR	2372.200	9589.000	2368.800	9607.000	2367.400	9613.000	2367.500	9638.000	2367.800	9652.000
GR	2367.400	9679.000	2367.300	9687.000	2366.900	9697.000	2366.000	9766.000	2364.800	9814.000
GR	2363.800	9864.000	2363.200	9905.000	2363.600	9931.000	2361.200	9953.000	2360.500	10000.000
GR	9.900	10048.000	2362.200	10064.000	2363.400	10088.000	2363.400	10119.000	2362.600	10128.000
GR	2363.100	10135.000	2362.500	10143.000	2363.200	10154.000	2363.100	10181.000	2360.500	10201.000
GR	2360.800	10215.000	2362.400	10226.000	2362.300	10244.000	2361.300	10255.000	2362.500	10265.000
GR	2362.900	10294.000	2362.400	10325.000	2363.800	10370.000	2365.300	10404.000	2365.900	10436.000
GR	2368.100	10484.000	2374.000	10535.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.050	9907.000	0.065	9944.000	0.025	10039.000	0.055	10315.000	0.000
X1	8.190	30.000	9944.000	10039.000	475.000	535.000	500.000	0.000	0.000	0.000
GR	2374.600	9557.000	2372.800	9574.000	2370.900	9587.000	2370.700	9645.000	2369.200	9697.000
GR	2367.400	9781.000	2366.300	9865.000	2365.900	9907.000	2364.900	9944.000	2362.200	9965.000
GR	2362.200	10000.000	2362.200	10039.000	2364.700	10059.000	2365.100	10072.000	2364.700	10084.000
GR	2365.500	10103.000	2365.500	10146.000	2363.900	10168.000	2364.000	10184.000	2365.300	10202.000
GR	2365.100	10218.000	2364.400	10235.000	2365.500	10256.000	2365.900	10281.000	2365.700	10310.000
GR	2365.300	10335.000	2366.300	10368.000	2367.900	10415.000	2369.500	10445.000	2372.100	10515.000
NH	3.000	0.050	9958.000	0.025	10022.000	0.045	10490.000	0.000	0.000	0.000
X1	8.290	30.000	9958.000	10022.000	510.000	510.000	500.000	0.000	0.000	0.000
GR	2377.900	9567.000	2376.500	9579.000	2371.700	9605.000	2373.100	9641.000	2371.900	9690.000
GR	2370.400	9773.000	2369.600	9842.000	2368.900	9874.000	2365.300	9900.000	2369.000	9906.000
GR	2369.200	9944.000	2367.500	9958.000	2364.700	9967.000	2364.000	10000.000	2364.000	10022.000
GR	2366.200	10040.000	2366.800	10059.000	2365.700	10088.000	2366.600	10097.000	2366.500	10110.000
GR	2364.400	10130.000	2364.800	10180.000	2368.000	10204.000	2368.700	10225.000	2368.600	10256.000
GR	2367.500	10275.000	2368.200	10286.000	2368.100	10339.000	2369.800	10422.000	2376.000	10490.000

NH	3.000	0.050	9949.000	0.025	10028.000	0.045	10305.000	0.000	0.000	0.000
X1	8.400	34.000	9949.000	10028.000	595.000	570.000	615.000	0.000	0.000	0.000
GR	2382.700	9493.000	2380.900	9504.000	2380.100	9518.000	2376.000	9551.000	2374.200	9577.000
GR	2373.600	9658.000	2373.300	9719.000	2372.600	9731.000	2371.900	9840.000	2371.500	9888.000
GR	2369.800	9906.000	2370.800	9917.000	2370.700	9927.000	2370.000	9937.000	2370.400	9949.000
GR	2367.000	9960.000	2366.600	10000.000	2367.400	10028.000	2369.000	10044.000	2367.400	10070.000
GR	2368.300	10079.000	2367.700	10088.000	2368.000	10101.000	2368.900	10106.000	2368.900	10118.000
GR	2366.600	10133.000	2366.600	10145.000	2368.600	10153.000	2367.100	10165.000	2371.500	10180.000
GR	2372.000	10198.000	2370.500	10216.000	2374.200	10249.000	2381.700	10305.000	0.000	0.000
OT	4.000	3867.000	7861.000	9862.000	14378.000	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.050	9900.000	0.065	9954.000	0.025	9985.000	0.065	10005.000	0.025
NH	10054.000	0.060	10090.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	8.480	20.000	9954.000	10044.000	425.000	370.000	390.000	0.000	0.000	0.000
GR	2387.900	9575.000	2384.900	9621.000	2380.400	9657.000	2373.700	9698.000	2374.200	9744.000
GR	2375.100	9756.000	2375.100	9776.000	2373.400	9801.000	2374.800	9820.000	2373.900	9856.000
GR	2372.500	9879.000	2374.600	9911.000	2373.600	9942.000	2368.800	9954.000	2368.700	9992.000
GR	2369.900	9998.000	2370.400	10000.000	2369.200	10012.000	2369.200	10044.000	2386.700	10090.000
NH	4.000	0.030	9900.000	0.065	9947.000	0.030	10039.000	0.060	10080.000	0.000
X1	8.570	24.000	9947.000	10039.000	440.000	500.000	500.000	0.000	0.000	0.000
GR	2389.300	9420.000	2377.400	9469.000	2376.800	9514.000	2378.200	9534.000	2378.100	9583.000
GR	2377.100	9624.000	2377.400	9662.000	2377.100	9691.000	2376.800	9699.000	2373.100	9729.000
GR	2373.300	9750.000	2376.700	9771.000	2376.200	9792.000	2375.800	9817.000	2376.700	9830.000
GR	2377.000	9861.000	2374.400	9886.000	2374.900	9904.000	2377.300	9923.000	2377.300	9947.000
GR	2373.300	9970.000	2372.100	10000.000	2371.700	10039.000	2386.800	10080.000	0.000	0.000
NH	7.000	0.100	9269.000	0.050	9875.000	0.025	9929.000	0.065	9955.000	0.025
NH	10026.000	0.050	10250.000	0.100	10385.000	0.000	0.000	0.000	0.000	0.000
X1	8.670	43.000	9875.000	10026.000	410.000	555.000	500.000	0.000	0.000	0.000
GR	2389.000	9040.000	2389.000	9043.000	2380.900	9080.000	2380.700	9095.000	2381.000	9106.000
GR	2379.300	9126.000	2377.000	9150.000	2377.100	9178.000	2381.100	9201.000	2381.700	9218.000
GR	2381.700	9269.000	2381.400	9335.000	2380.400	9383.000	2379.700	9401.000	2380.800	9417.000
GR	2380.000	9470.000	2379.200	9533.000	2378.000	9554.000	2379.200	9573.000	2379.200	9610.000
GR	2377.900	9641.000	2378.400	9664.000	2377.900	9685.000	2379.500	9714.000	2380.200	9747.000
GR	2380.200	9805.000	2379.000	9848.000	2378.000	9875.000	2377.400	9901.000	2377.600	9929.000
GR	2375.900	9958.000	2374.600	10000.000	2374.600	10026.000	2379.100	10040.000	2379.700	10051.000
GR	2378.400	10074.000	2377.600	10115.000	2378.900	10161.000	2380.800	10219.000	2382.200	10271.000
GR	2383.300	10288.000	2385.800	10349.000	2387.800	10385.000	0.000	0.000	0.000	0.000
OT	4.000	3696.000	7504.000	9419.000	13760.000	0.000	0.000	0.000	0.000	0.000
NH	5.000	0.100	9497.000	0.050	9958.000	0.025	10053.000	0.050	10350.000	0.100
NH	10645.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	8.760	39.000	9958.000	10053.000	450.000	515.000	500.000	0.000	0.000	0.000
GR	2393.100	9397.000	2391.400	9429.000	2387.600	9455.000	2382.900	9489.000	2381.800	9522.000
GR	2381.800	9567.000	2380.300	9578.000	2380.500	9587.000	2382.600	9598.000	2382.900	9665.000
GR	2382.500	9723.000	2381.500	9765.000	2380.300	9786.000	2381.600	9803.000	2380.800	9823.000
GR	2381.200	9836.000	2381.100	9857.000	2381.800	9874.000	2382.100	9913.000	2380.500	9947.000
GR	2378.700	9958.000	2378.100	9989.000	2378.400	10000.000	2378.400	10036.000	2383.300	10053.000
GR	2382.900	10097.000	2381.600	10172.000	2377.700	10189.000	2375.500	10200.000	2376.000	10206.000
GR	2380.300	10216.000	2380.800	10241.000	2380.800	10302.000	2382.600	10370.000	2384.700	10454.000
GR	2386.400	10515.000	2387.300	10569.000	2388.800	10630.000	2389.900	10645.000	0.000	0.000

NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
NH	7.000	0.050	9969.000	0.025	10032.000	0.065	10091.000	0.025	10164.000	0.040
H	10312.000	0.050	10445.000	0.100	11425.000	0.000	0.000	0.000	0.000	0.000
[illegible]	4.000	3258.000	6626.000	8325.000	12252.000	0.000	0.000	0.000	0.000	0.000
X1	8.860	51.000	9969.000	10164.000	470.000	670.000	510.000	0.000	0.000	0.000
R	2393.600	9600.000	2392.500	9614.000	2388.600	9635.000	2386.800	9672.000	2386.000	9712.000
R	2383.800	9784.000	2384.600	9793.000	2384.600	9804.000	2384.100	9813.000	2384.800	9819.000
GR	2384.400	9862.000	2385.200	9873.000	2385.500	9907.000	2384.700	9956.000	2381.200	9969.000
GR	2381.200	10000.000	2381.200	10013.000	2384.400	10032.000	2384.700	10055.000	2384.000	10072.000
R	2383.500	10091.000	2382.100	10106.000	2382.500	10142.000	2383.700	10153.000	2382.800	10164.000
GR	2384.200	10177.000	2384.900	10201.000	2384.300	10216.000	2383.100	10238.000	2383.600	10259.000
GR	2383.600	10267.000	2384.300	10272.000	2383.500	10281.000	2383.500	10294.000	2385.200	10312.000
R	2385.500	10328.000	2385.100	10353.000	2384.900	10383.000	2383.700	10391.000	2385.000	10406.000
R	2386.100	10445.000	2385.400	10564.000	2385.400	10642.000	2386.000	10693.000	2386.400	10772.000
GR	2386.700	10843.000	2386.700	10919.000	2386.500	10997.000	2387.700	11110.000	2390.000	11370.000
R	2392.000	11425.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.050	0.040	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
X1	8.947	26.000	9947.000	10129.000	450.000	535.000	480.000	0.840	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2390.700	2393.000	0.000
GR	2395.100	9240.000	2394.200	9350.000	2391.500	9450.000	2389.400	9550.000	2391.000	9650.000
GR	2389.100	9750.000	2390.900	9771.000	2390.900	9846.000	2390.700	9947.000	2384.900	9954.000
R	2385.700	10000.000	2386.600	10022.000	2387.700	10076.000	2389.300	10104.000	2392.000	10117.000
R	2393.000	10129.000	2393.300	10253.000	2394.000	10328.000	2394.000	10436.000	2394.700	10568.000
GR	2395.800	10721.000	2397.400	10921.000	2398.700	11081.000	2399.700	11231.000	2400.900	11413.000
R	1.500	11435.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.050	1.560	2.630	0.000	96.900	9.240	554.400	0.000	0.000	0.000
X1	8.953	25.000	9912.000	10103.000	30.000	30.000	30.000	0.840	0.000	0.000
X2	0.000	0.000	1.000	2393.400	2395.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2391.700	2393.600	0.000
BT	7.000	9140.000	2391.600	2391.600	9320.000	2392.800	2392.800	9720.000	2394.000	2394.000
BT	10000.000	2394.000	2394.000	10450.000	2396.000	2396.000	11000.000	2399.500	2399.500	11300.000
BT	2402.500	2402.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2395.300	9270.000	2395.300	9345.000	2392.100	9443.000	2392.400	9545.000	2392.900	9645.000
GR	2391.600	9726.000	2392.600	9789.000	2392.900	9870.000	2391.700	9912.000	2389.100	9928.000
GR	2384.800	9937.000	2385.200	10000.000	2383.700	10046.000	2386.400	10083.000	2393.600	10103.000
GR	2394.200	10199.000	2395.300	10299.000	2394.900	10395.000	2395.300	10493.000	2395.700	10611.000
GR	2396.600	10723.000	2397.200	10833.000	2398.400	10926.000	2398.900	11030.000	2399.200	11095.000
X1	9.060	13.000	9885.000	10215.000	605.000	540.000	565.000	0.000	0.000	0.000
GR	2401.700	9880.000	2401.400	9885.000	2400.100	9913.000	2397.100	9950.000	2390.500	9964.000
GR	2390.600	10000.000	2391.200	10051.000	2390.200	10109.000	2391.100	10118.000	2390.500	10137.000
GR	2390.300	10170.000	2390.500	10215.000	2400.900	10225.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9883.000	0.025	10120.000	0.040	10391.000	0.000	0.000	0.000
X1	9.160	16.000	9911.000	10085.000	475.000	460.000	500.000	0.000	0.000	0.000
GR	2400.600	9600.000	2395.000	9656.000	2393.800	9708.000	2393.400	9729.000	2394.100	9753.000
GR	2393.600	9776.000	2392.200	9787.000	2393.600	9800.000	2394.500	9824.000	2394.500	9883.000
GR	2393.400	9911.000	2393.200	9930.000	2393.400	10000.000	2394.200	10085.000	2396.200	10120.000
GR	405.200	10155.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

NH	4.000	0.100	9380.000	0.050	9918.000	0.025	10048.000	0.040	10520.000	0.000
X1	9.250	17.000	9918.000	10048.000	505.000	510.000	500.000	0.000	0.000	0.000
GR	2410.000	9340.000	2408.200	9380.000	2405.700	9439.000	2402.600	9500.000	2400.400	9548.000
GR	2399.100	9633.000	2398.600	9689.000	2399.600	9712.000	2399.000	9742.000	2399.500	9777.000
GR	2398.700	9796.000	2399.400	9805.000	2399.700	9886.000	2397.900	9918.000	2397.300	10000.000
GR	2397.600	10048.000	2407.500	10084.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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 SECND    DEPTH    CWSEL    CRIWS    WSELK    FG       HV       HI       OLOSS   RANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      THA   LEFT/RIGHT
 Time     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

*PROF 1

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECND 7.300
720 CRITICAL DEPTH ASSUMED
    7.30     5.16  2338.46  2338.46  2338.45  2340.00     1.54     0.00     0.00  2338.40
   4081.      354.     3669.      58.     134.     350.      19.      0.       0.   2334.00
    0.00     2.64    10.47     3.13    0.050    0.025    0.050    0.000  2333.30  9840.53
 0.004523      0.       0.       0.        0        4        0     0.00   195.79 10036.32

FLOW DISTRIBUTION FOR SECND=      7.30          CWSEL=   2338.46

STA=    9841.    9851.    9864.    9878.    9893.    9913.    9933.    9946.   10028.   10036.
 PER Q=      0.7      2.7      1.5      0.7      1.9      1.2      0.0     89.9      1.4
   AREA=    12.9     30.6     22.5     14.3     30.1     22.1      1.4    350.3     18.5
    VEL=     2.3      3.5      2.7      1.9      2.6      2.1      0.4     10.5      3.1

1490 NH CARD USED
*SEC[illegible].440

3265 DIVIDED FLOW

185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    7.44     4.24  2342.84  2342.84     0.00  2344.08     1.24     3.89     0.09  2341.00
   4081.      71.     3765.     245.      46.     406.      87.      9.       4.   2338.60
    0.02     1.55     9.28     2.83    0.065    0.025    0.055    0.000  2338.60  9675.96
 0.006122     660.     745.     800.        3       15        0     0.00   274.15 10201.66

FLOW DISTRIBUTION FOR SECND=      7.44          CWSEL=   2342.84

STA=    9676.    9924.   10068.   10177.   10202.
 PER Q=      1.7     92.3      3.9      2.1
   AREA=    45.6    405.8     54.5     32.2
    VEL=     1.5      9.3      2.9      2.6

CCHV=   0.600 CEHV=   0.800
1490 NH CARD USED
*SECND 7.530
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS    BANK ELEV
            DLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3265 DIVIDED FLOW

     7.53     4.37  2345.97  2345.97     0.00  2347.35     1.38     3.16     0.11  2342.70
    4081.     938.     2948.     196.     222.     276.     29.     13.      7.   2342.50
     0.04     4.21     10.67     6.82    0.055    0.025    0.025    0.000  2341.60  9819.15
 0.006489     465.     500.     610.        4        5        0     0.00   189.66 10060.50


FLOW DISTRIBUTION FOR SECNO=      7.53          CWSEL=   2345.97

STA=    9819.    9830.    9855.    9880.    9961.   10044.   10061.
  PER Q=     1.1     10.8      5.5      5.5     72.2      4.8
   AREA=    18.3     96.9     73.0     34.3    276.2     28.7
    VEL=     2.5      4.5      3.1      6.6     10.7      6.8

*SECNO 7.579

3301 HV CHANGED MORE THAN HVINS

718[illegible]IMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA=     2351.80 ELREA=     2351.50

     7.58     4.91  2348.51  2348.51     0.00  2350.99     2.47     1.38     0.88  2343.60
    4081.       0.     4081.       0.       0.     323.       0.     17.      7.   2343.60
     0.04     0.00     12.62     0.00    0.000    0.025    0.000    0.000  2343.60  9900.94
 0.005398     210.     235.     295.        2        8        0     0.00    65.80  9966.74


FLOW DISTRIBUTION FOR SECNO=      7.58          CWSEL=   2348.51

STA=    9901.    9967.
  PER Q=   100.0
   AREA=   323.3
    VEL=    12.6
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


PECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
227 DOWNSTREAM ELEV IS   2347.64 ,NOT   2348.51 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BARFA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00     65.80    4.23     473.08   0.00     2343.60  2343.60

*SECNO 7.590

301 HV CHANGED MORE THAN HVINS

CLASS B LOW FLOW

3420 BRIDGE W.S.=   2348.75 BRIDGE VELOCITY=,     12.88     CALCULATED CHANNEL AREA=,     317.

EGPRS    EGLWC    H3       QWEIR    QLOW     BAREA    TRAPEZOID   ELLC     ELTRD
                                                        AREA
  2350.30  2351.55   0.00       0.     4081.    475.     443.     2350.80  2353.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=    2351.80 ELRLA=    2351.50

   7.59     6.57  2350.17    0.00     0.00  2351.55     1.39     0.56     0.00  2343.60
  4081.       0.   4081.       0.       0.     432.       0.      18.       7.  2343.60
   0.05     0.00     9.44     0.00    0.000    0.025    0.000    0.000  2343.60  9900.94
0.002053     50.      50.      50.        0        0        0     0.00    65.80  9966.74


LOW DISTRIBUTION FOR SECNO=     7.59         CWSEL=   2350.17

STA=    9901.    9967.
 PER Q=    100.0
  AREA=    432.1
   VEL=      9.4

490 NH CARD USED
*SECNO 7.630
   7.63     3.75  2350.75  2350.72    0.00  2352.37     1.62     0.63     0.19  2351.50
  4081.       0.   4081.       0.       0.     399.       0.      19.       8.  2356.60
   0.05     0.00    10.22     0.00    0.000    0.026    0.000    0.000  2347.00  9934.90
0.006331    255.     190.     140.        4       11        0     0.00   120.53 10055.43
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      7.63         CWSEL=   2350.75

STA=    9935.   10067.
  PER Q=    100.0
   AREA=    399.4
    VEL=     10.2

1490 NH CARD USED
*SECNO 7.720

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

     7.72     4.18  2354.18     0.00     0.00  2354.89     0.71     1.97     0.55  2350.50
    4081.      29.     2764.    1208.      17.     375.     244.      25.      10.   2351.10
     0.07     1.69     7.38     5.29    0.065    0.025    0.025    0.000  2350.00  9948.86
 0.002684     500.     300.     505.        3        0        0     0.00   226.76 10195.97

FLOW DISTRIBUTION FOR SECNO=      7.72         CWSEL=   2354.18

STA=    9949.    9958.   10059.   10071.   10097.   10109.   10156.   10170.   10179.   10191.   10196.
  PER Q=      0.7     67.7      4.0      4.7      4.0      3.8      5.0      4.9      5.1      0.1
   AREA=     16.8    374.7     29.2     43.9     29.2     38.0     35.5     29.6     34.0      4.4
    VEL=      1.7      7.4      5.6      4.4      5.6      4.1      5.7      6.8      6.1      1.2

1490 NH CARD USED
*SECNO 7.820

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.82     3.73  2357.33  2357.33     0.00  2358.60     1.27     1.83     0.45  2354.50
    4081.      15.     3939.     127.       7.     428.      62.      31.      12.   2355.80
     0.09     2.02     9.20     2.06    0.065    0.025    0.055    0.000  2353.60  9927.89
 0.005868     535.     500.     380.        2       11        0     0.00   219.55 10147.45


FLOW DISTRIBUTION FOR SECNO=      7.82         CWSEL=   2357.33

STA=    9928.    9933.   10002.   10100.   10138.   10147.
  PER Q=      0.4     96.5      1.3      1.7      0.1
   AREA=      7.2    428.4     22.1     35.2      4.4
    VEL=      2.0      9.2      2.4      2.0      1.2
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
           QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN       SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IRC      ICONT    LOBAR    TOPWID      ENDST

CCHV=   0.600 CEHV=   0.800
*SECNO 7.884

3301 HV CHANGED MORE THAN HVINS

7105 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     2360.00 ELREA=     2362.70

    7.88     5.52  2360.12  2360.12     0.00  2362.30     2.18     2.09     0.72  2360.00
   4081.       0.    4081.       0.       0.     345.       0.      35.      13.  2362.70
    0.09     0.29    11.84     0.00    0.065    0.025    0.000    0.000  2354.60  9874.19
0.006365     360.     345.     145.        2       14        0     0.00    82.87  9957.06

FLOW DISTRIBUTION FOR SECNO=      7.88          CWSEL=   2360.12

STA=    9874.    9876.    9958.
  PER Q=      0.0    100.0
  [illegible]      0.1    344.7
   VEL=       0.3     11.8

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2358.42 ,NOT   2360.12 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00     67.20    6.36     395.90   0.00     2354.60  2354.60

*SECNO 7.891

3301 HV CHANGED MORE THAN HVINS

PRESSURE FLOW

 EGPRS     EGLWC     H3       QWEIR    QPR      BAREA    TRAPEZOID     ELLC     ELTRD
                                                          AREA
  2362.70  2361.96     0.00        0.    4081.     396.      274.    2359.10  2365.40


   7.89     7.30  2362.40     0.00     0.00  2362.70     0.30     0.40     0.00  2364.00
  4081.       0.    4081.       0.       0.     930.       0.      35.      13.  2364.70
   [illegible]10     0.00     4.39     0.00    0.000    0.025    0.000    0.000  2355.10  9868.96
0.000821     30.      30.      30.        2        0        0     0.00   219.21 10088.17
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XML	XNCH	XMR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IBC	ICONT	COBAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 7.89 CWSEL= 2362.40

STA= 9869. 10123.
PER Q= 100.0
AREA= 929.6
VEL= 4.4

1490 NH CARD USED
*SECNO 7.920

3265 DIVIDED FLOW

7.92	7.02	2362.72	0.00	0.00	2362.90	0.18	0.13	0.07	2357.60
4081.	341.	3679.	61.	278.	1029.	43.	40.	14.	2357.00
0.11	1.23	3.58	1.34	0.065	0.033	0.055	0.000	2355.70	9767.96
0.000655	150.	180.	220.	2	0	0	0.00	308.78	10139.84

FLOW DISTRIBUTION FOR SECNO= 7.92 CWSEL= 2362.72

STA= 9768. 9817. 9937. 10124. 10140.
PER Q= 4.3 4.1 90.2 1.5
AREA= 137.5 140.0 1028.6 45.3
VEL= 1.3 1.2 3.6 1.3

1490 NH CARD USED
*SECNO 8.000

3265 DIVIDED FLOW

8.00	6.11	2363.01	0.00	0.00	2363.18	0.17	0.27	0.01	2360.00
4081.	322.	2882.	877.	293.	770.	478.	51.	18.	2359.60
0.15	1.10	3.74	1.84	0.050	0.028	0.050	0.000	2356.90	9694.92
0.000613	440.	425.	420.	2	0	0	0.00	515.07	10217.52

FLOW DISTRIBUTION FOR SECNO= 8.00 CWSEL= 2363.01

STA= 9695. 9877. 9930. 10094. 10125. 10145. 10170. 10191. 10204. 10218.
PER Q= 3.4 4.4 70.6 4.4 3.8 5.5 3.7 3.1 1.1
AREA= 159.8 133.2 770.0 106.7 82.2 112.0 82.2 60.7 33.9
VEL= 0.9 1.4 3.7 1.7 1.9 2.0 1.8 2.1 1.3

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

CHV=   0.100 CEHV=   0.300
490 NH CARD USED
SECNO 8.100

301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
    8.10     3.97  2363.87  2363.87     0.00  2364.77     0.91     0.67     0.22  2361.20
   4081.      91.    2853.    1137.      60.     318.     426.      38.      24.  2359.90
    0.17     1.53     8.98     2.67    0.062    0.025    0.053    0.000  2359.90  9860.65
0.004562     465.     500.     535.       20       14        0     0.00   510.86 10371.52

LOW DISTRIBUTION FOR SECNO=      8.10          CWSEL=   2363.87

TA=    9861.    9953.   10048.   10064.   10154.   10201.   10215.   10244.   10263.   10325.   10372.
 PER Q=     2.2     69.9      3.4      3.0      4.0      4.8      3.9      3.3      4.0      1.4
  AREA=    59.5    317.8     45.1     74.7     60.7     43.0     52.2     42.4     71.6     34.6
           1.5      9.0      3.1      1.7      2.7      4.4      3.0      3.2      2.3      1.7

1490 NH CARD USED
SECNO 8.190
185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.19     4.08  2366.28  2366.28     0.00  2367.27     0.98     2.12     0.02  2364.90
   4081.      47.    3207.     827.      40.     360.     384.      77.      30.  2362.20
    0.19     1.17     8.92     2.15    0.063    0.025    0.053    0.000  2362.20  9866.64
0.003823     475.     500.     535.        2        8        0     0.00   500.84 10367.48

FLOW DISTRIBUTION FOR SECNO=      8.19          CWSEL=   2366.28

STA=    9867.    9944.   10039.   10059.   10146.   10184.   10233.   10367.
 PER Q=     1.2     78.6      4.6      4.0      4.6      3.7      3.4
  AREA=    40.5    359.6     56.7     90.8     72.2     69.8     94.9
   VEL=     1.2      8.9      3.3      1.8      2.6      2.1      1.5

1490 NH CARD USED
SECNO 8.290
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```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS    BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3265 DIVIDED FLOW

    8.29     4.41  2368.41     0.00     0.00  2369.04     0.63     1.73     0.04  2367.50
   4081.      96.    2069.    1916.      46.     252.     533.      86.      35.  2364.00
    0.21     2.08     8.22     3.60    0.050    0.025    0.045    0.000  2364.00  9877.55
0.003107     510.     500.     510.        2        0        0     0.00   387.99 10354.07


FLOW DISTRIBUTION FOR SECNO=      8.29          CWSEL=   2368.41

STA=    9878.    9958.   10022.   10040.   10088.   10110.   10130.   10180.   10204.   10354.
  PER Q=     2.4     50.7      5.9      7.2      3.2      5.5     21.0      3.4      0.7
   AREA=    46.1    251.7     59.6     98.9     44.5     59.2    190.4     48.2     31.8
    VEL=     2.1      8.2      4.1      3.0      3.0      3.8      4.5      2.9      0.9

1490 NH CARD USED
*SECNO 8.400

3265 DIVIDED FLOW

    8.40     3.90  2370.50     0.00     0.00  2371.43     0.93     2.30     0.09  2370.40
   4081.      10.    2471.    1600.      10.     265.     368.      96.      40.  2367.40
    0.23     0.95     9.33     4.35    0.050    0.025    0.045    0.000  2366.60  9898.71
0.004951     595.     615.     570.        1        0        0     0.00   261.39 10176.55


FLOW DISTRIBUTION FOR SECNO=      8.40          CWSEL=   2370.50

STA=    9899.    9949.   10028.   10044.   10070.   10088.   10101.   10133.   10145.   10165.   10177.
  PER Q=     0.2     60.5      3.6      5.9      4.9      3.7      6.9      6.6      6.0      1.5
   AREA=    10.3    264.9     56.6     59.5     46.1     34.3     70.3     46.7     54.8     19.6
    VEL=     1.0      9.3      4.0      4.0      4.3      4.4      4.0      5.7      4.5      3.2

1490 NH CARD USED
*SECNO 8.480

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    8.48     4.14  2372.84  2372.83     0.00  2374.60     1.76     2.92     0.25  2368.80
   3867.      84.    3613.     170.      22.     334.      17.     101.      42.  2369.20
    0.24     3.79    10.80     9.82    0.065    0.038    0.025    0.000  2368.70  9873.52
0.013467     425.     390.     370.        3       11        0     0.00   120.19 10053.55
```

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

FLOW DISTRIBUTION FOR SECNO=     8.48        CWSEL=   2372.84

 STA=    9874.    9879.    9884.    9954.   10044.   10054.
  PER Q=     0.0      0.0      2.1     93.4      4.4
   AREA=     0.9      0.8     20.3    334.4     17.3
    VEL=     1.0      1.0      4.0     10.8      9.8

1490 NH CARD USED
*SECNO 8.570

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    8.57     5.37  2377.07     0.00     0.00  2377.74     0.67     3.02     0.11  2377.30
   3867.     954.    2807.     106.     346.     374.      39.     107.      44.  2371.70
    0.27     2.76     7.51     2.71    0.052    0.030    0.060    0.000  2371.70  9493.80
0.003503     440.     500.     500.        2        0        0     0.00   358.64 10053.58

FLOW DISTRIBUTION FOR SECNO=     8.57        CWSEL=   2377.07

STA=    9491.    9729.    9750.    9771.    9886.    9921.   10039.   10054.
  PER Q=     4.8      9.1      3.2      4.1      3.4     72.6      2.7
   AREA=    67.8     81.3     43.5     91.4     62.2    373.5     39.1
    VEL=     2.7      4.3      2.8      1.8      2.1      7.5      2.7

1490 NH CARD USED
*SECNO 8.670

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.67     4.40  2379.00  2379.00     0.00  2379.89     0.89     1.99     0.07  2378.00
   3867.     272.    3346.     249.     182.     414.     109.     115.      48.  2374.60
    0.29     1.49     8.09     2.28    0.072    0.025    0.050    0.000  2374.60  9129.09
0.004813     410.     500.     555.        3       12        0     0.00   476.35 10164.17

FLOW DISTRIBUTION FOR SECNO=     8.67        CWSEL=   2379.00

STA=    9129.    9189.    9685.    9875.   10026.   10115.   10164.
  PER Q=     3.1      3.1      0.9     86.5      4.9      1.5
   AREA=    86.1     71.1     24.7    413.5     74.6     34.8
    VEL=     1.4      1.7      1.3      8.1      2.5      1.7
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   RANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROR     XNI      XNCH     XNR      WTN      ELKIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 8.760

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.76     7.89  2383.39  2383.39     0.00  2383.53     0.15     0.71     0.07  2378.70
   3696.     850.    1809.    1038.     736.     434.     690.     129.      56.  2383.30
    0.34     1.15     4.17     1.50    0.050    0.025    0.053    0.000  2375.50  9485.48
0.000657     450.     500.     515.       20       25        0     0.00   915.94 10401.42


FLOW DISTRIBUTION FOR SECNO=      8.76          CWSEL=   2383.39

STA=    9405.    9578.    9723.    9786.    9823.    9874.    9947.    9958.   10033.   10189.   10200.   10206.   10216.
  PER Q=     3.7      3.1      3.5      3.1      3.8      3.9      2.1     48.9      5.1      5.4      3.7      3.1
   AREA=   132.1    129.4    110.4     85.1    110.9    126.9     11.6    433.6    161.3     74.6     45.8     52.4
    VEL=     1.0      0.9      1.2      1.3      1.3      1.1      1.8      4.2      1.2      2.7      2.9      2.2
STA=   10216.   10302.   10401.
  PER Q=     9.1      1.7
   AREA=   228.6    127.0
    VEL=     1.5      0.5

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 8.860

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.86     3.65  2384.85  2384.85     0.00  2385.59     0.74     0.70     0.30  2381.20
   3258.     128.    2807.     243.      71.     394.     103.     145.      63.  2382.80
    0.36     1.82     7.32     2.30    0.050    0.022    0.041    0.000  2381.20  9749.76
0.004740     470.     510.     670.       20       14        0     0.00   486.72 10404.22
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 L        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XML      XMCH     XMR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

LOW DISTRIBUTION FOR SECNO=      8.86          CWSEL=   2384.05

STA=    9750.    9969.   10164.   10267.   10308.   10404.
 PER Q=     3.9     88.6      3.7      3.2      0.5
  AREA=    70.5    394.5     53.3     40.1     12.0
   VEL=     1.8      7.3      2.3      2.6      1.4

SECNO 8.947

3301 HV CHANGED MORE THAN HVINS

185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLFA=     2390.70 ELREA=     2393.00

    8.95     4.46  2389.36  2389.36     0.00  2390.73     1.37     2.74     0.31  2390.70
   3258.       0.    3258.       0.       0.     347.       0.     150.      68.  2393.00
    0.37     0.00     9.40     0.00    0.000    0.025    0.000    0.000  2384.90  9835.24
 0.0[illegible]51     450.     480.     535.       11       11        0     0.00   130.76  9966.00

FLOW DISTRIBUTION FOR SECNO=      8.95          CWSEL=   2389.36

STA=    9835.    9987.
 PER Q=   100.0
  AREA=   346.6
   VEL=     9.4

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00     96.90    9.24     554.40   0.00     2384.90  2384.90

*SECNO 8.753

3301 HV CHANGED MORE THAN HVINS

CLASS A LOW FLOW

3420 BRIDGE W.S.=   2388.84 BRIDGE VELOCITY=,      9.42      CALCULATED CHANNEL AREA=,      346.
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    RANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      THA      LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELKIN       SSTA
  SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST


 EGPRS     EGLWC      H3      QWEIR      QLOW     BARFA   TRAPEZOID     ELLC     ELTKD
                                                            AREA
     0.00   2390.72     0.98       0.     3258.     554.     743.    2393.40   2395.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA=    2391.70 ELREA=    2393.60

    8.95     5.34  2390.34     0.00     0.00  2390.72     0.38    -0.01     0.00  2391.70
   3258.       0.    3258.       0.       0.     658.       0.     150.      69.   2393.60
    0.37     0.00     4.95     0.00    0.000    0.025    0.000    0.000  2384.80  9816.31
0.000955      30.      30.      30.        0        0        0     0.00   146.57  9962.87


FLOW DISTRIBUTION FOR SECNO=     8.95          CWSEL=   2390.34

STA=    9816.    9970.
  PER Q=    100.0
  AREA=     658.0
            5.0

*SECNO 9.060
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    9.06     2.15  2392.35  2392.35     0.00  2393.27     0.87     1.19     0.24  2401.40
   3258.       0.    3254.       4.       0.     434.       2.     157.      71.   2390.50
    0.39     0.00     7.49     2.44    0.000    0.025    0.040    0.000  2390.20  9960.08
0.007834     605.     565.     540.       20       18        0     0.00   256.70 10216.78


FLOW DISTRIBUTION FOR SECNO=     9.06          CWSEL=   2392.35

STA=    9960.   10215.   10217.
  PER Q=     99.9      0.1
  AREA=     434.2      1.6
   VEL=       7.5      2.4

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 9.160
    9.16     3.35  2395.55     0.00     0.00  2395.95     0.40     2.68     0.05  2393.40
   3258.     1133.    2079.      46.     391.     349.      16.     164.      75.   2394.20
    0.42     2.90     5.96     2.88    0.045    0.025    0.025    0.000  2392.20  9650.49
0.003969     475.     500.     460.        4        0        0     0.00   458.13 10108.63
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

FLOW DISTRIBUTION FOR SECNO=      9.16          CWSEL=   2395.55

 STA=    9650.    9708.    9729.    9753.    9776.    9787.    9800.    9883.    9911.   10085.   10109.
  PER Q=    3.8      3.7      3.7      3.2      3.2      3.8      3.4      7.0     63.8      1.4
   AREA=   61.3     41.0     43.2     39.1     29.2     34.5     98.0     44.8    349.1     16.0
    VEL=    2.0      2.9      2.8      2.7      3.6      3.6      2.1      5.1      6.0      2.9

3490 NH CARD USED
SECNO 9.250
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    9.25     2.84  2400.14  2400.14     0.00  2400.90     0.76     2.18     0.11  2397.90
   3258.      613.     2610.      34.      307.      337.      12.      172.      81.  2397.60
    0.44     2.00     7.75     2.93    0.050    0.025    0.040    0.000  2397.30  9565.21
0.004769     505.     500.     510.       20       15        0     0.00   492.01 10057.22

FLOW DISTRIBUTION FOR SECNO=      9.25          CWSEL=   2400.14

 STA     9565.    9689.    9777.    9886.    9918.   10048.   10057.
  PER Q=    6.8      4.7      4.0      3.3     80.1      1.1
   AREA=  107.2     80.0     77.0     42.8    337.0     11.7
    VEL=    2.1      1.9      1.7      2.5      7.7      2.9
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THIS RUN EXECUTED MON, JUN 01 1987 15:43:24

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 50 YEAR PROFILE - R5

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2340.070	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

PROF 2

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 7.300
    7.30     7.07  2340.37  2340.35  2340.37  2342.60     2.23     0.00     0.00  2338.40
   8274.    1447.     6679.     148.     344.     507.      38.       0.       0.  2334.00
    0.00     4.21     13.17     3.91    0.050    0.025    0.050    0.000  2333.30  9837.37
0.004364       0.        0.       0.        0        4        0     0.00   207.51 10039.89

1490 NH CARD USED
*SECNO 7.440

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

    7.44     5.98  2344.58  2344.49     0.00  2345.91     1.33     3.04     0.27  2341.00
      .     747.     6698.     829.     368.     656.     283.      18.       6.  2338.60
    0.02     2.03     10.21     2.93    0.065    0.025    0.055    0.000  2338.60  9669.41
0.003911     660.      745.     800.        5       15        0     0.00   553.49 10239.77

CCHV=   0.600 CEHV=   0.800
1490 NH CARD USED
*SECNO 7.530

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.53     6.42  2348.02  2348.02     0.00  2349.58     1.56     2.08     0.18  2342.70
   8274.    2119.     3333.     801.     446.     446.     222.      32.      13.  2342.50
    0.04     4.75     12.00     3.61    0.051    0.025    0.033    0.000  2341.60  9812.57
0.004330     465.      500.     610.        2        8        0     0.00   519.14 10425.66

*SECNO 7.579

3301 HV CHANGED MORE THAN HVINS
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	DLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XHL	XHCH	XHR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IMC	ICONT	CORAR	TOPWID	ENDST

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2351.80 ELREA= 2351.50

7.58	7.90	2351.50	2351.50	0.00	2335.43	3.94	1.04	1.91	2343.60
8274.	0.	8274.	0.	0.	520.	0.	37.	15.	2343.60
0.04	0.00	15.93	0.00	0.000	0.025	0.000	0.000	2343.60	9900.94
0.004565	210.	235.	295.	4	11	0	0.00	65.80	9966.74

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS 2350.07 ,NOT 2351.50 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	CDFQ	RDLFN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.56	2.63	0.00	65.80	4.23	475.08	0.00	2343.60	2343.60

*SECN .590
3280 CROSS SECTION 7.59 EXTENDED 0.43 FEET

3301 HV CHANGED MORE THAN INTHS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BARFA	TRAPEZOID AREA	ELLC	ELTRD
2358.84	2358.06	0.00	1599.	6671.	475.	443.	2350.80	2353.70

7.59	10.42	2354.02	0.00	0.00	2356.27	2.25	0.84	0.00	2343.60
8274.	3.	8268.	3.	3.	686.	5.	38.	15.	2343.60
0.04	0.60	12.05	0.66	0.065	0.025	0.055	0.000	2343.60	9900.00
0.001805	50.	50.	50.	3	0	0	0.00	67.62	9967.62

1490 NH CARD USED
*SECND 7.630
3280 CROSS SECTION 7.63 EXTENDED 0.24 FEET

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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XML      XMCH     XMR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    COWAR    TOPWID     ENDST


3301 HV CHANGED MORE THAN HVINS

    7.63    10.04  2357.04     0.00     0.00  2357.53     0.49     0.20     1.06  2351.50
   8274.     1023.    7230.       1.     620.    1219.       2.      44.      16.  2356.60
    0.05     1.65     5.95     0.33    0.065    0.027    0.055    0.000  2347.00  9786.32
0.000654     255.     190.     140.        4        0        0     0.00   285.68 10072.00


1490 NH CARD USED
SECNO 7.720
    7.72     7.42  2357.42     0.00     0.00  2357.98     0.57     0.39     0.06  2350.50
   8274.       91.    4666.    3517.      59.     701.     678.      62.      19.  2351.10
    0.08     1.53     6.65     5.19    0.065    0.025    0.025    0.000  2350.00  9940.83
0.000946     500.     500.     505.        2        0        0     0.00   264.14 10204.97


1490 NH CARD USED
SECNO 7.820

3301 CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.82     5.26  2358.86  2358.86     0.00  2360.81     1.95     0.88     1.11  2354.50
   8274.       44.    7633.     597.      17.     657.     174.      74.      21.  2355.80
    0.09     2.56    11.62     3.43    0.065    0.025    0.055    0.000  2353.60  9925.12
0.005301     555.     500.     380.        2       19        0     0.00   237.96 10163.09


CCHV=   0.600 CEHV=   0.800
SECNO 7.884

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.88     8.31  2362.91  2362.91     0.00  2365.99     3.08     1.72     0.91  2360.00
   8274.      133.    8120.       1.      75.     571.       1.      80.      23.  2362.70
    0.10     2.05    14.21     0.42    0.065    0.025    0.055    0.000  2354.60  9824.99
0.004887     360.     345.     145.        3       15        0     0.00   147.12 10089.59
```

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

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS 2360.72 ,NOT 2362.91 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	CDFQ	RDLFN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.56	2.63	0.00	67.20	6.36	393.90	0.00	2354.60	2354.60

*SECNO 7.891

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
2373.49	2368.73	0.00	2675.	5602.	396.	274.	2359.10	2365.40
7.89	12.47	2367.57	0.00	0.00	2367.76	0.19	1.77	0.00	2364.00
8274.	45.	8201.	29.	90.	2328.	57.	81.	23.	2364.70
0.10	0.49	3.52	0.51	0.065	0.025	0.055	0.000	2355.10	9790.25
0.000217	30.	30.	30.	2	0	4	0.00	373.01	10163.26

1490 NH CARD USED
*SECNO 7.920

3265 DIVIDED FLOW

7.92	11.96	2367.66	0.00	0.00	2367.82	0.16	0.04	0.02	2357.60
8274.	1278.	6790.	206.	1021.	1953.	137.	92.	24.	2357.00
0.11	1.25	3.48	1.31	0.065	0.034	0.055	0.000	2355.70	9733.35
0.000273	150.	180.	220.	2	0	0	0.00	409.04	10153.53

1490 NH CARD USED
*SECNO 8.000

3265 DIVIDED FLOW

8.00	10.96	2367.86	0.00	0.00	2367.95	0.09	0.09	0.04	2360.00
8274.	1932.	4640.	1702.	1631.	1563.	1108.	129.	30.	2359.60
[illegible].17	1.18	2.96	1.54	0.050	0.028	0.050	0.000	2356.90	9567.78
0.[illegible]58	440.	425.	420.	2	0	0	0.00	646.54	10230.60

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VRUB     XML      XNCH     XNR      WTN      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    IOBAR    TOPWID      ENDST

CHV=   0.100 CEIV=   0.300
890 NH CARD USED
*SECNO 8.100
    8.10     8.02  2367.92     0.00     0.00  2368.11     0.19     0.13     0.03  2361.20
   8274.     1194.    3478.    3602.     861.     703.    1965.     174.      38.  2359.90
    0.21     1.39     4.95     1.83    0.054    0.025    0.052    0.000  2359.90  9610.77
0.000481     465.     500.     535.        2        0        0     0.00   869.32 10480.09

1490 NH CARD USED
*SECNO 8.190

3301 HV CHANGED MORE THAN HVINS

    8.19     5.68  2367.88     0.00     0.00  2368.83     0.95     0.50     0.23  2364.90
   8274.     530.    5016.    2729.     260.     512.     949.     205.      47.  2362.20
    0.23     2.04     9.80     2.88    0.056    0.025    0.055    0.000  2362.20  9758.28
0.002883     475.     500.     535.        2        0        0     0.00   656.33 10414.62

1490 NH CARD USED
*SECNO 8.290
    8.29     5.55  2369.55     0.00     0.00  2370.58     1.04     1.73     0.03  2367.50
   8274.     325.    3636.    4313.     121.     324.     931.     223.      54.  2364.00
    0.25     2.69    11.21     4.63    0.050    0.025    0.045    0.000  2364.00  9844.66
0.004127     510.     500.     510.        3        0        0     0.00   564.74 10409.40

1490 NH CARD USED
*SECNO 8.400

3265 DIVIDED FLOW

    8.40     5.36  2371.96  2371.75     0.00  2373.38     1.42     2.68     0.11  2370.40
   8274.     263.    4540.    3471.     104.     381.     616.     240.      61.  2367.40
    0.27     2.53    11.91     5.63    0.050    0.025    0.045    0.000  2366.60  9834.86
0.004767     595.     615.     570.        4       11        0     0.00   392.29 10229.03

1490 NH CARD USED
*SECNO 8.480
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3720 CRITICAL DEPTH ASSUMED
    8.48     6.86  2375.56  2375.56     0.00  2377.18     1.63     2.21     0.06  2368.80
   7861.     1167.    6472.     222.     368.     579.     53.     249.     64.   2369.20
    0.28     3.18    11.17     4.17    0.057    0.037    0.060    0.000  2368.70  9702.43
0.006649     425.     390.     370.       20       11        0     0.00   358.27 10060.71


1490 NH CARD USED
*SECNO 8.570

3301 HV CHANGED MORE THAN HVINS

    8.57     6.95  2378.65     0.00     0.00  2379.41     0.76     2.14     0.09  2377.30
   7861.     3093.    4567.     201.     999.     519.     66.     263.     69.   2371.70
    0.30     3.10     8.80     3.06    0.052    0.030    0.060    0.000  2371.70  9463.85
0.003163     440.     300.     300.        2        0        0     0.00   594.02 10057.87


1490 NH CARD USED
*SECNO 8.670

3265 DIVIDED FLOW

    8.67     5.69  2380.29  2380.19     0.00  2381.20     0.92     1.74     0.05  2378.00
   7861.     1441.    5483.     937.     630.     607.     303.     280.     77.   2374.60
    0.32     2.29     9.03     3.09    0.061    0.027    0.050    0.000  2374.60  9114.40
0.004251     410.     300.     555.        6       15        0     0.00   857.76 10203.31


1490 NH CARD USED
*SECNO 8.760
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.76     7.88  2383.38  2383.38     0.00  2383.99     0.61     1.67     0.03  2378.70
   7504.     1719.    3678.    2107.     732.     433.     687.     299.     86.   2383.30
    0.34     2.35     8.50     3.07    0.050    0.025    0.053    0.000  2375.50  9485.55
0.002733     450.     300.     515.       20       25        0     0.00   915.52 10401.07


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 8.860

3265 DIVIDED FLOW

3405 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.86     4.62  2385.82  2385.82     0.00  2386.67     0.85     1.86     0.12  2381.20
   6626.      638.     4937.     1051.      269.      585.      383.      318.       98.   2382.80
    0.37     2.37     8.44     2.74    0.050    0.025    0.043    0.000  2381.20  9717.80
0.004676     470.      510.      670.        5       14        0     0.00   903.17 10677.94


*SECNO 8.947
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,FLLEA-     2390.70 ELREA-     2393.00

    [illegible]95     6.52  2391.42  2391.42     0.00  2392.63     1.22     1.93     0.18  2390.70
    [illegible].      754.     5872.        0.      409.      626.        0.      331.      106.   2393.00
    0.38     1.85     9.38     0.00    0.050    0.023    0.000    0.000  2384.90  9419.70
0.003478     450.      480.      535.       20       14        0     0.00   554.62  9974.32


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2389.03 ,NOT   2391.42 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00     96.90    9.24     554.40   0.00     2384.90  2384.90

*SECNO 8.953

3265 DIVIDED FLOW

CLASS B LOW FLOW

3420 BRIDGE W.S.=   2390.52 BRIDGE VELOCITY=,     13.45     CALCULATED CHANNEL AREA=,     493.
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    FC       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


EGPRS     EGLWC     H3      QWEIR     QLOW     BAREA   TRAPEZOID     ELLC     ELTRD
                                                         AREA
    0.00  2393.09   0.00       0.    6626.     534.     743.    2393.40   2395.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=    2391.70 ELREA=    2393.60

    8.95     7.38  2392.37     0.00     0.00  2393.09     0.72     0.46     0.00  2391.70
   6626.      24.    6602.       0.      50.     970.       0.     331.     106.   2393.60
    0.38     0.48     6.81     0.00    0.050    0.025    0.000    0.000  2384.80  9409.79
0.001192      30.      30.      30.        0        0        0     0.00   343.48  9967.14


*SECNO 9.060

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    9.06     3.19  2393.39  2393.39     0.00  2394.77     1.38     1.33     0.33  2401.40
   6626.       0.    6614.      12.       0.     700.       4.     343.     110.   2390.50
    0.40     0.00     9.44     3.03    0.000    0.025    0.040    0.000  2390.20  9957.87
0.006656     605.     365.     540.        2       18        0     0.00   259.90 10217.78


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 9.160

3301 HV CHANGED MORE THAN HVINS

    9.16     4.39  2396.59     0.00     0.00  2397.19     0.60     2.34     0.08  2393.40
   6626.     2476.    3936.     214.     668.     530.      49.     354.     115.   2394.20
    0.42     3.71     7.42     4.37    0.045    0.025    0.025    0.000  2392.20  9640.09
0.003531     475.     500.     460.        1        0        0     0.00   481.43 10121.52


1490 NH CARD USED
*SECNO 9.250
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	COBAR	TOPWID	ENDST

720 CRITICAL DEPTH ASSUMED

9.25	3.77	2401.07	2401.07	0.00	2402.13	1.06	2.11	0.14	2397.90
6626.	2051.	4494.	82.	655.	438.	22.	367.	120.	2397.60
0.44	3.13	9.80	3.73	0.050	0.025	0.040	0.000	2397.30	9533.36
0.005067	305.	300.	510.	20	15	0	0.00	327.26	10060.62

THIS RUN EXECUTED MON, JUN 01 1987 15:43:37

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**************************************************
 HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
 ERROR CORR - 01,02,03,04,05,06
 MODIFICATION - 50,51,52,53,54,55,56
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T1 SOLS WASH
T2 REACH 5
T3 100 YEAR PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.000000	0.00	0.0	0.	2341.130	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIK	ITRACE
	3.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

PROF 3

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 7.300
    7.30     7.83  2341.13  2341.11  2341.13  2343.66     2.53     0.00     0.00  2338.40
   10370.    2067.    8104.     200.     431.     570.      47.       0.       0.  2334.00
    0.00     4.79    14.23     4.21    0.050    0.025    0.050    0.000  2333.30  9829.13
0.004366       0.       0.       0.        0        4        0     0.00   212.17 10041.30

1490 NH CARD USED
*SECNO 7.440

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

    7.44     6.89  2345.49     0.00     0.00  2346.64     1.15     2.56     0.41  2341.00
   [illegible]    1315.    7732.    1303.     592.     787.     442.      24.       6.  2338.60
    0.03     2.22     9.85     2.95    0.065    0.025    0.055    0.000  2338.60  9665.97
0.002852     660.     745.     800.        4        0        0     0.00   373.96 10244.23

CCHV=   0.600 CEHV=   0.800
1490 NH CARD USED
*SECNO 7.530

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.53     7.12  2348.72  2348.72     0.00  2350.25     1.54     1.69     0.31  2342.70
   10370.    2619.    6222.    1529.     541.     504.     493.      44.      14.  2342.50
    0.04     4.84    12.35     3.10    0.051    0.025    0.040    0.000  2341.60  9810.34
0.003900     465.     500.     610.        2        8        0     0.00   449.27 10467.47

*SECNO 7.579

3301 HV CHANGED MORE THAN HVINS
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
           QLOB     QCH      QROR     ALOB     ACH      AROR     VOL.     TWA    LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELHIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.58     9.13  2352.73  2352.73     0.00  2357.35     4.61     0.98     2.46  2343.60
  10370.       3.  10363.       3.       4.     601.       4.      50.      16.  2343.60
    0.04     0.86    17.24     0.95    0.065    0.025    0.055    0.000  2343.60  9900.08
 0.004408     210.     235.     295.       20       11        0     0.00    67.43  9967.51


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2351.12 ,NOT   2352.73 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00     65.80    4.23     473.08   0.00     2343.60  2343.60

*SECNO 7.590
3280 CROSS SECTION      7.59 EXTENDED      0.07 FEET


3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW


 EGPRS    EGLWC    H3       QWEIR    QPR      BAREA    TRAPEZOID     ELLC     ELTRD
                                                        AREA
  2364.27  2360.44     0.00     3784.    6639.     473.     443.     2350.80  2353.70


    7.59    10.07  2353.67     0.00     0.00  2357.46     3.79     0.12     0.00  2343.60
  10370.       4.  10363.       4.       5.     663.       4.      51.      16.  2343.60
    0.05     0.78    15.64     0.86    0.065    0.025    0.055    0.000  2343.60  9900.00
 0.003182      50.      50.      50.        5        0        3     0.00    67.59  9967.59


1490 NH CARD USED
*SECNO 7.630
3280 CROSS SECTION      7.63 EXTENDED      2.44 FEET


3301 HV CHANGED MORE THAN HVINS
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 SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOR     ACH      AROR     VOL      TWA     LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTH      ELHTN      SSTA
 SLOPE    XLOBL    XLCH     XLORR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

   7.63    12.24  2359.24     0.00     0.00  2359.67     0.43     0.19     2.02  2351.50
 10370.     1668.    8592.      11.     956.    1318.      13.      58.      17.   2356.60
   0.06     1.74     5.73     0.84    0.065    0.028    0.055    0.000  2347.00  9769.16
0.000474    255.     190.     140.        4        0        0     0.00   302.84 10072.00

1490 NH CARD USED
*SECNO 7.720
   7.72     9.49  2359.49     0.00     0.00  2359.95     0.46     0.25     0.02  2350.50
 10370.     139.     5467.    4764.     100.     910.     986.      84.      21.   2351.10
   0.08     1.38     6.01     4.83    0.065    0.025    0.026    0.000  2350.00  9935.70
0.000544    500.     300.     505.        3        0        0     0.00   275.04 10210.74

1490 NH CARD USED
*SECNO 7.820

1301 HV CHANGED MORE THAN HVINS

   7.82     6.13  2359.73  2359.51     0.00  2361.75     2.02     0.56     1.25  2354.50
 1[illegible]      65.     9383.     923.      25.     786.     248.     100.      23.   2355.80
   0.09     2.63    11.94     3.72    0.065    0.025    0.055    0.000  2353.60  9923.56
0.004402    535.     300.     380.        0       14        0     0.00   248.37 10171.93

CHV=   0.600 CEHV=   0.800
*SECNO 7.884
1185 MINIMUM SPECIFIC ENERGY
1720 CRITICAL DEPTH ASSUMED
   7.88    10.24  2364.84  2364.84     0.00  2367.13     2.29     1.16     0.21  2360.00
 10370.     501.     9331.    538.     214.     730.     293.     108.      25.   2362.70
   0.10     2.34    12.78     1.84    0.065    0.025    0.055    0.000  2354.60  9775.89
0.002851    360.     345.     145.        3       14        0     0.00   410.23 10186.12

SPECIAL BRIDGE

1070*VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

5227 DOWNSTREAM ELEV IS 2361.71 ,NOT 2364.84 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.56	2.63	0.00	67.20	6.36	395.90	0.00	2354.60	2354.60

*SECNO 7.891

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
2381.46	2369.73	0.00	5303.	5087.	396.	274.	2359.10	2365.40

7.89	13.51	2368.61	0.00	0.00	2368.84	0.23	1.71	0.00	2364.00
10370.	90.	10213.	67.	150.	2623.	106.	109.	25.	2364.70
[illegible]10	0.60	3.89	0.63	0.065	0.025	0.055	0.000	2355.10	9775.49
0.[illegible]6	50.	30.	30.	2	0	4	0.00	402.23	10177.72

1490 NH CARD USED
*SECNO 7.920

3265 DIVIDED FLOW

7.92	13.02	2368.72	0.00	0.00	2368.91	0.20	0.05	0.02	2357.60
10370.	1733.	8359.	278.	1232.	2150.	190.	122.	27.	2357.00
0.12	1.41	3.89	1.46	0.065	0.034	0.055	0.000	2355.70	9725.98
0.000302	130.	180.	220.	2	0	0	0.00	428.10	10156.45

1490 NH CARD USED
*SECNO 8.000

3265 DIVIDED FLOW

8.00	12.06	2368.96	0.00	0.00	2369.06	0.10	0.09	0.06	2360.00
10370.	2657.	5609.	2104.	2026.	1745.	1260.	165.	33.	2359.60
0.17	1.31	3.21	1.67	0.050	0.028	0.050	0.000	2356.90	9553.04
0.000161	440.	425.	420.	2	0	0	0.00	677.55	10233.55

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       ULOSS    BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XML      XMCH     XMR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

CHV=  0.100 CEHV=  0.300
1490 NH CARD USED
#SECNO 8.100
    8.10     9.13  2369.03     0.00     0.00  2369.70     0.17     0.12     0.02  2361.20
  10370.    1803.     3981.    4586.    1243.     808.    2451.     219.      42.  2359.90
    0.21     1.45     4.93     1.87    0.054    0.025    0.052    0.000  2359.90  9605.80
0.000396     465.     300.     535.        2        0        0     0.00   886.21 10492.01

1490 NH CARD USED
#SECNO 8.190
    8.19     6.85  2369.06     0.00     0.00  2369.72     0.66     0.37     0.15  2364.90
  10370.    1084.     5414.    3872.     509.     623.    1401.     261.      51.  2362.20
    0.24     2.13     8.69     2.76    0.054    0.025    0.055    0.000  2362.20  9703.73
0.001746     475.     300.     535.        2        0        0     0.00   732.94 10436.67

1490 NH CARD USED
#SECNO 8.290
    8.29     6.03  2370.03     0.00     0.00  2371.16     1.13     1.30     0.14  2367.50
  10370.     532.     4266.    5572.     185.     333.    1124.     285.      59.  2364.00
    0.26     2.88    12.01     4.96    0.050    0.025    0.045    0.000  2364.00  9805.17
 0.004190     510.     500.     510.        3        0        0     0.00   619.32 10424.49

1490 NH CARD USED
#SECNO 8.400

3301 HV CHANGED MORE THAN HVINS

    8.40     5.84  2372.44  2377.41     0.00  2374.11     1.67     2.79     0.16  2370.40
  10370.     483.     5490.    4398.     167.     418.     712.     303.      66.  2367.40
    0.27     2.89    13.12     6.18    0.050    0.025    0.045    0.000  2366.60  9795.21
 0.005325     595.     615.     570.        4        8        0     0.00   438.02 10233.22

1490 NH CARD USED
#SECNO 8.480
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.48     7.51  2376.21  2376.21     0.00  2377.93     1.72     2.29     0.01  2368.80
   9862.    2020.     7557.     285.     535.     638.      85.     317.      70.  2369.20
    0.29     3.77    11.84     4.42    0.056    0.037    0.060    0.000  2368.70  9693.57
 0.006538     425.     390.     370.       20        8        0     0.00   368.85 10062.42
```

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAN    TOPWID     ENDST


1490 NH CARD USED
*SECNO 8.570

3301 HV CHANGED MORE THAN HVINS

    8.57     7.58  2379.28     0.00     0.00  2380.05     0.77     2.03     0.10  2377.30
   9862.    4338.     5239.     244.    1306.     577.      78.     334.      75.  2371.70
    0.31     3.34     9.11     3.13    0.052    0.030    0.060    0.000  2371.70  9461.24
0.002942     440.     500.     500.        2        0        0     0.00   598.35 10059.59


1490 NH CARD USED
*SECNO 8.670

3265 DIVIDED FLOW

    8.67     6.20  2380.80     0.00     0.00  2381.67     0.87     1.59     0.03  2378.00
   9862.    2289.     6259.    1313.     922.     685.     398.     554.      83.  2374.60
    0.33     2.48     9.14     3.30    0.059    0.028    0.050    0.000  2374.60  9087.40
0.00[illegible]7     410.     500.     535.        3        0        0     0.00   957.59 10219.06


1490 NH CARD USED
*SECNO 8.760
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.76     7.84  2383.34  2383.34     0.00  2384.34     1.00     2.04     0.04  2378.70
   9419.    2128.     4647.    2641.     713.     429.     674.     376.      93.  2383.30
    0.34     2.98    10.82     3.92    0.050    0.025    0.053    0.000  2375.50  9485.81
0.004479     450.     500.     515.       20       19        0     0.00   913.82 10399.63


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 8.860
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.86     4.96  2386.16  2386.16     0.00  2387.06     0.90     2.49     0.03  2381.20
   8325.     962.     5803.    1560.     356.     631.     531.     397.     106.  2382.80
    0.37     2.70     8.92     2.81    0.050    0.026    0.046    0.000  2381.20  9704.04
0.004743     470.     510.     670.        2       14        0     0.00  1020.41 10724.45
```

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROR	ALOB	ACH	AROR	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROR	XHL	XHCH	XHR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SECNO 8.947
85 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2390.70 FLREA= 2393.00

8.95	7.02	2391.92	2391.92	0.00	2393.19	1.27	1.92	0.19	2390.70
8325.	1434.	6891.	0.	621.	697.	0.	413.	114.	2393.00
0.38	2.31	9.88	0.00	0.050	0.025	0.000	0.000	2384.90	9403.33
0.003413	450.	480.	535.	20	11	0	0.00	573.02	9976.36

PECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
227 DOWNSTREAM ELEV IS 2389.71 ,NOT 2391.92 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XKOR	COFQ	RDLFW	BWC	BWP	BAREA	SS	ELCHU	ELCHD
5	1.56	2.63	0.00	96.90	9.24	554.40	0.00	2384.90	2384.90

*SECNO 8.953

301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRR
2397.38	2394.26	0.00	2745.	5590.	554.	745.	2393.40	2395.70

8.95	8.98	2393.78	0.00	0.00	2394.38	0.60	1.19	0.00	2391.70
8325.	610.	7715.	0.	576.	1194.	2.	414.	115.	2393.60
0.38	1.06	6.46	0.22	0.050	0.025	0.040	0.000	2384.80	9372.86
0.000833	30.	30.	30.	3	0	5	0.00	621.20	9994.06

SECNO 9.060

3301 HV CHANGED MORE THAN HVINS

9.06	4.17	2394.37	0.00	0.00	2395.54	1.17	0.88	0.29	2401.40
5.	0.	8305.	20.	0.	954.	7.	432.	121.	2390.50
40	0.00	8.70	2.78	0.000	0.025	0.040	0.000	2390.20	9955.79
0.003791	605.	565.	540.	3	0	0	0.00	262.93	10218.72

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XML      XMCH     XMR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV= 0.100 CEHV= 0.300
1490 NH CARD USED
*SECNO 9.160
    9.16     4.59  2396.79     0.00     0.00  2397.60     0.81     2.02     0.04  2393.40
   8325.     3133.    4892.     300.     721.     565.     56.     443.     125.   2394.20
    0.42     4.34     8.66     5.33    0.045    0.025    0.025    0.000  2392.20  9638.11
0.004122     475.     300.     460.        3        0        0     0.00   484.18 10122.29


1490 NH CARD USED
*SECNO 9.250
3685 20 TRIALS ATTEMPTED WSEL,CWSFL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    9.25     4.13  2401.43  2401.43     0.00  2402.64     1.20     2.41     0.12  2397.90
   8325.     2840.    5377.     108.     796.     306.     27.     461.     131.   2397.60
    0.44     3.57    10.63     4.05    0.050    0.025    0.040    0.000  2397.30  9525.44
0.005231     503.     500.     510.       20       15        0     0.00   536.50 10061.94
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THIS RUN EXECUTED MON, JUN 01 1987 15:43:48

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**************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
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T1 SOLS WASH
T2 REACH 5
T3      500 YEAR PROFILE

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

    -10.       5.       0.       0.  0.000000     0.00     0.0      0.  2312.630   0.000

J2  NPROF    IPLOT    PRFVS    XSECV    XSFCH    FN       ALLDC    IRN      CHNIK    ITRACE

    15.000   0.000   -1.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOH      TWA    LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

#PROF 4

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
#SECNO 7.300
    7.30     9.35  2342.65  2342.62  2342.65  2345.76     3.11     0.00     0.00  2338.40
  15075.    3577.    11166.     332.     614.     694.      70.       0.       0.  2334.00
    0.00     5.83     16.09     4.75    0.050    0.025    0.050    0.000  2333.30  9822.94
 0.004286      0.        0.       0.        0        4        0     0.00   221.21 10044.14

1490 NH CARD USED
#SECNO 7.440

3301 HV CHANGED MORE THAN HVINS

    7.44     8.77  2347.37     0.00     0.00  2348.32     0.95     1.92     0.65  2341.00
  15075.    2694.     9938.    2424.    1082.    1037.     781.      46.       7.  2338.60
    0.03     2.49     9.42     3.11    0.065    0.025    0.055    0.000  2338.60  9658.89
 0.0[illegible]51      660.      745.     800.        3        0        0     0.00   594.26 10253.16

CCHV=   0.600 CEHV=   0.800
1490 NH CARD USED
#SECNO 7.530

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.53     8.18  2349.78  2349.78     0.00  2351.41     1.63     1.27     0.55  2342.70
  15075.    3687.     7962.   3125.     701.     392.     968.      67.      15.  2342.50
    0.04     5.26     13.46     3.54    0.051    0.025    0.045    0.000  2341.60  9806.93
 0.003734     465.      500.     610.        2       12        0     0.00   702.08 10509.01

#SECNO 7.579
3280 CROSS SECTION      7.58 EXTENDED      2.43 FEET

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROR     ALOR     ACH      AROB     VOL      TWA      LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XML      XMCH     XMR      WTN      ELMIN       SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID      ENDST

3493 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED
   7.58    12.43  2356.03  2356.03     0.00  2361.22     5.18     0.84     2.84  2343.60
  15075.       6.  14989.      80.       7.     818.      67.     76.      17.   2343.60
   0.05     0.89    18.32     1.20    0.065    0.025    0.055    0.000  2343.60  9900.00
0.003299    210.     235.     295.       20       14        0     0.00   155.10 10055.10


SPECIAL BRIDGE

070,VARIABLE ELCHU OR ELCHD ON CARD SR NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2353.25 ,NOT   2356.03 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

B  XK       XKOR     COFQ     RDLFN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
   1.05     1.56     2.63     0.00     65.80    4.23     475.08   0.00     2343.60  2343.60

SECNO 7.590
870 D.S. ENERGY OF 2361.22 HIGHER THAN COMPUTED ENERGY OF 2359.68
3280 CROSS SECTION      7.59 EXTENDED      2.73 FEET

RESSURE AND WEIR FLOW


EGPRS    EGLWC    H3       QWFIR    QPR      BAREA    TRAPEZOID     ELLC     ELTRD
                                                       AREA
 2380.42  2364.48     0.00     9269.    5834.    475.     443.     2350.80  2353.70


   7.59    12.72  2356.32     0.00     0.00  2361.22     4.89     0.00     0.00  2343.60
  15075.       6.  14936.     133.       7.     837.      23.     77.      18.   2343.60
   0.05     0.86    17.84     1.44    0.065    0.025    0.055    0.000  2343.60  9900.00
0.003030     50.      50.      50.        6        0        0     0.00   155.10 10055.10


1490 MM CARD USED
SECNO 7.630
280 CROSS SECTION      7.63 EXTENDED      6.87 FEET


301 HV CHANGED MORE THAN MVINS


   7.63    16.67  2363.67     0.00     0.00  2364.06     0.39     0.14     2.70  2351.50
  15075.    3227.   11814.      34.    1750.    2120.      33.     89.      19.   2356.60
   0.06     1.84     5.57     0.96    0.065    0.029    0.055    0.000  2347.00  9735.00
0.000302     255.     190.     140.        4        0        0     0.00   337.00 10072.00
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA     LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XML      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

1490 NM CARD USED
*SECNO 7.720
3280 CROSS SECTION      7.72 EXTENDED      2.33 FEET

    7.72     13.83  2363.83     0.00     0.00  2364.21     0.38     0.14     0.01  2350.50
   15075.     275.    7311.    7488.     221.    1349.    1674.     130.      22.  2351.10
    0.09     1.25     3.42     4.47    0.065    0.025    0.026    0.000  2350.00  9925.00
0.000262     500.     500.     505.        2        0        0     0.00   295.00 10220.00

1490 NM CARD USED
*SECNO 7.820

3265 DIVIDED FLOW

3280 CROSS SECTION      7.82 EXTENDED      0.51 FEET

3301 HV CHANGED MORE THAN HVINS

    7.82     10.31  2363.91     0.00     0.00  2364.99     1.08     0.22     0.56  2354.50
   15075.     159.   12681.    2234.      80.    1410.     725.     158.      26.  2355.80
    0.10     1.99     9.00     3.08    0.065    0.025    0.055    0.000  2353.60  9916.00
0.001148     535.     500.     380.        2        0        0     0.00   314.20 10247.00

CCHV=   0.600 CEHV=   0.800
*SECNO 7.384
3280 CROSS SECTION      7.88 EXTENDED      1.44 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    7.88     11.84  2366.44  2366.44     0.00  2368.86     2.41     0.54     1.07  2360.00
   15075.    1163.   11980.    1931.     416.     861.     676.     171.      28.  2362.70
    0.11     2.80    13.91     2.86    0.065    0.025    0.055    0.000  2354.60  9735.00
0.002708     360.     345.     145.        3        8        0     0.00   463.08 10198.08
```

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

ECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
27 DOWNSTREAM ELEV IS 2363.72 ,NOT 2366.44 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLFW	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.56	2.63	0.00	67.20	6.36	395.90	0.00	2354.60	2354.60

*SECNO 7.891
280 CROSS SECTION 7.89 EXTENDER 1.05 FEET

3301 HV CHANGED MORE THAN HVINS

RESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
2[illegible]7	2373.50	0.00	10020.	5062.	396.	274.	2359.10	2365.40

7.89	14.95	2370.05	0.00	0.00	2370.40	0.35	1.55	0.00	2364.00
15075.	224.	14671.	180.	231.	3029.	198.	173.	28.	2364.70
0.11	0.89	4.84	0.91	0.065	0.025	0.055	0.000	2355.10	9770.00
0.000288	30.	30.	30.	2	0	5	0.00	424.20	10194.20

1490 NH CARD USED
*SECNO 7.920

7.92	14.50	2370.20	0.00	0.00	2370.50	0.30	0.06	0.03	2357.60
15075.	2794.	11834.	447.	1552.	2427.	241.	189.	30.	2357.00
0.13	1.80	4.88	1.86	0.065	0.034	0.055	0.000	2355.70	9716.02
0.000405	150.	180.	220.	2	0	0	0.00	444.37	10160.39

490 NH CARD USED
*SECNO 8.000

8.00	13.66	2370.56	0.00	0.00	2370.71	0.14	0.12	0.09	2360.00
15075.	4299.	7777.	2999.	2647.	2008.	1487.	240.	36.	2359.60
0.17	1.62	3.87	2.02	0.050	0.028	0.050	0.000	2356.90	9532.97
0.000195	440.	425.	420.	2	0	0	0.00	704.91	10237.88

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

CCHV=   0.100 CEIV=   0.300
1490 NH CARD USED
*SECNO 8.100
     8.10    10.76  2370.66     0.00     0.00  2370.85     0.20     0.13     0.02  2361.20
   15075.    3132.    5205.    6737.    1816.     763.    3186.     309.      45.  2359.90
     0.21     1.73     5.41     2.11    0.053    0.025    0.052    0.000  2359.90  9597.17
 0.000377     465.     500.     535.        2        0        0     0.00   908.94 10506.11

1490 NH CARD USED
*SECNO 8.190
     8.19     8.52  2370.72     0.00     0.00  2371.29     0.57     0.32     0.11  2364.90
   15075.    2312.    6681.    6082.     958.     781.    2093.     367.      55.  2362.20
     0.24     2.41     8.56     2.91    0.053    0.025    0.055    0.000  2362.20  9640.13
 0.001253     475.     500.     535.        2        0        0     0.00   837.63 10477.76

1490 NH CARD USED
*SECNO 8.290
     8.29     7.36  2371.36     0.00     0.00  2372.36     1.00     0.95     0.13  2367.50
   15075.    1368.    5245.    8462.     452.     441.    1673.     404.      64.  2364.00
     0.26     3.02    11.89     5.06    0.050    0.025    0.045    0.000  2364.00  9719.54
 0.003081     510.     500.     510.        2        0        0     0.00   719.63 10439.18

1490 NH CARD USED
*SECNO 8.400

3301 HV CHANGED MORE THAN HVTMS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.40     6.99  2373.59  2373.59     0.00  2375.42     1.83     2.25     0.25  2370.40
   15075.    1398.    7260.    6417.     412.     510.     956.     434.      73.  2367.40
     0.27     3.39    14.23     6.71    0.050    0.025    0.045    0.000  2366.60  9659.18
 0.004807     595.     615.     570.        3        8        0     0.00   584.41 10243.59

1490 NH CARD USED
*SECNO 8.480
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XHL      XHCH     XHR      WTN      ELHIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST

    8.48     8.34  2377.24  2377.24     0.00  2379.34     2.09     2.26     0.08  2368.80
  14378.     4026.    9923.     429.     810.     731.     85.     450.     77.   2369.20
    0.28     4.97    13.57     5.05    0.055    0.037    0.060    0.000  2368.70  9484.54
 0.007113    425.     390.     370.       20       11        0     0.00   380.60 10065.14

1490 MH CARD USED
SECNO 8.570

3301 HV CHANGED MORE THAN HVINS

    8.57     8.88  2380.58     0.00     0.00  2381.36     0.78     1.89     0.13  2377.30
  14378.     7367.    6666.     345.    1938.     696.    107.     473.     82.   2371.70
    0.30     3.80     9.58     3.22    0.052    0.030    0.060    0.000  2371.70  9455.91
 0.002528    440.     500.     500.        2        0        0     0.00   607.19 10063.11

1490 MH CARD USED
SECNO 8.670
    8.67     7.32  2381.92     0.00     0.00  2382.62     0.70     1.26     0.01  2378.00
  1[illegible].      4620.    7547.    2210.    1698.     854.    638.     504.     92.   2374.60
    0.33     2.72     8.84     3.47    0.057    0.029    0.050    0.000  2374.60  9075.34
 0.002858    410.     500.     555.        3        0        0     0.00  1185.25 10260.39

1490 MH CARD USED
SECNO 8.760

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.76     8.34  2383.84  2383.84     0.00  2385.19     1.35     1.89     0.19  2378.70
  13760.     3652.    6224.    3884.     954.     477.    853.     534.    103.   2383.30
    0.34     3.83    13.04     4.55    0.050    0.025    0.054    0.000  2375.50  9482.17
 0.005653    450.     500.     515.       20       12        0     0.00   937.57 10419.74

CCHV=   0.300 CEHV=   0.500
1490 MH CARD USED
SECNO 8.860
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

8.86	5.87	2387.07	0.00	0.00	2387.81	0.74	2.44	0.18	2381.20
12252.	1900.	7211.	3141.	618.	829.	1223.	566.	119.	2382.80
0.37	3.07	8.70	2.57	0.050	0.027	0.052	0.000	2381.20	9666.37
0.003357	470.	510.	670.	2	0	0	0.00	1384.67	11051.04

*SECNO 8.947

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLFA= 2390.70 FLREA= 2393.00

8.95	7.85	2392.75	2392.75	0.00	2394.22	1.47	1.76	0.37	2390.70
[illegible]	3135.	9117.	0.	988.	818.	0.	591.	130.	2393.00
0.38	3.17	11.14	0.00	0.050	0.023	0.000	0.000	2384.90	9377.39
0.003762	450.	480.	535.	20	8	0	0.00	606.63	9984.23

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SR NOT SPECIFIED
5227 DOWNSTREAM ELEV IS 2391.12 ,NOT 2392.75 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDIEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.56	2.63	0.00	96.90	9.24	534.40	0.00	2384.90	2384.90

*SECNO 8.953
PRESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
2404.58	2397.64	0.00	6689.	5662.	554.	745.	2393.40	2395.70

8.95	9.43	2394.23	0.00	0.00	2395.27	1.05	1.05	0.00	2391.70
12252.	1267.	10967.	18.	778.	1267.	27.	592.	130.	2393.60
[illegible].38	1.63	8.65	0.67	0.050	0.025	0.040	0.000	2384.80	9360.91
0[illegible].82	30.	30.	30.	3	0	5	0.00	692.22	10053.14

```
 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
          QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      STA
 SLOPE    XLOBL    XLCH     XLOBR    JTRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


SECNO 9.060

3301 HV CHANGED MORE THAN HVINS

   9.06     4.97  2395.17     0.00     0.00  2396.87     1.70     1.27     0.33  2401.40
  12252.      0.    12217.     35.      0.     1165.     11.      614.     137.   2390.50
   0.40     0.00    10.49     3.35    0.000    0.025    0.040    0.000  2390.20  9954.07
0.004261    605.     365.     540.       2        0        0     0.00   265.43 10219.50


CHV=   0.100 CEHV=   0.300
190 NH CARD USED
*SECNO 9.160

301 HV CHANGED MORE THAN HVINS

   9.16     5.71  2397.91     0.00     0.00  2398.78     0.87     1.83     0.08  2393.40
  12252.    4744.    6873.    635.    1035.     760.    101.     631.     141.   2394.20
   0.42     4.58     9.04     6.31    0.045    0.025    0.025    0.000  2392.20  9626.86
0.0[illegible]37    475.     500.     460.       3        0        0     0.00   499.81 10126.66


1490 NH CARD USED
SECNO 9.250

3301 HV CHANGED MORE THAN HVINS

685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   9.25     4.85  2402.15  2402.15     0.00  2403.66     1.51     2.09     0.19  2397.90
  12252.    4752.    7324.    176.    1083.     599.     38.     652.     147.   2397.60
   0.43     4.39    12.23     4.66    0.050    0.025    0.040    0.000  2397.30  9509.80
0.005524    305.     500.     510.      20       15        0     0.00   554.75 10064.55
```

THIS RUN EXECUTED MON, JUN 01 1987 15:43:58

****
HEC2 RELEASE DATED NOV 76 UPDATED MAY 1984
ERROR CORR - 01,02,03,04,05,06
MODIFICATION - 50,51,52,53,54,55,56
****

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

SOLS WASH REACH 5

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
*	7.300	2338.46	5.16	2340.00	10.47	2333.30	0.00	195.79	9840.53	10036.32	353.59	3669.32	58.09
	7.300	2340.37	7.07	2342.60	13.17	2333.30	0.00	207.51	9832.37	10039.89	1447.01	6679.06	147.9[redacted]
	7.300	2341.13	7.83	2343.66	14.23	2333.30	0.00	212.17	9829.13	10041.30	2066.64	8103.53	199.8[redacted]
	7.300	2342.65	9.35	2345.76	16.09	2333.30	0.00	221.21	9822.94	10044.14	3577.29	11166.20	331.51
*	7.440	2342.84	4.24	2344.08	9.28	2338.60	745.00	274.15	9675.96	10201.66	70.56	3765.43	245.0[redacted]
	7.440	2344.58	5.98	2345.91	10.21	2338.60	745.00	553.49	9669.41	10239.77	746.89	6698.23	828.88
	7.440	2345.49	6.89	2346.64	9.85	2338.60	745.00	573.96	9665.97	10244.23	1315.33	7751.64	1303.00
	7.440	2347.37	8.77	2348.32	9.42	2338.60	745.00	594.26	9658.89	10253.16	2693.59	9957.80	2473.[redacted]
	7.530	2345.97	4.37	2347.35	10.67	2341.60	500.00	189.66	9819.15	10060.50	937.61	2947.79	195.59
*	7.530	2348.02	6.42	2349.58	12.00	2341.60	500.00	519.14	9812.57	10425.66	2119.42	5353.32	801.[redacted]
*	7.530	2348.72	7.12	2350.25	12.35	2341.60	500.00	649.27	9810.34	10467.47	2619.22	6222.13	1528.[redacted]
*	7.530	2349.78	8.18	2351.41	13.46	2341.60	500.00	702.08	9806.93	10509.01	3687.46	7962.37	3425.17
*	7.579	2348.51	4.91	2350.99	12.62	2343.60	235.00	65.80	9900.94	9966.74	0.00	4081.00	0.[redacted]
*	7.579	2351.50	7.90	2355.43	15.93	2343.60	235.00	65.80	9900.94	9966.74	0.00	8274.00	0.00
*	7.579	2352.73	9.13	2357.35	17.24	2343.60	235.00	67.43	9900.08	9967.51	3.38	10363.26	3.35
*	7.579	2356.03	12.43	2361.22	18.32	2343.60	235.00	155.10	9900.00	10055.10	6.23	14989.17	79.[redacted]
*	7.590	2350.17	6.57	2351.55	9.44	2343.60	50.00	65.80	9900.94	9966.74	0.00	4081.00	0.00
*	7.590	2354.02	10.42	2356.27	12.05	2343.60	50.00	67.62	9900.00	9967.62	3.06	8267.87	3.[redacted]
*	7.590	2353.67	10.07	2357.46	15.64	2343.60	50.00	67.59	9900.00	9967.59	3.72	10362.58	3.[redacted]
*	7.590	2356.32	12.72	2361.22	17.84	2343.60	50.00	155.10	9900.00	10055.10	6.27	14935.78	132.96
	7.630	2350.75	3.75	2352.37	10.22	2347.00	190.00	120.53	9934.90	10055.43	0.00	4081.00	0.[redacted]
	7.630	2357.04	10.04	2357.53	5.95	2347.00	190.00	285.68	9786.32	10072.00	1023.16	7250.27	0.56
	7.630	2359.24	12.24	2359.67	5.73	2347.00	190.00	302.84	9769.16	10072.00	1657.72	8691.64	10.64
	7.630	2363.67	16.67	2364.06	5.57	2347.00	190.00	337.00	9735.00	10072.00	3227.38	11814.09	33.[redacted]
	7.720	2354.18	4.18	2354.89	7.38	2350.00	500.00	226.76	9948.86	10195.97	28.51	2764.08	1288.40
	7.720	2357.42	7.42	2357.98	6.65	2350.00	500.00	264.14	9940.83	10204.97	90.85	4666.13	3517.[redacted]
	7.720	2359.49	9.49	2359.95	6.01	2350.00	500.00	275.04	9935.70	10210.74	138.51	5467.35	4764.[redacted]
	7.720	2363.83	13.83	2364.21	5.42	2350.00	500.00	295.00	9925.00	10220.00	275.41	7311.47	7488.12

SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
7.820	2357.33	3.73	2358.60	9.20	2353.60	500.00	219.55	9927.89	10147.45	14.55	3939.50	126.95
7.820	2358.86	5.26	2360.81	11.62	2353.60	500.00	237.96	9925.12	10163.09	43.94	7633.48	596.58
7.820	2359.73	6.13	2361.75	11.94	2353.60	500.00	248.37	9923.56	10171.93	64.95	9382.52	922.53
7.820	2363.91	10.31	2364.99	9.00	2353.60	500.00	314.20	9916.00	10247.00	159.18	12681.45	2234.38
7.884	2360.12	5.52	2362.30	11.84	2354.60	345.00	82.87	9874.19	9957.06	0.04	4080.96	0.00
7.884	2362.91	8.31	2365.99	14.21	2354.60	345.00	147.12	9824.99	10089.59	153.23	8120.22	0.55
7.884	2364.84	10.24	2367.13	12.78	2354.60	345.00	410.23	9775.89	10186.12	300.59	9331.41	538.00
7.884	2366.44	11.84	2368.86	13.91	2354.60	345.00	463.08	9735.00	10198.08	1163.49	11980.26	1931.24
7.891	2362.40	7.30	2362.70	4.39	2355.10	30.00	219.21	9868.96	10088.17	0.00	4081.00	0.00
7.891	2367.57	12.47	2367.76	3.52	2355.10	30.00	373.01	9790.25	10163.26	44.51	8200.69	28.80
7.891	2368.61	13.51	2368.84	3.89	2355.10	30.00	402.23	9775.49	10177.72	70.04	10212.71	67.25
7.891	2370.05	14.95	2370.40	4.84	2355.10	30.00	424.20	9770.00	10194.20	224.16	14671.15	179.69
7.920	2362.72	7.02	2362.90	3.38	2355.70	180.00	308.78	9767.96	10139.84	341.05	3679.34	60.61
7.920	2367.66	11.96	2367.82	3.48	2355.70	180.00	409.04	9733.35	10153.53	1278.29	6789.74	205.97
7.920	2368.72	13.02	2368.91	3.89	2355.70	180.00	428.10	9726.98	10156.45	1733.01	8358.76	278.23
7.920	2370.20	14.50	2370.50	4.88	2355.70	180.00	444.37	9716.02	10160.39	2794.07	11833.68	447.24
8.000	2363.01	6.11	2363.18	3.74	2356.90	425.00	515.07	9694.92	10217.52	321.72	2882.26	877.01
8.000	2367.86	10.96	2367.95	2.96	2356.90	425.00	646.54	9567.78	10230.60	1931.94	4640.14	1701.91
8.000	2368.96	12.06	2369.06	3.21	2356.90	425.00	677.55	9533.04	10233.55	2657.04	5609.09	2103.86
8.000	2370.56	13.66	2370.71	3.87	2356.90	425.00	704.91	9532.97	10237.88	4299.23	7776.69	2999.07
8.100	2363.87	3.97	2364.77	8.98	2359.90	500.00	510.86	9860.65	10371.52	90.80	2853.40	1136.79
8.100	2367.92	8.02	2368.11	4.95	2359.90	500.00	869.32	9610.77	10480.09	1193.56	3478.40	3602.04
8.100	2369.03	9.13	2369.20	4.93	2359.90	500.00	886.21	9605.80	10492.01	1802.86	3981.02	4586.11
8.100	2370.66	10.76	2370.85	5.41	2359.90	500.00	908.94	9597.17	10506.11	3132.27	5205.41	6737.32
8.190	2366.28	4.08	2367.27	8.92	2362.20	500.00	500.84	9866.64	10367.48	47.34	3206.69	826.97
8.190	2367.88	5.68	2368.83	9.80	2362.20	500.00	656.33	9758.28	10414.62	529.51	5015.53	2728.97
8.190	2369.06	6.85	2369.72	8.69	2362.20	500.00	732.94	9703.73	10436.67	1084.11	5413.63	3872.26
8.190	2370.72	8.52	2371.29	8.56	2362.20	500.00	837.63	9640.13	10477.76	2311.85	6681.16	6081.99
8.290	2368.41	4.41	2369.04	8.22	2364.00	500.00	387.99	9377.55	10354.07	96.08	2068.63	1916.28
8.290	2369.55	5.55	2370.58	11.21	2364.00	500.00	564.74	9844.66	10409.40	325.11	3635.81	4313.07
8.290	2370.03	6.03	2371.16	12.01	2364.00	500.00	619.32	9805.17	10424.49	531.71	4266.41	5571.88
8.290	2371.36	7.36	2372.36	11.89	2364.00	500.00	719.63	9719.54	10439.18	1367.66	5245.15	8462.19
8.400	2370.50	3.90	2371.43	9.33	2366.60	615.00	261.39	9898.71	10176.55	9.80	2470.85	1600.36
8.400	2371.96	5.36	2373.38	11.91	2366.60	615.00	392.29	9834.86	10229.03	262.93	4540.10	3470.96
8.400	2372.44	5.84	2374.11	13.12	2366.60	615.00	438.02	9795.21	10233.22	482.59	5489.73	4397.68
8.400	2373.59	6.99	2375.42	14.23	2366.60	615.00	584.41	9659.18	10243.59	1398.22	7259.77	6417.00
8.480	2372.84	4.14	2374.60	10.80	2368.70	390.00	120.19	9873.52	10053.55	83.81	3612.89	170.30
8.480	2375.56	6.86	2377.18	11.17	2368.70	390.00	358.27	9702.43	10060.71	1167.36	6472.12	221.52
8.480	2376.21	7.51	2377.93	11.84	2368.70	390.00	368.83	9693.37	10062.42	2020.36	7556.60	285.05
8.480	2377.24	8.54	2379.34	13.57	2368.70	390.00	380.60	9684.54	10065.14	4025.63	9923.05	429.31

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	8.570	2377.07	5.37	2377.74	7.31	2371.70	500.00	338.64	9493.80	10053.38	953.91	2806.87	106.22
	8.570	2378.65	6.95	2379.41	8.80	2371.70	500.00	594.02	9463.85	10057.87	3093.03	4567.08	200.89
	8.570	2379.28	7.58	2380.05	9.11	2371.70	500.00	598.35	9461.24	10059.59	4358.28	5259.29	244.44
	8.570	2380.58	8.88	2381.36	9.58	2371.70	500.00	607.19	9455.91	10063.11	7366.54	6666.43	345.03
*	8.670	2379.00	4.40	2379.89	8.09	2374.60	500.00	474.35	9129.09	10164.17	271.73	3346.07	249.20
	8.670	2380.29	5.69	2381.20	9.03	2374.60	500.00	857.76	9114.40	10203.31	1440.71	5483.06	937.23
	8.670	2380.80	6.20	2381.67	9.14	2374.60	500.00	957.59	9087.40	10219.06	2288.53	6258.93	1314.53
	8.670	2381.92	7.32	2382.62	8.84	2374.60	500.00	1185.25	9075.34	10260.59	4620.31	7547.28	2210.41
*	8.760	2383.39	7.89	2383.53	4.17	2375.30	500.00	913.94	9485.48	10401.42	849.36	1808.67	1037.77
*	8.760	2383.38	7.88	2383.99	8.50	2375.50	500.00	915.52	9485.55	10401.07	1719.16	3677.98	2106.86
*	8.760	2383.34	7.84	2384.34	10.82	2375.30	500.00	913.82	9485.81	10397.63	2128.11	4646.89	2643.94
*	8.760	2383.84	8.34	2385.19	13.04	2375.50	500.00	937.57	9482.17	10419.74	3652.01	6223.80	3884.19
*	8.860	2384.85	3.65	2385.59	7.32	2381.20	510.00	486.72	9749.76	10404.22	128.43	2886.69	242.88
*	8.860	2385.82	4.62	2386.67	8.44	2381.20	510.00	903.17	9717.80	10677.94	637.58	4937.02	1051.4
*	8.860	2386.16	4.96	2387.06	8.72	2381.20	510.00	1020.41	9704.04	10724.45	962.25	5802.92	1559.85
	8.860	2387.07	5.87	2387.81	8.70	2381.20	510.00	1384.67	9666.37	11051.04	1900.01	7210.89	3141.09
*	8.947	2389.36	4.46	2390.73	9.40	2384.90	480.00	130.76	9835.24	9966.00	0.00	3258.00	0.0
*	8.947	2391.42	6.52	2392.63	9.38	2384.90	480.00	554.62	9419.70	9974.32	754.39	5871.61	0.00
*	8.947	2391.92	7.02	2393.19	9.88	2384.90	480.00	573.02	9403.33	9976.36	1434.22	6890.78	0.0
*	8.947	2392.75	7.85	2394.22	11.14	2384.90	480.00	606.63	9377.59	9984.21	3134.51	9117.48	0.0
	8.953	2390.34	5.34	2390.72	4.95	2384.80	30.00	146.37	9816.31	9962.87	0.00	3258.00	0.00
*	8.953	2392.37	7.38	2393.09	6.81	2384.80	30.00	343.48	9409.79	9967.14	23.74	6602.26	0.0
*	8.953	2393.78	8.98	2394.38	6.46	2384.80	30.00	621.20	9372.86	9994.06	609.79	7714.74	0.48
*	8.953	2394.23	9.43	2395.27	8.65	2384.80	30.00	692.22	9360.91	10053.14	1266.62	10967.26	18.12
*	9.060	2392.35	2.15	2393.22	7.49	2390.20	565.00	236.70	9960.00	10216.78	0.00	3254.00	4.0
*	9.060	2393.39	3.19	2394.77	9.44	2390.20	565.00	259.90	9957.87	10217.78	0.00	6613.85	12.15
	9.060	2394.37	4.17	2395.54	8.70	2390.20	565.00	262.93	9953.79	10218.72	0.00	8304.97	20.0
	9.060	2395.17	4.97	2396.87	10.49	2390.20	565.00	265.43	9954.07	10219.50	0.00	12216.77	35.1
	9.160	2395.55	3.35	2395.95	5.96	2392.20	500.00	458.13	9650.49	10108.63	1132.74	2079.32	45.94
	9.160	2396.59	4.39	2397.19	7.42	2392.20	500.00	481.43	9640.09	10121.52	2476.10	3935.65	214.
	9.160	2396.79	4.59	2397.60	8.66	2392.20	500.00	484.18	9638.11	10122.29	3133.34	4891.89	299.77
	9.160	2397.91	5.71	2398.78	9.04	2392.20	500.00	499.81	9626.86	10126.66	4743.54	6873.41	635.05
*	9.250	2400.14	2.84	2400.90	7.75	2397.30	500.00	492.01	9363.21	10057.22	613.38	2610.30	34.
*	9.250	2401.07	3.77	2402.13	9.80	2397.30	500.00	527.26	9533.36	10060.62	2050.61	4493.77	81.62
*	9.250	2401.43	4.13	2402.64	10.63	2397.30	500.00	536.50	9525.44	10061.94	2840.34	5376.50	108.
*	9.250	2402.15	4.85	2403.66	12.23	2397.30	500.00	554.75	9509.80	10064.55	4752.48	7323.99	175.

RY OF ERRORS AND SPECIAL NOTES

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CAUTION SECNO=    7.884  PROFILE= 3  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=    7.891  PROFILE= 1  HYDRAULIC JUMP D.S.
CAUTION SECNO=    7.891  PROFILE= 2  HYDRAULIC JUMP D.S.
CAUTION SECNO=    7.891  PROFILE= 3  HYDRAULIC JUMP D.S.
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FLOOD INSURANCE ZONE DATA FOR SOUTH WASH REACH 5

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
7.300	0.	-2.67	-0.76	1.32
7.440	745.	-2.65	-0.91	1.88
7.530	1245.	-2.74	-0.69	1.06
7.579	1480.	-4.22	-1.24	3.30
7.590	1530.	-3.50	0.35	2.65
7.630	1720.	-8.48	-2.19	4.43
7.720	2220.	-5.30	-2.07	4.34
7.820	2720.	-2.41	-0.87	4.18
7.884	3065.	-4.72	-1.93	1.60
7.891	3095.	-6.21	-1.04	1.44
7.920	3275.	-6.00	-1.05	1.48
8.000	3700.	-5.94	-1.10	1.61
8.100	4200.	-5.16	-1.11	1.63
8.190	4700.	-2.77	-1.17	1.66
8.290	5200.	-1.62	-0.48	1.33
8.400	5815.	-1.94	-0.48	1.15
8.480	6205.	-3.37	-0.65	1.04
8.570	6705.	-2.22	-0.63	1.29
8.670	7205.	-1.80	-0.52	1.11
8.760	7705.	0.04	0.04	0.50
8.860	8215.	-1.31	-0.34	0.91
8.947	8695.	-2.56	-0.50	0.83
8.953	8725.	-3.44	-1.41	0.45
9.060	9290.	-2.02	-0.98	0.80
9.160	9790.	-1.24	-0.20	1.12
9.250	10290.	-1.30	-0.36	0.72
WEIGHTED AVG FOR REACH		-3.02	-0.84	1.64

FHF FOR THE REACH = 030 WITH 47.2 PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 6

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC.	TOTAL LENGTH	WEIGHTED AVG DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
19	1900.	-3.64	-0.97	2.18

FHF FOR REACH 1 = 035 WITH 84. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 7

23	2300.	-6.07	-2.08	4.36

FHF FOR REACH 2 = 060 WITH 100. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A12

30	3000.	-3.53	-1.35	3.79

FHF FOR REACH 3 = 035 WITH 86. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 7

47	4700.	-5.23	-1.12	1.60

FHF FOR REACH 4 = 050 WITH 82. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A10

77	7700.	-2.02	-0.55	1.18

FHF FOR REACH 5 = 020 WITH 80. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 4

81	8100.	-0.48	-0.11	0.66

FHF FOR REACH 6 = 005 WITH 100. PERCENT OF THE REACH WITHIN 0.5 FEET
ZONE FOR THE REACH = A 1

99	9900.	-2.02	-0.69	0.83

FHF FOR REACH 7 = 020 WITH 94. PERCENT OF THE REACH WITHIN 1.0 FEET
ZONE FOR THE REACH = A 4

102	10200.	-1.27	-0.28	0.91

FH[illegible]OR REACH 8 = 013 WITH 100. PERCENT OF THE REACH WITHIN 0.5 FEET
ZO[illegible]OR THE REACH = A 3

THIS RUN EXECUTED MON, JUN 01 1987 15:44:04

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**********************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
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Floodway, Reach #1
Cross Sec. .030-2.060

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH1.FLOOD.OUT

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

WWWW  W     WWW  WWW   W  WWWWW WWW   W
W  W W  W W  W W  W W  WW W    W  W WW
W  W W  W W  W W  W W  W WWWW W  W  W
WWWW WWWWW W W W WWWW W     W W W W  W
W      W  W  W    W  W     W W  W  W
W      W  W  W   W  W  W  W W  W  W
W      W  WWW WWW  WWW  WWW  WWW WWW


 WWW  WWW W    WWW      WWWW WWWWW WWW  WWW W  W  W      WWWWW W    WWW  WWW WWWW      WWW W  W WWWWW
W  W W  W W   W  W      W  W W    W  W W  W W W  WW      W   W  W  W W  W W  W     W  W W  W  W
W   W  W W   W          W  W W    W  W W   W W  W       W   W  W  W W  W W  W     W  W W  W  W
 WWW W  W W    WW       WWWW WWWW WWWWW W   WWWWW W      WWWW W   W W  W W  W     W  W W  W  W
   W W  W W       W     W W  W   W  W W   W  W  W      W   W  W  W W  W W  W     W  W W  W  W
W  W W  W W   W  W  WW W  W W   W  W W  W W  W  WW  WW W   W  W  W W  W W  W WW W  W W  W  W
 WWW  WWW WWWWW WWW  WW W  W WWWWW W  W WWW W  W WWW  WW W   WWWWW WWW  WWW WWWW  WW  WWW  WWW  W

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Label: PRT002 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH1.FLOOD.OUT
File last modified: 86-10-30.14:56:44.Thu

Spooled: 86-11-18.14:29:08.Tue [Spooler rev 19.4.5]
Started: 86-11-18.14:29:32.Tue on: AHLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  RUN DATE THU, OCT 30 1986 TIME 14:47:31          *
*****************************************************
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*************************************
*  U.S. ARMY CORPS OF ENGINEERS     *
*  THE HYDROLOGIC ENGINEERING CENTER *
*  609 SECOND STREET, SUITE D       *
*  DAVIS, CALIFORNIA 95616          *
*  (916) 440-2105 (FTS) 448-2105    *
*************************************
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X     X  XXXXXXX   XXXXX            XXXXX
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X     X  X       X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X       X               X
X     X  X       X     X         X
X     X  XXXXXXX   XXXXX          XXXXXXX
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THIS RUN EXECUTED THU, OCT 30 1986 14:47:49

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*****************************************
 HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
 ERROR CORR -  01,02,03,04,05,06
 MODIFICATION -  50,51,52,53,54,55,56
*****************************************

C
T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3      100 YEAR DISCHARGE - R1      FLOODWAY ANALYSIS

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

      0.       2.       0.       0.  0.004000     0.00     0.0      0.  2040.140   0.000

J2  NPROF    IPLOT    PRFVS    XSECV    XSECH     FN      ALLDC    IBW     CHNIM   ITRACE

     1.000    0.000   -1.000    0.000    0.000    0.000    0.000   0.000   0.000   15.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38.000    1.000    8.000    3.000   26.000   42.000    5.000   4.000  53.000  54.000

    13.000   14.000   15.000  200.000    0.000    0.000    0.000   0.000   0.000   0.000

NC      0.000      0.000      0.000      0.100      0.300      0.000      0.000      0.000      0.000      0.000
QT      2.000  13045.000  13045.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000
NH      4.000      1.000   9476.000      0.065  10104.000      0.025  10340.000      0.065  10722.000      0.000
ET      0.000      0.000      4.100   8730.000  10682.000      0.000      0.000      0.000      0.000      0.000
          RIVER MILE 0.0 - PROFILE BASE LINE FOR HASSAYAMPA
X1      0.030     21.000  10104.000  10340.000      0.000      0.000      0.000      0.000      0.000      0.000
GR   2044.500   8655.000   2044.400   8730.000   2043.700   8842.000   2043.300   8943.000   2042.600   9054.000
GR   2041.800   9168.000   2041.300   9308.000   2040.700   9395.000   2040.000   9476.000   2039.500   9661.000
GR   2038.700   9840.000   2038.200  10000.000   2038.100  10104.000   2037.400  10183.000   2037.100  10258.000
GR   2036.200  10340.000   2036.200  10440.000   2034.800  10571.000   2033.500  10593.000   2032.300  10682.000
GR   2047.500  10722.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000      0.000

NH      4.000      1.000   9438.000      0.065   9963.000      0.025  10044.000      0.065  10935.000      0.000
ET      0.000      0.000      4.100   9500.000  10045.000      0.000      0.000      0.000      0.000      0.000
X1      0.130     42.000   9963.000  10044.000    500.000    560.000    505.000      0.000      0.000      0.000
GR   2048.000   8515.000   2046.200   8945.000   2045.200   9041.000   2044.300   9141.000   2043.700   9248.000
GR   2044.300   9284.000   2044.800   9293.000   2046.300   9299.000   2046.600   9312.000   2043.800   9326.000
GR   2042.700   9402.000   2044.300   9419.000   2042.800   9438.000   2045.000   9459.000   2044.400   9519.000
GR   2044.300   9587.000   2043.500   9635.000   2044.000   9692.000   2043.700   9724.000   2042.700   9748.000
GR   2043.100   9813.000   2043.400   9869.000   2042.900   9928.000   2040.000   9963.000   2040.000  10000.000
GR   2040.000  10026.000   2046.400  10041.000   2047.600  10064.000   2047.600  10126.000   2047.400  10200.000
GR   2049.200  10225.000   2049.800  10307.000   2049.400  10380.000   2047.500  10442.000   2047.500  10486.000
GR   2051.300  10519.000   2052.400  10579.000   2052.900  10643.000   2052.000  10712.000   2050.700  10770.000
GR   2049.600  10831.000   2048.300  10935.000      0.000      0.000      0.000      0.000      0.000      0.000
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NH	3.000	0.065	9963.000	0.025	10037.000	0.065	10788.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9780.000	10170.000	0.000	0.000	0.000	0.000	0.000
X1	0.220	27.000	9899.000	10019.000	465.000	515.000	500.000	0.000	0.000	0.000
GR	2050.300	9433.000	2049.600	9473.000	2049.700	9508.000	2050.400	9516.000	2050.400	9590.000
GR	2050.400	9669.000	2051.500	9726.000	2051.300	9799.000	2051.000	9899.000	2044.600	9938.000
GR	2043.000	9963.000	2043.000	10000.000	2043.000	10019.000	2058.400	10037.000	2039.300	10170.000
GR	2060.600	10292.000	2061.600	10331.000	2061.400	10381.000	2057.800	10430.000	2056.900	10485.000
GR	2056.400	10541.000	2058.500	10573.000	2060.400	10625.000	2063.400	10628.000	2063.400	10671.000
GR	2062.000	10732.000	2061.700	10788.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
NH	4.000	1.000	9533.000	0.065	9905.000	0.025	10101.000	0.065	10414.000	0.000
ET	0.000	0.000	4.100	9870.000	10102.000	0.000	0.000	0.000	0.000	0.000
X1	0.360	23.000	9969.000	10046.000	615.000	785.000	770.000	0.000	0.000	0.000
GR	2055.200	9433.000	2055.800	9497.000	2055.700	9533.000	2056.300	9538.000	2056.400	9594.000
GR	2056.100	9667.000	2056.800	9752.000	2056.800	9866.000	2057.500	9905.000	2053.300	9942.000
GR	2049.200	9969.000	2048.400	9996.000	2048.400	10000.000	2049.400	10046.000	2054.000	10061.000
GR	2060.900	10101.000	2066.000	10136.000	2065.800	10149.000	2066.800	10235.000	2066.600	10290.000
GR	2066.300	10356.000	2066.200	10387.000	2072.800	10414.000	0.000	0.000	0.000	0.000
NC	0.065	0.065	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.110	9909.000	10111.000	0.000	0.000	0.000	0.000	0.000
	U.S. HIGHWAY 89 BRIDGE CROSSING									
X1	0.400	17.000	9910.000	10110.000	250.000	105.000	170.000	0.707	0.000	0.000
GR	2062.800	9546.000	2063.200	9577.000	2064.100	9661.000	2063.200	9675.000	2062.100	9718.000
GR	2064.700	9749.000	2064.700	9838.000	2064.700	9872.000	2051.800	9910.000	2051.700	9948.000
GR	2051.600	10000.000	2050.600	10110.000	2058.200	10134.000	2063.200	10162.000	2063.200	10216.000
GR	2065.800	10291.000	2066.400	10342.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.900	1.560	2.630	0.000	157.000	10.000	1720.000	0.000	0.000	0.000
ET	0.000	0.000	4.110	9932.000	10162.000	0.000	0.000	0.000	0.000	0.000
X1	0.120	17.000	9933.000	10161.000	135.000	135.000	135.000	0.707	0.000	0.000
X2	0.000	0.000	1.000	2061.700	2065.000	0.000	0.000	1.330	0.707	0.000
GR	2063.500	9428.000	2064.200	9453.000	2064.200	9541.000	2064.200	9645.000	2064.700	9736.000
GR	2064.000	9886.000	2052.300	9933.000	2052.500	10000.000	2052.500	10060.000	2053.300	10090.000
GR	2052.300	10130.000	2051.400	10161.000	2062.200	10208.000	2063.600	10289.000	2064.900	10366.000
GR	2066.400	10432.000	2066.500	10525.000	0.000	0.000	0.000	0.000	0.000	0.000
BT	2.000	9910.000	2065.000	2061.700	10130.000	2065.000	2061.700	0.000	0.000	0.000
ET	0.000	0.000	4.100	9870.000	10470.000	0.000	0.000	0.000	0.000	0.000
X1	0.470	22.000	9921.000	10038.000	190.000	260.000	230.000	0.000	0.000	0.000
GR	2063.500	9738.000	2064.000	9790.000	2063.300	9856.000	2062.300	9921.000	2054.900	9941.000
GR	2053.400	9961.000	2053.600	10000.000	2053.600	10024.000	2059.900	10038.000	2060.200	10145.000
GR	2059.700	10268.000	2054.300	10325.000	2054.700	10334.000	2057.900	10363.000	2058.600	10470.000
GR	2058.900	10536.000	2058.900	10574.000	2059.800	10597.000	2060.100	10664.000	2060.100	10711.000
GR	2064.000	10724.000	2078.400	10770.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.065	0.065	0.025	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9870.000	10665.000	0.000	0.000	0.000	0.000	0.000

X1	0.500	32.000	9919.000	10041.000	200.000	220.000	200.000	0.000	0.000	0.000
GR	2064.000	9600.000	2063.200	9622.000	2062.600	9628.000	2062.400	9665.000	2062.900	9694.000
GR	2062.200	9740.000	2061.900	9800.000	2062.500	9843.000	2062.200	9919.000	2055.500	9958.000
GR	2055.500	10000.000	2055.500	10041.000	2059.100	10058.000	2059.200	10079.000	2062.800	10114.000
GR	2062.800	10129.000	2062.000	10146.000	2062.900	10204.000	2062.600	10253.000	2061.300	10316.000
GR	2060.400	10373.000	2059.800	10426.000	2058.100	10444.000	2058.300	10437.000	2060.700	10470.000
GR	2061.300	10505.000	2060.600	10530.000	2060.900	10569.000	2061.800	10634.000	2062.200	10663.000
GR	2067.500	10671.000	2073.600	10705.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	2.000	14459.000	14459.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	1.000	9446.000	0.065	9928.000	0.025	10075.000	0.065	10575.000	0.000
ET	0.000	0.000	4.100	9830.000	10545.000	0.000	0.000	0.000	0.000	0.000

CONFLUENCE OF BRAIDED CHANNELS

X1	0.600	48.000	9928.000	10075.000	515.000	505.000	505.000	0.000	0.000	0.000
GR	2070.300	8792.000	2069.000	8819.000	2070.000	8838.000	2065.600	8862.000	2063.800	8891.000
GR	2064.800	8917.000	2065.400	8930.000	2064.900	9013.000	2064.300	9064.000	2065.000	9104.000
GR	2065.200	9168.000	2065.400	9230.000	2064.800	9320.000	2064.200	9403.000	2065.000	9446.000
GR	2065.100	9486.000	2064.300	9503.000	2065.300	9548.000	2066.100	9615.000	2066.800	9671.000
GR	2066.900	9736.000	2066.200	9798.000	2066.100	9807.000	2066.100	9842.000	2066.400	9859.000
GR	2065.800	9928.000	2059.700	9954.000	2059.900	10000.000	2059.900	10052.000	2066.400	10075.000
GR	2067.100	10097.000	2066.800	10124.000	2067.900	10141.000	2067.000	10154.000	2065.500	10178.000
GR	2066.800	10195.000	2067.000	10225.000	2066.400	10257.000	2067.100	10334.000	2066.400	10403.000
GR	2063.900	10431.000	2064.800	10476.000	2065.100	10494.000	2062.700	10520.000	2063.100	10532.000
GR	2069.700	10552.000	2070.400	10561.000	2069.700	10575.000	0.000	0.000	0.000	0.000
NH	6.000	1.000	9332.000	0.065	9720.000	0.025	9760.000	0.065	9973.000	0.025
NH	10050.000	0.065	10300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	2.000	14413.000	14413.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9640.000	10279.000	0.000	0.000	0.000	0.000	0.000
X1	0.490	44.000	9973.000	10050.000	495.000	490.000	510.000	0.000	0.000	0.000
GR	2074.700	8940.000	2072.300	8966.000	2069.300	9004.000	2069.300	9025.000	2068.700	9034.000
GR	2069.000	9080.000	2069.400	9145.000	2069.700	9209.000	2069.800	9269.000	2069.600	9332.000
GR	2069.400	9369.000	2069.900	9423.000	2069.900	9472.000	2064.800	9494.000	2064.900	9509.000
GR	2070.200	9543.000	2070.300	9609.000	2070.500	9663.000	2070.500	9702.000	2065.200	9720.000
GR	2064.600	9745.000	2064.700	9758.000	2070.500	9775.000	2071.000	9808.000	2070.200	9868.000
GR	2069.800	9918.000	2067.600	9950.000	2064.300	9973.000	2064.200	10000.000	2064.200	10034.000
GR	2065.800	10050.000	2064.400	10063.000	2065.100	10071.000	2067.300	10088.000	2067.600	10100.000
GR	2065.400	10118.000	2066.900	10124.000	2065.300	10135.000	2070.300	10152.000	2070.200	10184.000
GR	2068.600	10222.000	2068.600	10241.000	2068.200	10264.000	2072.100	10288.000	2072.800	10297.000
GR	2072.800	10300.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.065	9550.000	0.025	9590.000	0.065	9959.000	0.025	10075.000	0.000
ET	0.000	0.000	4.100	9520.000	10060.000	0.000	0.000	0.000	0.000	0.000
X1	0.790	35.000	9959.000	10040.000	485.000	495.000	500.000	0.000	0.000	0.000
GR	2080.600	8960.000	2078.300	8976.000	2077.700	9002.000	2074.700	9041.000	2068.400	9080.000
GR	2068.500	9088.000	2073.400	9126.000	2073.200	9135.000	2073.200	9149.000	2074.300	9214.000
GR	2074.000	9245.000	2074.500	9274.000	2074.100	9343.000	2074.400	9404.000	2074.600	9472.000
GR	2074.300	9518.000	2068.200	9557.000	2067.700	9585.000	2074.400	9598.000	2073.600	9644.000
GR	2068.600	9666.000	2073.700	9685.000	2073.900	9699.000	2072.600	9712.000	2074.200	9741.000
GR	2074.600	9794.000	2075.200	9883.000	2073.900	9911.000	2070.300	9940.000	2069.900	9959.000
GR	2068.900	10000.000	2068.900	10040.000	2077.100	10059.000	2078.000	10067.000	2078.200	10075.000

NH	6.000	1.000	8769.000	0.065	9475.000	0.025	9520.000	0.065	9958.000	0.025
NH	10045.000	0.065	10080.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9380.000	10061.000	0.000	0.000	0.000	0.000	0.000
X1	0.900	43.000	9958.000	10060.000	540.000	575.000	565.000	0.000	0.000	0.000
GR	2090.800	8508.000	2083.300	8563.000	2084.600	8590.000	2084.200	8614.000	2083.600	8638.000
GR	2079.100	8672.000	2079.100	8719.000	2077.500	8769.000	2075.400	8800.000	2072.800	8815.000
GR	2072.800	8824.000	2077.000	8849.000	2077.200	8898.000	2077.400	8966.000	2077.500	9029.000
GR	2077.800	9093.000	2078.300	9156.000	2078.600	9229.000	2078.700	9290.000	2078.400	9365.000
GR	2078.300	9435.000	2075.200	9457.000	2074.300	9474.000	2071.100	9500.000	2071.100	9520.000
GR	2075.700	9540.000	2077.800	9562.000	2078.600	9595.000	2077.900	9615.000	2078.400	9640.000
GR	2077.700	9668.000	2078.500	9688.000	2078.000	9793.000	2077.200	9808.000	2074.300	9828.000
GR	2077.000	9843.000	2078.600	9917.000	2077.700	9958.000	2073.500	9976.000	2073.100	10000.000
GR	2073.100	10050.000	2078.000	10060.000	2083.000	10080.000	0.000	0.000	0.000	0.000

NH	6.000	1.000	8603.000	0.065	9274.000	0.025	9310.000	0.065	9944.000	0.025
NH	10050.000	0.065	10075.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9214.000	10075.000	0.000	0.000	0.000	0.000	0.000
X1	1.000	49.000	9944.000	10050.000	570.000	565.000	560.000	0.000	0.000	0.000
GR	2097.200	8262.000	2089.400	8292.000	2086.600	8319.000	2084.000	8354.000	2083.000	8410.000
GR	2082.800	8469.000	2083.300	8481.000	2082.600	8516.000	2081.700	8539.000	2082.300	8544.000
GR	2081.700	8574.000	2082.500	8603.000	2082.700	8648.000	2082.100	8671.000	2082.800	8710.000
GR	2083.100	8757.000	2083.300	8837.000	2083.900	8898.000	2084.100	8967.000	2083.600	9018.000
GR	2083.400	9059.000	2082.800	9113.000	2082.200	9135.000	2082.200	9154.000	2082.900	9174.000
GR	2082.500	9214.000	2083.200	9234.000	2077.800	9257.000	2076.600	9274.000	2076.600	9302.000
GR	2078.600	9314.000	2079.000	9340.000	2082.700	9371.000	2083.000	9387.000	2083.400	9429.000
GR	2083.100	9586.000	2083.100	9682.000	2083.400	9776.000	2082.700	9814.000	2083.600	9831.000
GR	2083.200	9884.000	2081.600	9916.000	2078.900	9944.000	2078.300	9957.000	2078.100	10000.000
GR	2078.100	10033.000	2082.100	10050.000	2082.600	10059.000	2087.100	10075.000	0.000	0.000

NH	5.000	0.060	9331.000	0.025	9392.000	0.060	9949.000	0.025	10062.000	0.060
NH	10205.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9315.000	10195.000	0.000	0.000	0.000	0.000	0.000
X1	1.120	24.000	9949.000	10062.000	615.000	630.000	620.000	0.000	0.000	0.000
GR	2092.500	9227.000	2092.600	9301.000	2083.300	9331.000	2082.200	9392.000	2087.500	9437.000
GR	2088.000	9549.000	2087.700	9693.000	2087.200	9798.000	2086.600	9872.000	2086.400	9897.000
GR	2087.300	9926.000	2083.400	9949.000	2082.300	9970.000	2082.500	10000.000	2083.400	10035.000
GR	2084.900	10062.000	2086.400	10084.000	2086.100	10118.000	2086.600	10129.000	2086.600	10157.000
GR	2086.200	10164.000	2085.100	10180.000	2085.100	10185.000	2091.900	10205.000	0.000	0.000

NH	6.000	0.060	9272.000	0.025	9303.000	0.045	9550.000	0.065	9923.000	0.025
NH	10079.000	0.050	10530.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9250.000	10370.000	0.000	0.000	0.000	0.000	0.000
X1	1.300	40.000	9923.000	10079.000	935.000	885.000	935.000	0.000	0.000	0.000
GR	2112.500	9183.000	2098.600	9217.000	2094.100	9260.000	2091.300	9272.000	2091.300	9303.000
GR	2094.200	9322.000	2095.400	9341.000	2097.800	9398.000	2096.700	9458.000	2095.700	9543.000
GR	2097.100	9565.000	2096.400	9593.000	2097.400	9614.000	2096.800	9653.000	2096.800	9723.000
GR	2097.100	9777.000	2096.500	9816.000	2096.700	9882.000	2096.900	9923.000	2092.200	9930.000
GR	2092.200	9967.000	2092.900	10000.000	2093.400	10053.000	2095.300	10079.000	2095.800	10098.000
GR	2094.600	10116.000	2094.200	10161.000	2095.000	10175.000	2094.000	10228.000	2092.600	10268.000
GR	2092.300	10311.000	2095.000	10324.000	2095.200	10338.000	2094.200	10355.000	2096.800	10382.000
GR	2098.300	10424.000	2098.100	10493.000	2101.100	10513.000	2101.300	10521.000	2101.300	10530.000

NH	8.000	0.060	9145.000	0.025	9168.000	0.060	9200.000	0.025	9280.000	0.045
X	9500.000	0.055	9902.000	0.025	10091.000	0.050	10470.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9140.000	10390.000	0.000	0.000	0.000	0.000	0.000
X1	1.400	46.000	9902.000	10091.000	500.000	435.000	500.000	0.000	0.000	0.000
GR	2120.000	9030.000	2110.600	9060.000	2106.400	9096.000	2097.200	9139.000	2095.300	9151.000
GR	2095.500	9168.000	2100.000	9181.000	2097.200	9200.000	2098.800	9219.000	2098.700	9228.000
GR	2098.000	9277.000	2101.300	9298.000	2101.500	9343.000	2100.100	9415.000	2101.000	9433.000
GR	2100.700	9477.000	2100.100	9520.000	2100.900	9563.000	2100.500	9611.000	2100.700	9669.000
GR	2100.800	9760.000	2100.300	9812.000	2099.100	9866.000	2100.500	9902.000	2096.900	9935.000
GR	2096.900	9965.000	2098.000	9992.000	2098.000	10000.000	2097.800	10065.000	2098.000	10091.000
GR	2099.700	10116.000	2096.700	10147.000	2098.900	10162.000	2099.400	10190.000	2099.300	10217.000
GR	2099.800	10248.000	2098.700	10271.000	2099.300	10288.000	2097.800	10301.000	2097.400	10340.000
GR	2099.900	10352.000	2101.000	10384.000	2101.100	10406.000	2101.700	10442.000	2105.100	10460.000
GR	2106.100	10470.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	8.000	0.060	9028.000	0.025	9100.000	0.050	9350.000	0.055	9746.000	0.025
NH	9762.000	0.030	9930.000	0.025	10059.000	0.050	10530.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9040.000	10124.000	0.000	0.000	0.000	0.000	0.000
X1	1.490	49.000	9930.000	10059.000	500.000	490.000	500.000	0.000	0.000	0.000
GR	2120.500	8960.000	2112.000	8998.000	2102.100	9028.000	2102.200	9097.000	2104.600	9114.000
GR	2106.100	9156.000	2105.300	9202.000	2106.000	9264.000	2106.100	9350.000	2104.600	9416.000
GR	2105.700	9448.000	2105.900	9505.000	2104.900	9538.000	2104.400	9564.000	2105.300	9586.000
GR	2104.500	9621.000	2103.800	9658.000	2105.500	9688.000	2104.500	9714.000	2103.300	9736.000
GR	2101.500	9746.000	2101.600	9762.000	2104.000	9774.000	2104.500	9790.000	2103.500	9812.000
GR	2104.400	9820.000	2103.700	9857.000	2104.200	9891.000	2103.400	9930.000	2102.200	9941.000
GR	2101.800	9975.000	2102.300	10000.000	2102.800	10043.000	2103.700	10059.000	2104.300	10110.000
GR	2103.400	10159.000	2104.100	10205.000	2104.700	10247.000	2105.700	10265.000	2103.700	10292.000
GR	2104.300	10359.000	2104.500	10396.000	2104.300	10411.000	2104.900	10421.000	2102.400	10464.000
GR	2104.900	10486.000	2111.000	10508.000	2112.000	10519.000	2112.000	10530.000	0.000	0.000
NH	7.000	0.060	9158.000	0.025	9220.000	0.050	9740.000	0.040	9850.000	0.065
NH	9943.000	0.025	10033.000	0.030	10370.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9050.000	10053.000	0.000	0.000	0.000	0.000	0.000
X1	1.590	44.000	9943.000	10033.000	490.000	340.000	490.000	0.000	0.000	0.000
GR	2130.500	8975.000	2109.600	9042.000	2107.200	9061.000	2107.200	9065.000	2109.700	9085.000
GR	2109.900	9109.000	2109.100	9125.000	2109.800	9142.000	2107.300	9158.000	2107.300	9220.000
GR	2109.500	9240.000	2110.500	9262.000	2110.500	9326.000	2110.000	9381.000	2109.700	9425.000
GR	2109.600	9482.000	2109.300	9561.000	2108.500	9625.000	2108.400	9665.000	2109.100	9697.000
GR	2108.600	9705.000	2109.100	9714.000	2107.900	9725.000	2108.600	9733.000	2107.800	9756.000
GR	2107.700	9788.000	2108.500	9811.000	2108.500	9836.000	2107.900	9849.000	2109.200	9888.000
GR	2109.600	9929.000	2107.200	9943.000	2107.200	10000.000	2107.200	10033.000	2109.900	10051.000
GR	2110.000	10110.000	2109.400	10158.000	2110.700	10178.000	2111.400	10218.000	2113.000	10249.000
GR	2114.500	10275.000	2118.000	10300.000	2120.000	10345.000	2122.800	10370.000	0.000	0.000
NH	8.000	0.065	9314.000	0.025	9380.000	0.050	9828.000	0.025	9850.000	0.065
NH	9936.000	0.025	10064.000	0.050	10340.000	0.065	10523.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9270.000	10360.000	0.000	0.000	0.000	0.000	0.000
X1	1.680	42.000	9936.000	10064.000	495.000	490.000	490.000	0.000	0.000	0.000
GR	2123.900	9020.000	2121.700	9071.000	2119.900	9123.000	2117.400	9191.000	2113.300	9255.000
GR	2113.400	9307.000	2112.000	9314.000	2112.400	9361.000	2112.800	9377.000	2114.300	9400.000
GR	2114.400	9475.000	2114.700	9538.000	2114.300	9539.000	2114.700	9578.000	2114.000	9619.000
GR	2114.100	9688.000	2114.100	9753.000	2114.400	9819.000	2112.200	9828.000	2113.000	9861.000
GR	2114.300	9879.000	2114.100	9898.000	2114.200	9906.000	2114.800	9925.000	2114.100	9936.000

GR	2113.100	9945.000	2112.900	10000.000	2113.000	10064.000	2115.100	10083.000	2115.000	10111.000
GR	2114.600	10165.000	2114.500	10226.000	2114.100	10248.000	2111.800	10259.000	2112.100	10267.000
GR	2114.100	10280.000	2112.900	10302.000	2112.800	10328.000	2114.400	10340.000	2116.000	10460.000
GR	2120.000	10478.000	2130.000	10523.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	8.000	0.065	9475.000	0.045	9580.000	0.030	9645.000	0.025	9740.000	0.035
NH	9920.000	0.025	10080.000	0.035	10265.000	0.055	10325.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9510.000	10230.000	0.000	0.000	0.000	0.000	0.000
X1	1.820	25.000	9920.000	10080.000	715.000	650.000	695.000	0.000	0.000	0.000
GR	2150.000	9280.000	2140.000	9320.000	2130.000	9360.000	2124.000	9380.000	2122.000	9410.000
GR	2121.000	9475.000	2120.000	9570.000	2119.000	9580.000	2120.000	9590.000	2121.000	9645.000
GR	2120.000	9655.000	2120.000	9670.000	2120.500	9700.000	2120.000	9720.000	2120.000	9740.000
GR	2120.700	9815.000	2120.000	9920.000	2119.000	10000.000	2120.000	10080.000	2120.000	10215.000
GR	2122.000	10265.000	2124.000	10280.000	2126.000	10295.000	2128.000	10310.000	2130.000	10325.000
NC	0.050	0.055	0.025	0.100	0.300	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9550.000	10220.000	0.000	0.000	0.000	0.000	0.000
X1	1.870	33.000	9809.000	10071.000	330.000	305.000	305.000	0.000	0.000	0.000
GR	2145.100	9420.000	2136.500	9448.000	2124.200	9479.000	2122.900	9496.000	2123.500	9505.000
GR	2123.600	9520.000	2124.400	9531.000	2123.800	9549.000	2124.200	9554.000	2123.600	9565.000
GR	2123.300	9570.000	2124.300	9579.000	2124.200	9594.000	2123.400	9626.000	2123.800	9636.000
GR	2123.800	9683.000	2124.400	9739.000	2125.400	9775.000	2124.200	9809.000	2123.400	9831.000
GR	2123.400	9903.000	2123.500	9951.000	2122.400	9988.000	2122.000	10000.000	2122.000	10071.000
GR	2125.400	10090.000	2124.600	10151.000	2123.100	10229.000	2124.700	10261.000	2125.900	10305.000
GR	2128.000	10349.000	2129.500	10393.000	2136.200	10445.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9530.000	10127.000	0.000	0.000	0.000	0.000	0.000
X1	1.970	43.000	9879.000	10126.000	480.000	300.000	495.000	0.000	0.000	0.000
GR	2144.800	9360.000	2136.500	9380.000	2128.400	9407.000	2127.200	9446.000	2127.800	9455.000
GR	2128.000	9469.000	2127.600	9473.000	2127.600	9487.000	2128.100	9493.000	2127.700	9499.000
GR	2128.100	9512.000	2128.100	9533.000	2127.200	9541.000	2127.800	9549.000	2127.600	9562.000
GR	2128.100	9571.000	2127.400	9609.000	2128.200	9631.000	2128.200	9648.000	2127.900	9664.000
GR	2128.300	9687.000	2128.000	9707.000	2128.700	9761.000	2129.100	9795.000	2128.600	9810.000
GR	2128.800	9822.000	2128.500	9841.000	2128.400	9861.000	2126.800	9879.000	2126.600	9928.000
GR	2128.000	9938.000	2128.000	9949.000	2127.500	9958.000	2126.900	9972.000	2126.600	10000.000
GR	2127.100	10126.000	2140.900	10155.000	2141.800	10172.000	2140.300	10203.000	2138.600	10232.000
GR	2139.800	10256.000	2142.500	10271.000	2144.800	10285.000	0.000	0.000	0.000	0.000
QT	2.000	12945.000	12945.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9905.000	0.025	10083.000	0.055	10408.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9600.000	10330.000	0.000	0.000	0.000	0.000	0.000
X1	2.060	38.000	9905.000	10083.000	470.000	515.000	500.000	0.000	0.000	0.000
GR	2146.300	9340.000	2143.700	9365.000	2134.200	9413.000	2135.000	9426.000	2135.000	9430.000
GR	2134.500	9460.000	2133.700	9491.000	2133.000	9538.000	2133.400	9560.000	2132.500	9617.000
GR	2132.800	9628.000	2132.500	9643.000	2132.700	9656.000	2131.400	9679.000	2132.600	9687.000
GR	2133.100	9732.000	2133.500	9780.000	2134.200	9833.000	2134.300	9871.000	2133.700	9905.000
GR	2131.200	9919.000	2131.600	9952.000	2131.800	9960.000	2131.300	9990.000	2131.500	10002.000
GR	2131.700	10006.000	2131.200	10083.000	2132.900	10093.000	2132.400	10108.000	2131.800	10112.000
GR	2132.300	10117.000	2132.300	10137.000	2131.700	10304.000	2133.900	10319.000	2134.200	10339.000
GR	2133.700	10364.000	2134.000	10380.000	2141.700	10408.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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   SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LFFT/RIGHT
   ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAK    TOPWID     ENDST


*PROF 1

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 0.030
          RIVER MILE 0.0 - PROFILE BASE LINE FOR HASSAYAMPA
    0.03     7.84  2040.14     0.00  2040.14  2040.65     0.51     0.00     0.00  2038.10
   15045.    1369.    5362.    8314.     737.     692.    1859.       0.       0.  2036.20
    0.00     1.86     7.75     4.47    0.063    0.025    0.063    0.000  2032.30  9459.81
 0.004054      0.       0.       0.        0        0        0     0.00  1242.82 10702.63


FLOW DISTRIBUTION FOR SECNO=      0.03          CWSEL=   2040.14

STA=    9460.   10000.   10104.   10340.   10440.   10571.   10593.   10682.   10703.
  PER Q=      3.9      3.2     35.6      9.5     16.4      1.2     23.3      1.9
   AREA=    529.8    206.9    691.7    394.0    607.8    131.8    644.3     80.9
    VEL=      1.7      2.3      7.8      3.6      4.0      4.8      3.4      3.5

1490 NH CARD USED
*SECNO 0.130

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.13     7.07  2047.07  2047.07     0.00  2048.77     1.70     2.38     0.36  2040.00
   15045.    7514.    7528.       3.    3211.     313.       4.      12.      15.  2046.40
    0.02     2.34    14.62     0.79    0.100    0.025    0.065    0.000  2040.00  8738.13
 0.003236     300.     505.     360.       20       11        0     0.00  1316.96 10055.10


FLOW DISTRIBUTION FOR SECNO=      0.13          CWSEL=   2047.07

STA=    8738.    9459.    9587.    9635.    9692.    9748.    9816.    9869.    9928.    9963.   10044.   10055.
  PER Q=      3.5      6.7      3.6      4.6      5.0      7.7      5.7      6.3      6.8     50.0      0.0
   AREA=   1436.0    326.6    152.0    189.0    193.7    270.8    213.7    231.0    196.6    514.7      3.7
    VEL=      0.4      3.1      3.6      3.7      3.8      4.3      4.0      4.1      5.2     14.6      0.8

1490 NH CARD USED
*SECNO 0.220
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL.     TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3280 CROSS SECTION      0.22 EXTENDED      2.31 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.22     9.81  2052.81  2052.81     0.00  2054.77     1.96     2.31     0.08  2051.00
   15045.    2510.   12008.     527.     986.     970.      56.     73.      25.   2043.00
     0.03     2.55    12.38     9.37    0.065    0.032    0.025    0.000  2043.00  9433.00
 0.004298     465.     500.     515.       20       18        0     0.00   397.46 10030.46


FLOW DISTRIBUTION FOR SECNO=      0.22          CWSEL=   2052.81

STA=    9433.    9508.    9590.    9669.    9899.   10019.   10030.
  PER Q=      4.5      3.6      3.4      5.2     79.8      3.5
   AREA=    220.9    200.4    190.3    374.8    969.9     56.2
    VEL=      3.0      2.7      2.7      2.1     12.4      9.4

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 0.360
3280 CROSS SECTION      0.36 EXTENDED      3.02 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.36     9.82  2058.22  2058.22     0.00  2060.31     2.08     2.49     0.06  2049.20
   15045.    3815.    9944.    1286.    1165.     723.     150.     105.      35.   2049.40
     0.05     3.27    13.76     8.60    0.045    0.025    0.025    0.000  2048.40  9433.00
 0.002708     615.     770.     785.       20        5        0     0.00   652.49 10085.49


FLOW DISTRIBUTION FOR SECNO=      0.36          CWSEL=   2058.22

STA=    9433.    9667.    9866.    9942.    9969.   10046.   10061.   10085.
  PER Q=      3.3      3.4      4.6     14.0     66.1      6.8      1.7
   AREA=    517.5    313.2    146.4    188.3    722.7     97.9     51.7
    VEL=      1.0      1.6      4.7     11.2     13.8     10.5      5.0

*SECNO 0.400

3301 HV CHANGED MORE THAN HVINS
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          U.S. HIGHWAY 89 BRIDGE CROSSING
     0.40     7.72  2058.32  2058.32     0.00  2061.69     3.37     0.62     0.64  2051.80
   15045.      143.   14637.     245.      44.     983.      66.     112.      37.  2050.60
     0.05     3.23    14.92     3.68    0.065    0.025    0.065    0.000  2050.60  9789.78
 0.004747     250.     170.     105.        3       15        0     0.00   172.27  9962.04


FLOW DISTRIBUTION FOR SECNO=      0.40          CWSEL=   2058.32

STA=    9790.    9803.    9943.    9962.
  PER Q=      0.9     97.4      1.6
   AREA=     44.2    982.7     66.5
    VEL=      3.2     14.9      3.7


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SR NOT SPECIFIED
5277 DOWNSTREAM ELEV IS   2056.00 ,NOT   2058.32 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     0.90      1.36      2.63      0.00    157.00     10.00   1720.00      0.00   2050.60   2050.60

*SECNO 0.420

3301 HV CHANGED MORE THAN HVINS

CLASS B LOW FLOW

3420 BRIDGE W.S.=   2057.48 BRIDGE VELOCITY=,     14.88     CALCULATED CHANNEL AREA=,     1011.

 EGPRS      EGLWC      H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC     ELTRD
                                                              AREA
   2060.17   2061.93     0.00        0.    15043.     1720.     1632.     2061.70   2065.00


     0.42     7.97  2059.37     0.00     0.00  2061.93     2.56     0.24     0.00  2052.30
   15045.      220.   14495.     330.      71.     1109.      98.     116.      37.  2051.40
     0.06     3.10    13.07     3.38    0.065    0.025    0.065    0.000  2051.40  9764.97
 0.003700     135.     135.     135.        0        0        0     0.00   205.77  9970.74
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   NME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      0.42         CWSEL=   2059.37

STA=    9765.    9785.    9946.    9971.
  PER Q=      1.5     96.3      2.2
   AREA=     70.9   1108.7     97.6
    VEL=      3.1     13.1      3.4

*SECNO 0.470

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.47     8.23  2061.63  2061.63     0.00  2063.32     1.69     0.86     0.26  2062.30
   15045.       0.     9974.     3071.       0.     789.    1752.     126.      40.  2059.90
     0.06     0.00    12.65     2.89    0.000    0.025    0.065    0.000  2053.40  9922.82
 0.003589     190.     230.     260.       20        8        0     0.00   793.27 10716.09


FLOW DISTRIBUTION FOR SECNO=      0.47         CWSEL=   2061.63

STA=    9923.   10038.   10268.   10325.   10363.   10470.   10536.   10664.   10716.
  PER Q=     66.3      4.7      6.6      6.4      7.4      3.5      4.1      0.9
   AREA=    788.5    374.9    263.7    218.6    361.3    189.8    268.3     75.6
    VEL=     12.6      1.9      3.8      4.4      3.1      2.8      2.3      1.8

CCHV=   0.100 CEHV=   0.300
*SECNO 0.500
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.50     8.12  2063.62  2063.62     0.00  2065.20     1.58     0.68     0.01  2062.20
   15045.     563.   10354.     4128.     377.     860.    1561.     139.      43.  2055.50
     0.07     1.49    12.04     2.65    0.065    0.025    0.065    0.000  2055.50  9610.46
 0.003055     200.     200.     220.       20        5        0     0.00  1054.68 10665.14


FLOW DISTRIBUTION FOR SECNO=      0.50         CWSEL=   2063.62

STA=    9610.    9919.   10041.   10058.   10114.   10373.   10423.   10457.   10530.   10634.   10663.
  PER Q=      3.7     68.8      3.0      3.6      5.1      3.6      3.8      3.7      4.0      0.6
   AREA=    377.2    839.9    107.4    183.3    406.6    186.5    154.5    212.0    259.5     48.5
    VEL=      1.5     12.0      4.3      2.9      1.9      2.9      3.7      2.6      2.3      1.7
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL.      OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL.     XNCH     XNR      WTR      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 0.600

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          CONFLUENCE OF BRAIDED CHANNELS
    0.60     7.98  2067.68  2067.68     0.00  2069.17     1.48     1.47     0.01  2065.80
   14459.    1764.   11114.    1381.    2467.    1000.     760.     180.      61.  2066.40
    0.08     0.71    11.11     2.08    0.201    0.025    0.065    0.000  2059.70  8850.63
 0.002751     315.     505.     505.       20        8        0     0.00  1688.82 10545.89


FLOW DISTRIBUTION FOR SECNO=      0.60          CWSEL=   2067.68

STA=    8851.    9486.    9548.    9798.    9928.   10075.   10431.   10494.   10532.   10546.
 PER Q=     3.4      3.1      3.4      2.3     76.9      3.6      3.6      3.3      0.4
  AREA=  1757.3    180.6    326.7    202.9   1000.1    372.8    199.3    155.8     31.8
   VEL=     0.3      2.4      1.5      1.6     11.1      1.4      2.6      3.1      2.0

1490 NH CARD USED
*SECNO 0.690

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    0.69     6.54  2070.74  2070.74     0.00  2072.24     1.49     1.77     0.00  2064.50
   14413.    5413.    6727.    2271.    1481.     487.     624.     219.      77.  2065.80
    0.10     3.66    13.81     3.64    0.053    0.025    0.065    0.000  2064.20  8985.72
 0.004625     495.     510.     490.       20       12        0     0.00  1257.71 10279.65


FLOW DISTRIBUTION FOR SECNO=      0.69          CWSEL=   2070.74

STA=    8986.    9494.    9509.    9720.    9745.    9758.    9973.   10050.   10071.   10100.   10135.   10264.   10280.
 PER Q=     3.8      3.1      4.0     13.3      7.4      6.0     46.7      4.2      3.2      4.5      3.6      0.2
  AREA=   669.3     88.4    221.2    146.1     79.2    276.9    487.0    121.3    116.8    155.0    211.5     19.9
   VEL=     0.8      5.1      2.6     13.1     13.5      3.1     13.8      5.0      4.0      4.2      2.5      1.8
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  ZME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELKIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 0.790

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     0.79     7.19  2074.89  2074.89     0.00  2076.36     1.48     2.28     0.00  2068.90
   14413.    7613.     6470.     330.    1493.     485.      41.     245.      90.  2068.90
     0.12     5.10     13.35     7.94    0.043    0.025    0.025    0.000  2067.70  9038.59
 0.004638     485.      500.     495.       20        8        0     0.00   961.78 10053.87


FLOW DISTRIBUTION FOR SECNO=      0.79          CWSEL=   2074.89

STA=    9039.    9080.    9126.    9557.    9585.    9666.    9794.    9959.   10040.   10054.
  PER Q=     3.1      5.9     12.0     19.8      3.8      3.1      5.1     44.9      2.3
   AREA=   130.3    201.0    420.0    194.2    173.9    176.2    197.7    484.8     41.5
    VEL=     3.4      4.3      4.1     14.7      3.1      2.5      3.7     13.3      7.9

1[illegible] NH CARD USED
*SECNO 0.900

3301 HV CHANGED MORE THAN HVINS

     0.90     7.72  2078.82     0.00     0.00  2079.52     0.70     3.08     0.08  2077.70
   14413.   10053.     4359.       1.    1752.     508.       1.     272.     104.  2078.00
     0.14     5.74     8.58     1.02    0.043    0.042    0.065    0.000  2071.10  8728.08
 0.006895      340.      565.     575.        4        0        0     0.00  1335.16 10063.24


FLOW DISTRIBUTION FOR SECNO=      0.90          CWSEL=   2078.82

STA=    8728.    8813.    8849.    8966.    9229.    9474.    9500.    9520.    9540.    9828.    9938.   10060.   10063.
  PER Q=     4.3      5.5      3.4      3.2      3.7     18.1     20.6      4.3      4.2      2.5     30.2      0.0
   AREA=   170.6    151.8    186.4    234.0    175.7    138.9    154.2    108.2    264.7    147.6    508.1      1.3
    VEL=     3.6      5.2      2.6      1.9      3.0     16.4     19.3      5.8      2.3      2.5      8.6      1.0

1490 NH CARD USED
*SECNO 1.000
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.00     7.36  2083.96  2083.96     0.00  2085.23     1.27     3.14     0.17  2078.90
   14413.    7254.    7124.      34.    2057.     576.      18.     304.     124.  2082.10
     0.16     3.53    12.36     1.94    0.053    0.025    0.065    0.000  2076.60  8356.32
 0.004554     570.     560.     565.        7       11        0     0.00  1644.25 10063.83


FLOW DISTRIBUTION FOR SECNO=      1.00          CWSEL=   2083.96

 STA=    8356.    8837.    9237.    9274.    9302.    9340.    9586.    9944.   10050.   10064.
  PER Q=     3.3      4.8      4.4     21.7      7.1      3.6      5.4     49.4      0.2
   AREA=   334.3    333.8    114.9    206.0    210.4    237.2    380.6    576.2     17.8
    VEL=     0.9      2.1      5.5     15.2      4.8      2.0      2.1     12.4      1.9

1[illegible]NH CARD USED
*SECNO 1.120
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.12     6.18  2088.38  2088.38     0.00  2089.82     1.44     2.84     0.05  2083.40
   14413.    6172.    7381.     860.    1058.     600.     294.     337.     141.  2084.90
     0.18     5.84    12.31     2.92    0.035    0.025    0.060    0.000  2082.20  9314.62
 0.004640     615.     620.     630.       20       15        0     0.00   880.02 10194.64


FLOW DISTRIBUTION FOR SECNO=      1.12          CWSEL=   2088.38

 STA=    9313.    9392.    9437.    9872.    9949.   10062.   10129.   10195.
  PER Q=    31.4      4.3      3.9      3.2     51.2      3.2      2.8
   AREA=   384.9    158.8    353.1    160.9    599.6    154.7    139.5
    VEL=    11.8      3.9      1.6      2.9     12.3      3.0      2.9

1490 NH CARD USED
*SECNO 1.300
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        CLOSS   BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA   LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.30      5.74  2097.04  2097.04      0.00  2098.14      1.10      4.58      0.03  2096.90
   14413.      3797.     6733.     3883.      602.      624.      850.      379.      162.   2095.30
     0.21      6.31     10.80      4.57     0.034     0.025     0.050     0.000  2091.30  9231.88
 0.005269      935.      935.      885.        20        10         0      0.00  1049.55 10388.79


FLOW DISTRIBUTION FOR SECNO=      1.30          CWSEL=   2097.04

STA=    9232.    9303.    9322.    9723.    9923.   10079.   10161.   10228.   10268.   10311.   10353.   10389.
  PER Q=     19.5      3.6      3.0      0.3     46.7      4.7      4.7      5.4      8.2      3.2      0.8
   AREA=    271.5     81.6    195.1     54.0    623.6    180.4    168.9    149.7    197.5    111.1     42.5
    VEL=     10.3      6.3      2.2      0.8     10.8      3.8      4.0      5.2      6.0      4.1      2.8

1490 NH CARD USED
*SECNO 1.400

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.40      5.77  2101.07  2101.07      0.00  2102.09      1.02      2.79      0.01  2100.50
   14413.      5341.     6358.     2714.      840.      614.      636.      402.      174.   2098.00
     0.23      6.35     10.35      4.27     0.032     0.025     0.050     0.000  2095.30  9120.90
 0.006302      500.      300.      435.         3         5         0      0.00  1210.40 10399.78


FLOW DISTRIBUTION FOR SECNO=      1.40          CWSEL=   2101.07

STA=    9121.    9151.    9168.    9219.    9277.    9866.    9902.   10091.   10147.   10190.   10271.   10340.   10400.
  PER Q=      6.1     10.0      6.5      9.7      4.0      0.8     44.1      4.5      3.1      3.1      7.0      1.1
   AREA=     92.9     96.4    148.5    134.3    302.6     45.8    614.4    144.6    102.9    135.6    203.4     49.5
    VEL=      9.5     15.0      6.3      9.1      1.9      2.5     10.3      4.5      4.4      3.3      5.0      3.2

1490 NH CARD USED
*SECNO 1.490
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      FLMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.49     4.42  2105.92  2105.92     0.00  2106.83     0.91     3.17     0.01  2103.40
    14413.    6590.    4976.    2847.    1178.     433.     781.     428.     189.  2103.70
     0.25     5.59    11.00     3.64    0.036    0.025    0.050    0.000  2101.50  9016.41
 0.006427     500.     500.     490.        7       16        0     0.00  1357.82 10489.69


FLOW DISTRIBUTION FOR SECNO=      1.49         CWSEL=   2105.92

STA=    9016.    9097.    9364.    9688.    9762.    9812.    9891.    9930.   10039.   10159.   10247.   10359.   10464.
  PER Q=     21.3      3.4      3.0      8.8      3.0      3.9      2.3     34.5      5.2      4.2      4.1      4.8
   AREA=    282.6    216.8    163.4    173.8    106.6    132.3     82.8    452.5    199.8    164.0    175.0    190.3
    VEL=     10.9      2.2      2.7      7.3      4.1      3.7      3.9     11.0      3.8      3.7      3.4      3.6
STA=   10464.   10490.
  PER Q=      1.4
   AREA=     51.9
    VEL=      4.0

1490 NH CARD USED
*SECNO 1.590
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.59     3.82  2111.02  2111.02     0.00  2112.02     1.00     3.40     0.03  2107.20
    14413.    9534.    4264.     615.    1803.     343.     193.     453.     204.  2107.20
     0.27     5.28    12.41     3.19    0.042    0.025    0.050    0.000  2107.20  9037.46
 0.007314     490.     490.     540.       10       15        0     0.00  1158.63 10196.09


FLOW DISTRIBUTION FOR SECNO=      1.59         CWSEL=   2111.02

STA=    9037.    9083.    9220.    9381.    9361.    9625.    9663.    9714.    9756.    9788.    9811.    9849.    9929.
  PER Q=      3.4     22.0      3.1      5.6      3.9      3.4      3.3      4.5      5.1      3.0      4.2      3.6
   AREA=    119.5    330.0    149.9    253.0    135.5    102.7    109.4    114.6    104.5     67.1     99.5    162.5
    VEL=      4.1      9.1      3.0      3.2      4.2      4.8      4.3      5.7      7.0      6.5      6.0      3.2
STA=    9929.    9943.   10033.   10158.   10196.
  PER Q=      0.9     29.6      3.9      0.3
   AREA=     36.6    343.5    170.5     22.2
    VEL=      3.7     12.4      3.3      2.3
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LFFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 1.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.68     4.09  2115.89  2115.89     0.00  2116.87     0.98     4.14     0.00  2114.10
    14413.    7540.    4358.    2515.    1317.     367.     576.     481.     217.  2113.00
     0.29     5.73    11.86     4.37    0.042    0.025    0.051    0.000  2111.80  9237.07
 0.009760     495.     490.     490.        3        8        0     0.00  1214.54 10451.61


FLOW DISTRIBUTION FOR SECNO=      1.68          CWSEL=   2115.89

STA=    9237.    9361.    9377.    9473.    9578.    9688.    9753.    9819.    9861.    9936.   10064.   10226.   10267.
  PER Q=     19.3      4.7      5.1      3.5      5.6      3.5      3.1      4.6      2.9     30.2      4.8      3.9
   AREA=   280.9     32.6    169.2    139.8    189.9    116.2    108.1    131.8    128.3    367.3    198.8     98.8
    VEL=     9.9     13.0      4.3      3.6      4.2      4.3      4.1      5.1      3.3     11.9      3.5      5.7
STA=   10267.   10302.   10328.   10452.
  PER Q=      3.4      3.4      2.0
   AREA=     88.8     79.0    110.5
    VEL=      5.5      6.2      2.7

1[illegible]NH CARD USED
*SECNO 1.820
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.82     3.30  2122.50  2122.50     0.00  2123.59     1.09     6.16     0.03  2120.00
    14413.    6352.    5321.    2741.    1033.     480.     413.     513.     234.  2120.00
     0.31     6.15    11.09     6.63    0.036    0.025    0.035    0.000  2119.00  9402.52
 0.008052     713.     693.     650.        3       15        0     0.00   866.22 10268.74


FLOW DISTRIBUTION FOR SECNO=      1.82          CWSEL=   2122.50

STA=    9403.    9570.    9645.    9670.    9700.    9710.    9815.    9920.   10080.   10215.   10269.
  PER Q=      7.1      5.7      3.7      4.3      6.3      7.1      9.9     36.9     16.4      2.6
   AREA=    256.6    169.9     57.5     67.5     94.9    161.1    223.6    479.8    347.3     73.9
    VEL=      4.0      4.8      9.3      9.2      9.5      6.3      6.3     11.1      7.0      4.9

CCHV=   0.100 CEHV=   0.300
*SECNO 1.870
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA      LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       FLMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


     1.87      4.36   2126.36   2126.36      0.00   2127.63      1.27      2.23      0.05   2124.20
   14413.     3189.      9604.     1620.      762.      896.      458.      529.      240.   2122.00
     0.32      4.18     10.72      3.54     0.050     0.025     0.055     0.000   2122.00   9473.54
 0.006314      330.      305.      305.        20        11         0      0.00    841.18  10314.73


FLOW DISTRIBUTION FOR SECNO=      1.87          CWSEL=   2126.36

STA=    9474.    9520.    9565.    9626.    9683.    9739.    9809.   10071.   10229.   10315.
  PER Q=      4.0      3.1      4.6      4.6      3.6      2.3     66.6      8.4      2.9
   AREA=    124.4    105.7    151.4    148.2    126.8    105.9    895.9    329.9    127.9
    VEL=      4.7      4.2      4.3      4.5      4.1      3.1     10.7      3.7      3.2

*SECNO 1.970
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     1.97      3.86   2130.46   2130.46      0.00   2131.81      1.35      3.12      0.02   2126.80
   14413.     4781.      9598.       34.     1121.      872.       12.      552.      249.   2127.10
     0.34      4.26     11.01      2.85     0.050     0.025     0.055     0.000   2126.60   9400.13
 0.006385      480.      495.      500.         3        15         0      0.00    732.93  10133.06


FLOW DISTRIBUTION FOR SECNO=      1.97          CWSEL=   2130.46

STA=    9400.    9446.    9487.    9533.    9571.    9609.    9664.    9761.    9841.    9879.   10126.   10133.
  PER Q=      3.4      3.7      3.4      3.4      3.3      4.1      6.0      3.1      2.8     66.6      0.2
   AREA=    110.9    113.2    113.9    105.6    103.0    135.5    214.5    132.8     91.7    871.9     11.9
    VEL=      4.4      4.7      4.3      4.7      4.6      4.3      4.0      3.3      4.3     11.0      2.9

1490 NH CARD USED
*SECNO 2.060
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.06      3.85   2135.05   2135.05      0.00   2136.16      1.11      3.16      0.02   2133.70
   12945.     2859.      6853.     3233.      789.      621.      761.      376.      258.   2131.20
     0.35      3.62     10.98      4.25     0.050     0.025     0.055     0.000   2131.20   9408.69
 0.006417      470.      500.      513.         7         5         0      0.00    975.14  10383.83


FLOW DISTRIBUTION FOR SECNO=      2.06          CWSEL=   2135.05

STA=    9409.    9560.    9617.    9656.    9687.    9732.    9833.    9905.   10083.   10117.   10304.   10384.
  PER Q=      3.9      3.6      3.1      3.6      3.1      3.6      1.2     52.9      3.0     19.8      2.2
   AREA=    167.5    119.9     94.4     93.5     99.2    148.0     66.4    624.1     92.9    565.0    102.7
    VEL=      3.0      3.9      4.3      5.0      4.0      3.1      2.3     11.0      4.2      4.5      2.7
```

THIS RUN EXECUTED THU, OCT 30 1986 14:48:51

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R1 FLOODWAY PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2040.700	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHRIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA   LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


#PROF 2

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 0.030

3470 ENCROACHMENT STATIONS=    8730.0   10682.0  TYPE=     1  TARGET=    1952.000
          RIVER MILE 0.0 - PROFILE BASE LINE FOR MASSAYAMPA
     0.03     8.40  2040.70     0.00  2040.14  2041.10     0.40     0.00     0.00  2038.10
   15045.    1947.    5727.    7372.    1116.     824.    1969.       0.       0.  2036.20
     0.00     1.74     6.95     3.74    0.066    0.025    0.065    0.000  2032.30  9395.00
 0.002582       0.       0.       0.        0        0        0     0.00  1287.00 10682.00


1490 NH CARD USED
*SECNO 0.130

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9500.0   10045.0  TYPE=     1  TARGET=     545.000
     0.13     7.21  2047.21  2047.21  2047.07  2049.14     1.93     1.85     0.46  2040.00
   15045.    7188.    7856.       1.    1747.     526.       1.      37.      11.  2046.40
     0.01     4.11    14.93     0.97    0.065    0.023    0.065    0.000  2040.00  9500.00
 0.005302     500.     505.     560.       20       15        0     0.00   545.00 10045.00


1490 NH CARD USED
*SECNO 0.220

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9780.0   10170.0  TYPE=     1  TARGET=     390.000
     0.22     9.82  2052.82  2052.82  2052.81  2055.88     3.06     2.72     0.34  2051.00
   15045.     470.   13962.     613.     195.     971.      56.      56.      15.  2043.00
     0.02     2.41    14.38    10.88    0.065    0.032    0.023    0.000  2043.00  9780.00
 0.005791     465.     500.     515.       20       11        0     0.00   250.48 10030.47
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```
  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   RANK ELEV
  ID       QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  NME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 0.360
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9870.0   10102.0  TYPE=     1  TARGET=     232.000
     0.36     9.66  2058.06  2058.06  2058.22  2061.00     2.94     3.26     0.04  2049.20
   15045.    2941.   10748.    1355.     313.     710.     143.      76.      19.  2049.60
     0.04     9.40    13.14     9.47    0.025    0.025    0.025    0.000  2048.40  9870.00
 0.003356     615.     770.     785.        2        8        0     0.00   214.54 10084.53


*SECNO 0.400

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9802.6    9945.5  TYPE=     1  TARGET=     202.000
          U.S. HIGHWAY 89 BRIDGE CROSSING
     0.40     7.88  2058.48  2058.39  2058.32  2061.94     3.47     0.68     0.26  2051.80
    045.       5.   13033.       6.       5.    1006.       3.      81.      20.  2050.60
     0.04     1.16    14.95     1.17    0.065    0.025    0.065    0.000  2050.60  9802.64
 0.004620     250.     170.     103.        4       15        0     0.00   142.81  9945.45


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2056.00 ,NOT   2058.48 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLFN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    0.90     1.36     2.63     0.00   157.00    10.00  1720.00     0.00  2050.60  2050.60

*SECNO 0.420

3301 HV CHANGED MORE THAN HVINS

CLASS B LOW FLOW

3420 BRIDGE W.S.=   2057.48 BRIDGE VELOCITY=,     14.88     CALCULATED CHANNEL AREA=,     1011.
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS    BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


EGPRS      EGLWC      H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC     ELTRD
                                                             AREA
  2060.33   2062.22     0.00        0.    13045.     1720.     1632.     2061.70   2065.00


3470 ENCROACHMENT STATIONS=    9784.3    9946.9  TYPE=     1  TARGET=     230.000
     0.42     7.97  2059.37     0.00  2059.37  2062.22     2.85     0.27     0.00  2052.30
   15045.       5.   15034.       6.       5.    1109.       6.      84.      20.   2051.40
     0.05     1.08    13.56     1.09    0.063    0.025    0.065    0.000  2051.40  9784.33
 0.003980     135.     135.     135.        0        0        0     0.00   162.61  9946.94


*SECNO 0.470

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9870.0   10470.0  TYPE=     1  TARGET=     600.000
     0.47     8.38  2061.78  2061.78  2061.63  2063.82     2.04     0.92     0.24  2062.30
   15045.       0.   10790.     4255.       0.     806.    1286.      93.      22.   2059.90
     0.05     0.00    13.38     3.31    0.000    0.025    0.065    0.000  2053.40  9922.40
 0.003916     190.     230.     260.       20        8        0     0.00   547.60 10470.00


CCHV=   0.100 CEHV=   0.300
*SECNO 0.500
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9870.0   10665.0  TYPE=     1  TARGET=     795.000
     0.50     8.13  2063.63  2063.63  2063.62  2063.35     1.73     0.73     0.03  2062.20
   15045.     101.   10679.     4265.      65.     861.    1564.     104.      25.   2055.50
     0.06     1.55    12.41     2.73    0.065    0.025    0.065    0.000  2055.50  9870.00
 0.003240     200.     200.     220.       20        8        0     0.00   795.00 10665.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  :ME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 0.600

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9830.0   10545.0  TYPE=     1  TARGET=     715.000
          CONFLUENCE OF BRAIDED CHANNELS
    0.60     8.10  2067.80  2067.80  2067.68  2069.75     1.94     1.62     0.06  2065.80
   14439.     296.   12302.    1861.     164.    1018.     813.     130.      34.  2066.40
    0.07     1.80    12.09     2.28    0.065    0.025    0.065    0.000  2059.70  9830.00
 0.003181     515.     505.     505.       20        5        0     0.00   712.11 10545.00


1490 NH CARD USED
*SECNO 0.690
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3[illegible] CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9640.0   10279.0  TYPE=     1  TARGET=     639.000
    0.69     6.88  2071.08  2071.08  2070.74  2072.90     1.82     1.90     0.01  2064.50
   14413.    4522.    7259.    2633.     679.     513.     702.     153.      42.  2065.80
    0.09     6.66    14.14     3.75    0.036    0.025    0.065    0.000  2064.20  9640.00
 0.004520     495.     510.     490.       20       15        0     0.00   639.00 10279.00


1490 NH CARD USED
*SECNO 0.790

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9520.0   10060.0  TYPE=     1  TARGET=     540.000
    0.79     7.49  2075.19  2075.19  2074.89  2077.11     1.92     2.32     0.03  2068.90
   14413.    6827.    7201.     385.    1006.     509.      46.     172.      48.  2068.90
    0.10     6.79    14.14     8.42    0.037    0.025    0.025    0.000  2067.70  9520.00
 0.004878     485.     500.     495.       20        8        0     0.00   532.16 10054.56
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELHIR      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 0.900

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9380.0   10061.0  TYPE=     1  TARGET=     681.000
     0.90     8.23  2079.33  2078.99  2078.82  2080.32     0.99     3.12     0.09  2077.70
   14413.    9325.    5087.       2.    1277.     562.       1.     194.      56.  2078.00
     0.12     7.30     9.06     1.28    0.038    0.041    0.063    0.000  2071.10  9380.00
 0.006654     540.     565.     575.        8        9        0     0.00   681.00 10061.00


1490 NH CARD USED
*SECNO 1.000

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9214.0   10075.0  TYPE=     1  TARGET=     861.000
     1.00     7.33  2083.93  2083.93  2083.96  2085.58     1.65     3.33     0.20  2078.90
   14413.    6786.    7592.      36.    1252.     574.      17.     217.      66.  2082.10
     0.13     5.42    13.24     2.06    0.045    0.025    0.063    0.000  2076.60  9214.00
 0.005252     570.     560.     565.        2       15        0     0.00   849.74 10063.74


1490 NH CARD USED
*SECNO 1.120
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9315.0   10195.0  TYPE=     1  TARGET=     880.000
     1.12     6.18  2088.38  2088.38  2088.38  2089.82     1.44     3.04     0.02  2083.40
   14413.    6174.    7379.     860.    1059.     600.     295.     244.      78.  2084.90
     0.15     5.83    12.30     2.92    0.033    0.025    0.060    0.000  2082.20  9315.00
 0.004628     615.     620.     630.        3       15        0     0.00   879.65 10194.65


1490 NH CARD USED
*SECNO 1.300
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9250.0   10370.0  TYPE=     1  TARGET=    1120.000
     1.30     5.74  2097.04  2097.04  2097.04  2098.15     1.11     4.58     0.03  2096.90
   14413.    3781.    6752.    3880.     585.     624.     840.     287.      98.  2095.30
     0.19     6.46    10.83     4.62    0.034    0.023    0.050    0.000  2091.30  9250.00
 0.005296     935.     935.     885.       20       10        0     0.00  1012.87 10370.00


1490 NH CARD USED
*SECNO 1.400

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9140.0   10390.0  TYPE=     1  TARGET=    1250.000
     1.40     5.81  2101.11  2101.11  2101.07  2102.13     1.02     2.78     0.01  2100.50
   14413.    5174.    6460.    2779.     831.     623.     649.     309.     110.  2098.00
     0.20     6.22    10.38     4.29    0.031    0.023    0.030    0.000  2095.30  9140.00
 0.006227     500.     500.     435.        2        5        0     0.00  1184.01 10390.00


1490 NH CARD USED
*SECNO 1.490
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9040.0   10124.0  TYPE=     1  TARGET=    1084.000
     1.49     4.90  2106.40  2106.40  2105.92  2107.49     1.10     3.06     0.02  2103.40
   14413.    7852.    5946.     615.    1517.     513.     153.     334.     123.  2103.70
     0.22     5.18    11.58     4.01    0.039    0.023    0.030    0.000  2101.50  9040.00
 0.006025     500.     500.     490.       20       12        0     0.00  1084.00 10124.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   RANK ELEV
  ?        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  .ME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 1.590
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9050.0   10053.0  TYPE=     1  TARGET=    1003.000
     1.59     3.83  2111.03  2111.03  2111.02  2112.12     1.09     3.33     0.00  2107.20
   14413.    9799.    4397.     216.    1801.     345.      47.     339.     135.   2107.20
     0.24     5.44    12.75     4.61    0.042    0.025    0.030    0.000  2107.20  9050.00
 0.007669     490.     490.     540.        4       15        0     0.00  1003.00 10053.00


1490 NH CARD USED
*SECNO 1.680
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9270.0   10360.0  TYPE=     1  TARGET=    1090.000
     1.68     4.07  2115.87  2113.87  2115.89  2116.90     1.03     4.33     0.01  2114.10
   14413.    7568.    4401.    2445.    1286.     365.     514.     383.     147.   2113.00
     0.26     5.88    12.05     4.75    0.042    0.023    0.050    0.000  2111.80  9270.00
    .0169     495.     490.     490.        3        8        0     0.00  1090.00 10360.00


1490 NH CARD USED
*SECNO 1.820
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9510.0   10250.0  TYPE=     1  TARGET=     740.000
     1.82     3.53  2122.53  2122.53  2122.50  2123.72     1.19     6.33     0.04  2120.00
   14413.    6157.    5460.    2797.     921.     485.     406.     415.     162.   2120.00
     0.28     6.69    11.26     6.89    0.033    0.025    0.033    0.000  2119.00  9510.00
 0.008180     715.     695.     650.        4       15        0     0.00   740.00 10250.00


CCHV=   0.100 CEHV=   0.300
*SECNO 1.870
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9550.0   10220.0  TYPE=     1  TARGET=     670.000
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTH	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CURAR	TOPWID	ENDST
1.87	4.60	2126.60	2126.60	2126.36	2128.03	1.43	2.19	0.07	2124.20
14413.	2670.	10509.	1234.	630.	958.	337.	429.	167.	2122.00
0.29	4.24	10.97	3.66	0.050	0.025	0.055	0.000	2122.00	9550.00
0.006045	330.	305.	305.	20	11	0	0.00	670.00	10220.00

*SECNO 1.970
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9530.0 10127.0 TYPE= 1 TARGET= 597.000

1.97	4.14	2130.74	2130.74	2130.46	2132.25	1.51	2.96	0.02	2126.80
14413.	3850.	10557.	6.	888.	941.	3.	450.	174.	2127.10
0.30	4.34	11.22	1.80	0.050	0.025	0.055	0.000	2126.60	9530.00
0.005994	480.	495.	500.	3	11	0	0.00	597.00	10127.00

1490 NH CARD USED
*SECNO 2.060
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 9600.0 10330.0 TYPE= 1 TARGET= 730.000

2.06	3.93	2135.13	2135.13	2135.05	2136.43	1.30	3.17	0.02	2133.70
12945.	2251.	7346.	3348.	565.	637.	722.	471.	181.	2131.20
0.32	3.99	11.53	4.64	0.050	0.025	0.055	0.000	2131.20	9600.00
0.006883	470.	500.	515.	7	11	0	0.00	730.00	10330.00

THIS RUN EXECUTED THU, OCT 30 1986 14:49:49

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100 YEAR DISCHARGE - R1

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	10K*S	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	0.030	2040.14	7.84	2040.65	7.75	2032.30	40.54	1242.82	9459.81	10702.63	1369.19	5361.70	8314.11
	0.030	2040.70	8.40	2041.10	6.95	2032.30	25.82	1287.00	9395.00	10682.00	1946.54	5726.56	7371.89
*	0.130	2047.07	7.07	2048.77	14.62	2040.00	52.36	1316.96	8738.13	10055.10	7514.33	7527.73	2.93
*	0.130	2047.21	7.21	2049.14	14.93	2040.00	53.02	545.00	9500.00	10045.00	7188.23	7856.02	0.75
*	0.220	2052.81	9.81	2054.77	12.38	2043.00	42.98	597.46	9433.00	10030.46	2510.35	12007.94	526.71
*	0.220	2052.82	9.82	2055.88	14.38	2043.00	57.91	250.48	9780.00	10030.47	469.66	13962.48	612.86
*	0.360	2058.22	9.82	2060.31	13.76	2048.40	27.08	652.49	9443.00	10085.49	3814.59	9943.92	1286.48
*	0.360	2058.06	9.66	2061.00	15.14	2048.40	33.56	214.54	9870.00	10084.53	2941.23	10748.38	1355.39
*	0.400	2058.32	7.72	2061.69	14.92	2050.60	47.47	172.27	9789.78	9962.04	142.88	14657.42	244.71
	0.400	2058.48	7.88	2061.94	14.95	2050.60	46.20	142.81	9802.64	9945.45	5.35	15033.26	6.40
*	0.420	2059.37	7.97	2061.93	13.07	2051.40	37.00	205.77	9764.97	9970.74	219.94	14475.26	329.80
*	0.420	2059.37	7.97	2062.22	13.56	2051.40	39.80	162.61	9784.33	9946.94	5.30	15033.69	6.01
*	0.470	2061.63	8.23	2063.32	12.65	2053.40	35.89	793.27	9922.82	10716.09	0.00	9973.71	5071.29
*	0.470	2061.78	8.38	2063.82	13.38	2053.40	39.16	547.60	9922.40	10470.00	0.00	10789.86	4255.14
*	0.500	2063.62	8.12	2065.20	12.04	2055.50	30.55	1054.68	9610.46	10665.14	562.80	10334.42	4127.78
*	0.500	2063.63	8.13	2065.35	12.41	2055.50	32.40	795.00	9870.00	10665.00	100.74	10678.83	4265.43
*	0.600	2067.68	7.98	2069.17	11.11	2059.70	27.51	1688.82	9830.63	10545.89	1763.70	11114.37	1580.93
*	0.600	2067.80	8.10	2069.75	12.09	2059.70	31.81	712.11	9830.00	10545.00	296.22	12301.62	1861.16
*	0.690	2070.74	6.54	2072.24	13.81	2064.20	46.25	1237.71	8985.72	10279.65	5415.23	6727.25	2270.52
*	0.690	2071.08	6.88	2072.90	14.14	2064.20	45.20	639.00	9640.00	10279.00	4521.75	7258.67	2632.57
*	0.790	2074.89	7.19	2076.36	13.35	2067.70	46.38	961.78	9038.59	10053.87	7613.33	6470.09	329.38
*	0.790	2075.19	7.49	2077.11	14.14	2067.70	48.78	532.16	9520.00	10054.56	6827.24	7200.53	385.23

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	10K#S	TOPWID	SSTA	ENDST	QLOB	QCH	QRIB
	0.900	2078.82	7.72	2079.32	8.58	2071.10	68.93	1335.16	8728.08	10063.24	10052.97	4358.69	1[illegible]33
	0.900	2079.33	8.23	2080.32	9.06	2071.10	66.54	681.00	9380.00	10061.00	9324.74	5086.71	1.55
*	1.000	2083.96	7.36	2085.23	12.36	2076.60	43.54	1644.23	8356.32	10063.83	7254.28	7121.29	34[illegible]4
*	1.000	2083.93	7.33	2085.58	13.24	2076.60	52.52	849.74	9214.00	10063.74	6785.54	7591.53	35.92
*	1.120	2088.38	6.18	2089.82	12.31	2082.20	46.40	880.02	9314.62	10194.64	6171.72	7381.47	859[illegible]30
*	1.120	2088.38	6.18	2089.82	12.30	2082.20	46.28	879.65	9315.00	10194.65	6173.91	7378.60	860.49
*	1.300	2097.04	5.74	2098.14	10.80	2091.30	52.69	1049.55	9231.88	10388.79	3797.00	6733.47	388[illegible]52
*	1.300	2097.04	5.74	2098.15	10.83	2091.30	52.96	1012.87	9250.00	10370.00	3781.30	6751.95	387[illegible]75
*	1.400	2101.07	5.77	2102.09	10.35	2095.30	63.02	1210.40	9120.90	10399.78	5341.29	6357.73	271[illegible]99
*	1.400	2101.11	5.81	2102.13	10.38	2095.30	62.27	1184.01	9140.00	10390.00	5173.53	6460.02	277[illegible]4
*	1.490	2105.92	4.42	2106.83	11.00	2101.50	64.27	1357.82	9016.41	10489.69	6589.93	4976.44	2846.61
*	1.490	2106.40	4.90	2107.49	11.58	2101.50	60.25	1084.00	9040.00	10124.00	7851.88	5945.98	61[illegible]4
*	1.590	2111.02	3.82	2112.02	12.41	2107.20	73.14	1158.63	9037.46	10196.09	9534.23	4264.23	614.53
*	1.590	2111.03	3.83	2112.12	12.75	2107.20	76.69	1003.00	9050.00	10053.00	9799.27	4397.31	21[illegible]2
*	1.680	2115.89	4.09	2116.87	11.86	2111.80	97.60	1214.54	9237.07	10451.61	7540.32	4338.12	2514.56
*	1.680	2115.87	4.07	2116.90	12.05	2111.80	101.69	1090.00	9270.00	10360.00	7567.69	4400.61	244[illegible]70
*	1.820	2122.50	3.50	2123.59	11.09	2119.00	80.52	866.22	9402.52	10268.74	6331.51	5320.83	2740.66
*	1.820	2122.53	3.53	2123.72	11.26	2119.00	81.80	740.00	9510.00	10250.00	6156.67	5459.54	279[illegible]79
*	1.870	2126.36	4.36	2127.63	10.72	2122.00	63.14	841.18	9473.54	10314.73	3189.18	9603.80	1620.02
*	1.870	2126.60	4.60	2128.03	10.97	2122.00	60.45	670.00	9550.00	10220.00	2670.46	10508.97	1233.57
*	1.970	2130.46	3.86	2131.81	11.01	2126.60	64.85	732.93	9400.13	10133.06	4781.28	9597.88	3[illegible]83
*	1.970	2130.74	4.14	2132.25	11.22	2126.60	59.94	597.00	9530.00	10127.00	3849.71	10557.19	6.10
*	2.060	2133.05	3.85	2136.16	10.98	2131.20	64.17	973.14	9408.69	10383.83	2858.84	6852.68	323[illegible]48
*	2.060	2135.13	3.93	2136.43	11.53	2131.20	68.83	730.00	9600.00	10330.00	2251.12	7345.81	3348.07

ARY OF ERRORS AND SPECIAL NOTES

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FLOODWAY DATA, 100 YEAR DISCHARGE - R1
PROFILE NO, 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
0.030	1287.	3909.	3.8	2040.7	2040.1	0.6
0.130	545.	2274.	6.6	2047.2	2047.1	0.1
0.220	250.	1223.	12.3	2052.8	2052.8	0.0
0.360	215.	1166.	12.9	2058.1	2058.2	-0.1
0.400	143.	1016.	14.8	2058.5	2058.3	0.2
0.420	163.	1119.	13.4	2059.4	2059.4	0.0
0.470	548.	2092.	7.2	2061.8	2061.6	0.2
0.500	795.	2490.	6.0	2063.6	2063.6	0.0
0.600	715.	1997.	7.2	2067.8	2067.7	0.1
0.690	639.	1895.	7.6	2071.0	2070.7	0.3
0.790	535.	1561.	9.2	2075.2	2074.9	0.3
0.900	681.	1840.	7.8	2079.3	2078.8	0.5
1.000	830.	1843.	7.8	2084.0	2084.0	0.0
1.120	880.	1954.	7.4	2088.4	2088.4	0.0
1.300	1120.	2049.	7.0	2097.0	2097.0	0.0
1.400	1250.	2103.	6.9	2101.1	2101.1	0.0
1.490	1084.	2184.	6.6	2106.4	2105.9	0.5
1.590	1003.	2192.	6.6	2111.0	2111.0	0.0
1.680	1090.	2166.	6.7	2115.9	2115.9	0.0
1.820	740.	1811.	8.0	2122.5	2122.5	0.0
1.870	670.	1923.	7.5	2126.6	2126.4	0.2
1.970	597.	1832.	7.9	2130.8	2130.5	0.3
2.060	730.	1924.	6.7	2133.2	2133.1	0.1

THIS RUN EXECUTED THU, OCT 30 1986 14:49:56

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**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
**************************************************
```

Floodway, Reach #2
Cross Sec. 2.06 - 3.27

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH2.FLOOD.OUT

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

WWWW  W     WWW   WWW   W  WWWWW  WWW   W
W   W W  W  W   W W   W  WW  W    W   W  WW
W   W W  W  W   W W   W  W  WWWW  W   W  W
WWWW  WWWWW W W W  WWWW  W      W W W W  W
W       W  W   W    W  W      W W   W  W
W       W  W   W   W  W  W  W W   W  W
W       W   WWW  WWW   WWW  WWW   WWW  WWW


 WWW   WWW  W     WWW      WWWW  WWWWW  WWW   WWW  W   W  WWW      WWWWW W     WWW   WWW  WWWW       WWW  W   W WWWWW
W   W W   W W    W   W     W   W W    W   W W   W W  W W   W     W    W    W   W W   W W   W     W   W W  W   W
W    W   W W    W         W   W W    W   W W    W  W    W     W    W    W   W W   W W   W     W   W W  W   W
 WWW  W   W W     WWW      WWWW  WWWW  WWWW W    WWWWW   W     WWWW W    W   W W   W W   W     W   W W  W   W
    W W   W W        W     W W   W    W   W W    W  W  W      W    W    W   W W   W W   W     W   W W  W   W
W   W W   W W    W   W  WW W  W W    W   W W  W W  W W     WW W    W    W   W W   W W   W  WW W   W W  W   W
 WWW   WWW  WWWWW  WWW   WW W   W WWWWW W   W  WWW  W   W WWWWW  WW W    WWWWW  WWW   WWW  WWWW   WW  WWW  WWW   W


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Label: PRT001 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH2.FLOOD.OUT
File last modified: 86-10-30,13:11:56.Thu

Spooled: 86-11-18,16:33:04.Tue [Spooler rev 19.4.5]
Started: 86-11-18,16:33:12.Tue on: AHLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  RUN DATE THU, OCT 30 1986 TIME 13:01:54          *
*****************************************************
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*************************************
*  U.S. ARMY CORPS OF ENGINEERS     *
*  THE HYDROLOGIC ENGINEERING CENTE *
*  609 SECOND STREET, SUITE D       *
*  DAVIS, CALIFORNIA 95616          *
*  (916) 440-2105 (FTS) 448-2105    *
*************************************
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X     X  X       X     X          X     X
X     X  X       X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X       X                X
X     X  X       X     X          X
X     X  XXXXXXX   XXXXX           XXXXXXX
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THIS RUN EXECUTED THU, OCT 30 1986 15:02:18

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  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************

C
T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3      100 YEAR DISCHARGE - R2      FLOODWAY ANALYSIS

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      0.        2.        0.        0.  0.000000      0.00      0.0       0.  2135.000     0.000

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000    15.000

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38.000     1.000     8.000     3.000    26.000    42.000    39.000     4.000    33.000    34.000

    13.000    14.000    15.000   200.000     0.000     0.000     0.000     0.000     0.000     0.000

NC      0.000     0.000     0.000     0.100     0.300     0.000     0.000     0.000     0.000     0.000
NH      3.000     0.050  9905.000     0.025 10083.000     0.035 10408.000     0.000     0.000     0.000
QT      2.000 12945.000 12945.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     4.100  9600.000 10330.000     0.000     0.000     0.000     0.000     0.000
X1      2.060    38.000  9905.000 10083.000     0.000     0.000     0.000     0.000     0.000     0.000
GR   2146.500  9340.000  2143.700  9365.000  2134.200  9413.000  2135.000  9426.000  2133.000  9430.000
GR   2134.500  9460.000  2133.700  9491.000  2133.000  9538.000  2133.400  9560.000  2132.500  9617.000
GR   2132.800  9628.000  2132.300  9643.000  2132.700  9656.000  2131.400  9679.000  2132.600  9687.000
GR   2133.100  9732.000  2133.500  9780.000  2134.200  9833.000  2134.300  9871.000  2133.700  9905.000
GR   2131.200  9919.000  2131.600  9952.000  2131.800  9960.000  2131.300  9990.000  2131.500 10002.000
GR   2131.700 10006.000  2131.200 10083.000  2132.900 10093.000  2132.400 10108.000  2131.800 10112.000
GR   2132.300 10117.000  2132.300 10137.000  2131.700 10304.000  2133.900 10319.000  2134.200 10339.000
GR   2133.700 10364.000  2134.000 10380.000  2141.000 10408.000     0.000     0.000     0.000     0.000

NH      6.000     1.000  9660.000     0.050  9882.000     0.063  9936.000     0.025 10065.000     0.065
NH  10119.000     0.050 10246.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
ET      0.000     0.000     4.100  9700.000 10234.000     0.000     0.000     0.000     0.000     0.000
X1      2.170    22.000  9936.000 10065.000   520.000   610.000   575.000     0.000     0.000     0.000
GR   2147.400  9490.000  2144.300  9513.000  2137.200  9546.000  2136.400  9603.000  2136.600  9615.000
GR   2137.300  9646.000  2136.300  9705.000  2136.500  9715.000  2137.000  9727.000  2137.500  9767.000
GR   2138.100  9832.000  2138.700  9882.000  2139.000  9914.000  2136.700  9936.000  2136.400 10000.000
GR   2135.800 10065.000  2137.400 10076.000  2138.300 10119.000  2138.900 10161.000  2139.500 10199.000
GR   2139.300 10234.000  2142.600 10246.000     0.000     0.000     0.000     0.000     0.000     0.000
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NH	6.000	1.000	9854.000	0.050	9881.000	0.065	9941.000	0.025	10065.000	0.065
NH	10132.000	0.050	10213.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9881.000	10170.000	0.000	0.000	0.000	0.000	0.000
X1	2.250	19.000	9941.000	10065.000	430.000	440.000	430.000	0.000	0.000	0.000
GR	2150.000	9684.000	2144.000	9709.000	2140.000	9734.000	2139.200	9769.000	2140.000	9784.000
GR	2146.100	9854.000	2143.800	9881.000	2140.800	9933.000	2139.000	9941.000	2139.500	10000.000
GR	2139.500	10065.000	2141.400	10080.000	2142.000	10102.000	2142.100	10132.000	2143.300	10158.000
GR	2141.800	10175.000	2143.600	10205.000	2145.700	10213.000	2146.000	10214.000	0.000	0.000
NH	5.000	1.000	9935.000	0.065	9943.000	0.025	10060.000	0.050	10226.000	0.030
NH	10285.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9940.000	10243.000	0.000	0.000	0.000	0.000	0.000
X1	2.370	20.000	9945.000	10060.000	615.000	610.000	615.000	0.000	0.000	0.000
GR	2161.300	9810.000	2158.800	9839.000	2156.300	9853.000	2150.400	9877.000	2147.400	9896.000
GR	2147.400	9931.000	2144.000	9945.000	2144.000	10000.000	2144.700	10012.000	2144.900	10060.000
GR	2146.500	10074.000	2147.400	10113.000	2147.600	10148.000	2147.400	10183.000	2146.500	10210.000
GR	2145.400	10226.000	2145.200	10261.000	2146.000	10266.000	2150.400	10275.000	2151.200	10285.000
NH	8.000	0.050	9733.000	0.035	9805.000	0.030	9932.000	0.025	10034.000	0.065
NH	10081.000	0.025	10121.000	0.050	10219.000	0.030	10260.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9828.000	10230.000	0.000	0.000	0.000	0.000	0.000
X1	2.460	36.000	9952.000	10121.000	455.000	445.000	470.000	0.000	0.000	0.000
GR	2177.400	9615.000	2181.400	9645.000	2188.900	9653.000	2190.400	9670.000	2188.000	9696.000
GR	2185.600	9706.000	2164.800	9729.000	2149.000	9753.000	2149.300	9761.000	2150.400	9771.000
GR	2150.100	9780.000	2150.000	9788.000	2150.300	9795.000	2151.000	9805.000	2150.800	9819.000
GR	2150.100	9825.000	2150.800	9835.000	2151.100	9883.000	2150.600	9916.000	2149.000	9932.000
GR	2148.700	9952.000	2148.200	10016.000	2150.300	10034.000	2151.100	10049.000	2148.500	10081.000
GR	2148.500	10107.000	2149.000	10121.000	2149.700	10140.000	2150.600	10151.000	2151.400	10172.000
GR	2150.000	10192.000	2148.200	10219.000	2147.800	10233.000	2147.800	10240.000	2153.200	10251.000
GR	2154.800	10260.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	9.000	1.000	9423.000	0.030	9606.000	0.030	9620.000	0.030	9680.000	0.030
NH	9710.000	0.045	9901.000	0.065	9952.000	0.025	10054.000	0.065	10178.000	0.000
ET	0.000	0.000	4.100	9390.000	10098.000	0.000	0.000	0.000	0.000	0.000
X1	2.580	48.000	9952.000	10054.000	625.000	670.000	655.000	0.000	0.000	0.000
GR	2169.700	9280.000	2166.200	9313.000	2163.100	9349.000	2163.500	9356.000	2162.200	9369.000
GR	2161.100	9394.000	2161.100	9425.000	2156.100	9449.000	2156.600	9455.000	2157.700	9501.000
GR	2157.900	9542.000	2156.400	9579.000	2156.600	9594.000	2154.500	9606.000	2154.700	9620.000
GR	2156.600	9631.000	2156.300	9651.000	2154.300	9662.000	2154.400	9671.000	2155.300	9681.000
GR	2154.500	9693.000	2154.800	9697.000	2153.400	9702.000	2155.200	9707.000	2156.600	9719.000
GR	2157.000	9768.000	2156.600	9782.000	2155.500	9793.000	2155.500	9798.000	2156.600	9814.000
GR	2156.800	9835.000	2156.200	9872.000	2155.800	9901.000	2156.300	9931.000	2154.100	9952.000
GR	2153.700	9967.000	2152.000	9972.000	2152.400	10000.000	2152.400	10021.000	2153.200	10029.000
GR	2153.400	10037.000	2153.800	10054.000	2155.700	10071.000	2155.300	10087.000	2153.400	10098.000
GR	2156.400	10115.000	2157.800	10153.000	2160.900	10178.000	0.000	0.000	0.000	0.000
NH	6.000	1.000	9390.000	0.030	9678.000	0.025	9730.000	0.045	9940.000	0.025
NH	10055.000	0.050	10318.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9630.000	10120.000	0.000	0.000	0.000	0.000	0.000

X1	2.690	44.000	9940.000	10055.000	495.000	575.000	550.000	0.000	0.000	0.000
GR	2170.000	9300.000	2162.400	9338.000	2163.400	9351.000	2163.300	9390.000	2161.200	9397.000
	2160.500	9448.000	2161.100	9464.000	2161.500	9521.000	2161.300	9553.000	2161.700	9582.000
GR	2161.300	9652.000	2160.700	9678.000	2158.900	9690.000	2158.900	9730.000	2160.100	9739.000
GR	2159.500	9746.000	2159.800	9753.000	2160.800	9766.000	2161.000	9781.000	2161.400	9808.000
GR	2160.900	9824.000	2160.900	9842.000	2160.500	9857.000	2161.800	9873.000	2161.900	9914.000
GR	2158.200	9940.000	2157.600	9970.000	2156.700	9979.000	2157.100	10000.000	2157.700	10021.000
GR	2159.100	10032.000	2158.500	10055.000	2159.500	10069.000	2159.700	10082.000	2158.900	10092.000
GR	2159.200	10099.000	2159.800	10102.000	2159.800	10127.000	2162.100	10161.000	2162.000	10187.000
GR	2161.800	10239.000	2162.300	10264.000	2162.800	10293.000	2168.100	10318.000	0.000	0.000
NH	3.000	0.045	9877.000	0.025	10134.000	0.050	10421.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9750.000	10200.000	0.000	0.000	0.000	0.000	0.000
	VULTURE MINE ROAD									
X1	2.730	14.000	9877.000	10134.000	340.000	160.000	240.000	0.880	0.000	0.000
GR	2172.800	9525.000	2169.600	9571.000	2164.800	9668.000	2163.900	9735.000	2163.000	9877.000
GR	2162.900	9919.000	2162.400	10000.000	2162.100	10069.000	2162.400	10134.000	2164.200	10198.000
GR	2165.900	10258.000	2167.300	10312.000	2168.900	10397.000	2169.000	10421.000	0.000	0.000
NH	3.000	0.045	9937.000	0.025	10048.000	0.050	10547.000	0.000	0.000	0.000
QT	2.000	12817.000	12817.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9710.000	10345.000	0.000	0.000	0.000	0.000	0.000
X1	2.780	37.000	9937.000	10048.000	150.000	310.000	260.000	0.000	0.000	0.000
GR	2176.000	9585.000	2176.500	9597.000	2173.100	9640.000	2166.800	9692.000	2165.800	9729.000
GR	2164.900	9740.000	2165.100	9749.000	2166.800	9765.000	2166.400	9818.000	2166.100	9826.000
GR	2166.000	9840.000	2165.500	9917.000	2164.100	9937.000	2163.800	9961.000	2163.700	9964.000
GR	2163.700	10000.000	2163.700	10048.000	2166.100	10069.000	2165.900	10098.000	2165.900	10123.000
GR	2164.300	10202.000	2164.300	10219.000	2165.000	10238.000	2165.000	10303.000	2163.900	10318.000
GR	2164.900	10332.000	2164.800	10345.000	2164.100	10353.000	2165.200	10366.000	2165.200	10413.000
GR	2165.100	10460.000	2164.000	10471.000	2163.900	10476.000	2163.000	10492.000	2163.400	10518.000
GR	2163.700	10522.000	2170.000	10547.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9944.000	0.025	10064.000	0.050	10768.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9930.000	10330.000	0.000	0.000	0.000	0.000	0.000
X1	2.880	29.000	9944.000	10064.000	500.000	480.000	495.000	0.000	0.000	0.000
GR	2180.000	9840.000	2176.000	9878.000	2172.500	9912.000	2167.000	9944.000	2167.000	10000.000
GR	2167.000	10064.000	2167.600	10074.000	2169.300	10098.000	2169.600	10128.000	2169.300	10205.000
GR	2168.500	10238.000	2169.000	10254.000	2168.100	10289.000	2168.500	10304.000	2168.300	10328.000
GR	2168.100	10350.000	2168.500	10374.000	2169.400	10439.000	2170.800	10509.000	2170.300	10524.000
GR	2170.700	10538.000	2170.300	10594.000	2171.700	10669.000	2171.200	10681.000	2168.100	10705.000
GR	2170.200	10726.000	2178.800	10750.000	2180.000	10763.000	2180.000	10768.000	0.000	0.000
NH	4.000	0.050	9928.000	0.025	10086.000	0.065	10200.000	0.050	10831.000	0.000
ET	0.000	0.000	4.100	9928.000	10330.000	0.000	0.000	0.000	0.000	0.000
X1	2.970	33.000	9928.000	10086.000	510.000	400.000	500.000	0.000	0.000	0.000
GR	2202.800	9910.000	2171.100	9928.000	2171.700	9975.000	2171.800	10000.000	2171.100	10014.000
GR	2171.100	10086.000	2173.400	10100.000	2172.500	10147.000	2174.100	10179.000	2172.800	10203.000
GR	2171.800	10211.000	2172.000	10226.000	2172.600	10238.000	2172.900	10278.000	2173.600	10367.000
GR	2174.100	10410.000	2174.000	10438.000	2174.000	10506.000	2174.400	10544.000	2174.300	10554.000
GR	2174.600	10565.000	2174.800	10630.000	2176.100	10672.000	2175.400	10700.000	2175.000	10707.000
GR	2174.800	10724.000	2175.900	10742.000	2174.800	10752.000	2174.400	10761.000	2173.200	10773.000
GR	2173.200	10778.000	2175.800	10807.000	2183.500	10831.000	0.000	0.000	0.000	0.000

NH	3.000	0.050	9956.000	0.025	10160.000	0.050	10826.000	0.000	0.000	0.000
E	0.000	0.000	4.100	9956.000	10333.000	0.000	0.000	0.000	0.000	0.000
X1	3.070	39.000	9956.000	10160.000	515.000	360.000	500.000	0.000	0.000	0.000
GR	2210.000	9910.000	2194.500	9938.000	2176.200	9956.000	2176.200	9994.000	2177.100	9998.000
GR	2177.100	10000.000	2177.000	10008.000	2176.400	10013.000	2176.300	10019.000	2175.400	10027.000
GR	2174.900	10116.000	2175.200	10132.000	2175.900	10141.000	2175.300	10160.000	2176.800	10173.000
GR	2177.900	10212.000	2179.800	10217.000	2177.800	10229.000	2178.200	10267.000	2179.100	10288.000
GR	2178.800	10312.000	2179.800	10346.000	2179.800	10380.000	2179.400	10400.000	2179.400	10438.000
GR	2179.500	10461.000	2178.100	10497.000	2179.000	10513.000	2178.800	10536.000	2178.700	10555.000
GR	2179.000	10633.000	2179.700	10669.000	2180.300	10712.000	2180.500	10734.000	2179.800	10744.000
GR	2179.700	10754.000	2178.300	10771.000	2179.000	10797.000	2186.100	10826.000	0.000	0.000
NH	8.000	1.000	9540.000	0.050	9731.000	0.065	9769.000	0.025	9873.000	0.055
NH	9952.000	0.025	10041.000	0.050	10115.000	1.000	10530.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9675.000	10135.000	0.000	0.000	0.000	0.000	0.000
X1	3.180	40.000	9900.000	10056.000	555.000	610.000	620.000	0.000	0.000	0.000
GR	2194.200	9435.000	2188.400	9471.000	2185.000	9498.000	2183.500	9527.000	2180.400	9546.000
GR	2180.100	9564.000	2179.500	9569.000	2179.600	9577.000	2180.000	9583.000	2180.000	9616.000
GR	2179.800	9625.000	2180.300	9636.000	2180.300	9661.000	2180.700	9722.000	2181.600	9805.000
GR	2180.900	9815.000	2181.300	9827.000	2181.300	9863.000	2180.700	9900.000	2180.100	9926.000
GR	2179.700	10000.000	2179.700	10056.000	2182.800	10075.000	2184.900	10097.000	2184.800	10111.000
GR	2182.900	10124.000	2183.600	10161.000	2184.400	10197.000	2185.100	10264.000	2184.800	10328.000
GR	2185.900	10347.000	2185.400	10366.000	2185.700	10430.000	2190.400	10453.000	2194.200	10469.000
GR	2194.000	10482.000	2191.900	10495.000	2190.600	10510.000	2190.500	10521.000	2192.000	10530.000
QT	2.000	12464.000	12464.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N	7.000	1.000	9150.000	0.050	9731.000	0.065	9769.000	0.025	9873.000	0.055
NH	9952.000	0.025	10041.000	0.050	10115.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9440.000	10042.000	0.000	0.000	0.000	0.000	0.000
X1	3.270	37.000	9952.000	10041.000	485.000	455.000	460.000	0.000	0.000	0.000
GR	2193.900	8950.000	2191.700	9000.000	2188.800	9090.000	2186.900	9155.000	2185.500	9162.000
GR	2185.800	9186.000	2185.400	9194.000	2185.000	9219.000	2184.600	9223.000	2184.300	9246.000
GR	2183.900	9249.000	2183.300	9287.000	2184.900	9303.000	2184.500	9350.000	2184.200	9369.000
GR	2184.500	9383.000	2183.500	9437.000	2183.900	9483.000	2184.300	9517.000	2184.700	9560.000
GR	2184.500	9590.000	2185.300	9637.000	2186.300	9731.000	2184.300	9769.000	2184.000	9817.000
GR	2182.800	9853.000	2182.800	9873.000	2184.900	9888.000	2183.800	9910.000	2184.900	9928.000
GR	2184.900	9943.000	2183.900	9952.000	2183.700	10000.000	2184.200	10041.000	2191.700	10071.000
GR	2198.800	10093.000	2200.100	10115.000	0.000	0.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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


*PROF 1

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 2.060
3720 CRITICAL DEPTH ASSUMED
     2.06     3.86  2135.06  2135.06  2135.05  2136.16     1.10     0.00     0.00  2133.70
   12945.    2862.    6849.    3234.     790.     625.     762.       0.       0.  2131.20
     0.00     3.62    10.96     4.24    0.050    0.025    0.055    0.000  2131.20  9408.67
 0.006391       0.       0.       0.        0        4        0     0.00   975.56 10384.23


FLOW DISTRIBUTION FOR SECNO=      2.06          CWSEL=   2135.06

STA=    9409.    9560.    9617.    9656.    9687.    9732.    9833.    9905.   10083.   10117.   10304.   10384.
 PER Q=     3.9      3.6      3.1      3.6      3.1      3.6      1.2     52.9      3.0     19.8      2.2
  AREA=   148.0    120.1     94.5     93.6     99.3    148.3     66.6    624.7     93.0    565.7    103.2
   VEL=     3.0      3.9      4.3      5.0      4.0      3.1      2.3     11.0      4.2      4.5      2.7

1490 NH CARD USED
*SECNO 2.170
MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.17     4.88  2140.68  2140.68     0.00  2142.15     1.47     3.62     0.11  2136.70
   12945.    4512.    7136.    1298.    1292.     562.     338.      28.      11.  2135.80
     0.02     3.49    12.70     3.62    0.076    0.025    0.058    0.000  2135.80  9529.83
 0.006420     520.     575.     610.        7       11        0     0.00   709.18 10239.01


FLOW DISTRIBUTION FOR SECNO=      2.17          CWSEL=   2140.68

STA=    9530.    9705.    9727.    9767.    9832.    9882.    9936.   10065.   10119.   10199.   10239.
 PER Q=    11.3      4.2      5.7      7.0      3.6      3.0     55.1      5.1      4.0      1.0
  AREA=   643.7     89.9    137.1    187.1    113.9    120.7    341.8    166.5    143.5     48.2
   VEL=     2.3      6.1      5.4      4.8      4.1      3.2     12.7      3.9      3.6      2.7

1490 NH CARD USED
*SECNO 2.250

3265 DIVIDED FLOW
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   ME        VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.25      6.53  2145.53  2145.53      0.00  2147.72      2.19      2.28      0.22  2139.00
   12945.      933.    10143.    1870.      748.     762.      481.       49.       17.  2139.50
     0.03      1.25     13.30     3.89     0.193    0.025     0.058     0.000  2139.00  9702.63
 0.004447      430.      430.     440.        20       11         0      0.00    496.47 10212.35


FLOW DISTRIBUTION FOR SECNO=      2.25          CWSEL=   2145.53

STA=    9703.    9933.    9941.   10065.   10102.   10138.   10205.   10212.
  PER Q=      5.6      1.7     78.4      5.1      5.1      4.2      0.1
   AREA=    702.5     45.0    762.4    160.4    177.9    135.5      7.1
    VEL=      1.0      4.7     13.3      4.1      3.7      4.0      1.9

1490 NH CARD USED
*SECNO 2.370
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.37      5.93  2149.93  2149.93      0.00  2151.96      2.03      2.94      0.02  2144.00
   12945.      270.     8582.    4093.      168.     640.      690.       74.       23.  2144.90
     0.04      1.61     13.41     5.93     0.135    0.025     0.041     0.000  2144.00  9879.95
 0.005164      615.      615.     610.        20       11         0      0.00    394.10 10274.05


FLOW DISTRIBUTION FOR SECNO=      2.37          CWSEL=   2149.93

STA=    9880.    9945.   10060.   10113.   10183.   10226.   10261.   10274.
  PER Q=      2.1     66.3      6.5      5.1      5.4     12.4      2.2
   AREA=    168.3    639.9    173.7    170.4    144.3    162.2     37.5
    VEL=      1.6     13.4      4.8      3.9      4.8      9.9      7.6

1490 NH CARD USED
*SECNO 2.460

3301 HV CHANGED MORE THAN HVINS

     2.46      5.50  2153.30      0.00      0.00  2154.28      0.98      2.21      0.10  2148.70
   12945.     3304.     6847.    2794.      601.     722.      466.       91.       28.  2149.00
     0.06      5.50      9.48     5.99     0.038    0.028     0.040     0.000  2147.80  9746.47
 0.004467      435.      470.     445.         3        0         0      0.00    505.06 10251.53
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   SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


FLOW DISTRIBUTION FOR SECNO=      2.46          CWSEL=   2153.30

STA=    9746.    9771.    9795.    9835.    9883.    9932.    9952.   10121.   10151.   10219.   10233.   10240.   10252.
  PER Q=      3.9      3.5      3.4      3.0      4.2      7.4     52.9      4.0      7.3      5.8      4.1      1.5
   AREA=     81.6     75.4    105.5    112.6    136.6     88.9    722.0    109.6    213.4     74.1     38.5     30.0
    VEL=      6.2      6.1      4.2      3.5      4.0     10.7      9.5      4.7      4.4     10.1     10.3      6.1

1490 NH CARD USED
*SECNO 2.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.58     6.72  2158.72  2158.72     0.00  2160.11     1.39     2.82     0.12  2154.10
   12945.    5142.    7085.     719.    1220.     578.     252.     119.      37.  2155.80
     0.08     4.21    12.26     2.85    0.044    0.025    0.065    0.000  2152.00  9436.42
 0.004243     625.     655.     670.       20       11        0     0.00   724.00 10160.42


FLOW DISTRIBUTION FOR SECNO=      2.58          CWSEL=   2158.72

STA=    9436.    9579.    9620.    9662.    9681.    9697.    9719.    9782.    9835.    9901.    9952.   10054.   10098.
  PER Q=      3.8      5.8      3.5      3.9      3.8      3.1      3.1      4.0      4.9      3.7     54.7      3.5
   AREA=    198.8    129.0    116.8     78.0     62.1     69.0    121.0    130.6    161.0    154.0    577.7    139.1
    VEL=      2.5      5.8      3.9      6.5      8.0      5.9      3.3      4.0      3.9      3.1     12.3      3.2
STA=   10098.   10160.
  PER Q=      2.1
   AREA=    112.9
    VEL=      2.4

1490 NH CARD USED
*SECNO 2.690

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.69     6.31  2163.01  2163.01     0.00  2164.09     1.08     2.13     0.03  2158.20
   12945.    4819.    6605.    1321.    1159.     600.     447.     145.      46.  2158.50
     0.10     4.16    11.01     3.41    0.039    0.025    0.050    0.000  2156.70  9334.94
 0.003798     495.     550.     575.       20       10        0     0.00   914.06 10294.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


FLOW DISTRIBUTION FOR SECNO=     2.69         CWSEL=  2163.01

STA=    9335.    9464.    9582.    9678.    9730.    9766.    9842.    9940.   10055.   10082.   10127.   10264.   10294.
  PER Q=     3.5      3.8      3.2     14.3      3.8      3.7      5.0     31.0      3.4      5.1      3.2      0.1
   AREA=   154.5    193.0    158.2    203.0    112.9    148.4    189.2    599.9    100.5    155.7    177.0     13.5
    VEL=     3.0      2.5      2.6      9.1      4.4      3.2      3.4     11.0      4.4      4.2      2.3      1.1

1490 NH CARD USED
*SECNO 2.730
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
          VULTURE MINE ROAD
    2.73     4.11  2166.21  2166.21     0.00  2167.61     1.41     1.24     0.10  2163.00
   12945.    2243.    8971.    1731.     471.     840.     226.     136.      51.  2162.40
    0.11     4.76    10.68     7.65    0.045    0.027    0.027    0.000  2162.10  9625.84
0.006300     340.     240.     160.       20       14        0     0.00   554.57 10180.41


FLOW DISTRIBUTION FOR SECNO=     2.73         CWSEL=  2166.21

S      9626.    9651.    9710.    9835.   10061.   10117.   10170.   10180.
  PER Q=     0.3      3.3     13.7     69.3     12.1      1.2      0.0
   AREA=    17.6    109.4    344.3    840.2    163.6     61.0      1.6
    VEL=     2.1      4.0      5.2     10.7      9.6      2.6      0.7

1490 NH CARD USED
*SECNO 2.780

3301 HV CHANGED MORE THAN HVINS

    2.78     5.22  2168.22     0.00     0.00  2168.84     0.62     1.15     0.08  2164.10
   12817.    1906.    4396.    6313.     367.     496.    1628.     169.      55.  2163.70
    0.12     3.36     9.27     3.88    0.045    0.025    0.050    0.000  2163.00  9680.26
0.003305     130.     260.     310.        3        0        0     0.00   859.69 10539.95


FLOW DISTRIBUTION FOR SECNO=     2.78         CWSEL=  2168.22

STA=    9680.    9749.    9826.    9917.    9937.   10048.   10098.   10202.   10238.   10303.   10338.   10366.   10413.
  PER Q=     3.6      3.1      5.9      2.3     35.9      3.5      8.4      4.3      6.1      3.6      3.7      4.0
   AREA=   140.1    138.1    220.8     68.1    495.8    134.2    304.7    134.6    209.5    110.1    120.5    142.0
    VEL=     3.3      2.8      3.4      4.3      9.3      3.4      3.5      4.1      3.7      4.2      4.0      3.6
STA=   10413.   10460.   10492.   10518.   10540.
  PER Q=     4.1      4.9      5.1      1.6
   AREA=   144.4    138.1    130.6     59.3
    VEL=     3.6      4.6      5.0      3.5
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     STA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 2.880

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.88     4.74  2171.74  2171.74     0.00  2173.01     1.27     1.96     0.19  2167.00
   12817.      242.    6752.    3823.      65.     569.    1469.     195.      64.  2167.00
     0.14     3.70    11.87     3.96    0.050    0.025    0.050    0.000  2167.00  9916.41
 0.005002     300.     495.     480.       20       15        0     0.00   813.89 10730.30


FLOW DISTRIBUTION FOR SECNO=      2.88          CWSEL=   2171.74

STA=    9916.    9944.   10064.   10098.   10203.   10238.   10289.   10328.   10374.   10439.   10538.   10705.   10730.
  PER Q=      1.9     52.7      4.8      7.0      3.1      5.6      4.9      6.1      5.9      3.3      3.1      1.7
   AREA=     65.4    569.0    123.4    245.2     93.8    159.6    131.8    160.3    181.3    130.2    165.7     57.7
    VEL=      3.7     11.9      5.0      3.7      4.2      4.3      4.7      4.8      4.2      2.8      2.4      3.8

1[illegible] NH CARD USED
*SECNO 2.970

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     2.97     4.81  2175.91  2175.91     0.00  2177.15     1.24     2.17     0.00  2171.10
   12817.       15.    7979.    4823.       7.     725.    1431.     217.      72.  2171.10
     0.15     2.23    11.00     3.37    0.050    0.025    0.053    0.000  2171.10  9925.27
 0.004487     510.     500.     400.       20        5        0     0.00   868.68 10807.36


FLOW DISTRIBUTION FOR SECNO=      2.97          CWSEL=   2175.91

STA=    9925.    9928.   10086.   10117.   10203.   10226.   10278.   10367.   10458.   10504.   10761.   10807.
  PER Q=      0.1     62.3      4.9      3.6      3.4      5.8      7.1      4.3      3.7      3.0      1.9
   AREA=      6.6    725.4    190.6    142.8     89.1    170.9    237.1    178.3    157.1    186.0     80.0
    VEL=      2.2     11.0      3.3      3.2      4.9      4.4      3.8      3.1      3.0      2.1      3.0
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 3.070

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     3.07     5.57  2180.47  2180.47     0.00  2181.81     1.33     1.86     0.03  2176.20
   12817.      21.   10192.    2601.       9.     990.     937.     246.       80.  2175.30
     0.17     2.35    10.30     2.72    0.050    0.025    0.050    0.000  2174.90  9951.80
 0.003660      515.     500.     360.       20        8        0     0.00   847.62 10803.01


FLOW DISTRIBUTION FOR SECNO=      3.07          CWSEL=   2180.47

STA=    9952.    9956.   10160.   10212.   10288.   10497.   10633.   10803.
  PER Q=      0.2     79.5      5.8      3.8      3.9      4.5      2.4
   AREA=      9.0    989.7    179.3    160.4    241.3    226.2    149.7
    VEL=      2.4     10.3      4.2      3.0      2.1      2.5      2.0

1[illegible] NH CARD USED
*SECNO 3.180

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

     3.18     4.33  2183.83     0.00     0.00  2184.66     0.83     2.80     0.05  2180.70
   12817.    7400.    5194.      223.    1151.     611.      80.     262.       90.  2179.70
     0.19     6.43     8.50     2.79    0.039    0.034    0.058    0.000  2179.50  9520.64
 0.006160      555.     620.     610.        2        0        0     0.00   618.77 10171.29


FLOW DISTRIBUTION FOR SECNO=      3.18          CWSEL=   2183.83

STA=    9521.    9564.    9583.    9616.    9636.    9661.    9722.    9805.    9827.    9863.    9900.   10056.   10171.
  PER Q=      3.7      3.7      5.6      3.4      3.7      8.2     15.6      4.1      6.2      3.5     40.5      1.7
   AREA=    101.2     78.5    126.3     76.9     88.2    203.0    222.3     38.5     91.0    104.7    611.0     80.1
    VEL=      4.7      6.0      5.7      5.7      5.4      5.2      9.0      9.0      8.7      4.2      8.5      2.8
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 3.270
    3.27     4.12  2186.92     0.00     0.00  2187.55     0.63     2.08     0.02  2183.90
   12464.    9811.    2613.      41.    1891.     272.      15.     203.      99.  2184.20
    0.21     5.19     9.61     2.75    0.042    0.025    0.050    0.000  2182.80  9154.21
 [illegible]  485.     460.     455.        3        0        0     0.00   897.68 10051.89


FLOW DISTRIBUTION FOR SECNO=      3.27          CWSEL=   2186.92

STA=    9154.    9246.    9287.    9350.    9437.    9483.    9517.    9560.    9637.    9769.    9817.    9853.    9873.
 PER Q=     3.8      5.5      4.9      8.8      5.9      3.5      3.4      5.0      3.3      9.6     10.8      7.8
  AREA=   139.1    134.7    149.6    242.7    148.3     96.0    104.2    164.8    167.2    134.1    126.8     82.5
   VEL=     3.4      5.1      4.1      4.5      5.0      4.6      4.1      3.8      2.5      9.0     10.6     11.7
STA=    9873.    9910.    9952.   10041.   10052.
 PER Q=     3.4      3.0     21.0      0.3
  AREA=   102.7     99.4    271.8     14.8
   VEL=     4.1      3.7      9.6      2.7
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THIS RUN EXECUTED THU, OCT 30 1986 15:04:10

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R2 FLOODWAY PROFILE - 0.8 FOOT

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2135.130	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HI       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST


*PROF 2

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 2.060
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9600.0   10330.0  TYPE=     1  TARGET=     730.000
     2.06     3.94  2135.14  2135.14  2135.06  2136.43     1.29     0.00     0.00  2133.70
   12945.    2256.    7341.    3348.     567.     639.     724.       0.       0.  2131.20
     0.00     3.98    11.49     4.63    0.050    0.025    0.055    0.000  2131.20  9600.00
 0.006821       0.       0.       0.        0        4        0     0.00   730.00 10330.00


1490 NH CARD USED
*SECNO 2.170
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9700.0   10234.0  TYPE=     1  TARGET=     534.000
     2.17     5.27  2141.07  2141.07  2140.68  2142.67     1.61     3.33     0.09  2136.70
   12945.    3622.    7733.    1589.     763.     612.     421.      24.       8.  2135.80
     0.02     4.75    12.63     3.78    0.052    0.025    0.037    0.000  2135.80  9700.00
 0.005665     520.     575.     610.       20       11        0     0.00   534.00 10234.00


1490 NH CARD USED
*SECNO 2.250

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9881.0   10170.0  TYPE=     1  TARGET=     289.000
     2.25     6.60  2145.60  2145.60  2145.33  2148.06     2.46     2.22     0.26  2139.00
   12945.     807.   10628.    1510.     217.     771.     379.      40.      12.  2139.50
     0.03     3.71    13.78     3.99    0.065    0.025    0.061    0.000  2139.00  9881.00
 0.004703     430.     430.     440.       20       11        0     0.00   289.00 10170.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
           QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  NME      VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 2.370
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9940.0   10245.0  TYPE=     1  TARGET=     305.000
     2.37     6.33  2150.33  2150.35  2149.93  2152.37     2.21     2.93     0.02  2144.00
   12945.      91.     9386.     3468.      29.      688.      655.      59.      16.   2144.90
     0.04     3.16     13.65     5.30    0.043    0.025    0.043    0.000  2144.00  9940.00
 0.004856     615.      615.      610.       20        8        0     0.00   305.00 10245.00


1490 NH CARD USED
*SECNO 2.460

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9828.0   10230.0  TYPE=     1  TARGET=     402.000
     2.46     5.78  2153.66     0.00  2153.30  2154.93     1.26     2.27     0.10  2148.70
    945.     2442.     8173.     2330.      402.      783.      420.      75.      20.   2149.00
     0.06     6.08     10.44     5.55    0.038    0.028    0.046    0.000  2147.89  9828.00
 0.004936     455.      470.      445.        3        0        0     0.00   402.00 10230.00


1490 NH CARD USED
*SECNO 2.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9590.0   10098.0  TYPE=     1  TARGET=     508.000
     2.58     6.79  2158.79  2158.79  2158.72  2160.44     1.65     3.10     0.12  2154.10
   12945.    4938.     7546.      461.     1020.      584.      142.     100.      27.   2155.80
     0.08     4.84     12.91     3.23    0.043    0.025    0.065    0.000  2152.00  9590.00
 0.004634     625.      655.      670.       20       11        0     0.00   508.00 10098.00


1490 NH CARD USED
*SECNO 2.690
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
```

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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  ME       VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9630.0   10120.0  TYPE=     1  TARGET=     490.000
     2.69     6.32  2163.02  2163.02  2163.01  2164.66     1.63     2.54     0.00  2158.20
   12945.     4254.    7562.    1128.     746.     601.     235.     120.     33.   2158.50
     0.09     5.70    12.58     4.81    0.033    0.023    0.050    0.000  2136.70  9630.00
 0.004940     495.     550.     575.       20       11        0     0.00   490.00 10120.00


1490 NH CARD USED
*SECNO 2.730
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9723.0   10119.0  TYPE=     1  TARGET=     450.000
     2.73     4.16  2166.26  2166.26  2166.21  2167.95     1.69     1.46     0.02  2163.00
   12945.     1722.    9527.    1697.     319.     852.     170.     129.     36.   2162.40
     0.10     5.40    11.19     9.98    0.045    0.027    0.025    0.000  2162.10  9723.00
 0.006797     340.     240.     160.       20       14        0     0.00   396.00 10119.00


1490 NH CARD USED
*SECNO 2.780

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9710.0   10345.0  TYPE=     1  TARGET=     635.000
     2.78     4.63  2168.35     0.00  2168.22  2169.48     1.13     1.47     0.06  2164.10
   12817.     2404.    5896.    4517.     556.     509.     972.     138.     38.   2163.70
     0.11     4.32    11.39     4.63    0.043    0.025    0.050    0.000  2163.70  9710.00
 0.004987     150.     260.     310.        3        0        0     0.00   635.00 10345.00


1490 NH CARD USED
*SECNO 2.880

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS     BANK ELEV
   ?         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA     LEFT/RIGHT
   IME       VLOB      VCH       VROB      XNL       XNCH      XNR       WTR       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=    9930.0   10350.0  TYPE=     1  TARGET=     420.000
     2.88      5.08  2172.08  2172.08  2171.74  2173.89     1.81      2.58      0.20  2167.00
   12817.       263.    8006.    4348.      34.     410.     929.      139.      44.   2167.00
     0.12      4.84     13.13     4.89    0.050    0.025    0.050     0.000  2167.00  9930.00
 0.005378      500.     495.     480.       20        8        0      0.00   420.00 10350.00


1490 NH CARD USED
*SECNO 2.970
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9928.0   10330.0  TYPE=     1  TARGET=     402.000
     2.97      4.96  2176.06  2176.06  2173.91  2177.91     1.85      2.66      0.01  2171.10
   12817.        0.    9349.    3468.       0.     749.     774.      174.      48.   2171.10
     0.13      0.00     12.49     4.48    0.000    0.025    0.035     0.000  2171.10  9928.00
 0.005784      510.     500.     400.        3        8        0      0.00   402.00 10330.00


1490 NH CARD USED
*SECNO 3.070
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9956.0   10335.0  TYPE=     1  TARGET=     379.000
     3.07      3.46  2180.36  2180.36  2180.47  2182.27     1.91      2.34      0.02  2176.20
   12817.        0.   11320.    1497.       0.     967.     387.      189.      52.   2175.30
     0.15      0.00     11.71     3.86    0.000    0.025    0.030     0.000  2174.90  9956.00
 0.005010      515.     500.     360.       20        8        0      0.00   379.00 10335.00


1490 NH CARD USED
*SECNO 3.180

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9675.0   10155.0  TYPE=     1  TARGET=     480.000
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  SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
  Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
  TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
  SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CURAR     TOPWID     ENDST


    3.18      4.77   2184.47      0.00   2183.83   2185.56      1.09      3.21      0.08   2180.70
   12817.     6106.     6382.      329.      774.      710.      123.      210.       58.   2179.70
    0.17      7.89      8.98      2.66     0.032     0.034     0.067     0.000   2179.70   9675.00
 0.005639     333.      620.      610.         2         0         0      0.00    459.16  10155.00


1490 NH CARD USED
*SECNO 3.270

3470 ENCROACHMENT STATIONS=    9440.0    10042.0  TYPE=     1  TARGET=     602.000
    3.27      4.62   2187.42      0.00   2186.92   2188.33      0.92      2.76      0.02   2183.90
   12464.     9088.     3370.        6.     1465.      315.        3.      228.       64.   2184.20
    0.18      6.21     10.69      1.91     0.039     0.025     0.050     0.000   2182.80   9440.00
 0.005994     485.      460.      455.         2         0         0      0.00    602.00  10042.00
```

THIS RUN EXECUTED THU, OCT 30 1986 15:05:01

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100 YEAR DISCHARGE - R2

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	EMDST	QLOB	QCH	QR
*	2.060	2135.06	3.86	2136.16	10.96	2131.20	0.00	975.56	9408.67	10384.23	2861.75	6849.47	3237.77
*	2.060	2135.14	3.94	2136.43	11.49	2131.20	0.00	730.00	9600.00	10330.00	2256.10	7340.61	3348.29
*	2.170	2140.68	4.88	2142.15	12.70	2135.80	575.00	709.18	9529.83	10239.01	4311.83	7135.51	1297.66
*	2.170	2141.07	5.27	2142.67	12.63	2135.80	575.00	534.00	9700.00	10234.00	3622.40	7733.36	1508.24
*	2.250	2145.53	6.53	2147.72	13.30	2139.00	430.00	496.47	9702.63	10212.35	932.68	10142.80	1869.51
*	2.250	2145.60	6.60	2148.06	13.78	2139.00	430.00	289.00	9881.00	10170.00	806.52	10628.46	151[illegible]
*	2.370	2149.93	5.93	2151.96	13.41	2144.00	615.00	374.10	9879.95	10274.05	270.25	8581.65	4093.10
*	2.370	2150.35	6.35	2152.57	13.65	2144.00	615.00	305.00	9940.00	10245.00	90.75	9385.99	3468.25
	2.460	2153.30	5.50	2154.28	9.48	2147.80	470.00	503.06	9746.47	10251.53	3303.96	6846.91	2794.13
	2.460	2153.66	5.78	2154.93	10.44	2147.89	470.00	402.00	9828.00	10230.00	2442.26	8172.96	2329.78
*	2.580	2158.72	6.72	2160.11	12.26	2152.00	655.00	724.00	9436.42	10160.42	3141.86	7084.54	715.59
*	2.580	2158.79	6.79	2160.44	12.91	2152.00	655.00	508.00	9590.00	10098.00	4938.00	7545.98	461.03
*	2.690	2163.01	6.31	2164.09	11.01	2156.70	550.00	914.06	9334.94	10294.00	4818.99	6604.67	152[illegible]33
*	2.690	2163.02	6.32	2164.66	12.58	2156.70	550.00	490.00	9630.00	10120.00	4254.34	7562.26	1128.40
*	2.730	2166.21	4.11	2167.61	10.68	2162.10	240.00	534.57	9623.84	10180.41	2243.37	8970.68	173[illegible]94
*	2.730	2166.26	4.16	2167.95	11.19	2162.10	240.00	396.00	9723.00	10119.00	1721.67	9526.81	1698.52
	2.780	2168.22	5.22	2168.84	9.27	2163.00	260.00	859.69	9680.26	10539.95	1906.13	4595.78	631[illegible]09
	2.780	2168.35	4.65	2169.48	11.59	2163.70	260.00	635.00	9710.00	10345.00	2403.91	5896.12	4515.97
*	2.880	2171.74	4.74	2173.01	11.87	2167.00	495.00	813.89	9916.41	10730.30	242.12	6731.88	582[illegible]00
*	2.880	2172.08	5.08	2173.89	13.13	2167.00	495.00	420.00	9930.00	10350.00	262.80	8005.89	45[illegible]32
*	2.970	2175.91	4.81	2177.15	11.00	2171.10	500.00	868.68	9925.27	10807.36	14.71	7979.12	482[illegible]17
*	2.970	2176.06	4.96	2177.91	12.49	2171.10	500.00	402.00	9928.00	10330.00	0.00	9549.46	34[illegible]54

SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
* 3.070	2180.47	5.37	2181.81	10.30	2174.90	500.00	847.82	9951.80	10803.01	21.14	10192.28	2603.58
* 3.070	2180.36	5.46	2182.27	11.71	2174.90	500.00	379.00	9956.00	10335.00	0.00	11319.82	1497.18
3.180	2183.83	4.33	2184.66	8.50	2179.30	620.00	618.77	9520.64	10171.29	7399.55	3194.17	223.28
3.180	2184.47	4.77	2185.56	8.98	2179.70	620.00	459.16	9675.00	10155.00	6106.20	6381.93	328.87
3.270	2186.92	4.12	2187.35	9.61	2182.80	460.00	897.68	9154.21	10051.89	9810.58	2612.66	40.76
3.270	2187.42	4.62	2188.33	10.69	2182.80	460.00	602.00	9440.00	10042.00	9087.55	3370.49	5.96

ARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    2.060  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.060  PROFILE= 2  CRITICAL DEPTH ASSUMED

CAUTION  SECNO=    2.170  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.170  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.170  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.170  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.170  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.250  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.250  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.250  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.250  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.250  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.250  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.370  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.370  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.370  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.370  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.370  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.370  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.580  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.580  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.580  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.580  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.580  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.580  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.690  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.690  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.690  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.690  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.690  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.690  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.730  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.730  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.730  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.730  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.730  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.730  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    2.880  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.880  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.880  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.880  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.880  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.880  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    2.970  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.970  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    2.970  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    2.970  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    2.970  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    3.070  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.070  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.070  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.070  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.070  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.070  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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F WAY DATA, 100 YEAR DISCHARGE - R2
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
2.060	730.	1930.	6.7	2135.2	2135.1	0.1
2.170	534.	1795.	7.2	2141.1	2140.7	0.4
2.250	289.	1367.	9.5	2145.6	2145.5	0.1
2.370	305.	1371.	9.4	2150.3	2149.9	0.4
2.460	402.	1604.	8.1	2153.7	2153.3	0.4
2.580	508.	1747.	7.4	2158.8	2158.7	0.1
2.690	490.	1382.	8.2	2163.0	2163.0	0.0
2.730	396.	1341.	9.7	2166.3	2166.2	0.1
2.780	635.	2037.	6.3	2168.3	2168.2	0.1
2.880	420.	1594.	8.0	2172.0	2171.7	0.3
2.970	402.	1523.	8.4	2176.0	2175.9	0.1
3.070	379.	1354.	9.5	2180.5	2180.5	0.0
3.180	480.	1608.	8.0	2184.4	2183.8	0.6
3.270	602.	1783.	7.0	2187.4	2186.9	0.5

THIS RUN EXECUTED THU, OCT 30 1986 15:05:07

```
*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
```

Floodway, Reach #3
Cross Sec. 3.27-5.350

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH3.FLOOD.OUT

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

 WWWW  W     WWW   WWW   W  WWWWW  WWW   W
W   W W  W  W   W W   W  WW  W    W   W  WW
W   W W  W  W   W W   W  W  WWWW  W   W  W
WWWW  WWWWW W W W  WWWW  W      W W W W  W
W       W  W  W    W  W      W W   W  W
W       W  W  W   W   W  W   W W   W  W
W       W   WWW  WWW   WWW   WWW   WWW  WWW


 WWW   WWW  W     WWW       WWWW  WWWWW  WWW   WWW  W   W  WWW       WWWWW W     WWW   WWW  WWWW       WWW  W   W WWWWW
W   W W   W W    W   W      W   W W    W   W W   W W   W W  W   W      W    W    W   W W   W W  W   W      W   W W   W   W
W    W   W W W    W         W   W W    W   W W    W   W    W   W      W    W    W   W W   W W  W   W      W   W W   W   W
 WWW  W   W W     WWW      WWWW  WWWW  WWWWW W    WWWWW  WW      WWWW  W    W   W W   W W  W   W      W   W W   W   W
    W W   W W        W     W W   W    W   W W    W    W    W     W    W    W   W W   W W  W   W      W   W W   W   W
W   W W   W W    W   W  WW W  W W    W   W W   W W   W W  W  WW W    W    W   W W   W W  W   W  WW  W   W W   W   W
 WWW   WWW  WWWWW  WWW   WW  W   W WWWWW W   W  WWW  W   W  WWW   WW  W    WWWWW  WWW   WWW  WWWW   WW   WWW   WWW   W

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*****************************************************************************************************************
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Label: PRT007 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH3.FLOOD.OUT
File last modified: 86-10-30.15:21:00.Thu

Spooled: 86-11-19.07:38:24.Wed [Spooler rev 19.4.5]
Started: 86-11-19.07:38:36.Wed on: AHLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  RUN DATE THU, OCT 30 1986 TIME 15:15:43          *
*****************************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  THE HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616              *
*  (916) 440-2105 (FTS) 448-2105        *
*****************************************
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X     X  XXXXXXX   XXXXX            XXXXX
X     X  X       X     X          X     X
X     X  X       X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X       X                X
X     X  X       X     X          X
X     X  XXXXXXX   XXXXX           XXXXXXX
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THIS RUN EXECUTED THU, OCT 30 1986 15:16:10

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R3 FLOODWAY ANALYSIS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	0.000000	0.00	0.0	0.	2186.920	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	15.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38.000	1.000	8.000	3.000	26.000	42.000	39.000	4.000	53.000	54.000
13.000	14.000	15.000	200.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
QT	2.000	12464.000	12464.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	7.000	1.000	9150.000	0.050	9731.000	0.065	9769.000	0.025	9873.000	0.055
NH	9952.000	0.025	10041.000	0.030	10115.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9440.000	10042.000	0.000	0.000	0.000	0.000	0.000
X1	3.270	37.000	9932.000	10041.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2193.900	8950.000	2191.700	9000.000	2188.800	9090.000	2186.900	9155.000	2186.500	9162.000
GR	2185.800	9186.000	2185.400	9194.000	2185.000	9219.000	2184.600	9223.000	2184.300	9246.000
GR	2183.900	9249.000	2183.300	9287.000	2184.900	9303.000	2184.500	9350.000	2184.200	9369.000
GR	2184.500	9383.000	2183.300	9437.000	2183.900	9483.000	2184.300	9517.000	2184.700	9560.000
GR	2184.500	9590.000	2185.300	9637.000	2186.300	9731.000	2184.300	9769.000	2184.000	9817.000
GR	2182.800	9833.000	2182.800	9873.000	2184.900	9888.000	2183.800	9910.000	2184.900	9928.000
GR	2184.900	9943.000	2183.900	9952.000	2183.700	10000.000	2184.200	10041.000	2191.700	10071.000
GR	2198.800	10093.000	2200.400	10115.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	7.000	1.000	9050.000	0.050	9622.000	0.065	9672.000	0.025	9736.000	0.055
NH	9937.000	0.025	10020.000	0.030	10039.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9104.000	10032.000	0.000	0.000	0.000	0.000	0.000
X1	3.650	40.000	9937.000	10020.000	370.000	425.000	430.000	0.000	0.000	0.000
GR	2193.500	8950.000	2191.600	8996.000	2189.400	9060.000	2188.700	9097.000	2188.200	9104.000
GR	2187.900	9127.000	2187.400	9130.000	2187.000	9154.000	2187.800	9168.000	2187.000	9200.000
GR	2187.400	9320.000	2187.900	9400.000	2188.100	9441.000	2187.400	9457.000	2187.700	9491.000
GR	2187.900	9511.000	2187.400	9535.000	2188.600	9576.000	2188.900	9602.000	2188.900	9622.000
GR	2189.900	9635.000	2189.500	9659.000	2186.200	9672.000	2186.200	9702.000	2186.500	9736.000
GR	2187.900	9763.000	2189.100	9807.000	2189.200	9824.000	2189.400	9837.000	2189.800	9848.000
GR	2188.800	9881.000	2188.600	9906.000	2187.700	9923.000	2188.100	9937.000	2187.800	9972.000

GR	2187.000	9982.000	2187.000	10000.000	2187.000	10020.000	2193.600	10032.000	2194.400	10039.000
	6.000	0.065	9722.000	0.065	9785.000	0.025	9845.000	0.065	9912.000	0.025
NH	10043.000	0.050	10053.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9670.000	10033.000	0.000	0.000	0.000	0.000	0.000
X1	3.460	35.000	9912.000	10043.000	480.000	545.000	545.000	0.000	0.000	0.000
GR	2209.400	9225.000	2204.800	9253.000	2200.900	9267.000	2198.300	9277.000	2198.000	9295.000
GR	2197.600	9311.000	2197.700	9332.000	2195.900	9378.000	2194.000	9419.000	2192.300	9469.000
GR	2191.400	9510.000	2190.500	9541.000	2191.000	9579.000	2191.600	9611.000	2192.600	9682.000
GR	2192.500	9704.000	2191.800	9722.000	2192.600	9731.000	2192.600	9774.000	2190.400	9792.000
GR	2190.200	9835.000	2191.500	9843.000	2191.600	9857.000	2190.800	9873.000	2191.900	9885.000
GR	2191.900	9903.000	2190.900	9912.000	2190.900	9947.000	2192.200	9954.000	2192.100	9982.000
GR	2191.900	10000.000	2191.900	10013.000	2191.200	10020.000	2191.200	10043.000	2194.600	10053.000
NH	5.000	0.050	9721.000	0.035	9794.000	0.055	9942.000	0.025	10053.000	0.050
NH	10064.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9650.000	10054.000	0.000	0.000	0.000	0.000	0.000
X1	3.560	26.000	9942.000	10053.000	525.000	490.000	525.000	0.000	0.000	0.000
GR	2206.100	9285.000	2197.600	9328.000	2196.900	9386.000	2196.400	9440.000	2195.500	9503.000
GR	2195.800	9564.000	2196.400	9638.000	2195.600	9699.000	2194.600	9721.000	2193.400	9734.000
GR	2194.400	9756.000	2194.400	9794.000	2196.700	9811.000	2196.700	9821.000	2196.000	9837.000
GR	2196.700	9846.000	2196.700	9871.000	2196.700	9883.000	2195.600	9900.000	2196.400	9918.000
GR	2196.400	9942.000	2194.100	9972.000	2194.100	10000.000	2194.100	10043.000	2199.400	10053.000
GR	2200.400	10064.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.065	9522.000	0.025	9535.000	0.050	9873.000	0.065	9932.000	0.025
NH	10043.000	0.050	10066.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9490.000	10054.000	0.000	0.000	0.000	0.000	0.000
X1	3.660	37.000	9932.000	10043.000	535.000	575.000	570.000	0.000	0.000	0.000
GR	2219.100	8997.000	2213.000	9022.000	2212.400	9050.000	2213.100	9065.000	2211.700	9131.000
GR	2211.500	9170.000	2209.100	9230.000	2209.900	9262.000	2208.600	9307.000	2206.700	9325.000
GR	2205.900	9396.000	2205.100	9436.000	2204.100	9469.000	2202.900	9500.000	2201.500	9522.000
GR	2201.500	9529.000	2202.100	9545.000	2202.400	9576.000	2201.400	9623.000	2202.100	9665.000
GR	2202.100	9698.000	2202.100	9738.000	2200.500	9745.000	2200.500	9751.000	2202.400	9763.000
GR	2201.800	9800.000	2201.200	9811.000	2201.500	9827.000	2201.000	9850.000	2201.300	9873.000
GR	2201.100	9901.000	2200.500	9932.000	2199.200	9945.000	2199.000	10000.000	2199.000	10043.000
GR	2206.300	10059.000	2207.500	10066.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.050	9558.000	0.025	9679.000	0.045	9851.000	0.030	9872.000	0.065
NH	9920.000	0.025	10101.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9640.000	10095.000	0.000	0.000	0.000	0.000	0.000
X1	3.790	23.000	9920.000	10075.000	675.000	645.000	675.000	0.000	0.000	0.000
GR	2219.100	9405.000	2210.500	9452.000	2209.100	9464.000	2210.000	9472.000	2208.800	9487.000
GR	2208.800	9193.000	2208.900	9358.000	2207.800	9592.000	2208.600	9600.000	2207.300	9640.000
GR	2206.900	9648.000	2206.900	9668.000	2208.600	9679.000	2208.600	9730.000	2208.100	9805.000
GR	2206.500	9851.000	2206.500	9872.000	2206.900	9882.000	2204.200	9920.000	2204.000	10075.000
GR	2213.400	10095.000	2214.000	10096.000	2213.800	10101.000	0.000	0.000	0.000	0.000
NH	4.000	0.065	9933.000	0.025	10047.000	0.065	10131.000	0.030	10438.000	0.000
ET	0.000	0.000	4.100	9919.000	10250.000	0.000	0.000	0.000	0.000	0.000

X1	3.930	19.000	9933.000	10047.000	665.000	710.000	720.000	0.000	0.000	0.000
GR	2230.600	9875.000	2227.100	9897.000	2209.300	9933.000	2209.800	10000.000	2209.800	10047.000
	2212.200	10078.000	2213.200	10131.000	2213.500	10184.000	2213.500	10227.000	2214.000	10269.000
GR	2213.800	10318.000	2213.900	10345.000	2214.100	10367.000	2214.000	10376.000	2210.800	10398.000
GR	2210.900	10417.000	2213.600	10431.000	2222.900	10451.000	2223.200	10458.000	0.000	0.000
NH	4.000	0.045	9943.000	0.025	10057.000	0.035	10130.000	0.050	10565.000	0.000
ET	0.000	0.000	4.100	9932.000	10330.000	0.000	0.000	0.000	0.000	0.000
X1	4.070	23.000	9943.000	10037.000	770.000	725.000	770.000	0.000	0.000	0.000
GR	2232.300	9915.000	2215.000	9943.000	2215.500	10000.000	2216.300	10057.000	2217.300	10086.000
GR	2220.200	10131.000	2221.000	10172.000	2220.500	10210.000	2221.100	10233.000	2220.600	10294.000
GR	2220.500	10346.000	2219.600	10356.000	2220.400	10367.000	2220.200	10375.000	2219.700	10382.000
GR	2220.400	10390.000	2219.900	10397.000	2221.300	10412.000	2221.600	10442.000	2221.100	10469.000
GR	2220.600	10479.000	2227.900	10517.000	2234.500	10565.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.800	0.000	0.000	0.000	0.000	0.000
NH	7.000	0.045	9793.000	0.035	9833.000	0.025	9885.000	0.065	9955.000	0.025
NH	10037.000	0.065	10110.000	0.065	10690.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9780.000	10224.000	0.000	0.000	0.000	0.000	0.000
X1	4.160	34.000	9948.000	10063.000	440.000	310.000	430.000	0.000	0.000	0.000
GR	2237.300	9750.000	2218.600	9793.000	2220.100	9799.000	2219.200	9833.000	2218.600	9842.000
GR	2218.500	9885.000	2221.200	9898.000	2221.900	9912.000	2222.900	9922.000	2222.200	9932.000
GR	2221.700	9948.000	2220.300	9955.000	2220.300	10000.000	2220.300	10063.000	2224.600	10083.000
GR	2225.300	10123.000	2224.600	10178.000	2225.600	10198.000	2225.000	10217.000	2223.800	10237.000
GR	2225.300	10288.000	2224.800	10339.000	2224.400	10406.000	2223.800	10426.000	2224.800	10452.000
GR	2223.700	10472.000	2224.600	10480.000	2224.500	10506.000	2222.600	10561.000	2224.100	10576.000
GR	2224.100	10583.000	2230.500	10608.000	2235.800	10641.000	2238.400	10690.000	0.000	0.000
NH	8.000	0.070	9680.000	0.025	9734.000	0.030	9771.000	0.040	9888.000	0.035
NH	10077.000	0.065	10101.000	0.030	10178.000	0.050	10395.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9802.000	10152.000	0.000	0.000	0.000	0.000	0.000
X1	4.200	31.000	9888.000	10023.000	330.000	215.000	250.000	0.000	0.000	0.000
GR	2243.500	9410.000	2233.700	9454.000	2232.000	9485.000	2230.400	9558.000	2228.900	9634.000
GR	2223.300	9661.000	2223.400	9693.000	2223.300	9734.000	2225.300	9771.000	2225.800	9802.000
GR	2225.300	9830.000	2223.500	9888.000	2223.400	9954.000	2223.500	9996.000	2224.100	10000.000
GR	2224.400	10011.000	2223.300	10023.000	2223.700	10064.000	2225.400	10077.000	2225.400	10101.000
GR	2223.000	10111.000	2223.000	10128.000	2227.600	10135.000	2228.100	10173.000	2228.100	10197.000
GR	2228.300	10209.000	2227.800	10224.000	2227.800	10269.000	2227.300	10307.000	2225.500	10369.000
GR	2230.900	10393.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OT	2.000	12244.000	12244.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.100	9863.000	0.025	10063.000	0.050	10110.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9391.000	10075.000	0.000	0.000	0.000	0.000	0.000
X1	4.310	25.000	9863.000	10063.000	715.000	410.000	560.000	0.000	0.000	0.000
GR	2236.000	9025.000	2234.000	9085.000	2233.300	9175.000	2232.400	9251.000	2231.900	9311.000
GR	2231.800	9355.000	2233.000	9391.000	2232.700	9467.000	2232.300	9511.000	2232.500	9577.000
GR	2232.000	9646.000	2232.200	9710.000	2232.200	9749.000	2232.400	9788.000	2232.400	9838.000
GR	2231.700	9848.000	2228.600	9863.000	2229.200	9919.000	2228.300	9933.000	2228.000	9981.000
GR	2228.000	10000.000	2226.900	10008.000	2227.400	10063.000	2234.700	10074.000	2234.900	10110.000

NC	0.050	0.050	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.110	9858.000	10139.000	0.000	0.000	0.000	0.000	0.000
X1	4.338	13.000	9885.000	10133.000	165.000	185.000	170.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2230.000	2228.600	0.000
GR	2241.300	9245.000	2239.500	9345.000	2239.100	9445.000	2238.100	9545.000	2236.900	9645.000
GR	2237.400	9745.000	2235.700	9845.000	2230.000	9885.000	2230.000	9945.000	2230.000	10000.000
GR	2230.000	10015.000	2228.600	10115.000	2228.600	10135.000	2234.000	10140.000	2236.500	10215.000
SB	1.050	1.560	2.630	0.000	252.000	19.000	2100.000	2.000	0.000	0.000
ET	0.000	0.000	4.110	9843.000	10133.000	0.000	0.000	0.000	0.000	0.000
X1	4.344	12.000	9835.000	10135.000	40.000	40.000	40.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	2237.550	2240.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2237.800	2236.300	0.000
BT	5.000	9530.000	2240.800	2240.800	9730.000	2240.800	2240.800	10000.000	2240.700	2240.700
BT	10112.000	2240.500	2240.500	10135.000	2239.700	2239.700	0.000	0.000	0.000	0.000
GR	2242.000	9235.000	2240.400	9335.000	2240.000	9435.000	2239.700	9535.000	2249.000	9635.000
GR	2239.000	9735.000	2237.800	9835.000	2230.500	9855.000	2230.800	10000.000	2228.900	10100.000
GR	2228.900	10125.000	2236.300	10135.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.100	9754.000	0.045	9940.000	0.025	10036.000	0.065	10225.000	0.000
ET	0.000	0.000	4.100	9700.000	10043.000	0.000	0.000	0.000	0.000	0.000
X1	4.410	29.000	9940.000	10036.000	350.000	375.000	370.000	0.000	0.000	0.000
GR	2250.000	9110.000	2241.800	9166.000	2236.500	9221.000	2237.100	9257.000	2236.900	9320.000
GR	2235.800	9371.000	2237.000	9382.000	2236.300	9399.000	2236.900	9425.000	2236.500	9444.000
GR	2237.100	9516.000	2237.100	9545.000	2236.500	9552.000	2236.700	9613.000	2236.600	9674.000
GR	2237.200	9754.000	2237.500	9791.000	2235.900	9832.000	2236.700	9876.000	2237.300	9897.000
GR	2232.200	9940.000	2232.400	10000.000	2232.400	10036.000	2245.400	10053.000	2234.800	10081.000
GR	2253.500	10103.000	2254.100	10151.000	2258.500	10214.000	2259.800	10225.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.050	9819.000	0.025	10176.000	0.040	10318.000	0.065	10705.000	0.000
ET	0.000	0.000	4.100	9800.000	10440.000	0.000	0.000	0.000	0.000	0.000
X1	4.530	19.000	9819.000	10176.000	560.000	690.000	610.000	0.000	0.000	0.000
GR	2250.000	9670.000	2247.100	9698.000	2242.700	9731.000	2241.300	9768.000	2241.200	9793.000
GR	2238.400	9819.000	2238.000	9858.000	2238.300	9912.000	2238.500	9957.000	2237.800	10000.000
GR	2238.300	10065.000	2236.900	10176.000	2241.700	10228.000	2242.000	10318.000	2240.900	10456.000
GR	2241.100	10532.000	2248.300	10644.000	2254.100	10681.000	2260.300	10705.000	0.000	0.000
NH	4.000	0.045	9781.000	0.025	10194.000	0.045	10194.000	1.000	10500.000	0.000
ET	0.000	0.000	4.100	9770.000	10195.000	0.000	0.000	0.000	0.000	0.000
X1	4.600	21.000	9781.000	10194.000	315.000	525.000	390.000	0.000	0.000	0.000
GR	2255.900	9701.000	2255.700	9719.000	2254.000	9757.000	2252.000	9759.000	2242.500	9770.000
GR	2241.700	9777.000	2240.800	9781.000	2241.300	9841.000	2241.800	9907.000	2241.800	9985.000
GR	2242.300	10000.000	2242.000	10050.000	2241.300	10125.000	2240.900	10186.000	2245.200	10194.000
GR	2246.000	10219.000	2246.100	10274.000	2246.300	10360.000	2247.100	10415.000	2249.400	10466.000
GR	2250.000	10500.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.045	0.050	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9862.000	10171.000	0.000	0.000	0.000	0.000	0.000

X1	4.700	22.000	9868.000	10170.000	500.000	570.000	535.000	0.000	0.000	0.000
GR	2253.100	9855.000	2245.400	9868.000	2245.400	9932.000	2246.000	10000.000	2245.400	10048.000
GR	2245.000	10112.000	2244.200	10170.000	2245.300	10179.000	2246.200	10226.000	2248.000	10257.000
GR	2247.900	10284.000	2247.800	10292.000	2248.500	10297.000	2248.500	10307.000	2248.200	10319.000
GR	2248.200	10326.000	2250.400	10336.000	2251.000	10394.000	2251.300	10444.000	2255.100	10465.000
GR	2259.300	10517.000	2260.000	10555.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9885.000	10117.000	0.000	0.000	0.000	0.000	0.000
X1	4.790	22.000	9913.000	10103.000	455.000	495.000	470.000	0.000	0.000	0.000
GR	2260.000	9885.000	2249.900	9913.000	2250.300	9952.000	2248.900	9979.000	2248.700	10000.000
GR	2247.500	10052.000	2247.300	10103.000	2251.100	10117.000	2251.700	10155.000	2251.300	10211.000
GR	2251.500	10259.000	2250.200	10270.000	2251.000	10279.000	2252.000	10319.000	2252.600	10373.000
GR	2252.000	10421.000	2252.800	10475.000	2254.000	10547.000	2255.300	10588.000	2257.000	10641.000
GR	2259.300	10694.000	2259.800	10710.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9914.000	10220.000	0.000	0.000	0.000	0.000	0.000
X1	4.870	24.000	9927.000	10108.000	410.000	450.000	415.000	0.000	0.000	0.000
GR	2267.000	9850.000	2265.800	9888.000	2251.100	9927.000	2251.000	10000.000	2251.000	10057.000
GR	2251.800	10070.000	2252.400	10108.000	2253.400	10150.000	2251.800	10165.000	2252.900	10174.000
GR	2252.100	10184.000	2252.100	10195.000	2252.800	10229.000	2255.000	10263.000	2253.800	10287.000
GR	2254.700	10299.000	2255.600	10348.000	2255.800	10404.000	2256.800	10472.000	2256.600	10524.000
GR	2257.000	10547.000	2258.300	10601.000	2259.700	10672.000	2263.600	10735.000	0.000	0.000
QT	2.000	12118.000	12118.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.065	9941.000	0.025	10040.000	0.065	10082.000	0.025	10190.000	0.055
NH	10332.000	0.045	10820.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9916.000	10220.000	0.000	0.000	0.000	0.000	0.000
X1	4.980	35.000	9941.000	10190.000	585.000	525.000	580.000	0.000	0.000	0.000
GR	2265.400	9800.000	2261.400	9844.000	2259.200	9916.000	2253.400	9941.000	2253.400	9972.000
GR	2255.500	10000.000	2256.200	10040.000	2255.900	10082.000	2256.500	10092.000	2256.000	10103.000
GR	2255.700	10190.000	2259.100	10220.000	2258.400	10236.000	2257.200	10266.000	2257.900	10278.000
GR	2257.900	10317.000	2258.700	10332.000	2258.400	10349.000	2256.700	10362.000	2256.700	10378.000
GR	2258.500	10389.000	2259.000	10432.000	2259.700	10473.000	2261.400	10537.000	2262.100	10590.000
GR	2261.500	10604.000	2262.600	10614.000	2262.600	10640.000	2262.000	10654.000	2262.700	10679.000
GR	2263.100	10701.000	2262.600	10746.000	2262.600	10761.000	2263.400	10772.000	2268.700	10820.000
NH	4.000	0.055	9891.000	0.025	10109.000	0.065	10160.000	0.045	10930.000	0.000
ET	0.000	0.000	4.100	9795.000	10117.000	0.000	0.000	0.000	0.000	0.000
X1	5.080	25.000	9891.000	10109.000	515.000	460.000	505.000	0.000	0.000	0.000
GR	2276.400	9795.000	2259.200	9836.000	2259.000	9867.000	2258.400	9891.000	2258.900	9931.000
GR	2260.000	9965.000	2260.000	10000.000	2259.500	10057.000	2258.300	10109.000	2261.900	10127.000
GR	2262.100	10141.000	2262.300	10207.000	2261.900	10268.000	2261.800	10331.000	2259.900	10457.000
GR	2261.300	10472.000	2261.500	10507.000	2262.200	10539.000	2263.200	10595.000	2264.500	10643.000
GR	2265.800	10704.000	2267.300	10768.000	2267.800	10824.000	2268.400	10888.000	2269.200	10930.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.065	9763.000	0.025	9849.000	0.060	9888.000	0.025	10093.000	0.065
NH	10155.000	0.045	10675.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9746.000	10094.000	0.000	0.000	0.000	0.000	0.000
X1	5.170	39.000	9765.000	10093.000	510.000	480.000	495.000	0.000	0.000	0.000
GR	2279.700	9630.000	2278.700	9644.000	2265.100	9684.000	2269.500	9712.000	2268.600	9746.000
GR	2263.300	9765.000	2263.300	9817.000	2262.900	9848.000	2264.500	9861.000	2265.100	9881.000
GR	2264.300	9888.000	2264.300	9949.000	2264.600	10000.000	2264.100	10064.000	2264.400	10079.000
GR	2265.300	10093.000	2265.100	10121.000	2264.700	10131.000	2264.700	10155.000	2265.400	10166.000

GR	2265.400	10179.000	2265.100	10193.000	2265.800	10206.000	2266.800	10242.000	2266.300	10280.000
GR	2265.900	10299.000	2266.400	10305.000	2267.400	10363.000	2267.500	10398.000	2266.600	10431.000
GR	2264.700	10459.000	2266.300	10465.000	2265.500	10473.000	2266.400	10501.000	2265.800	10548.000
GR	2268.000	10568.000	2268.900	10593.000	2268.300	10622.000	2269.500	10675.000	0.000	0.000
NH	5.000	0.050	9842.000	0.065	9940.000	0.025	10071.000	0.065	10132.000	1.000
NH	10193.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9649.000	10193.000	0.000	0.000	0.000	0.000	0.000
X1	5.270	17.000	9940.000	10071.000	613.000	430.000	303.000	0.000	0.000	0.000
GR	2276.000	9080.000	2273.900	9380.000	2272.600	9513.000	2271.300	9649.000	2269.800	9741.000
GR	2268.600	9818.000	2272.900	9842.000	2272.900	9869.000	2271.600	9907.000	2266.900	9940.000
GR	2266.800	10000.000	2266.800	10024.000	2268.000	10035.000	2268.100	10071.000	2276.600	10114.000
GR	2277.000	10132.000	2277.300	10193.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	2.000	10370.000	10370.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	5.000	0.100	9824.000	0.025	9844.000	0.040	9995.000	0.025	10052.000	0.045
NH	10365.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9460.000	10062.000	0.000	0.000	0.000	0.000	0.000
X1	5.350	32.000	9995.000	10052.000	390.000	440.000	435.000	0.000	0.000	0.000
GR	2284.000	9285.000	2278.800	9356.000	2275.500	9399.000	2274.600	9423.000	2275.100	9436.000
GR	2274.400	9470.000	2273.200	9488.000	2272.600	9551.000	2272.300	9565.000	2272.700	9574.000
GR	2272.800	9647.000	2273.200	9673.000	2272.700	9700.000	2273.200	9726.000	2274.200	9760.000
GR	2274.300	9788.000	2273.300	9804.000	2270.400	9824.000	2270.200	9844.000	2271.900	9864.000
GR	2272.700	9894.000	2271.700	9934.000	2272.300	9954.000	2272.700	9983.000	2269.700	9995.000
GR	2269.700	10000.000	2269.700	10052.000	2276.200	10062.000	2276.200	10063.000	2276.000	10085.000
GR	2776.000	10165.000	2778.000	10365.000	0.000	0.000	0.000	0.000	0.000	0.000
EN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELMTR     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


*PROF 1

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 3.270
    3.27     4.12  2186.92     0.00  2186.92  2187.55     0.63     0.00     0.00  2183.90
   12464.    9810.    2613.      41.    1889.     272.      15.       0.       0.  2184.20
    0.00     5.19     9.62     2.75    0.042    0.025    0.050    0.000  2182.80  9154.31
 0.003925       0.       0.       0.        0        0        0     0.00   897.56 10051.88


FLOW DISTRIBUTION FOR SECNO=     3.27         CWSEL=   2186.92

STA=    9154.    9246.    9287.    9350.    9437.    9483.    9517.    9560.    9637.    9769.    9817.    9853.    9873.
  PER Q=     3.8      5.5      4.9      8.8      5.9      3.5      3.4      5.0      3.3      9.6     10.8      7.8
   AREA=   138.9    134.6    149.5    242.5    148.1     95.9    104.1    164.5    166.9    133.0    126.7     82.4
    VEL=     3.4      5.1      4.1      4.5      5.0      4.6      4.1      3.8      2.5      9.0     10.6     11.8
STA=    9873.    9910.    9952.   10041.   10052.
  PER Q=     3.4      3.0     21.0      0.3
   AREA=   102.6     99.2    271.5     14.8
    VEL=     4.1      3.7      9.6      2.8

1490 NH CARD USED
*SECNO 3.350

3265 DIVIDED FLOW

    3.35     3.60  2189.80     0.00     0.00  2190.63     0.83     3.02     0.06  2188.10
   12464.   10282.    2157.      26.    1647.     193.       7.      17.       8.  2187.00
    0.01     6.24    11.05     3.58    0.043    0.025    0.050    0.000  2186.20  9048.39
 0.011075      370.     430.     425.        2        0        0     0.00   969.29 10025.09


FLOW DISTRIBUTION FOR SECNO=     3.35         CWSEL=   2189.80

STA=    9048.    9154.    9200.    9320.    9400.    9437.    9491.    9555.    9672.    9702.    9736.    9763.    9923.
  PER Q=     5.6      5.0     14.8      7.2      4.1      3.3      5.5      3.3     12.7     13.4      3.0      3.6
   AREA=   148.3    110.4    311.9    171.9    106.5     76.3    134.1    116.3    108.0    117.3     70.2    148.9
    VEL=     4.7      5.6      5.9      5.2      4.8      5.4      5.1      3.6     14.7     14.3      5.4      3.1
STA=    9923.    9937.   10020.   10025.
  PER Q=     0.9     17.3      0.2
   AREA=    26.6    195.1      7.1
    VEL=     4.4     11.1      3.6
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 3.460
     3.46     4.28  2194.48     0.00     0.00  2195.53     1.05     4.04     0.07  2190.90
   12464.    8071.    4358.      35.    1352.     383.      10.      38.      17.  2191.20
     0.03     5.97    11.32     3.42    0.047    0.025    0.050    0.000  2190.20  9408.66
 0.008624     480.     545.     545.        3        0        0     0.00   640.41 10049.07


FLOW DISTRIBUTION FOR SECNO=      3.46          CWSEL=   2194.48

STA=    9409.    9510.    9541.    9579.    9611.    9682.    9774.    9792.    9835.    9843.    9873.    9912.   10043.
  PER Q=     4.9      4.3      5.8      3.7      5.1      5.1      4.9     20.6      3.0      3.4      3.8     35.0
   AREA=   176.7    109.4    141.7    101.7    168.9    185.7     53.6    179.7     29.0     93.5    111.7    385.1
    VEL=     3.4      4.9      5.1      4.6      3.8      3.4     11.4     14.3     12.9      4.0      4.3     11.3
STA=   10043.   10049.
  PER Q=     0.3
   AREA=    10.0
    VEL=     3.5

1490 NH CARD USED
*SECNO 3.560

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     3.56     6.07  2199.47  2199.47     0.00  2199.98     0.52     2.17     0.05  2196.40
   12464.    8044.    4420.       0.    2154.     533.       0.      64.      25.  2199.40
     0.06     3.73     8.26     0.01    0.046    0.025    0.050    0.000  2193.40  9318.55
 0.002415     525.     525.     490.       20       17        0     0.00   735.20 10053.75


FLOW DISTRIBUTION FOR SECNO=      3.56          CWSEL=   2199.47

STA=    9319.    9440.    9503.    9564.    9638.    9699.    9721.    9734.    9756.    9794.    9837.    9900.    9942.
  PER Q=     6.2      6.0      6.7      6.6      5.7      3.0      3.7      6.4      9.5      3.5      4.1      3.2
   AREA=   289.6    221.6    232.9    249.2    211.5     96.1     71.1    122.5    192.6    141.2    186.9    136.0
    VEL=     2.7      3.4      3.6      3.3      3.3      3.9      6.5      6.6      6.2      3.0      2.7      2.9
STA=    9942.   10053.
  PER Q=    35.5
   AREA=   534.8
    VEL=     3.3
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      FLMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 3.660

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     3.66     5.55  2204.55  2204.55     0.00  2206.06     1.51     1.79     0.30  2200.50
   12464.    4924.    7418.     122.    1267.     599.      33.      93.      34.  2199.00
     0.08     3.89    12.38     3.72    0.052    0.025    0.050    0.000  2199.00  9454.29
 0.004388     335.     370.     575.       20       15        0     0.00   600.54 10054.83


FLOW DISTRIBUTION FOR SECNO=      3.66          CWSEL=   2204.55

STA=    9434.    9529.    9576.    9625.    9665.    9738.    9763.    9811.    9830.    9901.    9932.   10043.   10055.
  PER Q=     3.0      3.4      4.0      3.6      5.2      3.1      3.8      4.5      5.5      3.5     59.5      1.0
   AREA=   108.6    115.1    129.7    111.8    178.5     84.1    124.0    126.9    171.8    116.1    399.0     32.8
    VEL=     3.5      3.7      3.9      4.0      3.7      4.5      3.8      4.4      4.0      3.7     12.4      3.7

1[illegible] NH CARD USED
*SECNO 3.790

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     3.79     5.63  2209.63  2209.63     0.00  2211.05     1.42     2.65     0.01  2204.20
   12464.    2955.    9290.     218.     788.     858.      34.     121.      43.  2204.00
     0.10     3.75    10.83     6.46    0.039    0.025    0.025    0.000  2204.00  9459.42
 0.003392     675.     675.     645.       20        5        0     0.00   619.73 10086.99


FLOW DISTRIBUTION FOR SECNO=      3.79          CWSEL=   2209.63

STA=    9439.    9640.    9668.    9806.    9872.    9920.   10075.   10087.
  PER Q=     5.2      4.0      3.5      6.2      4.9     74.5      1.8
   AREA=   185.3     74.9    169.7    173.2    184.5    857.7     33.8
    VEL=     3.5      5.7      2.5      4.4      3.3     10.8      6.5
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HI       OLOSS  BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 3.930
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     3.93     6.49  2215.79  2215.79     0.00  2217.50     1.71     2.57     0.09  2209.30
   12464.      123.     8653.     3686.      43.      700.     1050.      149.      52.  2209.80
     0.12     2.89    12.37     3.51    0.065    0.025    0.054    0.000  2209.30  9919.87
 0.003850     665.      720.      710.       20        8        0     0.00   515.84 10435.71


FLOW DISTRIBUTION FOR SECNO=      3.93          CWSEL=   2215.79

STA=    9920.    9933.   10047.   10078.   10131.   10184.   10269.   10345.   10398.   10417.   10436.
  PER Q=      1.0     69.4      4.8      4.0      3.5      4.6      3.3      3.7      4.0      1.8
   AREA=     42.6    699.9    148.6    163.9    129.4    184.3    145.2    129.7     93.9     54.8
    VEL=      2.9     12.4      4.0      3.0      3.3      3.1      2.8      3.5      5.4      4.0

1490 NH CARD USED
*SECNO 4.070
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.07     7.41  2222.41  2222.41     0.00  2224.16     1.75     2.65     0.01  2215.00
   12464.      178.     9412.     2874.      44.      779.      919.      179.      61.  2216.30
     0.14     4.01    12.09     3.13    0.045    0.025    0.051    0.000  2215.00  9931.01
 0.003190     770.      770.      725.       20        8        0     0.00   557.39 10488.40


FLOW DISTRIBUTION FOR SECNO=      4.07          CWSEL=   2222.41

STA=    9931.    9943.   10057.   10086.   10131.   10233.   10346.   10412.   10488.
  PER Q=      1.4     75.5      6.3      5.3      3.3      3.7      3.3      1.2
   AREA=     14.1    778.7    162.6    164.5    173.9    191.4    145.8     81.2
    VEL=      4.0     12.1      4.8      4.0      2.4      2.4      2.9      1.8

CCHV=   0.300 CEHV=   0.800
1490 NH CARD USED
*SECNO 4.160

3265 DIVIDED FLOW

     4.16     6.04  2224.54  2224.36     0.00  2226.12     1.58     1.91     0.05  2221.70
   12464.     8116.     3974.      374.      732.      483.      166.      193.      66.  2220.30
     0.15    11.09     8.23     2.26    0.032    0.040    0.065    0.000  2218.50  9779.34
 0.007139      440.      430.      310.        7       15        0     0.00   500.92 10584.72
```

```
  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA     LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      4.16          CWSEL=   2224.34

STA=    9779.    9799.    9833.    9842.    9885.    9912.    9948.   10063.   10583.   10585.
  PER Q=     4.4     13.8      6.5     34.2      4.0      2.2     31.9      3.0      0.0
   AREA=    71.7    166.3     50.8    257.6    102.9     82.8    482.9    165.1      0.4
    VEL=     7.7     10.3     15.9     16.6      4.8      3.4      8.2      2.3      0.7

1490 NH CARD USED
*SECNO 4.200

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS

    4.20     4.31  2227.31     0.00     0.00  2228.18     0.80     1.85     0.21  2223.50
   12464.    5636.    3936.    2892.     713.     306.     462.     203.      69.  2223.30
    0.16     7.91     7.77     6.26    0.030    0.035    0.036    0.000  2223.00  9641.65
0.005753     330.     230.     215.        3        0        0     0.00   583.37 10377.73


FLOW DISTRIBUTION FOR SECNO=      4.20          CWSEL=   2227.31

STA=    9642.    9693.    9734.    9771.    9830.    9888.   10023.   10064.   10111.   10128.   10378.
  PER Q=    12.3     14.7      7.0      3.4      7.8     31.6      9.9      4.8      5.9      2.7
   AREA=   163.6    162.5    111.5    104.0    168.9    506.5    156.3    112.9     73.3    119.1
    VEL=     9.2     11.3      7.8      4.1      5.7      7.8      7.9      5.3     10.0      2.9

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 4.310

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    4.31     6.43  2233.33  2233.33     0.00  2235.08     1.75     2.67     0.44  2228.60
   12244.     672.    11484.      88.     675.    1048.      26.     227.      80.  2227.40
    0.18     1.00     10.96     3.32    0.100    0.025    0.050    0.000  2226.90  9187.08
0.003736     715.     560.     410.       20       14        0     0.00   884.85 10071.93
```

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      4.31          CWSEL=   2233.33

STA=    9187.    9710.    9863.   10063.   10072.
  PER Q=      3.6      1.8     93.8      0.7
   AREA=    484.4    190.5   1048.1     26.4
    VEL=      0.9      1.2     11.0      3.3

*SECNO 4.338
     4.34     5.39  2233.99     0.00     0.00  2235.83     1.83     0.71     0.04  2230.00
   12244.     180.  12022.      41.      56.    1097.      13.     232.     82.   2228.60
     0.18     3.22    10.96     3.06    0.050    0.025    0.050    0.000  2228.60  9856.96
 0.001735     165.     170.     185.        2        0        0     0.00   283.03 10139.99


FLOW DISTRIBUTION FOR SECNO=      4.34          CWSEL=   2233.99

STA=    9857.    9885.   10133.   10140.
  PER Q=      1.5     98.2      0.3
   AREA=     56.0   1096.7     13.5
    VEL=      3.2     11.0      3.1

SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00   252.00    19.00  2100.00     2.00  2228.60  2228.60

*SECNO 4.344

3301 HV CHANGED MORE THAN HVINS

CLASS A LOW FLOW

3420 BRIDGE W.S.=   2233.46 BRIDGE VELOCITY=,     10.39     CALCULATED CHANNEL AREA=,     1178.

 EGPRS     EGLWC      H3       QWEIR     QLOW     BAREA   TRAPEZOID     ELLC     ELTRD
                                                           AREA
     0.00  2236.31     1.08        0.   12244.    2100.    2245.    2237.55  2240.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     2237.80 ELREA=     2236.30

     4.34     6.17  2233.07     0.00     0.00  2236.31     1.24     0.48     0.00  2237.80
   12244.       0.  12244.       0.       0.    1373.       0.     233.     82.   2236.30
     0.18     0.00     8.92     0.00    0.000    0.025    0.000    0.000  2228.90  9842.47
  002883      40.      40.      40.        0        0        0     0.00   290.87 10133.34
```

```
   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CURAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      4.34          CWSEL=   2235.07

STA=    9842.   10135.
  PER Q=    100.0
   AREA=   1372.6
    VEL=      8.9

1490 NH CARD USED
*SECNO 4.410
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.41     6.99  2239.19  2239.19     0.00  2240.72     1.53     1.11     0.14  2232.20
    12244.    4170.    7998.     76.    1875.     658.     30.     250.     87.   2232.40
     0.19     2.22    12.16     2.51    0.072    0.025    0.065    0.000  2232.20  9193.08
 0.003214     330.     370.     375.       20        8        0     0.00   851.80 10044.88


FLOW DISTRIBUTION FOR SECNO=      4.41          CWSEL=   2239.19

STA=    9193.    9371.    9516.    9674.    9791.    9876.    9940.   10036.   10045.
  PER Q=      5.0      4.6      4.9      3.8      6.8      9.0     65.3      0.6
   AREA=    406.3    360.7    390.3    231.3    229.3    236.9    657.9     30.1
    VEL=      1.5      1.5      1.5      1.8      3.6      4.7     12.2      2.5

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 4.530

3265 DIVIDED FLOW

     4.53     4.83  2241.73     0.00     0.00  2242.82     1.09     2.06     0.04  2238.40
    12244.     153.   11483.     607.      64.    1333.     228.     278.     97.   2236.90
     0.22     2.38     8.62     2.66    0.050    0.025    0.044    0.000  2236.90  9757.54
 0.003628     360.     610.     690.        3        0        0     0.00   669.69 10541.81


FLOW DISTRIBUTION FOR SECNO=      4.53          CWSEL=   2241.73

STA=    9758.    9819.   10176.   10228.   10342.
  PER Q=      1.3     93.8      4.2      0.8
   AREA=     64.5   1332.7    126.4    102.1
    VEL=      2.4      8.6      4.0      1.0
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
             QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
    TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 4.600
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.60     4.42  2245.22  2245.22     0.00  2246.22     1.00     1.36     0.01  2240.80
   12244.      171.   12073.      0.      42.    1497.      0.      293.     102.   2245.20
     0.23     4.08     8.07     0.00    0.045    0.025    0.000    0.000  2240.80  9766.85
 0.003320     315.     390.     525.      20       18        0     0.00   427.76 10194.61


FLOW DISTRIBUTION FOR SECNO=      4.60          CWSEL=   2245.22

STA=    9767.    9781.   10194.
  PER Q=      1.4      98.6
   AREA=     42.0    1496.6
    VEL=      4.1       8.1

*SECNO 4.700

3701 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.70     4.59  2248.79  2248.79     0.00  2250.37     1.58     2.34     0.17  2245.40
   12244.       32.   11053.   1159.      10.    1030.     279.     310.     108.   2244.20
     0.24     3.28    10.53     4.15    0.045    0.025    0.050    0.000  2244.20  9862.27
 0.003961     300.     335.     370.      20        8        0     0.00   466.44 10328.70


FLOW DISTRIBUTION FOR SECNO=      4.70          CWSEL=   2248.79

STA=    9862.    9868.   10170.   10179.   10226.   10237.   10284.   10292.   10297.   10307.   10319.   10326.   10329.
  PER Q=      0.3     90.3      1.7      5.6      1.4      0.4      0.1      0.0      0.0      0.1      0.1      0.0
   AREA=      9.7   1049.7     36.4    143.1     32.5     22.8      7.6      3.2      2.9      5.3      4.2      0.8
    VEL=      3.3     10.5      5.8      4.8      3.3      2.1      2.2      1.7      1.0      1.3      1.6      1.0

*SECNO 4.790
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.79     6.03  2253.53  2253.53     0.00  2255.08     1.54     2.30     0.00  2249.90
   12244.       53.   10117.   2074.      18.     929.     696.     327.     114.   2247.50
     0.26     3.00    10.89     2.98    0.045    0.025    0.050    0.000  2247.50  9902.93
 0.004042     435.     470.     495.      20       11        0     0.00   615.92 10518.85
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   SECNO    DEPTH    CWSEL    CRTWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   AHE      VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      4.79          CWSEL=   2253.33

STA=    9903.    9913.   10103.   10155.   10259.   10319.   10475.   10519.
  PER Q=      0.4     82.6      4.4      3.4      3.7      3.2      0.1
   AREA=     18.3    929.2    140.2    216.0    137.1    186.6     16.0
    VEL=      3.0     10.9      3.9      3.1      3.3      2.1      1.0

*SECNO 4.870
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.87     4.95  2255.95  2255.95     0.00  2257.65     1.70     1.86     0.05  2251.10
   12244.      124.     9758.     2362.      31.      844.      586.      342.      120.   2252.40
     0.27     3.97    11.56     4.03    0.045    0.025    0.050    0.000  2251.00  9914.14
 0.004849     410.      415.      450.        2       15        0     0.00   499.75 10413.89


FLOW DISTRIBUTION FOR SECNO=      4.87          CWSEL=   2255.95

STA=    9914.    9927.   10108.   10150.   10174.   10195.   10229.   10299.   10414.
  PER Q=      1.0     79.7      4.5      3.2      3.1      4.6      3.2      0.7
   AREA=     31.1    844.5    127.9     82.5     76.8    118.8    127.0     53.4
    VEL=      4.0     11.6      4.3      4.7      4.9      4.8      3.1      1.5

1490 NH CARD USED
*SECNO 4.980
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     4.98     4.42  2259.82  2259.82     0.00  2261.28     1.46     3.03     0.02  2255.40
   12118.      208.    10375.     1536.      69.      998.      448.      361.      126.   2255.70
     0.29     2.99    10.39     3.43    0.065    0.028    0.050    0.000  2255.40  9895.62
 0.005835     585.      380.      526.        3       11        0     0.00   581.99 10477.61


FLOW DISTRIBUTION FOR SECNO=      4.98          CWSEL=   2259.82

STA=    9896.    9941.   10190.   10266.   10332.   10378.   10478.
  PER Q=      1.7     85.6      3.5      3.3      3.8      2.1
   AREA=     69.4    998.1    131.5    125.1    101.1     90.2
    VEL=      3.0     10.4      3.2      3.2      4.6      2.8

1490 NH CARD USED
*SECNO 5.080
7185 MINIMUM SPECIFIC ENERGY
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   BANK ELEV
            QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3720 CRITICAL DEPTH ASSUMED
     5.08     4.80  2263.10  2263.10     0.00  2264.35     1.25     2.74     0.02  2258.40
   12118.     1216.    8519.    2383.     248.     821.     714.     380.     134.  2258.30
     0.30     4.90    10.38     3.34    0.055    0.025    0.047    0.000  2258.30  9826.69
 0.003203     515.     505.     460.        2        8        0     0.00   762.95 10589.64


FLOW DISTRIBUTION FOR SECNO=      5.08          CWSEL=   2263.10

STA=    9827.    9847.    9891.   10109.   10268.   10457.   10507.   10590.
  PER Q=      5.5      4.6     70.3      4.0     11.4      3.0      1.2
   AREA=    142.3    105.7    820.9    190.5    363.1     97.2     63.0
    VEL=      4.7      5.2     10.4      2.6      3.8      3.8      2.3

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 5.170

3265 DIVIDED FLOW

7[illegible] MINIMUM SPECIFIC ENERGY
3[illegible] CRITICAL DEPTH ASSUMED
     5.17     4.48  2267.38  2267.38     0.00  2268.57     1.19     2.68     0.02  2263.30
   12118.     126.   10181.    1811.      54.    1078.     582.     399.     143.  2265.30
     0.32     2.32     9.45     3.11    0.065    0.026    0.050    0.000  2262.90  9677.29
 0.003694     510.     495.     480.        5       11        0     0.00   792.98 10562.39


FLOW DISTRIBUTION FOR SECNO=      5.17          CWSEL=   2267.38

STA=    9677.    9765.   10093.   10155.   10206.   10459.   10548.   10562.
  PER Q=      1.0     84.0      3.9      3.6      4.1      3.2      0.2
   AREA=     54.1   1077.6    150.3    106.4    190.2    123.6     11.4
    VEL=      2.3      9.4      3.1      4.1      2.6      3.1      2.1

1490 NH CARD USED
*SECNO 5.270
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.27     6.23  2273.03  2273.03     0.00  2274.67     1.64     2.35     0.23  2266.90
   12118.    2993.    8970.     155.     891.     761.      61.     420.     151.  2268.10
     0.33     3.36    11.78     2.53    0.052    0.025    0.065    0.000  2266.80  9469.13
 0.003762     615.     505.     430.       20       11        0     0.00   626.80 10095.93
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      5.27          CWSEL=   2273.03

STA=    9469.    9741.    9818.    9940.   10071.   10096.
  PER Q=      8.7     10.9      5.2     74.0      1.3
   AREA=    384.2    294.8    212.5    761.4     61.4
    VEL=      2.7      4.5      3.0     11.8      2.5

1490 NH CARD USED
*SECNO 5.350
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.35     5.60  2275.30  2275.30     0.00  2276.71     1.42     1.84     0.07  2269.70
   10370.    5856.    4410.     104.    1415.     319.      24.     436.     157.  2269.70
     0.35     4.14    13.82     4.30    0.053    0.025    0.045    0.000  2269.70  9404.42
 0.003443     390.     435.     440.        3       15        0     0.00   656.19 10060.61


FLOW DISTRIBUTION FOR SECNO=      5.35          CWSEL=   2275.30

STA=    9104.    9551.    9647.    9726.    9824.    9844.    9864.    9894.    9934.    9954.    9983.    9995.   10052.
  PER Q=      3.4      5.0      3.4      3.1     12.4      5.9      4.9      7.0      3.9      4.3      3.3     42.5
   AREA=    208.8    251.0    184.1    176.5     99.9     84.9     89.9    123.9     65.9     81.1     49.2    319.0
    VEL=      1.7      2.1      1.9      1.8     12.8      7.2      5.7      5.8      6.1      5.4      6.9     13.8
STA=   10052.   10061.
  PER Q=      1.0
   AREA=     24.1
    VEL=      4.3
```

THIS RUN EXECUTED THU, OCT 30 1986 15:17:43

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R3 FLOODWAY PROFILE - 0.8 FOOT

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2187.420	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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


*PROF 2

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 3.270

3470 ENCROACHMENT STATIONS=    9440.0   10042.0  TYPE=     1  TARGET=     602.000
     3.27     4.62  2187.42     0.00  2186.92  2188.33     0.91     0.00     0.00  2183.90
   12464.    9089.    3369.      6.    1469.     316.      3.       0.       0.   2184.20
     0.00     6.19    10.66     1.93    0.039    0.025    0.050    0.000  2182.80  9440.00
 0.005940       0.       0.       0.       0        0        0     0.00   602.00 10042.00


1490 NH CARD USED
*SECNO 3.350

3470 ENCROACHMENT STATIONS=    9104.0   10032.0  TYPE=     1  TARGET=     928.000
     3.35     3.98  2190.18     0.00  2189.80  2190.79     0.61     2.44     0.03  2188.10
   12464.   10260.    2175.     28.    1927.     227.      9.      17.       7.   2187.00
     0.02     5.32     9.59     3.06    0.043    0.023    0.050    0.000  2186.20  9104.00
 0.006806     370.     430.     425.       2        0        0     0.00   921.79 10025.79


1490 NH CARD USED
*SECNO 3.460

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9670.0   10053.0  TYPE=     1  TARGET=     383.000
     3.46     4.75  2194.95  2194.95  2191.48  2196.73     1.78     3.94     0.35  2190.90
   12464.    6659.    5753.     52.     790.     446.     13.      36.      14.   2191.20
     0.03     8.43    12.89     3.98    0.038    0.025    0.050    0.000  2190.20  9670.00
 0.009192     480.     545.     545.       4       11        0     0.00   379.94 10049.94


1490 NH CARD USED
*SECNO 3.560

3301 HV CHANGED MORE THAN HVINS
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
             QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9650.0    10054.0  TYPE=     1  TARGET=     404.000
     3.56      6.04   2199.44   2199.44   2199.47   2200.67     1.23      3.30      0.05   2196.40
   12464.     6439.     6025.       0.     1115.      532.       0.        54.       19.   2199.40
     0.05      5.78     11.33      0.02     0.044     0.023    0.050     0.000   2193.40   9650.00
 0.004580     525.      525.      490.       20        22        0      0.00    403.43  10053.43


1490 NH CARD USED
*SECNO 3.660
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9490.0    10054.0  TYPE=     1  TARGET=     564.000
     3.66      5.53   2204.53   2204.53   2204.55   2206.07     1.54      2.36      0.09   2200.50
   12464.     4894.     7445.      124.     1239.      597.      32.       76.       25.   2199.00
     0.07      3.95     12.46      3.83     0.052     0.023    0.050     0.000   2199.00   9490.00
    .4665     535.      570.      575.       20        15        0      0.00    564.00  10054.00


1490 NH CARD USED
*SECNO 3.790
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9640.0    10095.0  TYPE=     1  TARGET=     455.000
     3.79      5.57   2209.57   2209.57   2209.63   2211.30     1.72      2.90      0.06   2204.20
   12464.     2371.     9864.      229.      585.      848.      33.      102.       33.   2204.00
     0.08      4.05     11.63      6.94     0.043     0.025    0.025     0.000   2204.00   9640.00
 0.003968     675.      675.      645.       20         5        0      0.00    446.86  10086.86


1490 NH CARD USED
*SECNO 3.930

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  [illegible]  QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  [illegible]ME    VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9919.0   10250.0  TYPE=     1  TARGET=     331.000
     3.93     6.80  2216.10  2216.10  2215.79  2218.36     2.26     2.93     0.16  2209.30
   12464.     147.    9862.    2456.      47.     735.     653.     125.      39.  2209.80
     0.10     3.13    13.41     3.76    0.065    0.025    0.058    0.000  2209.30  9919.24
 0.004242     665.     720.     710.       20       11        0     0.00   330.76 10250.00


1490 NH CARD USED
*SECNO 4.070
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9932.0   10330.0  TYPE=     1  TARGET=     398.000
     4.07     7.35  2222.35  2222.35  2222.41  2224.45     2.10     3.00     0.02  2215.00
   12464.     190.    9957.    2317.      44.     773.     648.     150.      45.  2216.30
     0.12     4.36    12.88     3.57    0.045    0.023    0.052    0.000  2215.00  9932.00
 0.003660     770.     770.     725.       20        8        0     0.00   398.00 10330.00


CCHV=   0.300 CEHV=   0.800
1490 NH CARD USED
*SECNO 4.160

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9780.0   10274.0  TYPE=     1  TARGET=     444.000
     4.16     6.77  2225.27     0.00  2224.51  2226.44     1.17     1.70     0.28  2221.70
   12464.    8057.    4120.     287.     855.     567.     124.     164.      48.  2220.30
     0.13     9.43     7.27     2.32    0.032    0.040    0.063    0.000  2218.50  9780.00
 0.004506     440.     430.     310.        4        0        0     0.00   423.92 10223.79


1490 NH CARD USED
*SECNO 4.200
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   BANK ELEV
   0        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9802.0   10152.0  TYPE=     1  TARGET=     350.000
     4.20     4.56  2227.56  2227.56  2227.31  2229.29     1.72     1.87     0.45  2223.50
   12464.     1912.    6177.    4375.     240.     540.     429.     173.      51.  2223.30
     0.14     7.97    11.43    10.19    0.040    0.033    0.036    0.000  2223.00  9802.00
 0.011423     330.     250.     215.        3       14        0     0.00   350.00 10152.00


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 4.310
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9391.0   10075.0  TYPE=     1  TARGET=     684.000
     4.31     6.34  2233.24  2233.24  2233.33  2235.16     1.92     3.54     0.10  2228.60
   12244.     439.   11716.     88.     434.    1030.      26.     191.      58.  2227.40
     0.16     1.01    11.37     3.45    0.100    0.025    0.050    0.000  2226.90  9391.00
 0.004119     715.     560.     410.        3       11        0     0.00   680.79 10071.79


*SECNO 4.338

3470 ENCROACHMENT STATIONS=    9858.0   10139.0  TYPE=     1  TARGET=     281.000
     4.34     5.78  2234.38     0.00  2233.99  2233.92     1.55     0.65     0.11  2230.00
   12244.     210.   11994.     40.      66.    1191.      14.     196.      60.  2228.60
     0.16     3.17    10.07     2.79    0.050    0.025    0.050    0.000  2228.60  9858.00
 0.003578     165.     170.     185.        4        0        0     0.00   281.00 10139.00


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
    1.05     1.56     2.63     0.00     252.00   19.00    2100.00  2.00     2228.60  2220.60

*SECNO 4.344
    3700.   BRIDGE STENCL=   9843.00    STENCR=  10133.00
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


CLASS A LOW FLOW

3420 BRIDGE W.S.=   2234.05 BRIDGE VELOCITY=,      9.21      CALCULATED CHANNEL AREA=,     1330.

 EGPRS      EGLWC      H3       QWEIR      QLOW      BAREA   TRAPEZOID      ELLC    ELTRD
                                                             AREA
     0.00   2236.33     0.73        0.   12244.     2100.     2245.     2237.55   2240.70


3470 ENCROACHMENT STATIONS=    9843.0   10133.0  TYPE=     1  TARGET=     290.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     2237.80 ELREA=     2236.30

    4.34     6.21  2235.11     0.00  2235.07  2236.33     1.21     0.40     0.00100000.00
  12244.       0.  12244.       0.       0.    1384.       0.     197.      60. 100000.00
    0.16     0.00     8.85     0.00    0.000    0.025    0.000    0.000  2228.90  9843.00
0.002797      40.      40.      40.        0        0        0     0.00   290.00 10133.00


1490 NH CARD USED
*[illegible]0 4.410

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9700.0   10045.0  TYPE=     1  TARGET=     345.000
    4.41     7.29  2239.49  2239.49  2239.19  2241.68     2.19     1.18     0.49  2232.20
  12244.     2898.    9253.      92.     724.     686.      33.     209.      63.  2232.40
    0.17     4.00    13.48     2.81    0.049    0.025    0.063    0.000  2232.20  9700.00
0.003735     350.     370.     375.       20       11        0     0.00   345.00 10045.00


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 4.530

3301 HV CHANGED MORE THAN HVINS
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  SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        NL        CLOSS   BANK ELEV
            QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA   LEFT/RIGHT
  TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
  SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


3470 ENCROACHMENT STATIONS=    9800.0   10440.0  TYPE=     1  TARGET=     640.000
     4.53      5.73  2242.63     0.00  2241.73  2243.30     0.67      1.47      0.11  2238.40
   12244.       151.  11274.     819.      61.    1654.     380.      234.      70.   2236.90
     0.20      2.47     6.82     2.16    0.050    0.025    0.044     0.000  2236.90  9800.00
 0.001703     360.     610.     690.        2        0        0      0.00   610.00 10440.00


1490 NH CARD USED
*SECNO 4.600
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9770.0   10195.0  TYPE=     1  TARGET=     425.000
     1.60      4.45  2245.25  2245.25  2245.22  2246.24     0.99      0.90      0.10  2240.80
   12244.       146.  12098.       0.      38.    1507.       0.      251.      75.   2245.20
     0.21      3.84     8.03     0.00    0.045    0.025    0.000     0.000  2240.80  9770.00
 0.003258     315.     390.     525.       20       22        0      0.00   425.00 10195.00


*SECNO 4.700

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9862.0   10171.0  TYPE=     1  TARGET=     309.000
     4.70      4.80  2249.00  2249.00  2248.79  2250.86     1.86      2.31      0.26  2245.40
   12244.        38.  12197.      10.      11.    1112.       5.      267.      80.   2244.20
     0.22      3.44    10.96     2.03    0.045    0.025    0.030     0.000  2244.20  9862.00
 0.005980     500.     535.     570.       20        8        0      0.00   309.00 10171.00


*SECNO 4.790

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
           QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


3470 ENCROACHMENT STATIONS:   9885.0   10117.0  TYPE=     1  TARGET=     232.000
     4.79     6.05  2253.55  2253.55  2253.53  2256.00     2.45     2.69     0.18  2249.90
   12244.      65.  11876.     303.      19.     934.      60.     278.      82.  2247.50
     0.23     3.51    12.72     5.09    0.045    0.025    0.050    0.000  2247.50  9902.87
 0.005482     435.     470.     495.       20       11        0     0.00   214.13 10117.00


*SECNO 4.870

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=   9914.0   10220.0  TYPE=     1  TARGET=     306.000
     4.87     5.38  2256.38     0.00  2253.93  2258.01     1.63     1.93     0.08  2251.10
   12244.     143.  10206.    1895.      37.     923.     426.     290.      85.  2252.40
     0.25     3.90    11.06     4.43    0.045    0.023    0.050    0.000  2251.00  9914.00
 0.003942     410.     415.     450.        3        0        0     0.00   306.00 10220.00


1490 NH CARD USED
*SECNO 4.980
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=   9916.0   10220.0  TYPE=     1  TARGET=     304.000
     4.98     4.48  2259.88  2259.88  2259.82  2261.84     1.96     2.95     0.10  2255.40
   12118.     226.  11592.     301.      65.    1013.      74.     307.      89.  2255.70
     0.26     3.50    11.45     4.04    0.065    0.028    0.035    0.000  2255.40  9916.00
 0.006946     585.     580.     525.        2       15        0     0.00   304.00 10220.00


1490 NH CARD USED
*SECNO 5.080
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=   9795.0   10147.0  TYPE=     1  TARGET=     352.000
     5.08     5.01  2263.31  2263.31  2263.10  2265.28     1.97     3.38     0.00  2258.40
   12118.    1471.  10366.     281.     261.     865.      83.     320.      92.  2258.30
     0.27     5.64    11.99     3.38    0.035    0.023    0.063    0.000  2258.30  9826.21
 0.006479     515.     505.     460.        1        8        0     0.00   320.79 10147.00
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTR      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 5.170
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9746.0   10094.0  TYPE=     1  TARGET=     348.000
     5.17     4.64  2267.54  2267.54  2267.38  2269.29     1.75     3.30     0.07  2263.30
   12118.      98.  12017.       3.      32.    1128.       2.      334.      96.  2265.30
     0.29     3.04    10.65     1.48    0.065    0.026    0.065    0.000  2262.90  9749.81
 0.006833     510.     495.     480.        2       11        0     0.00   344.19 10094.00


1490 NH CARD USED
*SECNO 5.270

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9649.0   10193.0  TYPE=     1  TARGET=     544.000
     5.27     6.10  2272.90  2272.90  2273.03  2274.79     1.90     2.78     0.07  2266.90
   12118.    2690.    9273.     155.     697.     744.      58.     350.     101.  2268.10
     0.30     3.86    12.46     2.66    0.054    0.023    0.065    0.000  2266.80  9649.00
 0.004343     615.     505.     430.        1       11        0     0.00   419.11 10095.26


1490 NH CARD USED
*SECNO 5.350

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9460.0   10062.0  TYPE=     1  TARGET=     602.000
     5.35     5.97  2273.67     0.00  2273.30  2276.78     1.11     1.75     0.24  2269.70
   10370.    6042.    4223.     106.    1591.     340.      27.     366.     106.  2269.70
     0.32     3.80    12.41     3.86    0.054    0.025    0.045    0.000  2269.70  9460.00
 0.004029     390.     435.     440.        5        0        0     0.00   601.18 10061.18
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THIS RUN EXECUTED THU, OCT 30 1986 15:18:50

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*************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100 YEAR DISCHARGE - R3

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	3.270	2186.92	4.12	2187.35	9.62	2182.80	0.00	897.56	9154.31	10051.88	9810.16	2613.13	40.70
	3.270	2187.42	4.62	2188.33	10.66	2182.80	0.00	602.00	9440.00	10042.00	9089.67	3369.37	5.96
	3.350	2189.80	3.60	2190.63	11.03	2186.20	430.00	969.29	9048.39	10025.09	10281.97	2156.51	25.52
	3.350	2190.18	3.98	2190.79	9.59	2186.20	430.00	921.79	9104.00	10025.79	10260.39	2175.42	28.18
	3.460	2194.48	4.28	2195.53	11.32	2190.20	545.00	640.41	9408.66	10049.07	8070.72	4338.21	35.07
*	3.460	2194.95	4.75	2196.73	12.89	2190.20	545.00	379.94	9670.00	10049.94	6659.08	5753.27	51.64
*	3.560	2199.47	6.07	2199.98	8.26	2193.40	525.00	735.20	9318.55	10053.75	8044.32	4419.68	0.00
*	3.560	2199.44	6.04	2200.67	11.33	2193.40	525.00	403.43	9650.00	10053.43	6438.57	6025.43	0.00
*	3.660	2204.55	5.55	2206.06	12.38	2199.00	570.00	600.34	9454.29	10054.83	4923.61	7418.39	122.00
*	3.660	2204.53	5.53	2206.07	12.46	2199.00	570.00	564.00	9490.00	10054.00	4894.20	7445.36	124.44
*	3.790	2209.63	5.63	2211.05	10.83	2204.00	675.00	619.73	9459.42	10086.97	2955.50	9290.36	218.14
*	3.790	2209.57	5.57	2211.30	11.63	2204.00	675.00	446.86	9640.00	10086.86	2371.33	9863.52	229.15
*	3.930	2215.79	6.49	2217.50	12.37	2209.30	720.00	515.84	9919.87	10435.71	123.24	8654.76	3685.99
*	3.930	2216.10	6.80	2218.36	13.41	2209.30	720.00	330.76	9919.24	10250.00	146.52	9861.75	2455.73
*	4.070	2222.41	7.41	2224.16	12.09	2215.00	770.00	557.39	9931.01	10488.40	177.93	9412.01	2874.05
*	4.070	2222.35	7.35	2224.45	12.88	2215.00	770.00	398.00	9932.00	10330.00	189.90	9956.82	2317.28
	4.160	2224.54	6.04	2226.12	8.23	2218.50	430.00	500.92	9779.34	10584.72	8115.93	3973.81	374.26
	4.160	2225.27	6.77	2226.44	7.27	2218.50	430.00	423.92	9780.00	10273.79	8056.99	4120.02	286.99
	4.200	2227.31	4.31	2228.18	7.77	2223.00	250.00	383.37	9641.65	10377.73	5635.55	3936.23	2892.21
*	4.200	2227.56	4.56	2229.29	11.43	2223.00	250.00	350.00	9802.00	10152.00	1911.79	6176.91	4375.29
*	4.310	2233.33	6.43	2235.08	10.96	2226.90	560.00	884.85	9187.08	10071.93	672.08	11484.16	87.76
*	4.310	2233.24	6.34	2235.16	11.37	2226.90	560.00	680.79	9391.00	10071.79	439.04	11716.50	88.45

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XI CH	TOPWID	SSTA	ENDST	QLOB	QCH	Q[illegible]
	4.338	2233.99	5.39	2235.83	10.96	2228.60	170.00	283.03	9836.96	10139.99	180.47	12022.26	41.26
	4.338	2234.38	5.78	2235.92	10.07	2228.60	170.00	281.00	9858.00	10139.00	209.54	11994.13	4[illegible]33
	4.344	2235.07	6.17	2236.31	8.92	2228.90	40.00	290.87	9842.47	10133.34	0.00	12244.00	0.00
	4.344	2235.11	6.21	2236.33	8.85	2228.90	40.00	290.00	9843.00	10133.00	0.00	12244.00	0.00
*	4.410	2239.19	6.99	2240.72	12.16	2232.20	370.00	851.80	9193.08	10044.88	4169.86	7998.43	7[illegible]70
*	4.410	2239.49	7.29	2241.68	13.48	2232.20	370.00	345.00	9700.00	10045.00	2898.49	9253.49	92.02
	4.530	2241.73	4.83	2242.82	8.62	2236.90	610.00	669.69	9757.54	10541.81	153.47	11483.34	60[illegible]48
	4.530	2242.63	5.73	2243.30	6.82	2236.90	610.00	640.00	9800.00	10440.00	150.68	11274.39	818.93
*	4.600	2245.22	4.42	2246.22	8.07	2240.80	390.00	427.76	9766.85	10194.61	171.17	12072.83	[illegible]00
*	4.600	2245.25	4.45	2246.24	8.03	2240.80	390.00	425.00	9770.00	10195.00	145.82	12098.18	0.00
*	4.700	2248.79	4.59	2250.37	10.53	2244.20	535.00	466.44	9862.27	10328.70	31.94	11053.37	115[illegible]70
*	4.700	2249.00	4.80	2250.86	10.96	2244.20	535.00	309.00	9862.00	10171.00	37.64	12196.74	[illegible]62
*	4.790	2253.53	6.03	2255.08	10.89	2247.50	470.00	615.92	9902.93	10518.85	54.82	10116.67	207[illegible].51
*	4.790	2253.55	6.05	2256.00	12.72	2247.50	470.00	214.13	9902.87	10117.00	64.94	11875.71	30[illegible]35
*	4.870	2255.95	4.95	2257.65	11.56	2251.00	415.00	499.75	9914.14	10413.89	123.59	9758.48	2361.93
	4.870	2256.38	5.38	2258.01	11.06	2251.00	415.00	306.00	9914.00	10220.00	143.37	10206.09	189[illegible]54
*	4.980	2259.82	4.42	2261.28	10.39	2255.40	580.00	581.99	9895.62	10477.61	207.65	10374.79	1535.56
*	4.980	2259.88	4.48	2261.84	11.45	2255.40	580.00	304.00	9916.00	10220.00	225.53	11591.85	30[illegible]63
*	5.080	2263.10	4.80	2264.35	10.38	2258.30	505.00	762.95	9826.69	10589.64	1215.95	8518.97	2383.08
*	5.080	2263.31	5.01	2265.28	11.99	2258.30	505.00	320.79	9826.21	10147.00	1470.73	10366.09	2[illegible]17
*	5.170	2267.38	4.48	2268.37	9.45	2262.90	495.00	792.98	9677.29	10362.39	125.81	10181.27	1810.92
*	5.170	2267.54	4.64	2269.29	10.65	2262.90	495.00	344.19	9749.81	10094.00	97.83	12016.87	[illegible]60
*	5.270	2273.03	6.23	2274.67	11.78	2266.80	505.00	626.80	9469.13	10095.93	2992.62	8970.20	155.18
*	5.270	2272.90	6.10	2274.79	12.46	2266.80	505.00	419.11	9649.00	10095.26	2690.03	9272.98	154.99
*	5.350	2275.30	5.60	2276.71	13.82	2269.70	435.00	656.19	9404.42	10060.61	5856.22	4410.14	10[illegible]64
	5.350	2275.67	5.97	2276.78	12.41	2269.70	435.00	601.18	9460.00	10061.18	6041.68	4222.53	105.79

MARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    3.460  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.460  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    3.560  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.560  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.560  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.560  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.560  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.560  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    3.660  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    3.660  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.660  PROFILE= 2  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    3.660  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    3.790  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    3.790  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    3.790  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    3.790  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    3.790  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    3.930  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    3.930  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    4.790  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    5.270  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    5.350  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    5.350  PROFILE= 1  MINIMUM SPECIFIC ENERGY
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FLOODWAY DATA, 100 YEAR DISCHARGE - R3
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
3.270	602.	1788.	7.0	2187.4	2186.9	0.5
3.350	922.	2163.	5.8	2190.2	2189.8	0.4
3.460	380.	1249.	10.0	2195.0	2194.5	0.5
3.560	403.	1646.	7.6	2199.5	2199.5	0.0
3.660	364.	1869.	6.7	2204.5	2204.5	0.0
3.790	447.	1467.	8.5	2209.6	2209.6	0.0
3.930	331.	1435.	8.7	2216.1	2215.8	0.3
4.070	398.	1465.	8.5	2222.4	2222.4	0.0
4.160	484.	1545.	8.1	2225.2	2224.5	0.7
4.200	350.	1209.	10.3	2227.6	2227.3	0.3
4.310	681.	1490.	8.2	2233.3	2233.3	0.0
4.338	281.	1272.	9.6	2234.4	2234.0	0.4
4.344	290.	1384.	8.8	2235.1	2235.1	0.0
4.410	345.	1443.	8.5	2239.5	2239.2	0.3
4.530	640.	2095.	5.8	2242.6	2241.7	0.9
4.600	425.	1545.	7.9	2245.2	2245.2	0.0
4.700	309.	1128.	10.9	2249.0	2248.8	0.2
4.790	214.	1012.	12.1	2253.5	2253.5	0.0
4.870	306.	1385.	8.8	2256.3	2255.9	0.4
4.980	304.	1151.	10.5	2259.9	2259.8	0.1
5.080	321.	1209.	10.0	2263.3	2263.1	0.2
5.170	344.	1162.	10.4	2267.6	2267.4	0.2
5.270	446.	1499.	8.1	2273.0	2273.0	0.0
5.350	601.	1958.	5.3	2275.7	2275.3	0.4

THIS RUN EXECUTED THU, OCT 30 1986 15:19:10

```
*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************************
```

Floodway, Reach #4
Cross Sec 5.35 - 7.366

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH4.FLOOD.OUT

```
*****************************************************************************************************************
*****************************************************************************************************************

WWWW  W     WWW   WWW   W  WWWWW  WWW   W
W   W W  W  W   W W   W W  W    W   W  WW
W   W W  W  W   W W   W  W  WWWW  W   W  W
WWWW  WWWWW W W W  WWWW  W      W W W W  W
W       W  W   W    W  W      W W   W  W
W       W  W   W   W  W  W  W W   W  W
W       W   WWW  WWW   WWW  WWW   WWW  WWW


 WWW   WWW  W     WWW      WWWW  WWWWW  WWW   WWW  W   W W         WWWWW W     WWW   WWW  WWWW       WWW  W   W WWWWW
W   W W   W W    W   W     W   W W    W   W W   W W W  W W  W       W    W    W   W W   W W W  W     W   W W   W  W
W    W   W W    W         W   W W    W   W W    W  W W  W  W       W    W    W   W W   W W W  W     W   W W   W  W
 WWW  W   W W     WWW      WWWW  WWWW  WWWWW W    WWWWW WWWWW      WWWW W    W   W W   W W  W     W   W W   W  W
    W W   W W        W     W W   W    W   W W    W   W   W        W    W    W   W W   W W W  W     W   W W   W  W
W   W W   W W    W   W  WW W  W  W    W   W W  W W   W   W   WW W    W    W   W W   W W W  W  WW W   W W   W  W
 WWW   WWW  WWWWW  WWW   WW W   W WWWWW W   W  WWW  W   W   W   WW W    WWWWW  WWW   WWW  WWWW   WW  WWW   WWW   W

*****************************************************************************************************************
*****************************************************************************************************************
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Label: PRT007 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH4.FLOOD.OUT
File last modified: 86-11-19.08:41:44.Wed

Spooled: 86-11-19.08:43:20.Wed [Spooler rev 19.4.5]
Started: 86-11-19.08:43:32.Wed on: AWLC by: DEC

```
*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  RUN DATE WED, NOV 19 1986 TIME 08:40:35          *
*****************************************************
```

```
*****************************************
*  U.S. ARMY CORPS OF ENGINEERS
*  THE HYDROLOGIC ENGINEERING CEN
*  609 SECOND STREET, SUITE D
*  DAVIS, CALIFORNIA 95616
*  (916) 440-2105 (FTS) 448-2105
*****************************************
```

```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X       X     X            X     X
X     X  X       X                        X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X       X                  X
X     X  X       X     X            X
X     X  XXXXXXX   XXXXX            XXXXXXX
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THIS RUN EXECUTED WED, NOV 19 1986 08:40:52

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*****************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************
```

T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R4 FLOODWAY ANALYSIS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	0.000000	0.00	0.0	0.	2275.300	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	15.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38.000	1.000	8.000	3.000	26.000	42.000	39.000	4.000	53.000	54.000
13.000	14.000	15.000	200.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
QT	2.000	10370.000	10370.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	5.000	0.100	9824.000	0.025	9844.000	0.040	9995.000	0.025	10032.000	0.045
NH	10365.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9460.000	10062.000	0.000	0.000	0.000	0.000	0.000
X1	5.330	32.000	9995.000	10032.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	2284.000	9285.000	2278.800	9356.000	2275.500	9399.000	2274.600	9423.000	2275.100	9436.000
GR	2274.400	9470.000	2273.200	9488.000	2272.600	9551.000	2272.300	9565.000	2272.700	9574.000
GR	2272.800	9647.000	2273.200	9673.000	2272.700	9700.000	2273.200	9726.000	2274.200	9760.000
GR	2274.300	9788.000	2273.300	9804.000	2270.400	9824.000	2270.200	9844.000	2271.900	9864.000
GR	2272.700	9894.000	2271.700	9934.000	2272.300	9954.000	2272.700	9983.000	2269.700	9997.000
GR	2269.700	10000.000	2269.700	10032.000	2276.200	10062.000	2276.200	10063.000	2276.000	10085.000
GR	2276.000	10165.000	2778.000	10365.000	0.000	0.000	0.000	0.000	0.000	0.000

NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.045	9963.000	0.025	10041.000	0.065	10073.000	0.045	10215.000	0.000
ET	0.000	0.000	4.100	9460.000	10106.000	0.000	0.000	0.000	0.000	0.000
X1	5.470	34.000	9963.000	10041.000	450.000	620.000	610.000	0.000	0.000	0.000
GR	2281.900	9400.000	2275.800	9436.000	2275.900	9448.000	2276.600	9462.000	2276.600	9483.000
GR	2275.400	9494.000	2276.800	9501.000	2277.200	9523.000	2275.400	9583.000	2276.900	9607.000
GR	2276.700	9642.000	2276.800	9668.000	2277.000	9680.000	2277.800	9699.000	2278.300	9733.000
GR	2278.000	9771.000	2277.800	9817.000	2278.100	9850.000	2278.700	9875.000	2277.900	9892.000
GR	2273.700	9929.000	2274.000	9932.000	2275.600	9939.000	2275.600	9963.000	2274.100	9972.000
GR	2273.700	10000.000	2273.700	10041.000	2279.300	10059.000	2279.300	10073.000	2278.200	10092.000
GR	2275.100	10106.000	2277.300	10118.000	2280.500	10169.000	2285.800	10215.000	0.000	0.000

	0.045	0.045	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	4.100	9553.000	10050.000	0.000	0.000	0.000	0.000	0.000
X1	5.580	20.000	9947.000	10044.000	485.000	525.000	515.000	0.000	0.000	0.000
GR	2288.300	9436.000	2281.500	9475.000	2279.800	9500.000	2280.100	9553.000	2279.500	9562.000
GR	2280.000	9570.000	2280.300	9615.000	2281.100	9670.000	2281.400	9739.000	2281.100	9789.000
GR	2281.100	9846.000	2280.200	9890.000	2279.200	9923.000	2278.600	9937.000	2278.800	9947.000
GR	2277.400	9969.000	2277.000	10000.000	2277.000	10044.000	2294.000	10065.000	2294.600	10092.000
ET	0.000	0.000	4.100	9560.000	10087.000	0.000	0.000	0.000	0.000	0.000
X1	5.650	28.000	9951.000	10068.000	300.000	340.000	335.000	0.000	0.000	0.000
GR	2288.500	9465.000	2284.900	9486.000	2282.800	9509.000	2282.200	9527.000	2282.800	9539.000
GR	2282.500	9550.000	2282.500	9568.000	2282.100	9577.000	2282.600	9585.000	2283.500	9658.000
GR	2282.200	9695.000	2283.600	9715.000	2283.900	9762.000	2287.200	9800.000	2287.900	9816.000
GR	2281.200	9828.000	2281.600	9839.000	2282.300	9860.000	2282.400	9873.000	2282.500	9891.000
GR	2282.100	9913.000	2282.300	9928.000	2280.100	9951.000	2278.900	10000.000	2278.900	10068.000
GR	2284.100	10084.000	2288.100	10112.000	2293.400	10135.000	0.000	0.000	0.000	0.000
NH	4.000	0.100	9682.000	0.045	9932.000	0.025	10045.000	0.045	10310.000	0.000
ET	0.000	0.000	4.100	9720.000	10170.000	0.000	0.000	0.000	0.000	0.000
X1	5.740	32.000	9932.000	10045.000	430.000	520.000	500.000	0.000	0.000	0.000
GR	2294.200	9210.000	2293.000	9251.000	2290.800	9328.000	2289.400	9390.000	2288.000	9437.000
GR	2287.000	9497.000	2286.500	9568.000	2285.800	9600.000	2286.400	9613.000	2287.100	9682.000
GR	2287.400	9744.000	2287.300	9761.000	2287.500	9780.000	2287.400	9829.000	2287.600	9852.000
GR	2287.900	9872.000	2287.400	9882.000	2285.100	9912.000	2282.500	9932.000	2281.400	10000.000
GR	2281.400	10045.000	2284.300	10057.000	2284.600	10087.000	2286.800	10110.000	2286.800	10123.000
GR	2285.500	10167.000	2284.800	10214.000	2284.400	10227.000	2284.800	10243.000	2290.800	10259.000
	2287.900	10284.000	2295.500	10310.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9920.000	0.025	10068.000	0.045	10500.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9910.000	10130.000	0.000	0.000	0.000	0.000	0.000
X1	5.850	15.000	9920.000	10068.000	575.000	580.000	570.000	0.000	0.000	0.000
GR	2297.600	9880.000	2296.500	9892.000	2286.000	9920.000	2286.200	9948.000	2285.800	10000.000
GR	2284.700	10046.000	2289.600	10068.000	2290.000	10099.000	2289.600	10168.000	2288.800	10245.000
GR	2289.800	10284.000	2289.500	10328.000	2290.600	10352.000	2294.800	10461.000	2300.400	10500.000
NC	0.050	0.045	0.030	0.600	0.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9940.000	10384.000	0.000	0.000	0.000	0.000	0.000
X1	5.920	25.000	9953.000	10075.000	390.000	415.000	400.000	0.000	0.000	0.000
GR	2307.900	9913.000	2304.900	9929.000	2288.000	9953.000	2288.000	10000.000	2288.800	10041.000
GR	2292.100	10075.000	2292.500	10097.000	2294.600	10117.000	2294.100	10147.000	2293.400	10168.000
GR	2294.700	10194.000	2294.300	10229.000	2293.900	10246.000	2294.900	10263.000	2295.300	10280.000
GR	2294.400	10323.000	2295.100	10353.000	2294.700	10384.000	2295.800	10407.000	2295.100	10425.000
GR	2295.400	10443.000	2295.300	10461.000	2295.900	10505.000	2296.500	10525.000	2303.700	10580.000
NH	3.000	0.045	9879.000	0.025	10120.000	0.045	10445.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9849.000	10230.000	0.000	0.000	0.000	0.000	0.000
X1	6.010	17.000	9954.000	10093.000	560.000	210.000	480.000	0.000	0.000	0.000
GR	2304.000	9843.000	2297.900	9867.000	2292.500	9879.000	2292.300	9913.000	2292.400	9954.000
GR	2293.700	9969.000	2293.500	10000.000	2293.500	10030.000	2293.200	10093.000	2292.200	10120.000
GR	2297.500	10133.000	2297.600	10192.000	2297.900	10252.000	2298.000	10342.000	2298.300	10385.000
GR	2305.700	10416.000	2314.600	10445.000	0.000	0.000	0.000	0.000	0.000	0.000

	0.045	0.045	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	4.100	9762.000	10040.000	0.000	0.000	0.000	0.000	0.000
X1	6.090	19.000	9912.000	10037.000	500.000	290.000	430.000	0.000	0.000	0.000
GR	2309.900	9655.000	2307.900	9670.000	2295.300	9710.000	2295.600	9728.000	2299.100	9753.000
GR	2298.000	9778.000	2298.700	9793.000	2299.600	9833.000	2299.100	9850.000	2298.200	9855.000
GR	2299.500	9875.000	2298.300	9912.000	2295.100	9951.000	2295.100	10000.000	2293.000	10037.000
GR	2310.500	10049.000	2313.700	10069.000	2314.400	10082.000	2310.000	10085.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9953.000	0.025	10037.000	0.045	10075.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9752.000	10075.000	0.000	0.000	0.000	0.000	0.000
X1	6.210	21.000	9953.000	10037.000	540.000	640.000	530.000	0.000	0.000	0.000
GR	2313.900	9401.000	2312.300	9407.000	2311.200	9416.000	2303.400	9425.000	2304.600	9465.000
GR	2303.600	9575.000	2303.100	9634.000	2302.700	9695.000	2303.400	9731.000	2303.000	9767.000
GR	2303.400	9787.000	2303.500	9833.000	2304.000	9886.000	2300.600	9935.000	2300.100	9946.000
GR	2298.300	9953.000	2298.600	10000.000	2298.000	10019.000	2298.000	10037.000	2327.800	10075.000
GR	2327.800	10076.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9895.000	0.025	10041.000	0.045	10100.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9820.000	10055.000	0.000	0.000	0.000	0.000	0.000
X1	6.310	23.000	9895.000	10041.000	450.000	505.000	500.000	0.000	0.000	0.000
GR	2315.800	9305.000	2314.600	9311.000	2308.300	9341.000	2307.500	9362.000	2308.400	9379.000
GR	2309.300	9404.000	2307.800	9454.000	2309.100	9483.000	2309.600	9514.000	2309.000	9553.000
GR	2308.100	9589.000	2307.100	9615.000	2306.000	9639.000	2306.700	9660.000	2306.900	9713.000
GR	2307.000	9770.000	2306.900	9812.000	2304.300	9838.000	2304.700	9888.000	2304.300	9895.000
GR	2300.900	9979.000	2301.100	10000.000	2302.700	10041.000	2309.500	10055.000	2324.100	10100.000
NH	3.000	0.045	9949.000	0.025	10081.000	0.045	10220.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9863.000	10150.000	0.000	0.000	0.000	0.000	0.000
X1	6.400	28.000	9949.000	10081.000	420.000	520.000	500.000	0.000	0.000	0.000
GR	2315.000	9439.000	2314.200	9497.000	2312.600	9597.000	2310.500	9638.000	2308.700	9682.000
GR	2310.000	9729.000	2309.200	9764.000	2308.600	9786.000	2309.800	9797.000	2308.900	9816.000
GR	2306.100	9836.000	2307.300	9851.000	2307.600	9892.000	2306.300	9895.000	2306.500	9911.000
GR	2307.000	9915.000	2306.300	9949.000	2306.100	9976.000	2305.100	9997.000	2304.500	10000.000
GR	2303.900	10031.000	2305.600	10052.000	2306.900	10064.000	2304.300	10081.000	2304.300	10117.000
GR	2307.300	10136.000	2310.800	10156.000	2318.800	10220.000	0.000	0.000	0.000	0.000
NH	3.000	0.045	9952.000	0.025	10058.000	0.045	10500.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9952.000	10239.000	0.000	0.000	0.000	0.000	0.000
X1	6.500	29.000	9952.000	10058.000	470.000	560.000	500.000	0.000	0.000	0.000
GR	2321.800	9488.000	2320.900	9501.000	2318.300	9519.000	2316.800	9562.000	2317.700	9587.000
GR	2319.200	9628.000	2319.800	9658.000	2318.400	9701.000	2317.300	9744.000	2315.700	9806.000
GR	2313.600	9843.000	2314.800	9891.000	2313.700	9927.000	2309.900	9952.000	2309.100	10000.000
GR	2308.600	10051.000	2311.700	10058.000	2311.900	10069.000	2311.100	10075.000	2311.100	10099.000
GR	2312.600	10122.000	2314.500	10205.000	2316.300	10271.000	2318.000	10349.000	2317.800	10391.000
GR	2316.500	10419.000	2316.500	10452.000	2320.100	10479.000	2323.300	10500.000	0.000	0.000

	5.000	0.050	9937.000	0.025	10034.000	0.045	10077.000	0.030	10116.000	0.045
	10390.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9922.000	10331.000	0.000	0.000	0.000	0.000	0.000
X1	6.610	25.000	9937.000	10034.000	570.000	590.000	570.000	0.000	0.000	0.000
GR	2322.100	9807.000	2322.100	9813.000	2320.800	9822.000	2325.900	9832.000	2324.600	9837.000
GR	2327.700	9853.000	2323.700	9876.000	2322.100	9904.000	2315.000	9937.000	2312.200	9944.000
GR	2312.700	10000.000	2312.700	10034.000	2315.000	10077.000	2314.100	10116.000	2315.300	10129.000
GR	2315.200	10149.000	2315.800	10158.000	2315.500	10169.000	2316.500	10202.000	2316.000	10218.000
GR	2316.000	10225.000	2316.900	10276.000	2318.400	10341.000	2319.400	10366.000	2320.100	10390.000
NH	5.000	0.045	9945.000	0.025	10040.000	0.060	10070.000	0.025	10178.000	0.045
NH	10310.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9914.000	10224.000	0.000	0.000	0.000	0.000	0.000
X1	6.690	16.000	9945.000	10178.000	430.000	420.000	425.000	0.000	0.000	0.000
GR	2324.300	9893.000	2324.400	9900.000	2319.600	9917.000	2315.800	9945.000	2315.700	9974.000
GR	2316.300	10000.000	2317.800	10064.000	2315.700	10122.000	2315.100	10131.000	2315.200	10178.000
GR	2320.100	10189.000	2320.400	10200.000	2319.400	10217.000	2320.700	10227.000	2320.600	10286.000
GR	2326.600	10310.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	5.000	0.065	9909.000	0.025	10000.000	0.060	10100.000	0.025	10172.000	0.050
NH	10260.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9880.000	10184.000	0.000	0.000	0.000	0.000	0.000
X1	6.760	15.000	9951.000	10124.000	360.000	385.000	370.000	0.000	0.000	0.000
GR	2326.100	9848.000	2319.900	9874.000	2321.200	9892.000	2318.600	9909.000	2318.900	9951.000
GR	2318.000	9960.000	2317.800	9989.000	2318.400	10000.000	2319.300	10044.000	2319.800	10084.000
GR	2317.300	10124.000	2317.300	10172.000	2322.700	10184.000	2330.600	10231.000	2333.200	10260.000
NH	4.000	0.050	9959.000	0.025	10045.000	0.050	10350.000	1.000	10835.000	0.000
ET	0.000	0.000	4.100	9780.000	10176.000	0.000	0.000	0.000	0.000	0.000
X1	6.880	43.000	9959.000	10045.000	580.000	615.000	620.000	0.000	0.000	0.000
GR	2329.200	9753.000	2328.300	9763.000	2328.600	9768.000	2325.600	9781.000	2325.700	9799.000
GR	2326.200	9804.000	2324.900	9845.000	2322.600	9868.000	2324.700	9890.000	2322.900	9916.000
GR	2323.100	9936.000	2320.500	9939.000	2320.500	10000.000	2320.500	10021.000	2325.200	10045.000
GR	2324.600	10079.000	2324.200	10117.000	2323.100	10158.000	2324.200	10168.000	2324.800	10213.000
GR	2325.000	10233.000	2325.400	10299.000	2327.100	10343.000	2327.300	10412.000	2324.900	10429.000
GR	2326.200	10442.000	2327.500	10475.000	2325.500	10494.000	2325.600	10521.000	2326.900	10532.000
GR	2327.200	10536.000	2326.100	10589.000	2324.700	10629.000	2324.900	10642.000	2327.300	10653.000
GR	2327.000	10691.000	2325.300	10701.000	2325.300	10709.000	2327.500	10720.000	2326.800	10738.000
GR	2327.200	10750.000	2325.500	10780.000	2338.100	10833.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9954.000	0.025	10030.000	0.050	10420.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9954.000	10259.000	0.000	0.000	0.000	0.000	0.000
X1	6.990	22.000	9954.000	10030.000	595.000	595.000	610.000	0.000	0.000	0.000
GR	2332.600	9912.000	2332.600	9919.000	2329.200	9932.000	2327.600	9954.000	2323.200	9965.000
GR	2322.800	10000.000	2322.800	10022.000	2325.400	10030.000	2325.400	10051.000	2328.300	10065.000
GR	2328.200	10102.000	2328.200	10160.000	2327.900	10191.000	2327.300	10210.000	2327.500	10216.000
GR	2327.000	10227.000	2327.600	10235.000	2327.300	10284.000	2325.700	10302.000	2326.500	10313.000
GR	2327.200	10379.000	2334.600	10420.000	0.000	0.000	0.000	0.000	0.000	0.000

	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
	3.000	0.050	9967.000	0.025	10041.000	0.050	10390.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9954.000	10190.000	0.000	0.000	0.000	0.000	0.000
X1	7.130	19.000	9967.000	10041.000	725.000	720.000	725.000	0.000	0.000	0.000
GR	2339.000	9948.000	2327.500	9967.000	2327.300	10000.000	2327.300	10023.000	2331.900	10041.000
GR	2332.200	10058.000	2333.100	10075.000	2332.800	10119.000	2333.600	10131.000	2332.800	10165.000
GR	2333.300	10181.000	2332.600	10200.000	2332.900	10213.000	2331.900	10226.000	2332.600	10241.000
GR	2332.200	10273.000	2335.400	10326.000	2340.500	10373.000	2341.200	10390.000	0.000	0.000
NH	3.000	0.050	9979.000	0.025	10010.000	0.050	10240.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9959.000	10110.000	0.000	0.000	0.000	0.000	0.000
X1	7.210	12.000	9955.000	10066.000	420.000	410.000	420.000	0.000	0.000	0.000
GR	2340.900	9950.000	2340.500	9955.000	2329.800	9979.000	2329.800	10000.000	2332.100	10010.000
GR	2332.500	10048.000	2331.000	10066.000	2331.000	10079.000	2335.000	10091.000	2335.900	10113.000
GR	2346.000	10183.000	2334.200	10240.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9946.000	0.025	10028.000	0.050	10095.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9840.000	10030.000	0.000	0.000	0.000	0.000	0.000
X1	7.300	13.000	9946.000	10028.000	505.000	450.000	480.000	0.000	0.000	0.000
GR	2344.500	9816.000	2342.100	9825.000	2336.000	9851.000	2336.200	9864.000	2337.500	9878.000
GR	2337.500	9893.000	2336.400	9913.000	2338.300	9933.000	2338.400	9946.000	2333.300	9967.000
GR	2333.600	10000.000	2334.000	10028.000	2369.900	10095.000	0.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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


*PROF 1

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 5.350
3720 CRITICAL DEPTH ASSUMED
     5.35     5.61  2275.31  2275.31  2275.30  2276.71     1.40     0.00     0.00  2269.70
   10370.    5864.    4402.     104.    1424.     320.      24.       0.       0.  2269.70
     0.00     4.12    13.76     4.28    0.053    0.025    0.045    0.000  2269.70  9404.04
 0.003377       0.       0.       0.        0        4        0     0.00   656.59 10060.63


FLOW DISTRIBUTION FOR SECNO=      5.35          CWSEL=   2275.31

STA=    9404.    9551.    9647.    9726.    9824.    9844.    9864.    9894.    9934.    9954.    9983.    9995.   10052.
  PER Q=      3.5      5.1      3.4      3.1     12.3      5.9      4.9      7.0      3.9      4.3      3.3     42.4
   AREA=    210.9    232.3    185.2    177.9    100.2     85.2     90.3    124.4     66.2     81.5     49.3    319.8
    VEL=      1.7      2.1      1.9      1.8     12.8      7.1      5.7      5.8      6.1      5.4      6.9     13.8
STA=   10052.   10061.
  PER Q=      1.0
   AREA=     24.2
    VEL=      4.3

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 5.470

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.47     5.54  2279.24  2279.24     0.00  2280.42     1.19     2.54     0.02  2275.60
   10370.    4876.    4965.     329.    1205.     416.     161.      20.       8.  2273.70
     0.02     4.05    11.94     3.28    0.045    0.025    0.050    0.000  2273.70  9415.72
 0.004343     450.     610.     620.        2        5        0     0.00   717.80 10148.85


FLOW DISTRIBUTION FOR SECNO=      5.47          CWSEL=   2279.24

STA=    9416.    9462.    9494.    9533.    9383.    9607.    9642.    9680.    9817.    9929.    9963.   10041.   10118.
  PER Q=      4.8      3.8      5.1      3.8      3.3      3.2      3.5      4.5      7.8      7.1     47.9      4.6
   AREA=    117.2     90.9    138.2     88.1     74.1     85.2     92.6    177.9    206.3    144.4    415.8    131.1
    VEL=      4.2      4.4      3.9      4.5      4.6      3.9      3.9      2.6      3.9      5.5     11.9      3.5
STA=   10118.   10149.
  PER Q=      0.6
   AREA=     29.9
    VEL=      2.1
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS    BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA    LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      FLMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


*SECNO 5.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.58     5.84  2282.84  2282.84     0.00  2284.18     1.34     2.06     0.04  2278.80
   10370.     4079.    6216.      75.    1091.     536.      21.      40.      15.  2277.00
     0.04     3.74    11.59     3.56    0.045    0.025    0.045    0.000  2277.00  9467.29
 0.003887     485.     515.     525.       20        8        0     0.00   583.93 10051.22


FLOW DISTRIBUTION FOR SECNO=      5.58          CWSEL=   2282.84

STA=    9467.    9533.    9615.    9670.    9789.    9890.    9923.    9947.   10044.   10051.
  PER Q=      8.1      6.8      3.9      5.1      6.1      4.4      4.9     59.9      0.7
   AREA=    213.4    173.4    117.9    189.7    193.9    106.7     96.6    536.4     21.1
    VEL=      3.9      4.1      3.4      2.8      3.2      4.4      5.2     11.6      3.6

*SECNO 5.650
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.65     5.79  2284.69  2284.69     0.00  2286.05     1.36     1.20     0.01  2280.10
   10370.     3001.    7138.     211.     917.     648.      52.      51.      19.  2278.90
     0.05     3.27    11.05     4.03    0.045    0.025    0.045    0.000  2278.90  9488.33
 0.003329     300.     335.     340.       20        5        0     0.00   599.79 10088.11


FLOW DISTRIBUTION FOR SECNO=      5.65          CWSEL=   2284.69

STA=    9488.    9550.    9638.    9762.    9828.    9860.    9913.    9951.   10068.   10088.
  PER Q=      3.1      5.7      3.7      3.8      3.6      4.1      4.8     69.0      2.0
   AREA=    107.6    199.1    147.8    128.1     93.6    123.2    117.5    647.7     52.2
    VEL=      3.0      3.0      2.6      3.1      4.0      3.4      4.2     11.1      4.0

1490 NH CARD USED
*SECNO 5.740

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.74     6.41  2287.81  2287.81     0.00  2289.26     1.45     1.63     0.03  2282.50
   10370.     800.    7627.    1943.     449.     687.     525.      69.      26.  2281.40
     0.06     1.78    11.10     3.70    0.061    0.025    0.045    0.000  2281.40  9448.40
 0.003145     430.     500.     520.       20        8        0     0.00   794.84 10251.03
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOI      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


FLOW DISTRIBUTION FOR SECNO=      5.74         CWSEL=   2287.81

STA=    9448.    9912.    9932.   10045.   10057.   10087.   10167.   10214.   10243.   10251.
  PER Q=     1.1      3.6     73.6      3.0      4.0      3.5      4.3      3.6      0.3
   AREA=   368.5     80.2    686.9     59.5    100.8    134.7    125.0     93.1     12.1
    VEL=     1.2      4.6     11.1      5.3      4.2      2.7      3.6      4.0      2.3

1490 NH CARD USED
*SECNO 5.850
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.85     6.61  2291.31  2291.31     0.00  2292.93     1.62     1.95     0.00  2286.00
   10370.      139.     8754.     1477.      38.      793.      503.      89.      35.  2289.60
     0.08     3.69    11.04     2.94    0.045    0.025    0.045    0.000  2284.70  9905.83
 0.003702     375.      370.      580.       20        8        0     0.00   464.66 10370.49


FLOW DISTRIBUTION FOR SECNO=      5.85         CWSEL=   2291.31

STA=    9906.    9920.   10068.   10168.   10243.   10328.   10370.
  PER Q=     1.3     84.4      3.9      5.2      4.4      0.7
   AREA=    37.6    792.6    151.2    162.7    152.3     36.9
    VEL=     3.7     11.0      2.6      3.3      3.0      2.1

CCHV=   0.600 CEHV=   0.800
*SECNO 5.920

3265 DIVIDED FLOW

3185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     5.92     7.54  2295.54  2295.54     0.00  2297.24     1.70     1.54     0.06  2288.00
   10370.      160.     9110.     1099.      40.      821.      407.     101.      39.  2292.10
     0.09     3.96    11.10     2.70    0.050    0.030    0.045    0.000  2288.00  9942.29
 0.003960     390.      400.      415.        3        8        0     0.00   524.80 10478.97


FLOW DISTRIBUTION FOR SECNO=      5.92         CWSEL=   2295.54

STA=    9942.    9953.   10075.   10097.   10168.   10323.   10479.
  PER Q=     1.5     87.9      3.1      3.2      3.4      0.9
   AREA=    40.4    820.8     71.4    113.4    156.9     64.9
    VEL=     4.0     11.1      4.6      2.9      2.2      1.4
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTH       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 6.010

3301 HV CHANGED MORE THAN HVINS

     6.01      5.95  2298.15      0.00      0.00  2299.01      0.86      1.26      0.50  2292.40
   10370.     3815.     4937.     1619.      469.      658.      322.      114.       43.  2293.20
     0.11      8.14      7.51      5.03     0.026     0.025     0.030     0.000  2292.20  9866.03
 0.002009      560.      480.      210.         3         0         0      0.00   496.98 10363.01


FLOW DISTRIBUTION FOR SECNO=      6.01          CWSEL =   2298.15

STA=    9866.    9913.    9954.   10093.   10120.   10153.   10363.
  PER Q=     17.1     19.7     47.6     11.7      3.4      0.5
   AREA=    230.9    237.7    657.6    147.0    108.8     66.3
    VEL=      7.7      8.6      7.5      8.2      3.3      0.8

*SECNO 6.090

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.09      5.82  2300.82  2300.82      0.00  2302.66      1.84      1.29      0.79  2298.50
   10370.     2389.     7938.       44.      534.      650.       13.      127.       47.  2295.00
     0.12      4.47     12.21      3.32     0.045     0.025     0.045     0.000  2295.00  9692.48
 0.004685      500.      430.      290.         2         5         0      0.00   349.02 10041.50


FLOW DISTRIBUTION FOR SECNO=      6.09          CWSEL.=   2300.82

STA=    9692.    9710.    9728.    9753.    9778.    9793.    9833.    9850.    9855.    9875.    9912.   10037.   10042.
  PER Q=      2.0      6.5      4.3      2.1      1.5      2.0      0.7      0.4      1.3      2.2     76.5      0.4
   AREA=     18.3     96.6     86.7     36.7     37.0     66.7     25.0     10.8     39.4     67.3    650.3     13.1
    VEL=      4.3      6.9      5.1      3.9      4.1      3.2      2.9      3.7      3.5      3.4     12.2      3.3

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 6.210
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        CLOSS     BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XHL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


     6.21      7.41   2303.41   2303.41      0.00   2306.85      1.44      1.90      0.12   2298.30
   10370.     3344.     6902.      125.     1073.      595.       35.      145.       53.   2298.00
     0.13      3.12     11.59      3.56     0.045     0.025     0.045     0.000   2298.00   9424.99
 0.002792      540.      530.      640.        20        11         0      0.00    621.46  10046.45


FLOW DISTRIBUTION FOR SECNO=      6.21          CWSEL=   2303.41

STA=    9425.    9575.    9634.    9695.    9767.    9833.    9935.    9953.   10037.   10046.
  PER Q=      3.0      3.3      4.8      4.8      3.6      7.5      5.2     66.6      1.2
   AREA=    160.3    121.5    153.0    164.4    134.3    240.2     99.1    595.5     35.0
    VEL=      2.0      2.8      3.2      3.0      2.8      3.2      5.4     11.6      3.6

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 6.310

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3703 PROBABLE MINIMUM SPECIFIC ENERGY
     CRITICAL DEPTH ASSUMED
     6.31      6.74   2307.64   2307.64      0.00   2309.39      1.74      1.57      0.09   2304.30
   10370.     1264.     9020.       87.      403.      799.       23.      161.       59.   2302.70
     0.15      3.13     11.29      3.44     0.045     0.025     0.045     0.000   2300.90   9358.24
 0.003749      430.      500.      505.        20        11         0      0.00    456.75  10051.18


FLOW DISTRIBUTION FOR SECNO=      6.31          CWSEL=   2307.64

STA=    9358.    9812.    9888.    9895.   10041.   10051.
  PER Q=      3.0      8.2      0.9     87.0      0.8
   AREA=    171.0    210.3     22.0    798.6     25.1
    VEL=      1.8      4.1      4.3     11.3      3.4

1490 NH CARD USED
*SECNO 6.400

3301 HV CHANGED MORE THAN HVINS

     6.40      6.20   2310.10      0.00      0.00   2311.27      1.17      1.82      0.06   2306.30
   10370.     2021.     6508.     1841.      543.      633.      313.      176.       64.   2304.30
     0.16      3.73     10.28      5.89     0.045     0.025     0.045     0.000   2303.90   9647.84
 0.003709      420.      500.      520.         3         0         0      0.00    504.15  10151.99
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   SECNO    DEPTH    CWSEL    CRIWS    WNELK    EG       HV       HL       CLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


FLOW DISTRIBUTION FOR SECNO=      6.40          CWSEL=   2310.10

STA=    9648.    9836.    9882.    9911.    9949.   10081.   10117.   10136.   10152.
  PER Q=      4.0      5.3      4.4      5.8     62.8     13.1      4.2      0.5
   AREA=    178.8    133.0    100.1    130.6    633.3    208.7     81.7     22.4
    VEL=      2.3      4.1      4.6      4.6     10.3      6.5      3.3      2.5

1490 NH CARD USED
*SECNO 6.500

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.50     6.83  2315.43  2315.43     0.00  2317.31     1.88     1.90     0.21  2309.90
   10370.      338.     8071.     1760.      143.      657.      421.      192.      69.  2311.70
     0.18     3.72    12.29     4.18    0.045    0.025    0.045    0.000  2308.60  9853.48
 0.003789     470.     500.     360.       20        8        0     0.00   385.45 10238.93


FLOW DISTRIBUTION FOR SECNO=      6.50          CWSEL=   2315.43

STA=    9853.    9952.   10058.   10099.   10122.   10205.   10239.
  PER Q=      5.2     77.8      8.4      3.8      4.6      0.2
   AREA=    144.7    656.7    167.2     82.2    155.6     15.7
    VEL=      3.7     12.3      5.2      4.7      3.1      1.2

1490 NH CARD USED
*SECNO 6.610
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.61     5.98  2318.18  2318.18     0.00  2319.84     1.66     2.35     0.02  2315.00
   10370.       62.     6658.     3650.       23.      539.      724.      209.      74.  2312.70
     0.19     2.65    12.35     5.04    0.050    0.025    0.040    0.000  2312.20  9922.23
 0.004422     570.     570.     390.        3       15        0     0.00   409.10 10331.33


FLOW DISTRIBUTION FOR SECNO=      6.61          CWSEL=   2318.18

STA=    9922.    9937.   10034.   10077.   10116.   10149.   10202.   10276.   10331.
  PER Q=      0.6     64.2     10.5     10.6      4.7      4.6      4.2      0.6
   AREA=     23.3    538.9    186.0    141.4    103.7    123.7    134.1     35.3
    VEL=      2.7     12.4      5.8      7.8      4.7      3.9      3.3      1.6
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


1490 NH CARD USED
*SECNO 6.690

3265 DIVIDED FLOW

     6.69      5.25  2320.35      0.00      0.00  2321.99      1.63      2.15      0.00  2315.80
   10370.      247.     9968.      154.      75.      933.      42.      220.      78.   2315.20
     0.21      3.30     10.44      3.69     0.065     0.028     0.045     0.000  2315.10  9914.36
 0.005859      430.      425.      420.         2         0         0      0.00   307.03 10224.28


FLOW DISTRIBUTION FOR SECNO=      6.69          CWSEL=   2320.35

STA=    9914.    9945.   10178.   10224.
  PER Q=      2.4      96.1      1.5
   AREA=     75.1     954.5     41.8
    VEL=      3.3      10.4      3.7

1490 NH CARD USED
*SECNO 6.760
     6.76      5.40  2322.70      0.00      0.00  2323.89      1.19      1.86      0.04  2318.90
   10370.     1884.     5258.     3228.      268.      689.      291.      210.      80.   2317.30
     0.22      7.02      7.63     11.07     0.031     0.032     0.026     0.000  2317.30  9862.27
 0.004313      360.      370.      383.         3         0         0      0.00   321.73 10183.99


FLOW DISTRIBUTION FOR SECNO=      6.76          CWSEL=   2322.70

STA=    9862.    9951.   10124.   10172.   10184.
  PER Q=     18.2      50.7     30.0      1.1
   AREA=    268.5     689.1    259.1     32.4
    VEL=      7.0       7.6     12.0      3.6

1490 NH CARD USED
*SECNO 6.880

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.88      6.44  2326.94  2326.94      0.00  2328.35      1.41      2.55      0.07  2320.50
   10370.     2165.     6038.     2167.      313.      497.      889.      232.      88.   2325.20
     0.24      4.22     12.15      2.44     0.050     0.025     0.062     0.000  2320.50  9775.21
 0.004054      580.      620.      613.        20        11         0      0.00   816.58 10786.27
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       GLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


FLOW DISTRIBUTION FOR SECNO=      6.88          CWSEL=   2326.94

STA=    9775.    9868.    9916.    9936.    9959.   10045.   10117.   10158.   10213.   10299.   10386.
  PER Q=      4.8      6.1      3.6      6.4     58.2      5.3      5.4      4.9      4.5      0.7
   AREA=    162.0    153.8     78.7    118.1    497.1    165.6    134.7    142.5    161.3    285.0
    VEL=      3.1      1.1      4.7      5.6     12.1      3.3      4.2      3.6      2.9      0.3

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 6.990
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     6.99     7.40  2330.19  2330.19     0.00  2331.84     1.64     2.32     0.07  2327.60
   10370.      106.     6506.     3767.      41.      514.     1013.      276.      97.  2325.40
     0.26     2.57     12.67     3.70    0.050    0.025    0.050    0.000  2322.80  9928.20
 0.003629     593.      610.     393.       20       11        0     0.00   467.40 10395.59


FLOW DISTRIBUTION FOR SECNO=      6.99          CWSEL=   2330.19

     9928.    9954.   10030.   10051.   10102.   10160.   10210.   10284.   10313.   10379.   10396.
  PER Q=      1.0     62.7      4.9      3.7      3.2      3.5      7.1      4.7      8.5      0.6
   AREA=     41.4    513.6    100.7    118.8    115.7    113.8    206.8    111.5    220.8     24.8
    VEL=      2.6     12.7      5.1      3.2      2.8      3.1      3.6      4.4      4.0      2.3

CCHV=   0.300 CEHV=   0.300
1490 NH CARD USED
*SECNO 7.130
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.13     8.48  2335.78  2335.78     0.00  2337.67     1.89     2.38     0.13  2327.50
   10370.      214.     7479.     2677.      57.      583.      807.      301.      104.  2331.90
     0.28     3.79     12.84     3.32    0.050    0.025    0.050    0.000  2327.30  9953.32
 0.003008     725.      725.      720.       20        8        0     0.00   376.16 10329.48


FLOW DISTRIBUTION FOR SECNO=      7.13          CWSEL=   2335.78

STA=    9953.    9967.   10041.   10075.   10119.   10165.   10200.   10241.   10273.   10329.
  PER Q=      2.1     72.1      4.2      3.9      3.5      3.0      4.8      3.8      2.6
   AREA=     56.6    582.7    116.5    124.4    118.6     97.1    136.2    108.1    105.5
    VEL=      3.8     12.8      3.7      3.3      3.1      3.2      3.6      3.7      2.6
```

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


1490 NH CARD USED
*SECNO 7.210

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.21      8.02  2337.82  2337.82      0.00  2340.47      2.65      2.05      0.38  2340.50
   10370.        0.     9692.     1678.        0.      628.      211.      312.      107.  2331.00
     0.28      0.00     13.84      7.95     0.000     0.034     0.050     0.000  2329.80  9961.02
 0.009397      420.      420.      410.         3        11         0      0.00   165.27 10126.29


FLOW DISTRIBUTION FOR SECNO=      7.21          CWSEL=   2337.82

STA=    9961.   10066.   10079.   10091.   10113.   10126.
  PER Q=     83.8      8.9      4.4      2.6      0.3
   AREA=    628.0     88.6     57.8     52.1     12.7
    VEL=     13.8     10.4      7.9      5.1      2.8

1490 NH CARD USED
*SECNO 7.300
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.30      7.83  2341.13  2341.13      0.00  2343.66      2.53      2.96      0.04  2338.40
   10370.    2068.     8102.      200.      432.      570.       47.      322.      109.  2334.00
     0.30      4.79     14.22      4.21     0.050     0.025     0.050     0.000  2333.30  9829.12
 0.004355      303.      480.      450.         4         8         0      0.00   212.20 10041.31


FLOW DISTRIBUTION FOR SECNO=      7.30          CWSEL=   2341.13

STA=    9829.    9851.    9864.    9878.    9893.    9913.    9933.    9946.   10028.   10041.
  PER Q=      2.0      3.6      3.0      2.4      4.1      3.5      1.4     78.1      1.9
   AREA=     36.2     65.4     60.0     54.5     83.7     75.7     36.2    569.9     47.5
    VEL=      3.6      5.8      5.2      4.6      5.1      4.7      3.9     14.2      4.2
```

THIS RUN EXECUTED WED, NOV 19 1986 08:41:29

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*****************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
*****************************************
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUTNY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R4 FLOODWAY PROFILE - 0.8 FOOT

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2275.670	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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


*PROF 2

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 5.350

3470 ENCROACHMENT STATIONS=    9460.0   10062.0  TYPE=     1  TARGET=     602.000
     3.35     3.97  2275.67     0.00  2275.31  2276.78     1.11     0.00     0.00  2269.70
   10370.    6043.    4222.     106.    1592.     340.      27.       0.       0.  2269.70
     0.00     3.80    12.41     3.86    0.054    0.025    0.043    0.000  2269.70  9460.00
 0.004022       0.       0.       0.        0        0        0     0.00   601.18 10061.18


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 5.470
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9460.0   10106.0  TYPE=     1  TARGET=     646.000
     3.47     3.70  2279.40  2279.40  2279.24  2280.67     1.27     2.18     0.05  2275.60
   10370.    4869.    5191.     310.    1176.     429.     105.      21.       7.  2273.70
     0.02     4.14    12.11     2.96    0.045    0.025    0.055    0.000  2273.70  9460.00
 0.004287     450.     610.     620.       20       11        0     0.00   646.00 10106.00


*SECNO 5.580
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9553.0   10050.0  TYPE=     1  TARGET=     497.000
     5.58     6.04  2283.04  2283.04  2282.84  2284.32     1.48     2.06     0.06  2278.80
   10370.    3686.    6603.      81.     954.     555.      22.      39.      13.  2277.00
     0.03     3.86    11.89     3.73    0.045    0.025    0.045    0.000  2277.00  9553.00
 0.003908     485.     515.     525.       20        8        0     0.00   497.00 10050.00


*SECNO 5.630
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3470 ENCROACHMENT STATIONS=    9560.0   10087.0  TYPE=     1  TARGET=     527.000
     5.65      5.89  2284.79  2284.79  2284.69  2286.21     1.43      1.20      0.03  2280.10
   10370.     2790.     7358.     222.     826.     639.      54.       50.       17.  2278.90
     0.04      3.38     11.16     4.11    0.045    0.025    0.045     0.000  2278.90  9560.00
 0.003318     300.      335.     340.       20        8        0      0.00   527.00 10087.00


1490 NH CARD USED
*SECNO 5.740
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9720.0   10170.0  TYPE=     1  TARGET=     450.000
     5.74      6.38  2287.98  2287.98  2287.81  2289.80     1.82      1.71      0.12  2282.50
   10370.     672.     8405.     1293.     218.     706.     324.       65.       22.  2281.40
     0.06      3.08     11.90     3.99    0.045    0.025    0.045     0.000  2281.40  9720.00
 0.003478     430.      500.     520.       20        8        0      0.00   450.00 10170.00


    NH CARD USED
*SECNO 5.850
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9910.0   10130.0  TYPE=     1  TARGET=     220.000
     3.85      6.66  2291.36  2291.36  2291.31  2293.67     2.31      2.28      0.15  2286.00
   10370.     157.     9942.     271.      35.     799.      93.       80.       26.  2289.60
     0.07      4.51     12.44     2.91    0.045    0.025    0.045     0.000  2284.70  9910.00
 0.004643     575.      570.     580.       20        5        0      0.00   220.00 10130.00


CCHV=   0.600 CEHV=   0.800
*SECNO 5.920

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9940.0   10384.0  TYPE=     1  TARGET=     444.000
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        DLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       THA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN      SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID     ENDST


     5.92      7.44   2295.44   2295.44   2295.54   2297.25      1.81      1.78      0.30   2288.00
   10370.       160.      9212.      998.       39.      809.      335.       90.       30.   2292.10
     0.08      4.07     11.39      2.81     0.050     0.030     0.045     0.000   2288.00   9942.43
 0.004258      390.      400.      415.         2         8         0      0.00    441.57  10384.00


1490 NH CARD USED
*SECNO 6.010

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9849.0   10230.0  TYPE=     1  TARGET=     381.000
     6.01      6.06   2298.26      0.00   2298.15   2299.09      0.83      1.25      0.59   2292.40
   10370.      3801.      4948.     1621.      478.      672.      311.      103.       33.   2293.20
     0.10      7.95      7.36      3.21     0.026     0.025     0.030     0.000   2272.20   9865.61
 0.001873      560.      480.      210.         3         0         0      0.00    364.39  10230.00


*SECNO 6.090

HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9762.0   10040.0  TYPE=     1  TARGET=     278.000
     6.09      6.37   2301.37   2301.37   2300.82   2303.44      2.08      1.18      1.00   2298.50
   10370.      1426.      8902.       42.      368.      719.       13.      115.       36.   2295.00
     0.11      3.88     12.39      3.17     0.043     0.025     0.043     0.000   2295.00   9762.00
 0.004222      500.      430.      290.        20         8         0      0.00    278.00  10040.00


CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 6.210
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9752.0   10075.0  TYPE=     1  TARGET=     323.000
     6.21      7.37   2303.57   2303.57   2303.41   2307.71      2.14      2.04      0.03   2298.30
   10370.      2199.      8024.      148.      540.      609.       37.      130.       39.   2298.00
     0.12      4.07     13.18      4.03     0.043     0.025     0.043     0.000   2298.00   9752.00
 0.003504      540.      530.      640.        20        11         0      0.00    294.63  10046.63
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  SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
  Q        OLOB     OCH      OROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
  TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
  SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 6.310

3470 ENCROACHMENT STATIONS=    9820.0   10055.0  TYPE=     1  TARGET=     235.000
     6.31     6.75  2307.65     0.00  2307.64  2309.57     1.92     1.83     0.02  2304.30
   10370.     963.    9317.      90.     224.     800.      25.     142.      42.   2302.70
     0.14     4.30    11.64     6.33    0.045    0.025    0.045    0.000  2300.90  9820.00
 0.003969     450.     500.     505.        3        0        0     0.00   231.20 10051.20


1490 NH CARD USED
*SECNO 6.400

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9863.0   10150.0  TYPE=     1  TARGET=     287.000
     6.40     6.29  2310.19     0.00  2310.10  2311.60     1.41     1.98     0.05  2306.30
   10370.    1347.    7033.    1990.     288.     645.     319.     155.      45.   2304.30
     0.15     4.68    10.90     6.24    0.045    0.025    0.045    0.000  2303.90  9863.00
  04065     420.     500.     520.        2        0        0     0.00   287.00 10150.00


1490 NH CARD USED
*SECNO 6.500

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9952.0   10239.0  TYPE=     1  TARGET=     287.000
     6.50     6.89  2315.49  2315.49  2315.43  2317.38     2.09     2.12     0.20  2309.90
   10370.       0.    8427.    1943.       0.     664.     433.     169.      49.   2311.70
     0.16     0.00    12.69     4.48    0.000    0.025    0.045    0.000  2308.60  9952.00
 0.004262     470.     500.     560.       20        8        0     0.00   287.00 10239.00


1490 NH CARD USED
*SECNO 6.610
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```
   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTH       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9922.0   10331.0  TYPE=     1  TARGET=     409.000
     6.61      6.29  2318.49     0.00  2318.18  2319.87     1.38      2.21      0.07  2315.00
   10370.       73.     6464.    3833.      28.     569.     816.      185.       53.  2312.70
     0.18      2.59     11.36     4.69     0.050    0.023    0.041     0.000  2312.20  9922.00
 0.003479     570.      570.     590.        3        0        0      0.00   409.00 10331.00


1490 NH CARD USED
*SECNO 6.690

3265 DIVIDED FLOW


3470 ENCROACHMENT STATIONS=    9914.0   10224.0  TYPE=     1  TARGET=     310.000
     6.69      5.10  2320.20  2320.12  2320.35  2321.97     1.77      1.98      0.12  2315.80
   10370.      239.     9988.     144.      71.     920.      36.      197.       57.  2315.20
     0.19      3.38     10.86     3.98     0.065    0.028    0.045     0.000  2315.10  9914.88
   06616      430.      425.     420.        4       15        0      0.00   297.41 10223.13


1490 NH CARD USED
*SECNO 6.760

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9880.0   10184.0  TYPE=     1  TARGET=     304.000
     6.76      5.46  2322.76     0.00  2322.70  2323.96     1.20      1.93      0.06  2318.90
   10370.     1826.     5303.    3241.     241.     699.    295.      207.       59.  2317.30
     0.20      7.59      7.59    10.99     0.029    0.032    0.026     0.000  2317.30  9880.00
 0.004197     360.      370.     385.        3        0        0      0.00   304.00 10184.00


1490 NH CARD USED
*SECNO 6.880

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED

470 ENCROACHMENT STATIONS=    9780.0   10176.0  TYPE=     1  TARGET=     396.000
    6.88     6.52  2327.02  2327.02  2326.94  2328.77     1.75     2.66     0.16  2320.50
  10370.    2380.    6532.    1458.     525.     504.     365.     225.      64.  2325.20
    0.22     4.54    12.96     3.99    0.050    0.025    0.050    0.000  2320.50  9780.00
0.004526     580.     620.     615.       20       11        0     0.00   396.00 10176.00


CHV=   0.100 CEHV=   0.300
490 NH CARD USED
*SECNO 6.990
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

470 ENCROACHMENT STATIONS=    9954.0   10259.0  TYPE=     1  TARGET=     305.000
    6.99     7.97  2330.77  2330.77  2330.19  2332.84     2.08     2.32     0.10  2327.60
  10370.       0.    7462.    2908.       0.     557.     718.     244.      69.  2325.40
    0.24     0.00    13.40     1.05    0.000    0.025    0.050    0.000  2322.80  9954.00
0.003844     595.     610.     595.       20       11        0     0.00   305.00 10259.00


CHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 7.130
685 20 TRIALS ATTEMPTED WSEL,CWSEL
693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

470 ENCROACHMENT STATIONS=    9954.0   10190.0  TYPE=     1  TARGET=     236.000
    7.13     8.72  2336.02  2336.02  2335.78  2338.53     2.50     2.63     0.21  2327.50
  10370.     251.    8405.    1714.      60.     601.     464.     263.      73.  2331.90
    0.25     4.21    13.99     3.70    0.050    0.025    0.050    0.000  2327.30  9954.00
0.003429     725.     725.     720.       20        8        0     0.00   236.00 10190.00


490 NH CARD USED
*SECNO 7.210

470 ENCROACHMENT STATIONS=    9959.0   10110.0  TYPE=     1  TARGET=     151.000
    7.21     8.39  2338.39     0.00  2337.82  2340.61     2.22     2.00     0.08100000.00
  10370.       0.    8698.    1672.       0.     689.     218.     273.      75.  2331.00
    0.26     0.00    12.63     7.67    0.000    0.034    0.050    0.000  2329.80  9959.72
0.007137     420.     420.     410.        4        0        0     0.00   150.27 10110.00
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HI       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


1490 NH CARD USED
*SECNO 7.300
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9840.0   10050.0  TYPE=     1  TARGET=     210.000
     7.30     7.78  2341.08  2341.08  2341.13  2343.69     2.60     2.69     0.19  2338.40
   10370.    2031.    8140.     199.     412.     566.      47.     284.      77.   2334.00
     0.27     4.93    14.39     4.26    0.050    0.025    0.050    0.000  2333.30  9840.00
 0.004508     505.     480.     450.        1       11        0     0.00   201.22 10041.21
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THIS RUN EXECUTED WED, NOV 19 1986 08:41:45

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*************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
 ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
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TE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

0 YEAR DISCHARGE - R4

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	5.350	2275.31	5.61	2276.71	13.76	2269.70	0.00	636.39	9404.04	10060.63	5864.44	4401.86	103.70
	5.350	2275.67	5.97	2276.78	12.41	2269.70	0.00	601.18	9460.00	10061.18	6042.70	4221.50	105.80
	5.470	2279.24	5.54	2280.42	11.94	2273.70	610.00	717.80	9415.72	10148.85	4876.39	4964.99	528.62
*	5.470	2279.40	5.70	2280.67	12.11	2273.70	610.00	646.00	9460.00	10106.00	4869.12	5191.14	309.74
	5.580	2282.84	5.84	2284.18	11.59	2277.00	515.00	583.93	9467.29	10051.22	4079.38	6215.59	75.03
	5.580	2283.04	6.04	2284.52	11.89	2277.00	515.00	497.00	9553.00	10050.00	3685.96	6603.16	80.88
	5.650	2284.69	5.79	2286.05	11.05	2278.90	335.00	599.79	9488.33	10088.11	3001.21	7138.18	210.62
	5.650	2284.79	5.89	2286.21	11.16	2278.90	335.00	527.00	9560.00	10087.00	2790.42	7337.97	221.61
*	5.740	2287.81	6.41	2289.26	11.10	2281.40	500.00	794.84	9418.40	10251.00	799.84	7627.49	1942.66
	5.740	2287.98	6.58	2289.80	11.90	2281.40	500.00	450.00	9720.00	10170.00	672.10	8405.32	1292.58
*	5.850	2291.31	6.61	2292.93	11.04	2284.70	570.00	464.66	9905.83	10370.49	138.81	8733.82	1477.36
	5.850	2291.36	6.66	2293.67	12.44	2284.70	570.00	220.00	9910.00	10130.00	156.96	9941.90	271.14
*	5.920	2295.54	7.54	2297.24	11.10	2288.00	400.00	521.80	9942.29	10478.97	160.20	9110.45	1099.35
*	5.920	2295.44	7.44	2297.25	11.39	2288.00	400.00	441.57	9942.43	10384.00	160.27	9211.87	997.86
	6.010	2298.15	5.95	2299.01	7.51	2292.20	480.00	496.98	9866.03	10363.01	3814.86	4934.34	1618.60
	6.010	2298.26	6.06	2299.09	7.36	2292.20	480.00	364.39	9865.61	10230.00	3301.22	4947.94	1620.84
	6.090	2300.82	5.82	2302.66	12.21	2295.00	430.00	349.02	9692.48	10041.50	2388.96	7937.53	43.51
*	6.090	2301.37	6.37	2303.44	12.39	2295.00	430.00	278.00	9762.00	10040.00	1426.02	8901.89	42.09
	6.210	2305.41	7.41	2306.85	11.59	2298.00	530.00	621.46	9424.99	10046.45	3343.65	6901.74	124.61
*	6.210	2305.57	7.57	2307.71	13.18	2298.00	530.00	294.65	9752.00	10046.65	2190.69	8023.60	117.71
	6.310	2307.64	6.74	2309.39	11.29	2300.90	500.00	456.75	9458.24	10051.18	1263.67	9019.71	86.62
	6.310	2307.65	6.75	2309.57	11.64	2300.90	500.00	231.20	9820.00	10051.20	963.16	9317.09	89.75

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
	6.400	2310.10	6.20	2311.27	10.28	2303.90	500.00	304.13	9647.84	10151.99	2021.24	6507.83	1840.92
	6.400	2310.19	6.29	2311.60	10.90	2303.90	500.00	287.00	9863.00	10150.00	1347.06	7033.00	1989.9[illegible]
*	6.500	2315.43	6.83	2317.31	12.29	2308.60	500.00	385.45	9833.48	10238.93	538.23	8071.46	1760.31
*	6.500	2315.49	6.89	2317.58	12.69	2308.60	500.00	287.00	9952.00	10239.00	0.00	8426.97	1943.0[illegible]
*	6.610	2318.18	3.98	2319.84	12.35	2312.20	570.00	409.10	9922.23	10331.33	62.15	6657.68	3650.1[illegible]
	6.610	2318.49	6.29	2319.87	11.36	2312.20	570.00	409.00	9922.00	10331.00	72.89	6464.10	3933.01
	6.690	2320.35	3.23	2321.99	10.44	2315.10	425.00	307.03	9914.36	10224.28	247.41	9968.27	154.3[illegible]
	6.690	2320.20	5.10	2321.97	10.86	2315.10	425.00	297.41	9914.88	10223.13	238.51	9987.81	143.68
	6.760	2322.70	5.40	2323.89	7.63	2317.30	370.00	321.73	9862.27	10183.99	1884.29	5257.86	3227.8[illegible]
	6.760	2322.75	5.46	2323.96	7.59	2317.30	370.00	304.00	9880.00	10184.00	1825.83	5302.90	3241.27
*	6.880	2326.94	6.44	2328.35	12.13	2320.50	620.00	316.58	9775.21	10786.27	2164.77	6038.05	2167.4[illegible]
*	6.880	2327.02	6.52	2328.77	12.96	2320.50	620.00	396.00	9780.00	10176.00	2379.94	6532.14	1457.92
*	6.990	2330.19	7.40	2331.84	12.67	2322.80	610.00	467.40	9928.20	10395.59	106.29	6506.31	3757.4[illegible]
*	6.990	2330.77	7.97	2332.84	13.40	2322.80	610.00	305.00	9954.00	10259.00	0.00	7462.13	2907.8[illegible]
*	7.130	2333.78	8.48	2337.67	12.84	2327.30	725.00	376.16	9933.32	10329.48	214.36	7478.90	2676.7[illegible]
*	7.130	2336.02	8.72	2338.53	13.99	2327.30	725.00	236.00	9954.00	10190.00	251.21	8404.51	1714.2[illegible]
*	7.210	2337.82	8.02	2340.47	13.84	2329.80	420.00	165.27	9961.02	10126.29	0.00	8691.70	1678.39
	7.210	2338.39	8.59	2340.61	12.63	2329.80	420.00	150.27	9959.72	10110.00	0.00	8698.02	1671.[illegible]
*	7.300	2341.13	7.83	2343.66	14.22	2333.30	480.00	212.20	9829.12	10041.31	2067.94	8102.10	199.94
*	7.300	2341.08	7.78	2343.69	14.39	2333.30	480.00	201.22	9840.00	10041.21	2030.54	8140.03	199.[illegible]

MMARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    5.350  PROFILE= 1  CRITICAL DEPTH ASSUMED

AUTION   SECNO=    5.470  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    5.470  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.470  PROFILE= 2  CRITICAL DEPTH ASSUMED
AUTION   SECNO=    5.470  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.470  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

AUTION   SECNO=    5.580  PROFILE= 1  CRITICAL DEPTH ASSUMED
AUTION   SECNO=    5.580  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.580  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
AUTION   SECNO=    5.580  PROFILE= 2  CRITICAL DEPTH ASSUMED
AUTION   SECNO=    5.580  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.580  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

AUTION   SECNO=    5.650  PROFILE= 1  CRITICAL DEPTH ASSUMED
AUTION   SECNO=    5.650  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.650  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
AUTION   SECNO=    5.650  PROFILE= 2  CRITICAL DEPTH ASSUMED
AUTION   SECNO=    5.650  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.650  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

 ION     SECNO=    5.740  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    5.740  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    5.740  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION  SECNO=    5.740  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
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CAUTION  SECNO=    5.850  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
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CAUTION  SECNO=    5.920  PROFILE= 1  MINIMUM SPECIFIC ENERGY
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AUTION   SECNO=    6.090  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    6.210  PROFILE= 1  CRITICAL DEPTH ASSUMED
 ION     SECNO=    6.210  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
UTION    SECNO=    6.210  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    6.210  PROFILE= 2  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    6.210  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    6.310  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    6.500  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    6.500  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    6.500  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    6.500  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

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CAUTION  SECNO=    7.130  PROFILE= 1  CRITICAL DEPTH ASSUMED
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CAUTION  SECNO=    7.130  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    7.130  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.130  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    7.130  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    7.210  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.210  PROFILE= 1  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    7.300  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.300  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    7.300  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.300  PROFILE= 2  MINIMUM SPECIFIC ENERGY
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LOODWAY DATA, 100 YEAR DISCHARGE - R4
ROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
5.350	601.	1960.	5.3	2275.7	2275.3	0.4
5.470	646.	1710.	6.1	2279.4	2279.2	0.2
5.580	497.	1531.	6.8	2283.0	2282.8	0.2
5.650	527.	1539.	6.7	2284.8	2284.7	0.1
5.740	450.	1248.	8.3	2288.0	2287.8	0.2
5.850	220.	927.	11.2	2291.3	2291.3	0.0
5.920	442.	1202.	8.6	2295.5	2295.5	0.0
6.010	364.	1461.	7.1	2298.2	2298.1	0.1
6.090	278.	1100.	9.4	2301.3	2300.8	0.5
6.210	295.	1186.	8.7	2305.6	2305.4	0.2
6.310	231.	1050.	9.9	2307.6	2307.6	0.0
6.400	287.	1252.	8.3	2310.2	2310.1	0.1
6.500	287.	1097.	9.5	2315.5	2315.4	0.1
6.610	409.	1413.	7.3	2318.5	2318.2	0.3
6.690	308.	1027.	10.1	2320.3	2320.4	-0.1
6.760	304.	1234.	8.4	2322.8	2322.7	0.1
6.880	396.	1394.	7.4	2327.0	2326.9	0.1
6.990	305.	1275.	8.1	2330.8	2330.2	0.6
7.130	236.	1124.	9.2	2336.0	2335.8	0.2
7.210	150.	907.	11.4	2338.4	2337.8	0.6
7.300	201.	1025.	10.1	2341.1	2341.1	0.0

THIS RUN EXECUTED WED, NOV 19 1986 08:41:48

```
**********************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
**********************************************
```

Floodway, Reach #5
Cross Sec 7.30-9.250

User: P4091501 -at DEC

<CBA>PHOENIX>P40915>HYDRO>SOLS.REACH5.FLOOD.OUT

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

WWWW  W     WWW   WWW   W  WWWWW  WWW   W
  W W  W  W  W W  W  WW  W    W   W  WW
 W  W W  W  W  W W  W   W  WWWW  W   W   W
WWWW  WWWWW W W W  WWWW  W     W W W W   W
      W  W  W    W  W     W W  W   W   W
      W  W  W   W   W  W  W W  W   W   W
W     W   WWW  WWW   WWW  WWW   WWW   WWW


WWW   WWW  W     WWW      WWWW  WWWWW  WWW   WWW  W   W WWWWW      WWWWW W     WWW   WWW  WWWW       WWW  W   W WWWWW
W  W W  W W    W  W      W  W W    W  W W   W W W  W W          W    W    W  W W  W W  W      W  W W   W  W
W    W  W W    W         W  W W    W  W W    W  W W    W  W WWWW      W    W    W  W W  W W  W      W  W W   W  W
WWW  W  W W     WWW      WWWW  WWWW  WWWWW W    WWWWW    W      WWWW  W    W  W W  W W  W      W  W W   W  W
  W W  W W       W      W W   W    W  W W    W    W    W      W    W    W  W W  W W  W      W  W W   W  W
W  W W  W W    W  W  WW  W  W  W    W  W W  W W  W  W  WW  W    W    W  W W  W W  W  WW  W  W W   W  W
WWW   WWW  WWWWW  WWW   WW  W   W WWWWW W   W  WWW\W   W  WWW   WW  W    WWWWW  WWW   WWW  WWWW   WW  WWW  WWW   W
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****
****

Label: PRT001 -form

Pathname: <CBA>PHOENIX>P40915>HYDRO>SOLS.REACH5.FLOOD.OUT
File last modified: 86-11-18.09:35:32.Tue

Spooled: 86-11-19.10:09:56.Wed [Spooler rev 19.4.5]
Started: 86-11-19.10:07:12.Wed on: ANLC by: DEC

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*****************************************************
*  WATER SURFACE PROFILES                           *
*  VERSION OF NOVEMBER 1976                         *
*  UPDATED MAY 1984                                 *
*                                                   *
*  RUN DATE TUE, NOV 18 1986 TIME 09:34:38          *
*****************************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  THE HYDROLOGIC ENGINEERING CENTER    *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616              *
*  (916) 440-2163 (FTS) 448-2105        *
*****************************************
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```
X     X  XXXXXXX   XXXXX            XXXXX
X     X  X       X     X          X     X
X     X  X       X                       X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X       X                 X
X     X  X       X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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THIS RUN EXECUTED TUE, NOV 18 1986 09:34:54

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**************************************************
HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
 ERROR CORR -  01,02,03,04,05,06
 MODIFICATION -  50,51,52,53,54,55,56
**************************************************
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 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3      100 YEAR DISCHARGE - R5          FLOODWAY ANALYSIS

1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

     0.        2.        0.        0.  0.000000      0.00      0.0       0.  2341.130    0.000

J2 NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHWIM     ITRACE

   1.000     0.000    -1.000     0.000     0.000     0.000     0.000     0.000     0.000    15.000

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

  38.000     1.000     8.000     3.000    26.000    42.000    39.000     4.000    53.000    51.000

  13.000    14.000    15.000   200.000     0.000     0.000     0.000     0.000     0.000     0.000

X     2.000 10370.000 10370.000     0.000     0.000     0.000     0.000     0.000     0.000     0.000
C     0.000     0.000     0.000     0.300     0.500     0.000     0.000     0.000     0.000     0.000
NH    3.000     0.050  9946.000     0.025 10028.000     0.050 10095.000     0.000     0.000     0.000
T     0.000     0.000     4.100  9840.000 10050.000     0.000     0.000     0.000     0.000     0.000
1     7.300    13.000  9946.000 10028.000     0.000     0.000     0.000     0.000     0.000     0.000
GR 2344.500  9816.000  2342.100  9825.000  2336.000  9851.000  2336.200  9864.000  2337.500  9878.000
GR 2337.500  9893.000  2336.400  9913.000  2338.300  9933.000  2339.400  9946.000  2333.300  9967.000
GR 2333.600 10000.000  2334.000 10028.000  2369.900 10095.000     0.000     0.000     0.000     0.000

NH    3.000     0.065  9924.000     0.025 10068.000     0.055 10320.000     0.000     0.000     0.000
T     0.000     0.000     4.100  9703.000 10120.000     0.000     0.000     0.000     0.000     0.000
1     7.440    28.000  9924.000 10068.000   660.000   800.000   745.000     0.000     0.000     0.000
GR 2349.600  9648.000  2349.600  9650.000  2347.600  9658.000  2342.300  9678.000  2341.500  9697.000
GR 2345.800  9734.000  2343.100  9748.000  2344.200  9773.000  2342.500  9807.000  2343.300  9837.000
GR 2343.000  9903.000  2341.000  9924.000  2340.400  9985.000  2340.300 10000.000  2339.200 10022.000
GR 2338.600 10068.000  2343.800 10088.000  2344.200 10131.000  2343.200 10154.000  2340.800 10177.000
GR 2341.600 10184.000  2340.800 10189.000  2342.800 10201.000  2343.600 10214.000  2343.700 10231.000
GR 2344.600 10240.000  2350.900 10270.000  2354.800 10320.000     0.000     0.000     0.000     0.000

NC    0.000     0.000     0.000     0.600     0.800     0.000     0.000     0.000     0.000     0.000
1     3.000     0.065  9938.000     0.025 10063.000     0.055 10555.000     0.000     0.000     0.000
T     0.000     0.000     4.100  9913.000 10162.000     0.000     0.000     0.000     0.000     0.000
```

X1	7.530	20.000	9961.000	10044.000	465.000	610.000	500.000	0.000	0.000	0.000
GR	2352.400	9786.000	2352.200	9796.000	2351.000	9803.000	2342.600	9830.000	2341.600	9855.000
	2349.200	9913.000	2346.300	9938.000	2342.700	9961.000	2342.700	10000.000	2342.500	10044.000
GR	2346.500	10063.000	2347.300	10086.000	2347.600	10134.000	2348.300	10182.000	2348.000	10242.000
GR	2347.100	10322.000	2347.400	10378.000	2348.300	10447.000	2349.500	10506.000	2334.000	10555.000
NC	0.065	0.055	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.110	9901.000	10160.000	0.000	0.000	0.000	0.000	0.000
X1	7.579	6.000	9902.000	10042.000	210.000	295.000	235.000	0.470	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2351.800	2351.500	0.000
GR	2353.600	9900.000	2343.600	9902.000	2343.600	10000.000	2343.600	10042.000	2354.690	10044.000
GR	2356.000	10230.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.050	1.560	2.630	0.000	65.800	4.230	475.080	0.000	0.000	0.000
ET	0.000	0.000	4.110	9901.000	10160.000	0.000	0.000	0.000	0.000	0.000
X1	7.590	6.000	9902.000	10042.000	50.000	50.000	50.000	0.470	0.000	0.000
X2	0.000	0.000	1.000	2350.800	2353.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2351.800	2351.500	0.000
BT	3.000	9900.000	2334.630	2330.630	10044.000	2354.690	2351.690	10230.000	2356.000	2356.000
GR	2353.600	9900.000	2343.600	9902.000	2343.600	10000.000	2343.600	10042.000	2354.690	10044.000
GR	2356.000	10230.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.065	9954.000	0.025	10048.000	0.055	10072.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9737.000	10070.000	0.000	0.000	0.000	0.000	0.000
X1	7.630	10.000	9931.000	10067.000	255.000	140.000	190.000	0.000	0.000	0.000
GR	2363.600	9735.000	2354.400	9807.000	2352.300	9858.000	2351.000	9904.000	2351.500	9931.000
GR	2347.100	9954.000	2347.000	10000.000	2347.000	10048.000	2356.600	10067.000	2356.800	10072.000
NH	3.000	0.065	9958.000	0.025	10191.000	0.055	10220.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9927.000	10215.000	0.000	0.000	0.000	0.000	0.000
X1	7.720	18.000	9958.000	10039.000	300.000	305.000	500.000	0.000	0.000	0.000
GR	2363.800	9925.000	2350.500	9958.000	2350.000	10000.000	2350.000	10019.000	2351.100	10031.000
GR	2351.100	10039.000	2352.400	10071.000	2352.900	10087.000	2351.600	10097.000	2351.900	10109.000
GR	2351.900	10115.000	2356.500	10129.000	2351.800	10156.000	2351.500	10170.000	2350.300	10179.000
GR	2352.400	10191.000	2360.300	10213.000	2361.500	10220.000	0.000	0.000	0.000	0.000
NH	3.000	0.065	9933.000	0.025	10082.000	0.055	10247.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9910.000	10100.000	0.000	0.000	0.000	0.000	0.000
X1	7.820	15.000	9933.000	10082.000	535.000	380.000	500.000	0.000	0.000	0.000
GR	2370.000	9903.000	2354.500	9933.000	2354.500	9947.000	2353.500	9972.000	2353.600	9980.000
GR	2353.600	10000.000	2354.300	10043.000	2355.800	10082.000	2356.400	10100.000	2356.400	10138.000
GR	2361.400	10189.000	2363.400	10222.000	2362.100	10232.000	2363.400	10240.000	2363.400	10247.000
NC	0.065	0.055	0.025	0.600	0.800	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.110	9800.000	10300.000	0.000	0.000	0.000	0.000	0.000
X1	7.884	12.000	9935.000	10051.000	360.000	145.000	345.000	0.707	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2360.000	2362.700	0.000
GR	2366.000	9735.000	2364.000	9835.000	2360.000	9935.000	2359.600	9945.000	2355.600	9946.000
GR	2355.600	10000.000	2354.600	10045.000	2362.700	10051.000	2363.700	10136.000	2362.900	10236.000
GR	2364.500	10336.000	2365.000	10390.000	0.000	0.000	0.000	0.000	0.000	0.000

2	1.050	1.560	2.630	0.000	67.200	6.360	395.900	0.030	0.000	0.000
	0.000	0.000	4.110	9790.000	10271.000	0.000	0.000	0.000	0.000	0.000
	7.891	12.000	9870.000	10270.000	30.000	30.000	30.000	0.707	0.000	0.000
2	0.000	0.000	1.000	2359.100	2363.400	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2361.400	2360.100	0.000
T	6.000	9835.000	2366.700	2366.700	9935.000	2366.300	2366.300	10000.000	2365.800	2365.800
T	10035.000	2365.800	2365.800	10135.000	2365.400	2365.400	10235.000	2365.800	2365.800	0.000
GR	2369.000	9770.000	2364.000	9870.000	2361.000	9945.000	2355.800	9950.000	2355.800	9970.000
GR	2355.800	10000.000	2355.100	10070.000	2355.100	10100.000	2360.000	10105.000	2360.100	10170.000
R	2364.700	10270.000	2369.800	10370.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.065	9977.000	0.025	10076.000	0.055	10180.000	0.000	0.000	0.000
T	0.000	0.000	4.100	9918.000	10140.000	0.000	0.000	0.000	0.000	0.000
1	7.920	23.000	9937.000	10124.000	150.000	220.000	180.000	0.000	0.000	0.000
GR	2372.000	9707.000	2370.000	9717.000	2360.000	9787.000	2358.000	9817.000	2360.000	9827.000
GR	2369.000	9887.000	2366.600	9891.000	2361.200	9915.000	2357.600	9937.000	2358.200	9958.000
R	2356.500	9977.000	2355.700	10000.000	2355.700	10023.000	2358.300	10030.000	2357.900	10049.000
GR	2357.800	10076.000	2356.800	10086.000	2357.500	10096.000	2358.300	10110.000	2357.000	10118.000
GR	2357.000	10124.000	2370.000	10160.000	2380.000	10180.000	0.000	0.000	0.000	0.000
NH	4.000	0.050	9930.000	0.065	9967.000	0.025	10094.000	0.050	10275.000	0.000
ET	0.000	0.000	4.100	9719.000	10200.000	0.000	0.000	0.000	0.000	0.000
	8.000	35.000	9930.000	10094.000	440.000	420.000	425.000	0.000	0.000	0.000
R	2372.000	9515.000	2368.000	9565.000	2366.000	9605.000	2364.500	9615.000	2366.000	9635.000
GR	2369.200	9665.000	2367.400	9670.000	2366.300	9675.000	2363.000	9695.000	2362.400	9722.000
GR	2363.100	9754.000	2362.700	9770.000	2362.800	9775.000	2361.300	9831.000	2361.000	9877.000
	2360.000	9930.000	2359.000	9960.000	2356.900	9967.000	2357.300	10000.000	2358.500	10016.000
GR	2358.100	10038.000	2357.600	10048.000	2357.700	10061.000	2359.400	10073.000	2359.600	10094.000
GR	2359.600	10106.000	2359.500	10125.000	2358.300	10145.000	2358.300	10157.000	2359.200	10170.000
R	2359.000	10191.000	2358.000	10200.000	2358.000	10204.000	2373.200	10245.000	2380.000	10275.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
H	5.000	0.050	9920.000	0.065	9953.000	0.025	10048.000	0.065	10119.000	0.030
H	10535.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9620.000	10401.000	0.000	0.000	0.000	0.000	0.000
X1	8.100	37.000	9953.000	10048.000	465.000	535.000	500.000	0.000	0.000	0.000
R	2372.200	9589.000	2368.800	9607.000	2367.400	9613.000	2367.300	9638.000	2367.800	9652.000
GR	2367.400	9679.000	2367.300	9687.000	2366.900	9697.000	2366.000	9766.000	2364.800	9814.000
GR	2363.800	9864.000	2363.200	9905.000	2363.600	9931.000	2361.200	9953.000	2360.500	10000.000
R	2359.900	10048.000	2362.200	10064.000	2363.400	10089.000	2363.400	10119.000	2362.600	10128.000
R	2363.100	10135.000	2362.300	10143.000	2363.200	10154.000	2363.100	10181.000	2360.500	10201.000
GR	2360.800	10215.000	2362.400	10226.000	2362.300	10244.000	2361.300	10255.000	2362.500	10265.000
R	2362.900	10294.000	2362.400	10325.000	2363.800	10370.000	2365.300	10404.000	2365.900	10436.000
R	2368.100	10484.000	2374.000	10535.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.030	9907.000	0.065	9944.000	0.025	10039.000	0.033	10515.000	0.000
T	0.000	0.000	4.100	9700.000	10357.000	0.000	0.000	0.000	0.000	0.000
X1	8.190	30.000	9944.000	10039.000	475.000	535.000	500.000	0.000	0.000	0.000
GR	2374.600	9557.000	2372.800	9574.000	2370.900	9587.000	2370.700	9645.000	2369.200	9697.000
R	2367.400	9781.000	2366.300	9865.000	2365.900	9907.000	2364.900	9944.000	2362.200	9965.000
GR	2362.200	10000.000	2362.200	10039.000	2364.700	10059.000	2365.100	10072.000	2364.700	10084.000
GR	2365.500	10103.000	2365.500	10146.000	2363.900	10168.000	2364.000	10184.000	2363.300	10202.000
	2365.100	10218.000	2364.400	10233.000	2365.500	10256.000	2365.900	10281.000	2365.700	10310.000

GR	2365.300	10335.000	2366.300	10368.000	2367.900	10415.000	2369.500	10445.000	2372.100	10515.000
	3.000	0.050	9958.000	0.025	10022.000	0.045	10490.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9850.000	10326.000	0.000	0.000	0.000	0.000	0.000
X1	8.290	30.000	9958.000	10022.000	510.000	510.000	500.000	0.000	0.000	0.000
GR	2377.900	9567.000	2376.500	9579.000	2371.700	9605.000	2373.100	9641.000	2371.900	9690.000
GR	2370.400	9773.000	2369.600	9812.000	2368.900	9874.000	2365.300	9900.000	2369.000	9906.000
GR	2369.200	9944.000	2367.500	9958.000	2364.700	9967.000	2364.000	10000.000	2364.000	10022.000
GR	2366.200	10040.000	2366.800	10059.000	2365.700	10088.000	2366.600	10097.000	2366.500	10110.000
GR	2364.400	10130.000	2364.800	10180.000	2368.000	10204.000	2368.700	10225.000	2368.600	10256.000
GR	2367.500	10275.000	2368.200	10286.000	2368.100	10339.000	2369.800	10422.000	2376.000	10490.000
NH	3.000	0.050	9949.000	0.025	10028.000	0.045	10305.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9870.000	10170.000	0.000	0.000	0.000	0.000	0.000
X1	8.400	34.000	9949.000	10028.000	595.000	570.000	615.000	0.000	0.000	0.000
GR	2382.700	9493.000	2380.900	9504.000	2380.100	9518.000	2376.000	9551.000	2374.200	9577.000
GR	2373.600	9658.000	2373.300	9714.000	2372.600	9781.000	2371.900	9840.000	2371.500	9888.000
GR	2369.800	9906.000	2370.800	9917.000	2370.700	9927.000	2370.000	9937.000	2370.400	9949.000
GR	2367.000	9960.000	2366.600	10000.000	2367.400	10028.000	2369.000	10044.000	2367.400	10070.000
GR	2368.300	10079.000	2367.700	10088.000	2368.000	10101.000	2368.900	10106.000	2368.900	10118.000
GR	2366.600	10133.000	2366.600	10145.000	2368.600	10153.000	2367.100	10165.000	2371.500	10180.000
GR	2372.000	10198.000	2370.500	10216.000	2374.200	10249.000	2381.700	10305.000	0.000	0.000
QT	2.000	9862.000	9862.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	6.000	0.050	9900.000	0.065	9954.000	0.025	9985.000	0.065	10005.000	0.025
NH	10054.000	0.060	10090.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9801.000	10060.000	0.000	0.000	0.000	0.000	0.000
	8.480	20.000	9954.000	10044.000	425.000	370.000	390.000	0.000	0.000	0.000
GR	2387.900	9575.000	2384.900	9621.000	2380.400	9657.000	2375.700	9698.000	2374.200	9744.000
GR	2375.100	9756.000	2375.100	9776.000	2373.400	9801.000	2374.800	9820.000	2373.900	9856.000
GR	2372.500	9879.000	2374.600	9911.000	2373.600	9942.000	2368.800	9954.000	2368.700	9992.000
GR	2369.900	9998.000	2370.400	10000.000	2369.200	10012.000	2369.200	10044.000	2386.700	10090.000
NH	4.000	0.050	9900.000	0.065	9947.000	0.040	10039.000	0.060	10080.000	0.000
ET	0.000	0.000	4.100	9580.000	10060.000	0.000	0.000	0.000	0.000	0.000
X1	8.570	24.000	9947.000	10039.000	440.000	500.000	500.000	0.000	0.000	0.000
GR	2389.300	9420.000	2377.400	9469.000	2376.800	9514.000	2378.200	9534.000	2378.100	9533.000
GR	2377.100	9624.000	2377.400	9662.000	2377.100	9691.000	2376.800	9699.000	2376.100	9729.000
GR	2373.300	9750.000	2376.700	9771.000	2376.200	9792.000	2375.800	9817.000	2376.700	9838.000
GR	2377.000	9861.000	2374.400	9886.000	2374.900	9904.000	2377.300	9923.000	2377.300	9947.000
GR	2373.300	9970.000	2372.100	10000.000	2371.700	10039.000	2386.800	10080.000	0.000	0.000
NH	7.000	0.100	9269.000	0.030	9875.000	0.025	9929.000	0.065	9950.000	0.025
NH	10026.000	0.050	10250.000	0.100	10385.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9470.000	10066.000	0.000	0.000	0.000	0.000	0.000
X1	8.670	43.000	9875.000	10026.000	410.000	555.000	500.000	0.000	0.000	0.000
GR	2389.000	9040.000	2389.000	9043.000	2380.900	9080.000	2380.700	9095.000	2381.000	9106.000
GR	2379.300	9126.000	2377.000	9150.000	2377.100	9178.000	2381.100	9201.000	2381.700	9218.000
GR	2381.700	9269.000	2381.400	9335.000	2380.400	9386.000	2379.700	9401.000	2380.800	9417.000
GR	2380.000	9470.000	2379.200	9533.000	2378.000	9554.000	2379.200	9573.000	2379.200	9610.000
GR	2377.900	9641.000	2378.300	9664.000	2377.900	9683.000	2379.300	9714.000	2380.200	9747.000
GR	2380.200	9805.000	2379.000	9848.000	2378.000	9875.000	2377.400	9901.000	2377.600	9920.000
GR	2375.900	9958.000	2374.600	10000.000	2374.600	10026.000	2379.100	10040.000	2379.700	10051.000
	2378.400	10074.000	2377.600	10115.000	2378.900	10161.000	2380.800	10219.000	2382.200	10271.000

R	2383.300	10288.000	2385.800	10349.000	2387.800	10385.000	0.000	0.000	0.000	0.000
	2.000	9419.000	9419.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	5.000	0.100	9497.000	0.050	9958.000	0.025	10053.000	0.050	10350.000	0.100
H	10645.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9560.000	10241.000	0.000	0.000	0.000	0.000	0.000
X1	8.760	39.000	9938.000	10053.000	450.000	315.000	500.000	0.000	0.000	0.000
R	2393.100	9397.000	2391.400	9429.000	2387.600	9455.000	2382.900	9489.000	2381.800	9522.000
GR	2381.800	9567.000	2380.300	9578.000	2380.500	9587.000	2382.600	9598.000	2382.900	9665.000
GR	2382.500	9723.000	2381.500	9765.000	2380.300	9786.000	2381.600	9803.000	2380.800	9823.000
R	2381.200	9836.000	2381.100	9857.000	2381.800	9874.000	2382.100	9913.000	2380.500	9947.000
R	2378.700	9958.000	2378.100	9989.000	2378.400	10000.000	2378.400	10036.000	2383.300	10053.000
GR	2382.900	10097.000	2381.600	10172.000	2377.700	10189.000	2375.500	10200.000	2376.000	10206.000
R	2380.300	10216.000	2380.800	10241.000	2380.800	10302.000	2382.600	10370.000	2384.700	10454.000
R	2386.400	10515.000	2387.300	10569.000	2388.800	10630.000	2389.900	10665.000	0.000	0.000
NC	0.000	0.000	0.000	0.300	0.500	0.000	0.000	0.000	0.000	0.000
H	7.000	0.050	9969.000	0.025	10032.000	0.065	10091.000	0.025	10164.000	0.040
H	10312.000	0.050	10445.000	0.100	11425.000	0.000	0.000	0.000	0.000	0.000
QT	2.000	8325.000	8325.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
T	0.000	0.000	4.100	9672.000	10328.000	0.000	0.000	0.000	0.000	0.000
X	8.860	51.000	9969.000	10164.000	470.000	670.000	510.000	0.000	0.000	0.000
GR	2393.600	9600.000	2392.500	9614.000	2389.600	9635.000	2386.800	9672.000	2386.000	9717.000
GR	2383.800	9784.000	2384.600	9793.000	2384.600	9804.000	2384.100	9813.000	2384.800	9819.000
R	2384.400	9862.000	2385.200	9873.000	2385.500	9907.000	2384.700	9956.000	2381.200	9969.000
GR	2381.200	10000.000	2381.200	10013.000	2384.400	10032.000	2384.700	10055.000	2384.000	10072.000
GR	2383.500	10091.000	2382.100	10106.000	2382.500	10142.000	2383.700	10153.000	2382.800	10164.000
	2384.200	10177.000	2384.900	10201.000	2384.300	10216.000	2385.100	10238.000	2383.600	10259.000
	2383.600	10267.000	2384.300	10272.000	2383.500	10281.000	2383.500	10294.000	2385.200	10312.000
GR	2385.500	10328.000	2385.100	10353.000	2384.900	10383.000	2383.700	10391.000	2385.000	10406.000
R	2386.100	10445.000	2385.400	10564.000	2385.400	10642.000	2386.000	10693.000	2386.400	10772.000
R	2386.700	10843.000	2386.700	10919.000	2386.500	10997.000	2387.700	11110.000	2390.000	11370.000
GR	2392.000	11425.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
C	0.050	0.040	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	4.110	9750.000	10253.000	0.000	0.000	0.000	0.000	0.000
X1	8.947	26.000	9947.000	10129.000	450.000	535.000	480.000	0.840	0.000	0.000
3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2390.700	2393.000	0.000
R	2395.100	9240.000	2394.200	9350.000	2391.500	9450.000	2389.400	9550.000	2391.000	9650.000
GR	2389.100	9750.000	2390.900	9771.000	2390.900	9846.000	2390.700	9947.000	2384.300	9954.000
R	2385.700	10000.000	2386.600	10022.000	2387.700	10076.000	2389.300	10104.000	2392.000	10117.000
R	2393.000	10129.000	2393.300	10253.000	2394.000	10320.000	2394.000	10436.000	2394.700	10564.000
GR	2395.800	10721.000	2397.400	10921.000	2398.700	11081.000	2399.700	11231.000	2400.900	11413.000
GR	2401.500	11435.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	1.050	1.560	2.630	0.000	96.900	9.240	554.400	0.000	0.000	0.000
ET	0.000	0.000	4.110	9545.000	10199.000	0.000	0.000	0.000	0.000	0.000
1	8.953	25.000	9912.000	10103.000	30.000	30.000	30.000	0.840	0.000	0.000
2	0.000	0.000	1.000	2393.400	2395.700	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	2391.700	2393.600	0.000
	7.000	9140.000	2391.600	2391.600	9320.000	2392.800	2392.800	9720.000	2394.000	2394.000
T	10000.000	2394.000	2394.000	10450.000	2396.000	2396.000	11000.000	2399.500	2399.500	11300.000
BT	2402.500	2402.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	2395.300	9270.000	2395.300	9345.000	2392.100	9415.000	2392.400	9545.000	2392.900	9645.000

GR	2391.600	9726.000	2392.600	9789.000	2392.900	9870.000	2391.700	9912.000	2389.100	9928.000
GR	2384.800	9937.000	2385.200	10000.000	2385.700	10046.000	2386.400	10085.000	2393.600	10103.000
	2394.200	10199.000	2395.300	10299.000	2394.900	10393.000	2395.300	10493.000	2395.700	10611.000
GR	2396.600	10723.000	2397.200	10833.000	2398.400	10926.000	2398.900	11030.000	2399.200	11095.000
ET	0.000	0.000	4.100	9900.000	10200.000	0.000	0.000	0.000	0.000	0.000
X1	9.060	13.000	9885.000	10215.000	605.000	540.000	565.000	0.000	0.000	0.000
GR	2401.700	9880.000	2401.400	9885.000	2400.100	9913.000	2397.100	9950.000	2390.500	9964.000
GR	2390.600	10000.000	2391.200	10051.000	2390.200	10109.000	2391.100	10118.000	2390.500	10137.000
GR	2390.300	10170.000	2390.500	10215.000	2400.900	10225.000	0.000	0.000	0.000	0.000
NC	0.000	0.000	0.000	0.100	0.300	0.000	0.000	0.000	0.000	0.000
NH	3.000	0.050	9883.000	0.025	10120.000	0.040	10391.000	0.000	0.000	0.000
ET	0.000	0.000	4.100	9602.000	10150.000	0.000	0.000	0.000	0.000	0.000
X1	9.160	16.000	9911.000	10085.000	475.000	460.000	500.000	0.000	0.000	0.000
GR	2400.600	9600.000	2395.000	9656.000	2393.800	9708.000	2393.400	9729.000	2394.100	9753.000
GR	2393.600	9776.000	2392.200	9787.000	2393.600	9800.000	2394.500	9824.000	2394.500	9883.000
GR	2393.400	9911.000	2393.200	9930.000	2393.400	10000.000	2394.200	10085.000	2396.200	10120.000
GR	2405.200	10153.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NH	4.000	0.100	9380.000	0.050	9918.000	0.025	10048.000	0.040	10529.000	0.000
ET	0.000	0.000	4.100	9700.000	10070.000	0.000	0.000	0.000	0.000	0.000
X1	9.250	17.000	9918.000	10048.000	505.000	510.000	500.000	0.000	0.000	0.000
GR	2410.000	9340.000	2408.200	9380.000	2405.700	9439.000	2402.600	9500.000	2400.400	9548.000
GR	2399.100	9633.000	2398.600	9689.000	2399.600	9712.000	2399.000	9742.000	2399.500	9777.000
GR	2398.700	9796.000	2399.400	9805.000	2399.700	9886.000	2397.900	9918.000	2397.300	10000.000
GR	2397.600	10048.000	2407.500	10084.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

XPROF 1

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
ECNO 7.300
   7.30     7.93  2341.13  2341.11  2341.13  2343.66     2.53     0.00     0.00  2338.40
  10370.    2067.    8104.     200.     431.     570.      47.       0.       0.  2334.00
   0.00     4.79    14.23     4.21    0.050    0.025    0.050    0.000  2333.30  9829.13
.004366       0.       0.       0.        0        4        0     0.00   212.17 10041.30

OW DISTRIBUTION FOR SECNO=      7.30          CWSEL=   2341.13

STA=    9829.    9831.    9864.    9878.    9893.    9913.    9933.    9946.   10028.   10041.
PER Q=     2.0      3.6      3.0      2.4      4.1      3.5      1.4     78.1      1.9
 AREA=    36.1     65.4     59.9     54.4     83.6     75.6     46.1    569.6     47.4
  VEL=     3.6      5.8      5.2      4.6      5.1      4.8      3.9     14.2      4.2

90 NH CARD USED
XSECNO 7.440

5 DIVIDED FLOW


01 HV CHANGED MORE THAN HVINS

   7.44     6.89  2345.49     0.00     0.00  2346.64     1.15     2.36     0.41  2341.00
  10370.    1315.    7752.    1303.     592.     787.     142.      24.       6.  2338.60
   0.03     2.22     9.85     2.95    0.065    0.025    0.050    0.000  2338.60  9665.97
0.002852     660.     745.     800.        4        0        0     0.00   573.96 10244.23


OW DISTRIBUTION FOR SECNO=      7.44          CWSEL=   2345.49

A=    9666.    9731.    9837.    9905.    9921.   10068.   10088.   10177.   10201.   10244.
PER Q=     3.5      4.1      3.3      1.8     74.8      3.1      4.6      3.3      1.6
 AREA=   155.8    211.1    159.0     66.3    787.1     85.8    185.3     95.7     74.9
  VEL=     2.3      2.0      2.2      2.8      9.8      3.7      2.6      3.6      2.2

CCHV=   0.600 CEHV=   0.800
1490 NH CARD USED
ECNO 7.530
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        QLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL.      TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.53      7.12  2348.72  2348.72      0.00  2350.25      1.54      1.69      0.31  2342.70
   10370.     2619.     6222.     1529.      541.      504.      493.       14.       14.  2342.50
     0.04      4.84     12.35      3.10     0.051     0.025     0.040     0.000  2341.60  9810.34
 0.003900      465.      500.      610.         2         8         0      0.00   649.27 10467.47


FLOW DISTRIBUTION FOR SECNO=      7.53          CWSEL=   2348.72

STA=    9810.    9855.    9909.    9961.   10044.   10063.   10242.   10378.   10467.
  PER Q=      9.7      6.2      9.4     60.0      7.4      3.0      3.4      0.9
   AREA=    225.5    193.2    122.1    503.7     80.1    173.3    173.4     64.0
    VEL=      4.5      3.3      8.0     12.4      9.5      1.8      2.0      1.5

#SECNO 7.579

7701 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     7.58      9.13  2352.73  2352.73      0.00  2357.35      4.61      0.98      2.46  2343.60
   10370.        3.   10363.        3.        4.      601.        4.       50.       16.  2343.60
     0.04      0.86     17.24      0.95     0.065     0.025     0.055     0.000  2343.60  9900.08
 0.004408      210.      235.      295.        20        11         0      0.00    67.43  9967.51


FLOW DISTRIBUTION FOR SECNO=      7.58          CWSEL=   2352.73

STA=    9900.    9901.    9967.    9968.
  PER Q=      0.0     99.9      0.0
   AREA=      3.9    601.0      3.5
    VEL=      0.9     17.2      0.9
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	FLMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

ECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
27 DOWNSTREAM ELEV IS 2331.12 ,NOT 2352.73 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLFN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.05	1.56	2.63	0.00	65.80	4.23	473.08	0.00	2343.60	2343.60

*SECNO 7.590
80 CROSS SECTION 7.59 EXTENDED 0.07 FEET

301 HV CHANGED MORE THAN HVINS

RESSURE AND WEIR FLOW

GPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
2364.27	2360.44	0.00	3784.	6639.	475.	443.	2350.80	2353.70

7.59	10.07	2353.67	0.00	0.00	2357.46	3.79	0.12	0.00	2343.60
10370.	4.	10363.	4.	5.	663.	4.	51.	16.	2343.60
0.05	0.78	15.64	0.86	0.065	0.025	0.055	0.000	2343.60	9900.00
0.003182	50.	50.	50.	5	0	3	0.00	67.59	9967.59

FLOW DISTRIBUTION FOR SECNO= 7.59 CWSEL= 2353.67

A=	9900.	9901.	9967.	9968.
PER Q=	0.0	99.9	0.0
AREA=	4.8	662.6	4.3
VEL=	0.8	15.6	0.9

1490 NH CARD USED
ECNO 7.630
80 CROSS SECTION 7.63 EXTENDED 2.44 FEET

01 HV CHANGED MORE THAN HVINS

7.63	12.24	2359.24	0.00	0.00	2359.67	0.43	0.19	2.02	2351.50
10370.	1668.	8692.	11.	956.	1318.	13.	58.	17.	2356.60
0.06	1.74	5.73	0.84	0.065	0.028	0.055	0.000	2347.00	9769.16
0.000474	233.	190.	140.	4	0	0	0.00	302.84	10072.00

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


FLOW DISTRIBUTION FOR SECNO=     7.63         CWSEL=  2359.24

STA=    9769.    9807.    9858.    9904.    9931.   10067.   10072.
  PER Q=     0.8      4.7      6.5      4.1     83.8      0.1
   AREA=    91.5    300.2    348.9    215.6   1517.6     12.7
    VEL=     0.9      1.6      1.9      2.0      5.7      0.8

1490 NH CARD USED
*SECNO 7.720
     7.72     9.49  2359.49     0.00     0.00  2359.95     0.46     0.25     0.02  2350.50
   10370.     139.    5467.    4764.     100.     910.     986.      84.      21.  2351.10
     0.08     1.38     6.01     4.83    0.065    0.025    0.026    0.000  2350.00  9935.70
 0.000544     300.     300.     305.        3        0        0     0.00   275.04 10210.74


FLOW DISTRIBUTION FOR SECNO=     7.72         CWSEL=  2359.49

STA=    9936.    9958.   10039.   10071.   10087.   10097.   10109.   10129.   10136.   10170.   10179.   10191.   10211.
  PER Q=     1.3     52.7      4.8      5.3      3.6      4.9      5.3      5.8      5.8      4.3      5.2      0.9
   AREA=   100.2    910.4     92.9    109.4     72.4     92.9    119.6    144.1    109.7     77.3     97.7     70.0
    VEL=     1.4      6.0      5.4      5.0      5.2      5.4      4.6      4.2      5.5      5.8      5.6      1.4

1490 NH CARD USED
*SECNO 7.820

3301 HV CHANGED MORE THAN HVINS

     7.82     6.13  2359.73  2359.51     0.00  2361.75     2.02     0.56     1.25  2354.50
   10370.      63.    9383.     924.      25.     786.     248.     100.      23.  2355.80
     0.09     2.63    11.94     3.72    0.065    0.025    0.055    0.000  2353.60  9923.56
 0.004402     533.     500.     380.        0       14        0     0.00   248.37 10171.93


FLOW DISTRIBUTION FOR SECNO=     7.82         CWSEL=  2359.73

STA=    9924.    9933.   10082.   10100.   10138.   10172.
  PER Q=     0.6     90.5      2.7      4.9      1.4
   AREA=    24.7    786.0     65.3    126.4     56.4
    VEL=     2.6     11.9      4.2      4.0      2.5

CCHV=   0.600 CEHV=   0.300
*SECNO 7.884
7185 MINIMUM SPECIFIC ENERGY
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       QLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IBC      ICONT    CORQR    TOPWID    ENDST

20 CRITICAL DEPTH ASSUMED
   7.88    10.24  2364.84  2364.84     0.00  2367.13     2.29     1.16     0.21  2360.00
  10370.     501.     9331.     538.     214.     730.     293.     108.      25.   2362.70
   0.10     2.34     12.78     1.84    0.065    0.025    0.055    0.000  2354.60  9775.89
.002851     360.     345.     145.        3       14        0     0.00   410.23 10186.12

OW DISTRIBUTION FOR SECNO=      7.88          CWSEL =   2364.84

STA=    9776.    9806.    9876.    9958.   10019.   10089.   10160.   10186.
PER Q=      0.1      4.7     90.0      1.9      2.0      1.2      0.0
 AREA=     12.6    201.0    729.9     98.7    109.1     80.8      4.5
  VEL=      0.7      2.4     12.8      2.0      1.9      1.6      0.4

PECIAL BRIDGE

70,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
27 DOWNSTREAM ELEV IS   2361.71 ,NOT   2364.84 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

CR  XK       XKOR     COFQ     RDLEN    BWC      BWP      BARFA    SS       ELCHU    ELCHD
    1.05     1.36     2.63     0.00     67.20    6.36     395.90   0.00     2354.60  2354.60

SECNO 7.891

301 HV CHANGED MORE THAN HVINS

RESSURE AND WEIR FLOW

EGPRS    EGLWC    H3       QWEIR    QPR      BARFA    TRAPEZOID AREA    ELLC     ELTRD
 2381.46  2369.73     0.00     5303.     5087.     396.     274.     2359.10  2363.40


   7.89    13.51  2368.61     0.00     0.00  2368.84     0.23     1.71     0.00  2364.00
  10370.     90.    10213.     67.     130.    2623.     106.     109.      25.   2364.70
   0.10     0.60     3.89     0.63    0.065    0.025    0.055    0.000  2355.10  9775.49
.000226     30.     30.     30.        2        0        4     0.00   402.23 10177.72

LOW DISTRIBUTION FOR SECNO=      7.89          CWSEL=   2368.61

STA=    9775.    9841.   10133.   10178.
PER Q=      0.9     98.5      0.6
 AREA=    150.4   2622.7    106.1
  VEL=      0.6      3.9      0.6
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL.     TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      FLHIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 7.920

3265 DIVIDED FLOW

     7.92    13.02  2368.72     0.00     0.00  2368.91     0.20     0.05     0.02  2357.60
   10370.     1733.    8339.     278.    1232.    2150.     190.     122.     27.   2357.00
     0.12     1.41     3.89     1.46    0.065    0.034    0.055    0.000  2355.70  9725.98
 0.000302     150.     180.     220.        2        0        0     0.00   428.10 10156.45


FLOW DISTRIBUTION FOR SECNO=      7.92          CWSEL=   2368.72

STA=    9726.    9817.    9885.    9937.   10124.   10156.
  PER Q=      7.8      4.2      4.7     80.6      2.7
   AREA=    557.4    350.4    324.3   2149.9    190.1
    VEL=      1.4      1.3      1.5      3.9      1.5

1490 NH CARD USED
*SECNO 8.000

3 DIVIDED FLOW

     8.00    12.06  2368.96     0.00     0.00  2369.06     0.10     0.09     0.06  2360.00
   10370.     2637.    5609.    2104.    2026.    1745.    1260.     165.     33.   2359.60
     0.17     1.31     3.21     1.67    0.050    0.028    0.050    0.000  2356.90  9553.04
 0.000161     440.     425.     420.        2        0        0     0.00   677.55 10233.55


FLOW DISTRIBUTION FOR SECNO=      8.00          CWSEL=   2368.96

STA=    9553.    9722.    9770.    9831.    9877.    9930.   10094.   10125.   10145.   10170.   10191.   10234.
  PER Q=      4.6      3.6      5.5      5.1      6.8     54.1      4.7      3.4      4.5      3.5      4.2
   AREA=    305.1    293.3    417.8    339.1    448.2   1744.9    291.0    201.1    260.6    207.0    299.8
    VEL=      0.9      1.3      1.4      1.5      1.6      3.2      1.7      1.8      1.8      1.7      1.4

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 8.100
     8.10     9.13  2369.03     0.00     0.00  2369.20     0.17     0.12     0.02  2361.20
   10370.     1803.    3981.    4386.    1243.     808.    2451.     219.     42.   2359.90
     0.21     1.45     4.93     1.87    0.054    0.025    0.052    0.000  2359.90  9605.80
 0.000396     465.     500.     535.        2        0        0     0.00   886.21 10492.01
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELHIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


LOW DISTRIBUTION FOR SECNO=      8.10          CWSEL=   2369.03

STA=    9606.    9814.    9864.    9905.    9953.   10048.   10088.   10128.   10154.   10201.   10226.   10255.   10294.
 PER Q=     3.3      3.8      4.0      4.3     38.4      4.4      3.4      3.1      6.0      4.5      4.1      3.1
 AREA=    487.5    236.4    226.6    292.1    808.0    277.1    228.7    161.0    303.2    199.0    199.7    254.8
  VEL=      1.1      1.7      1.8      1.5      4.9      1.7      1.6      2.0      2.1      2.4      2.1      2.1
STA=   10294.   10325.   10370.   10436.   10492.
 PER Q=     3.9      5.0      3.8      0.9
 AREA=    197.7    266.7    261.9    101.0
  VEL=      2.0      1.9      1.5      0.9

190 NH CARD USED
*SECNO 8.190
    8.19     6.85  2369.06     0.00     0.00  2369.72     0.66     0.37     0.15  2364.90
  10370.    1084.    5414.    3872.     509.     623.    1401.     261.      51.  2362.20
    0.24     2.13     8.69     2.76    0.054    0.025    0.055    0.000  2362.20  9703.73
0.001746     475.     500.     535.        2        0        0     0.00   732.94 10436.67


FLOW DISTRIBUTION FOR SECNO=      8.19          CWSEL=   2369.06

STA=    9704.    9865.    9907.    9944.   10039.   10069.   10103.   10146.   10184.   10218.   10266.   10310.   10348.
 PER Q=     4.4      3.1      3.0     52.2      3.8      5.0      3.9      5.4      4.0      4.5      4.3      4.8
 AREA=    249.3    124.2    135.3    622.9    112.1    179.1    132.9    177.5    141.0    159.0    178.3    196.4
  VEL=      1.8      2.6      2.3      8.7      3.5      2.9      2.6      3.2      2.9      2.9      2.5      2.5
STA=   10348.   10437.
 PER Q=     1.7
 AREA=    104.5
  VEL=      1.6

190 NH CARD USED
SECNO 8.290
    8.29     6.03  2370.03     0.00     0.00  2371.16     1.13     1.30     0.14  2367.50
  10370.     532.    4266.    3372.     185.     355.    1124.     285.      59.  2364.00
    0.26     2.88    12.01     4.96    0.050    0.025    0.045    0.000  2364.00  9805.17
0.004190     510.     300.     510.        3        0        0     0.00   619.32 10424.49


LOW DISTRIBUTION FOR SECNO=      8.29          CWSEL=   2370.03
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CURAR    TOPWID     ENDST


STA=    9805.    9900.    9958.   10022.   10040.   10059.   10088.   10110.   10130.   10180.   10204.   10275.   10339.
  PER Q=     3.3      1.8     41.1      5.3      4.2      5.5      3.9      5.2     17.3      4.2      3.3      3.9
   AREA=   108.8     76.0    355.3     88.7     67.0    109.5     80.1     91.4    271.4     87.0    115.5    123.4
    VEL=     3.2      2.5     12.0      6.2      5.0      5.2      5.1      3.9      6.6      5.0      3.0      3.3
STA=   10339.   10424.
  PER Q=     1.9
   AREA=    89.7
    VEL=     2.2

1490 NH CARD USED
*SECNO 8.400

3301 HV CHANGED MORE THAN HVINS

    8.40     5.84  2372.44  2372.41     0.00  2374.11     1.67     2.79     0.16  2370.40
   10370.     483.    5490.    4398.     167.     418.     712.     303.      66.  2367.40
    0.27     2.89    13.12     6.18    0.050    0.025    0.045    0.000  2366.60  9795.21
0.005325     595.     613.     370.        4        8        0     0.00   438.02 10233.22


FLOW DISTRIBUTION FOR SECNO=     8.40         CWSEL=   2372.44

STA=    9795.    9937.    9949.   10028.   10044.   10070.   10088.   10101.   10118.   10133.   10145.   10165.   10216.
  PER Q=     3.7      1.0     52.9      4.1      6.7      5.1      3.8      3.4      4.5      5.3      6.0      3.0
   AREA=   140.2     26.8    418.4     67.7    110.0     81.1     59.6     62.3     70.2     70.0     93.6     80.5
    VEL=     2.7      3.7     13.1      6.3      6.3      6.6      6.6      5.7      6.7      7.8      6.7      3.9
STA=   10216.   10233.
  PER Q=     0.4
   AREA=    16.6
    VEL=     2.3

1490 NH CARD USED
*SECNO 8.480
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.48     7.51  2376.21  2376.21     0.00  2377.93     1.72     2.29     0.01  2368.80
    9862.    2020.    7557.     285.     533.     638.      65.     317.      70.  2369.20
    0.29     3.77    11.84     4.42    0.056    0.037    0.060    0.000  2368.70  9693.57
0.006538     425.     390.     370.       20        8        0     0.00   368.85 10062.42
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       CLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWO   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


FLOW DISTRIBUTION FOR SECNO=      8.48          CWSEL=   2376.21

STA=    9694.    9801.    9856.    9879.    9911.    9954.   10044.   10062.
 PER Q=     4.7      4.1      3.5      3.1      5.2     76.6      2.9
 AREA=    148.8    106.9     69.2     85.1    125.4    638.1     64.5
  VEL=      3.1      3.7      5.0      3.5      4.0     11.8      4.4

490 NH CARD USED
SECNO 8.570

7301 HV CHANGED MORE THAN HVINS

    8.57     7.58  2379.28     0.00     0.00  2380.05     0.77     2.03     0.10  2377.30
    9862.    4338.    5259.     241.    1306.     577.      78.     334.      75.  2371.70
    0.31     3.34     9.11     3.13    0.052    0.030    0.060    0.000  2371.70  9461.24
 0.002942     440.     500.     500.        2        0        0     0.00   598.35 10059.59


FLOW DISTRIBUTION FOR SECNO=      8.57          CWSEL=   2379.28

STA=    9461.    9534.    9662.    9729.    9750.    9771.    9817.    9861.    9886.    9923.    9947.   10039.   10060.
 PER Q=     3.7      4.6      7.7      7.0      3.8      4.9      3.6      3.4      4.6      0.9     53.3      2.5
 AREA=    141.2    201.8    207.6    127.8     90.0    141.6    114.9     89.6    143.9     47.6    577.1     78.1
  VEL=      2.6      2.3      3.7      5.4      4.2      3.4      3.1      3.8      3.1      2.0      9.1      3.1

490 NH CARD USED
*SECNO 8.670

265 DIVIDED FLOW

    8.67     6.20  2380.80     0.00     0.00  2381.67     0.87     1.59     0.03  2378.00
    9862.    2289.    6259.    1313.     922.     683.     398.     334.      83.  2374.60
    0.33     2.48     9.14     3.30    0.059    0.028    0.050    0.000  2374.60  9087.40
 0.003857     410.     300.     535.        3        0        0     0.00   957.59 10219.06


FLOW DISTRIBUTION FOR SECNO=      8.67          CWSEL=   2380.80

STA=    9087.    9178.    9534.    9641.    9683.    9848.    9875.   10026.   10074.   10113.   10161.   10219.
 PER Q=     3.6      4.2      5.1      4.3      4.0      2.0     63.5      4.0      4.3      4.1      1.0
 AREA=    182.5    208.8    170.9    118.9    178.9     62.1    685.0    111.0    114.9    117.4     55.2
  VEL=      2.0      2.0      2.9      3.6      2.2      3.2      9.1      3.5      3.7      3.4      1.8
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CURAR    TOPWID    ENDST


1490 NH CARD USED
*SECNO 8.760
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.76     7.84  2383.34  2383.34     0.00  2384.34     1.00     2.04     0.04  2378.70
    9419.    2128.    1647.    2644.     715.     429.     674.     376.      93.  2383.30
    0.34     2.98    10.82     3.92    0.050    0.025    0.053    0.000  2375.50  9485.81
 0.004479     450.     500.     515.       20       19        0     0.00   913.82 10399.63


FLOW DISTRIBUTION FOR SECNO=      8.76          CWSEL =   2383.34

STA=    9486.    9578.    9765.    9803.    9857.    9947.    9958.   10053.   10189.   10200.   10206.   10216.   10302.
  PER Q=      3.6      4.4      3.5      4.3      4.8      2.1     49.3      5.0      5.0      3.7      3.1      9.0
   AREA=    128.0    179.2     91.9    119.3    155.8     41.1    429.4    155.2     74.1     45.5     51.9    224.8
    VEL=      2.6      2.3      3.6      3.4      2.9      4.8     10.8      3.1      7.0      7.7      5.0      3.8
STA=   10302.   10400.
  PER Q=      1.7
   AREA=    122.6
    VEL=      1.3

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
*SECNO 8.860
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.86     4.96  2386.16  2386.16     0.00  2387.06     0.90     2.49     0.03  2381.20
    8325.     962.    3803.    1540.     356.     651.     534.     397.     106.  2382.80
    0.37     2.70     8.92     2.81    0.050    0.026    0.046    0.000  2381.20  9704.04
 0.004743     470.     510.     670.        2       14        0     0.00  1020.41 10724.45


FLOW DISTRIBUTION FOR SECNO=      8.86          CWSEL=   2386.16

STA=    9704.    9793.    9862.    9969.   10164.   10201.   10259.   10294.   10383.   10693.   10724.
  PER Q=      3.3      3.7      4.5     69.7      3.7      4.0      4.9      3.2      3.1      0.0
   AREA=    108.9    110.7    136.1    650.5     73.2     93.5     86.4    101.8    197.1      2.5
    VEL=      2.5      2.8      2.8      8.9      4.2      3.5      4.7      2.6      1.3      0.7

*SECNO 8.947
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CODAR	TOPWID	ENDST

720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 2390.70 ELREA= 2393.00

8.95	7.02	2391.92	2391.92	0.00	2393.19	1.27	1.92	0.19	2390.70
8325.	1434.	6891.	0.	621.	697.	0.	413.	114.	2393.00
0.38	2.31	9.88	0.00	0.050	0.023	0.000	0.000	2384.90	9403.33
.003413	450.	480.	535.	20	11	0	0.00	573.02	9976.36

LOW DISTRIBUTION FOR SECNO= 8.95 CWSEL= 2391.92

STA=	9403.	9416.	9500.	9584.	9668.	9686.	9749.	9834.	9987.
PER Q=	0.0	3.3	4.3	5.0	1.1	1.4	2.1	82.8
AREA=	2.7	123.5	144.5	157.1	33.9	64.3	95.0	697.3
VEL=	0.6	2.2	2.5	2.6	2.7	1.8	1.9	9.9

ECIAL BRIDGE

70,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
7 DOWNSTREAM ELEV IS 2389.71 ;NOT 2391.92 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BARFA	SS	ELCHU	ELCHD
	1.05	1.36	2.63	0.00	96.90	9.24	534.40	0.00	2384.90	2384.90

SECNO 8.953

301 HV CHANGED MORE THAN HVINS

RESSURE AND WEIR FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD
2397.38	2394.26	0.00	2743.	5590.	554.	743.	2393.40	2393.70

8.95	8.98	2393.78	0.00	0.00	2394.38	0.60	1.19	0.00	2391.70
8325.	610.	7715.	0.	376.	1194.	2.	414.	115.	2393.60
0.38	1.06	6.46	0.22	0.050	0.025	0.040	0.000	2384.80	9372.86
.000833	30.	30.	30.	3	0	5	0.00	621.20	9994.06

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


FLOW DISTRIBUTION FOR SECNO=     8.95         CWSEL=  2393.78

STA=    9373.    9417.    9501.    9585.    9653.    9706.    9774.    9809.    9970.    9994.
  PER Q=     0.3      1.8      1.1      1.4      1.3      0.7      0.7     92.7      0.0
   AREA=    37.1    128.6     95.0    104.2     89.0     70.2     52.3   1194.2      2.2
    VEL=     0.8      1.1      0.9      1.1      1.2      0.9      1.1      6.5      0.2

*SECNO 9.060

3301 HV CHANGED MORE THAN HVINS

    9.06     4.17  2394.37     0.00     0.00  2395.54     1.17     0.88     0.29  2401.40
   8325.       0.    8305.      20.       0.     954.       7.     432.     121.   2390.50
    0.40     0.00     8.70     2.78    0.000    0.025    0.040    0.000  2390.20  9955.79
0.003791     603.     565.     340.        3        0        0     0.00   262.93 10216.72


FLOW DISTRIBUTION FOR SECNO=     9.06         CWSEL=  2394.37

STA=    9956.   10215.   10219.
  PER Q=    99.8      0.2
   AREA=   954.2      7.2
    VEL=     8.7      2.8

CCHV=   0.100 CEHV=   0.300
1490 NH CARD USED
*SECNO 9.160
    9.16     4.59  2396.79     0.00     0.00  2397.60     0.81     2.02     0.04  2393.40
   8325.    3133.    4892.     300.     721.     565.      56.     445.     125.   2394.20
    0.42     4.34     8.66     5.33    0.045    0.025    0.025    0.000  2392.20  9638.11
0.004422     475.     500.     460.        3        0        0     0.00   484.18 10122.29


FLOW DISTRIBUTION FOR SECNO=     9.16         CWSEL=  2396.79

STA=    9638.    9708.    9729.    9753.    9776.    9800.    9821.    9883.    9911.   10085.   10120.   10142.
  PER Q=     5.6      3.4      3.6      3.3      5.5      3.1      5.6      7.6     58.8      3.6      0.0
   AREA=   140.3     67.0     72.9     67.6     93.3     65.7    135.1     79.5    564.6     33.6      0.7
    VEL=     3.3      4.3      4.1      4.1      4.9      3.9      3.4      7.9      8.7      5.4      1.1

1490 NH CARD USED
*SECNO 9.250
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	GLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

693 PROBABLE MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED

9.25	4.13	2401.43	2401.43	0.00	2402.64	1.20	2.41	0.12	2397.90
8325.	2840.	3377.	108.	796.	506.	27.	461.	131.	2397.60
0.44	3.57	10.63	4.05	0.050	0.025	0.040	0.000	2397.30	9525.44
0.003231	303.	500.	310.	20	15	0	0.00	536.50	10061.94

OW DISTRIBUTION FOR SECNO= 9.25 CWSEL= 2401.43

TA=	9525.	9633.	9689.	9742.	9777.	9805.	9886.	9918.	10048.	10062.
PER Q=	5.4	7.0	5.2	3.3	3.0	6.0	4.1	64.6	1.3	
AREA=	154.8	144.7	117.7	76.4	65.8	152.6	84.3	505.6	26.7	
VEL=	2.9	4.0	3.7	3.6	3.8	3.3	4.1	10.6	4.0	

THIS RUN EXECUTED TUE, NOV 18 1986 09:30:29

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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T1 SOLS WASH FLOODPLAIN DELINEATION, MARICOPA COUNTY, ARIZONA
T2 BY CELLA BARR ASSOCIATES FOR THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
T3 100 YEAR DISCHARGE - R5 FLOODWAY PROFILE - 0.8 FOOT

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	3.	0.	0.	0.000000	0.00	0.0	0.	2341.100	0.000

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	15.000	0.000	-1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

PROF 2

CCHV=   0.300 CEHV=   0.500
1490 NH CARD USED
SECNO 7.300

3470 ENCROACHMENT STATIONS=    9840.0   10050.0  TYPE=     1  TARGET=     210.000
    7.30     7.80  2341.10  2341.09  2341.13  2343.69     2.59     0.00     0.00  2338.40
  10370.    2036.    8135.     200.     414.     567.      47.       0.       0.   2334.00
    0.00     4.91    11.34     4.25    0.030    0.025    0.030    0.000  2333.30  9840.00
 0.004463      0.       0.       0.        0        4        0     0.00   201.25 10041.25


1490 NH CARD USED
SECNO 7.440

3265 DIVIDED FLOW


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9705.0   10120.0  TYPE=     1  TARGET=     415.000
    7.44     6.67  2345.27  2345.23  2345.49  2347.11     1.85     3.21     0.22  2341.00
  10370.    1061.    8863.     446.     430.     755.     124.      19.       5.   2338.60
    0.02     2.47    11.73     3.61    0.065    0.025    0.035    0.000  2338.60  9705.00
 0.004276     660.     745.     800.        6       15        0     0.00   407.66 10120.00


CCHV=   0.600 CEHV=   0.800
1490 NH CARD USED
SECNO 7.330
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9913.0   10162.0  TYPE=     1  TARGET=     249.000
    7.53     6.89  2349.39  2349.39  2348.72  2351.65     2.26     2.11     0.33  2342.70
  10370.    1296.    7549.    1525.     153.     559.     287.      33.       9.   2342.50
    0.03     8.16    13.50     5.31    0.028    0.025    0.035    0.000  2342.50  9913.00
 0.004049     465.     500.     610.        2        8        0     0.00   249.00 10162.00
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HI        OLOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


*SECNO 7.579

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9900.5   10022.2  TYPE=     1  TARGET=     259.000
     7.58      9.14  2352.74  2352.74  2352.73  2337.35     4.61      1.00      1.88  2343.60
   10370.        2.   10364.       3.       3.     601.       4.       37.       10.  2343.60
     0.04      0.74     17.24     0.95    0.065    0.025    0.035     0.000  2343.60  9900.47
 0.004403      210.      235.     295.        3       11        0      0.00     67.04  9967.51


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2351.12 ,NOT   2352.74 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    1.05      1.56      2.63      0.00     63.80      4.23    475.08      0.00   2343.60   2343.60

*SECNO 7.590
     3700.   BRIDGE STENCL=   9901.00    STENCR=  10160.00

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW


 EGPRS     EGLWC     H3        QWEIR     QPR       BAREA   TRAPEZOID     ELLC      ELTRD
                                                             AREA
   2364.28   2360.44     0.00     3647.     6749.     475.     443.     2350.80   2353.70


3470 ENCROACHMENT STATIONS=    9900.5   10022.2  TYPE=     1  TARGET=     259.000
     7.59     10.60  2354.20     0.00  2353.67  2337.62     3.42      0.28      0.00  2343.60
   10370.        2.   10364.       4.       4.     698.       5.       38.       10.  2343.60
     0.04      0.60     14.84     0.82    0.063    0.025    0.035     0.000  2343.60  9900.47
 0.002675       50.       50.      50.        4        0        3      0.00     67.17  9967.64
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HI       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELHTN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

890 NH CARD USED
SECNO 7.630
3290 CROSS SECTION      7.63 EXTENDED      2.35 FEET

3301 HV CHANGED MORE THAN HVINS

470 ENCROACHMENT STATIONS=    9737.0   10070.0  TYPE=     1  TARGET=     333.000
    7.63    12.15  2359.15     0.00  2359.24  2339.60     0.44     0.19     1.79  2351.50
  10370.    1655.    8709.       6.     942.     1506.       7.      46.      11.   2356.60
    0.05     1.76     5.78     0.74    0.063    0.028    0.055    0.000  2347.00  9769.84
 0.000488     255.     190.     140.        4        0        0     0.00   300.16 10070.00

1490 NH CARD USED
*SECNO 7.720

470 ENCROACHMENT STATIONS=    9927.0   10215.0  TYPE=     1  TARGET=     288.000
    7.72     9.41  2359.41     0.00  2359.49  2339.88     0.47     0.26     0.02  2350.50
  10370.     138.    5479.     4754.      99.      903.     974.      71.      14.   2351.10
    0.07     1.40     6.07     4.88    0.063    0.023    0.026    0.000  2350.00  9933.89
 0.000563     500.     500.     505.        3        0        0     0.00   274.63 10210.52

1490 NH CARD USED
*SECNO 7.820

301 HV CHANGED MORE THAN HVINS

185 MINIMUM SPECIFIC ENERGY
720 CRITICAL DEPTH ASSUMED

7470 ENCROACHMENT STATIONS=    9910.0   10100.0  TYPE=     1  TARGET=     190.000
    7.82     6.04  2359.64  2359.61  2359.73  2362.18     2.35     0.60     1.66  2354.50
  10370.       68.   10041.      261.      24.      772.      64.      86.      16.   2355.30
    0.08     2.87    13.00     4.10    0.065    0.025    0.053    0.000  2353.60  9923.72
 0.005342     535.     500.     380.        2       14        0     0.00   176.28 10100.00

CHV=   0.600 CEHV=   0.800
SECNO 7.884
7185 MINIMUM SPECIFIC ENERGY
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   SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        ULOSS    BANK ELEV
   Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA    LEFT/RIGHT
   TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN       SSTA
   SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID      ENDST


3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9781.0   10134.5  TYPE=     1  TARGET=     500.000
     7.88    10.11  2364.71  2364.71  2364.84  2367.14     2.43     1.34     0.07  2360.00
   10370.     477.    9423.     470.     201.     719.     250.      93.      18.  2362.70
     0.09     2.37    13.10     1.88    0.065    0.023    0.055    0.000  2354.60  9780.95
 0.003053     360.     345.     145.        2       14        0     0.00   353.50 10134.45


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2361.71 ,NOT   2364.71 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
    1.05      1.56      2.63      0.00     67.20      6.36    393.90      0.00   2354.60   2354.60

*SECNO 7.891
    3700.   BRIDGE STENCL=   9790.00    STENCR=  10271.00

 1 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW


 EGPRS     EGLWC     H3        QWEIR     QPR       BAREA   TRAPEZOID      ELLC      ELTRD
                                                             AREA
  2381.33  2369.87     0.00     3236.     3154.     396.     274.     2359.10   2365.40


3470 ENCROACHMENT STATIONS=    9784.1   10124.2  TYPE=     1  TARGET=     481.000
     7.89    13.48  2368.58     0.00  2368.61  2368.82     0.24     1.68     0.00  2364.00
   10370.      95.   10275.       1.     146.    2614.       3.      95.      18.  2364.70
     0.09     0.65     3.93     0.29    0.065    0.023    0.055    0.000  2355.10  9781.14
 0.000231      30.      30.      30.        2        0        4     0.00   340.07 10124.21


1490 NH CARD USED
*SECNO 7.920

3470 ENCROACHMENT STATIONS=    9918.0   10140.0  TYPE=     1  TARGET=     222.000
     7.92    12.92  2368.62     0.00  2368.72  2368.93     0.31     0.06     0.06  2357.60
   10370.     300.    9810.     261.     180.    2132.     140.     105.      19.  2357.00
     0.10     1.67     4.60     1.87    0.065    0.034    0.055    0.000  2355.70  9918.00
 0.000427     150.     180.     220.        2        0        0     0.00   222.00 10140.00
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HI.      OLOSS   BANK ELEV
 Q        OLOB     OCH      OROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

1490 NH CARD USED
ECNO 8.000

3470 ENCROACHMENT STATIONS=    9719.0   10200.0  TYPE=     1  TARGET=     481.000
   8.00     12.14  2369.04     0.00  2368.96  2369.16     0.13     0.11     0.11  2360.00
 10370.     2385.    6068.    1917.    1557.    1758.    1062.     139.      23.  2359.60
   0.15      1.53     3.45     1.81    0.050    0.028    0.050    0.000  2356.90  9719.00
.000184      440.     425.     420.        2        0        0     0.00   481.00 10200.00

CCHV=   0.100 CEHV=   0.300
90 NH CARD USED
ECNO 8.100

70 ENCROACHMENT STATIONS=    9620.0   10401.0  TYPE=     1  TARGET=     781.000
   8.10      9.23  2369.13     0.00  2369.03  2369.31     0.18     0.13     0.02  2361.20
 10370.     1867.    4069.    4435.    1259.     818.    2264.     189.      30.  2359.90
   0.19      1.48     4.98     1.96    0.054    0.023    0.052    0.000  2359.90  9620.00
.000398      465.     500.     535.        2        0        0     0.00   781.00 10401.00

 NH CARD USED
ECNO 8.190

70 ENCROACHMENT STATIONS=    9700.0   10357.0  TYPE=     1  TARGET=     657.000
   8.19      6.93  2369.15     0.00  2369.06  2369.83     0.68     0.37     0.15  2364.90
 10370.     1145.    5502.    3723.     532.     632.    1294.     229.      38.  2362.20
   0.22      2.15     8.71     2.88    0.054    0.023    0.035    0.000  2362.20  9700.00
.001719      475.     500.     535.        2        0        0     0.00   657.00 10357.00

90 NH CARD USED
ECNO 8.290

01 HV CHANGED MORE THAN HVINS

70 ENCROACHMENT STATIONS=    9850.0   10326.0  TYPE=     1  TARGET=     476.000
   8.29      6.08  2370.08     0.00  2370.03  2371.29     1.21     1.30     0.16  2367.50
 10370.      549.    4372.    5449.     178.     358.    1024.     253.      45.  2364.00
   0.23      3.08    12.20     3.32    0.050    0.023    0.045    0.000  2364.00  9850.00
.004277      510.     500.     510.        3        0        0     0.00   476.00 10326.00
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        OLOB     OCH      ORUB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN      SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST

1490 NH CARD USED
*SECNO 8.400

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9870.0   10170.0  TYPE=     1  TARGET=     300.000
     8.40     3.91  2372.31     0.00  2372.44  2374.28     1.77     2.82     0.17  2370.40
   10370.     472.    5630.    4269.     142.     425.     649.     271.      50.  2397.40
     0.25     3.33    13.26     6.38    0.050    0.025    0.045    0.000  2366.60  9870.00
 0.005329     595.     615.     570.        3        0        0     0.00   300.00 10170.00


1490 NH CARD USED
*SECNO 8.480
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9801.0   10060.0  TYPE=     1  TARGET=     259.000
     8.48     7.36  2376.06  2376.06  2376.21  2378.19     2.13     2.49     0.11  2368.80
    9862.    1542.    8015.     305.     364.     625.      61.     281.      53.  2369.20
     0.26     4.23    12.83     4.99    0.058    0.037    0.060    0.000  2368.70  9801.00
 0.007894     425.     390.     370.       20       11        0     0.00   259.00 10060.00


1490 NH CARD USED
*SECNO 8.570

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=    9580.0   10060.0  TYPE=     1  TARGET=     480.000
     8.57     7.91  2379.61     0.00  2379.28  2380.34     0.74     2.01     0.14  2377.30
    9862.    4258.    5346.     258.    1231.     607.      85.     297.      57.  2371.70
     0.28     3.46     8.81     3.04    0.052    0.030    0.060    0.000  2371.70  9580.00
 0.002573     440.     500.     500.        2        0        0     0.00   480.00 10060.00


1490 NH CARD USED
*SECNO 8.670
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       DLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VRUB     XNL      XNCH     XNR      WTN      FLMIN      SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID     ENDST


01 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
20 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=    9470.0   10066.0  TYPE=     1  TARGET=     596.000
    8.67     6.32  2380.92  2380.92  2380.80  2382.17     1.24     1.61     0.15  2378.00
   9862.    2247.    7217.     397.     701.     703.      98.     315.      62.  2374.60
    0.30     3.20    10.26     4.04    0.050    0.028    0.050    0.000  2374.60  9470.00
 0.004736     410.     500.     555.        2       16        0     0.00   596.00 10066.00


1490 NH CARD USED
SECNO 8.760
85 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

70 ENCROACHMENT STATIONS=    9560.0   10241.0  TYPE=     1  TARGET=     681.000
    8.76     7.92  2383.42  2383.42  2383.34  2384.71     1.29     2.42     0.01  2378.70
   9419.    2189.    5125.    2105.     655.     437.     411.     332.     69.  2383.30
    0.31     3.34    11.73     5.12    0.050    0.025    0.050    0.000  2375.50  9560.00
 0.005140     450.     500.     515.       17       19        0     0.00   681.00 10241.00


CHV=   0.300 CEHV=   0.500
1490 NH CARD USED
ECNO 8.860

3470 ENCROACHMENT STATIONS=    9672.0   10328.0  TYPE=     1  TARGET=     656.000
    8.86     5.23  2386.43     0.00  2386.16  2387.23     0.81     2.38     0.15  2381.20
   8325.    1146.    5853.    1326.     429.     703.     343.     350.     77.  2382.80
    0.34     2.67     8.32     3.86    0.050    0.026    0.040    0.000  2381.20  9690.49
 0.003834     470.     510.     670.        2        0        0     0.00   637.51 10328.00


*SECNO 8.947

01 HV CHANGED MORE THAN HVINS

7685 20 TRIALS ATTEMPTED WSEL,CWSEL
93 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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   SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
   Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
   TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTN      ELMIN     SSTA
   SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


3470 ENCROACHMENT STATIONS=    9668.4   10090.9  TYPE=     1  TARGET=     503.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA=     2390.70 ELRFA=     2393.00

     8.95     7.12  2392.02  2392.02  2391.92  2393.81     1.79     1.92     0.49  2390.70
    8325.      472.    7853.       0.     210.     712.       0.     363.      82.  2393.00
     0.35     2.25    11.03     0.00    0.050    0.023    0.000    0.000  2384.90  9668.40
 0.004160     450.     480.     535.       20       11        0     0.00   308.30  9976.89


SPECIAL BRIDGE

5070,VARIABLE ELCHU OR ELCHD ON CARD SB NOT SPECIFIED
5227 DOWNSTREAM ELEV IS   2389.71 ,NOT   2392.02 HYDRAULIC JUMP OCCURS DOWNSTREAM (IF LOW FLOW CONTROLS)

SB  XK       XKOR     COFQ     RDLEN    BWC      BWP      BAREA    SS       ELCHU    ELCHD
     1.05     1.56     2.63     0.00     96.90     9.24   554.40     0.00  2384.90  2384.90

*SECNO 8.953
     3700.   BRIDGE STENCL=   9545.00    STENCR=  10199.00

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW


 EGPRS     EGLWC     HJ       QWEIR    QPR      BAREA   TRAPEZOID     ELLC     ELTRD
                                                          AREA
  2397.48  2394.30     0.00     2021.    6311.    554.     745.    2393.40  2393.70


3470 ENCROACHMENT STATIONS=    9501.0   10050.4  TYPE=     1  TARGET=     654.000
     8.95     9.94  2394.73     0.00  2393.78  2395.16     0.43     1.35     0.00  2391.70
    8325.     832.    7443.      51.     706.    1348.      68.     364.      83.  2393.60
     0.35     1.18     3.52     0.75    0.050    0.023    0.040    0.000  2384.80  9501.00
 0.000518      30.      30.      30.        2        0        4     0.00   519.36 10050.36


*SECNO 9.060

3301 HV CHANGED MORE THAN HVINS
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 SECNO    DEPTH    CWSEL    CRIWS    WSELK    EG       HV       HL       OLOSS   BANK ELEV
 Q        QLOB     QCH      QROB     ALOB     ACH      AROB     VOL      TWA   LEFT/RIGHT
 TIME     VLOB     VCH      VROB     XNL      XNCH     XNR      WTH      ELMIN     SSTA
 SLOPE    XLOBL    XLCH     XLOBR    ITRIAL   IDC      ICONT    CORAR    TOPWID    ENDST


70 ENCROACHMENT STATIONS=   9900.0   10200.0  TYPE=    1  TARGET=    300.000
   9.06     4.83  2395.03     0.00  2394.37  2395.99     0.96     0.56     0.27100000.00
  8325.       0.    8325.       0.       0.    1036.       0.     385.      88. 100000.00
   0.37     0.00     7.88     0.00    0.000    0.025    0.000    0.000  2390.20  9954.40
0.002390     605.     565.     540.        3        0        0     0.00   245.60 10200.00


CHV=   0.100 CEHV=   0.300
1490 NH CARD USED
SECNO 9.160

3470 ENCROACHMENT STATIONS=   9602.0   10150.0  TYPE=    1  TARGET=    548.000
   9.16     4.63  2396.83     0.00  2396.79  2397.62     0.79     1.61     0.02  2393.40
  8325.     3138.    4891.     306.     734.     572.     58.     399.     92.   2394.20
   0.39     4.28     8.53     5.28    0.045    0.025    0.025    0.000  2392.20  9637.66
0.004208     475.     500.     460.        3        0        0     0.00   484.80 10122.46


1490 NH CARD USED
SECNO 9.250

3301 HV CHANGED MORE THAN HVINS

85 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

470 ENCROACHMENT STATIONS=   9700.0   10070.0  TYPE=    1  TARGET=    370.000
   9.25     4.45  2401.75  2401.75  2401.43  2403.23     1.48     2.34     0.21  2397.90
  8325.    2094.    6098.     133.     537.     547.     31.     413.     97.   2397.60
   0.41     3.90    11.16     4.23    0.050    0.025    0.040    0.000  2397.30  9700.00
0.005192     505.     500.     510.       20        8        0     0.00   363.09 10063.08
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THIS RUN EXECUTED TUE, NOV 18 1986 09:35:46

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*****************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
  ERROR CORR -  01,02,03,04,05,06
  MODIFICATION -  50,51,52,53,54,55,56
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100 YEAR DISCHARGE - R5

SUMMARY PRINTOUT

	SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QRO
	7.300	2341.13	7.83	2343.66	14.23	2333.30	0.00	212.17	9829.13	10041.30	2066.64	8103.53	199.
	7.300	2341.10	7.80	2343.69	14.34	2333.30	0.00	201.25	9840.00	10041.25	2035.61	8134.58	199.
	7.440	2345.49	6.89	2346.64	9.85	2338.60	745.00	573.96	9665.97	10240.93	1313.23	7751.66	1303.
	7.440	2345.27	6.67	2347.11	11.73	2338.60	745.00	407.66	9705.00	10120.00	1060.55	8863.45	445.
*	7.530	2348.72	7.12	2350.25	12.35	2341.60	500.00	649.27	9810.34	10467.47	2619.22	6222.13	1528.
	7.530	2349.39	6.89	2351.65	13.50	2342.50	500.00	249.00	9913.00	10162.00	1296.07	7548.53	1525.
*	7.579	2352.73	9.13	2357.35	17.24	2343.60	235.00	67.43	9900.08	9967.51	3.38	10363.26	3.35
*	7.579	2352.74	9.14	2357.35	17.24	2343.60	235.00	67.04	9900.47	9967.51	2.31	10364.32	3.
*	7.590	2353.67	10.07	2357.46	15.64	2343.60	50.00	67.59	9900.00	9967.59	3.72	10362.58	3.70
*	7.590	2354.20	10.60	2357.62	14.84	2343.60	50.00	67.17	9900.47	9967.64	2.28	10363.81	3.
	7.630	2359.24	12.24	2359.67	5.73	2347.00	190.00	302.84	9769.16	10072.00	1667.72	8691.64	10.
	7.630	2359.15	12.15	2359.60	5.78	2347.00	190.00	300.16	9769.84	10070.00	1655.00	8709.50	5.50
	7.720	2359.49	9.49	2359.95	6.01	2350.00	500.00	273.04	9935.70	10210.74	138.51	5467.35	4764.
	7.720	2359.41	9.41	2359.88	6.07	2350.00	500.00	274.63	9935.89	10210.52	137.59	5478.36	4753.
	7.820	2359.73	6.13	2361.75	11.94	2353.60	500.00	248.37	9923.56	10171.93	64.93	9382.52	922.
*	7.820	2359.64	6.04	2362.18	13.00	2353.60	500.00	176.28	9923.72	10100.00	68.38	10040.62	261.
*	7.884	2364.84	10.24	2367.13	12.78	2354.60	345.00	410.23	9775.89	10186.12	300.59	9831.41	538.
*	7.884	2364.71	10.11	2367.14	13.10	2354.60	345.00	353.50	9780.95	10134.45	476.73	9472.90	470.
*	7.891	2368.61	13.51	2368.84	3.89	2355.10	30.00	402.23	9775.49	10177.72	90.04	10212.71	67.
*	7.891	2368.58	13.48	2368.82	3.93	2355.10	30.00	340.07	9784.14	10124.21	94.69	10274.51	0.
	7.920	2368.72	13.02	2368.91	3.89	2355.70	180.00	428.10	9725.98	10156.48	1733.01	8338.76	278.
	7.920	2368.62	12.92	2368.93	4.60	2355.70	180.00	222.00	9918.00	10140.00	299.60	9809.64	26.

SECNO	CWSEL	DEPTH	EG	VCH	ELMIN	XLCH	TOPWID	SSTA	ENDST	QLOB	QCH	QROB
8.000	2368.96	12.06	2369.06	3.21	2356.90	425.00	677.33	9533.04	10233.33	2657.04	3609.09	2103.86
8.000	2369.03	12.14	2369.16	3.45	2356.90	425.00	481.00	9719.00	10200.00	2384.56	6068.12	1917.31
8.100	2369.03	9.13	2369.20	4.93	2359.90	500.00	886.21	9605.80	10492.01	1802.86	3981.02	4586.11
8.100	2369.13	9.23	2369.31	4.98	2359.90	500.00	781.00	9620.00	10401.00	1866.79	4068.56	4464.65
8.190	2369.06	6.85	2369.72	8.69	2362.20	500.00	732.94	9703.73	10436.67	1084.11	5413.63	3872.26
8.190	2369.15	6.95	2369.83	8.71	2362.20	500.00	657.00	9700.00	10357.00	1145.31	5501.78	3722.91
8.290	2370.03	6.03	2371.16	12.01	2364.00	500.00	619.32	9805.17	10424.49	331.71	4266.41	5571.88
8.290	2370.08	6.08	2371.29	12.20	2364.00	500.00	476.00	9850.00	10326.00	348.75	4372.13	5149.12
8.400	2372.44	5.84	2374.11	13.12	2366.60	615.00	438.02	9795.21	10233.22	482.39	5489.73	4397.68
8.400	2372.51	5.91	2374.28	13.26	2366.60	615.00	300.00	9870.00	10170.00	471.86	5629.56	4268.57
8.480	2376.21	7.51	2377.93	11.84	2368.70	390.00	368.85	9693.57	10062.42	2020.36	7336.60	285.05
8.480	2376.06	7.36	2378.19	12.83	2368.70	390.00	259.00	9801.00	10060.00	1542.07	8015.19	304.73
8.570	2379.28	7.38	2380.05	9.11	2371.70	500.00	598.35	9461.24	10059.59	4338.28	5259.29	244.44
8.570	2379.61	7.91	2380.34	8.81	2371.70	500.00	480.00	9580.00	10060.00	4258.02	5346.37	257.61
8.670	2380.80	6.20	2381.67	9.14	2374.60	500.00	957.59	9087.40	10219.06	2288.53	6238.93	1314.33
8.670	2380.92	6.32	2382.17	10.26	2374.60	500.00	596.00	9470.00	10066.00	2247.38	7217.13	397.49
8.760	2383.34	7.84	2384.34	10.82	2375.50	500.00	913.82	9483.81	10399.63	2128.14	4646.89	2643.96
8.760	2383.42	7.92	2384.71	11.73	2375.50	500.00	681.00	9560.00	10241.00	2188.95	5124.67	2105.38
8.860	2386.16	4.96	2387.06	8.92	2381.20	510.00	1020.41	9704.04	10724.45	962.23	3802.92	1559.83
8.860	2386.43	5.23	2387.23	8.32	2381.20	510.00	637.51	9690.49	10628.00	1146.14	5553.33	1325.52
8.947	2391.92	7.02	2393.19	9.88	2384.90	480.00	573.02	9403.33	9976.36	1434.22	6890.78	0.00
8.947	2392.02	7.12	2393.81	11.03	2384.90	480.00	308.50	9668.40	9976.89	471.59	7853.41	0.00
8.953	2393.78	8.98	2394.38	6.46	2384.80	30.00	621.20	9372.86	9994.06	609.79	7714.74	0.48
8.953	2394.73	9.94	2395.16	5.52	2384.80	30.00	549.36	9501.00	10050.36	831.51	7442.84	50.66
9.060	2394.37	4.17	2395.54	8.70	2390.20	565.00	262.93	9953.79	10218.72	0.00	8304.97	20.03
9.060	2395.03	4.83	2395.99	7.88	2390.20	565.00	245.60	9954.40	10200.00	0.00	8325.00	0.00
9.160	2396.79	4.59	2397.60	8.66	2392.20	500.00	484.18	9638.11	10122.29	3133.34	4891.89	299.77
9.160	2396.83	4.63	2397.62	8.53	2392.20	500.00	484.80	9637.66	10122.46	3137.97	4850.79	306.24
9.250	2401.43	4.13	2402.64	10.63	2397.30	500.00	536.30	9325.44	10061.94	2840.34	3376.50	108.16
9.250	2401.75	4.45	2403.23	11.16	2397.30	500.00	363.09	9700.00	10063.08	2094.47	6097.58	132.95

SUMMARY OF ERRORS AND SPECIAL NOTES

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CAUTION  SECNO=    7.530  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.530  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    7.530  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.530  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    7.579  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.579  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    7.579  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    7.579  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.579  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    7.590  PROFILE= 1  HYDRAULIC JUMP D.S.
CAUTION  SECNO=    7.590  PROFILE= 2  HYDRAULIC JUMP D.S.

CAUTION  SECNO=    7.820  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.820  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    7.884  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.884  PROFILE= 1  MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    7.884  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    7.884  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    7.891  PROFILE= 1  HYDRAULIC JUMP D.S.
CAUTION  SECNO=    7.891  PROFILE= 2  HYDRAULIC JUMP D.S.

CAUTION  SECNO=    8.480  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.480  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    8.480  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    8.480  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.480  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    8.480  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION  SECNO=    8.670  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.670  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    8.760  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.760  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    8.760  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    8.760  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.760  PROFILE= 2  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    8.860  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.860  PROFILE= 1  MINIMUM SPECIFIC ENERGY

CAUTION  SECNO=    8.947  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.947  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    8.947  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION  SECNO=    8.947  PROFILE= 2  CRITICAL DEPTH ASSUMED
CAUTION  SECNO=    8.947  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION  SECNO=    8.947  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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UTION  SECNO=    8.953  PROFILE= 1  HYDRAULIC JUMP D.S.
TION   SECNO=    8.953  PROFILE= 2  HYDRAULIC JUMP D.S.

UTION  SECNO=    9.250  PROFILE= 1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=   9.250  PROFILE= 1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   9.250  PROFILE= 1  20 TRIALS ATTEMPTED TO BALANCE WSEL
UTION  SECNO=    9.250  PROFILE= 2  CRITICAL DEPTH ASSUMED
UTION  SECNO=    9.250  PROFILE= 2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=   9.250  PROFILE= 2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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FLOODWAY DATA, 100 YEAR DISCHARGE - R5
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
7.300	201.	1028.	10.1	2341.1	2341.1	0.0
7.440	415.	1309.	7.9	2345.4	2345.5	-0.1
7.530	249.	1000.	10.4	2349.4	2348.7	0.7
7.579	67.	608.	17.1	2352.7	2352.7	0.0
7.590	67.	707.	14.7	2354.2	2353.7	0.5
7.630	300.	2455.	4.2	2359.2	2359.2	0.0
7.720	275.	1975.	5.3	2359.5	2359.5	0.0
7.820	176.	860.	12.1	2359.7	2359.7	0.0
7.884	353.	1170.	8.9	2364.8	2364.8	0.0
7.891	340.	2763.	3.8	2368.6	2368.6	0.0
7.920	222.	2452.	4.2	2368.7	2368.7	0.0
8.000	481.	4377.	2.4	2369.1	2369.0	0.1
8.100	781.	4340.	2.4	2369.1	2369.0	0.1
8.190	657.	2457.	4.2	2369.2	2369.1	0.1
8.290	476.	1560.	6.6	2370.0	2370.0	0.0
8.400	300.	1215.	8.5	2372.5	2372.4	0.1
8.480	259.	1030.	9.4	2376.2	2376.2	0.0
8.570	480.	1922.	5.1	2379.6	2379.3	0.3
8.670	596.	1503.	6.6	2380.9	2380.8	0.1
8.760	681.	1503.	6.3	2383.4	2383.3	0.1
8.860	638.	1476.	5.6	2386.5	2386.2	0.3
8.947	308.	922.	9.0	2392.0	2391.9	0.1
8.953	519.	2121.	3.9	2394.8	2393.8	1.0
9.060	246.	1056.	7.9	2395.1	2394.4	0.7
9.160	485.	1364.	6.1	2396.8	2396.8	0.0
9.250	363.	1115.	7.5	2401.7	2401.4	0.3

THIS RUN EXECUTED TUE, NOV 18 1986 09:35:53

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HEC2 RELEASE DATED NOV 76 UPDATED MAY  1984
ERROR CORR -  01,02,03,04,05,06
MODIFICATION -  50,51,52,53,54,55,56
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