SCATTER WASH

LETTER OF MAP REVISION

INDEX NO. ST - 951350

TECHNICAL DOCUMENTATION

BOOK 2 OF 2

PREPARED BY:

KAMINSKI HUBBARD engineering, inc.

SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY.,SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

PREPARED FOR:

City Of Phoenix
Engineering And Architectural
Services Department

October 6, 1995

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BOOK 2 OF 2

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO.
25957
DARRYL L.
BRADLEY
Date Signed 10-6-95
ARIZONA, U.S.A.

PREPARED BY:

KAMINSKI HUBBARD engineering, inc.
SURVEYING • CIVIL • HYDROLOGY
4550 N. BLACK CANYON HWY., SUITE C
PHOENIX, ARIZONA 85017
(602) 242-5588

Registered Professional Engineer (Civil)
CERTIFICATE NO.
23268
LYNN M.
THOMAS
Date Signed 10-6-95
ARIZONA, U.S.A.

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SCATTER WASH LETTER OF MAP REVISION
INDEX NO. ST - 951350

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REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 25957 DARRYL L. BRADLEY Date Signed 10-6-95 ARIZONA, U.S.A.

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SCATTER WASH LETTER OF MAP REVISION
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APPENDIX J

HEC-1 Input and Output Data

For

(1) 10-Year 24-Hour Storm

(2) 50-Year 24-Hour Storm

(3) 100-Year 24-Hour Storm

(4) 500-Year 24-Hour Storm

HEC-1 Input and Output Data

10-Year 24-Hour Storm
(File Name: 344-10.DAT)

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*                                       *
*  RUN DATE  10/02/95  TIME  09:45:22   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*          (916) 551-1748               *
*                                       *
*****************************************
```

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

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

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

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

  1           ID    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
  2           ID    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
  3           ID    INDEX NO. ST-951350
  4           ID
  5           ID    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
  6           ID    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
  7           ID    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.
  8           ID
  9           ID    FILENAME:  344-10.DAT     KHE JOB NO. 0344
 10           ID    10-YEAR 24-HOUR DURATION STORM
 11           ID    SCS TYPE-II DISTRIBUTION WAS USED
              *
              *  APRIL 11, 1992
              *
              *  Based on FCDMC comments dated March 17,1992 we adjusted the Mannings "n"
              *  coefficient to reflect weighted averaging in lieu of log averaging.
              *  We also changed the S-graph from Phoenix Mountain to Phoenix Valley.
              *
              *  REVISED:  JULY 6, 1994   Revised to address FEMA comments in a letter dated
              *                           November 15, 1993.
              *
              *  REVISED:  SEPTEMBER 12, 1994   Revised to address FEMA comments in a tele-
              *                                 phone conversation on August 10, 1994.
              *
              *  FINAL HEC-1 INPUT FILE - OCTOBER 24, 1994
              *
              *
 12           IT       4 10OCT92    1200    1000
 13           IO       5
 14           IN      30
 15           JD    2.54    0.01
              * KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
 16           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   2.489     3.0
 22           JD   2.438    10.0
 23           JD   2.337    20.0
 24           JD   2.286    30.0

 25           KK    310S
 26           KM   RUNOFF GENERATED ON SUB-BASIN 310
 27           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 28           KM    L= 1.36 mi.  Lca= 0.64 mi.  S= 282 ft/mi.  Kn= .063  LAG= 29.46 min.
 29           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 30           BA    .679
 31           LG     .15     .25    8.60     .07    2.50
 32           UI     78.    132.    309.    408.    494.    617.    888.    887.    683.    560.
 33           UI    448.    352.    219.    135.    116.     78.     49.     24.     24.     24.
 34           UI     24.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 35           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 36           KK   311S
 37           KM   RUNOFF GENERATED ON SUB-BASIN 311
 38           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 39           KM    L= 1.52 mi.  Lca= 0.71 mi.  S=  260 ft/mi.  Kn= .063  LAG= 32.47 min.
 40           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 41           BA    .569
 42           LG     .15     .33    7.78    .105    6.53
 43           UI     59.     77.    216.    291.    346.    419.    528.    736.    629.    507.
 44           UI    423.    346.    282.    195.    110.     98.     70.     59.     24.     18.
 45           UI     18.     18.     18.     18.      0.      0.      0.      0.      0.      0.
 46           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 47           KK   HC311
 48           KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 310 & 311
 49           HC       2

 50           KK   311RR
 51           KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO. 1
 52           RS       1    ELEV      12
 53           SV       0     2.2    11.6    35.4    81.1   156.4
 54           SE      12      14      16      18      20      22
 55           SL   15.62    9.62     0.6     0.5
 56           SS      20     200     3.0     1.5

 57           KK   RM311
 58           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 312
 59           KM            1) Reach Length = 8800 ft.
 60           RD
 61           RC     .05     .04     .05    8800   .0085
 62           RX       0     100     120     125     140     145     165     265
 63           RY       4       2       1       0       0       1       2       4

 64           KK    312S
 65           KM   RUNOFF GENERATED ON SUB-BASIN 312
 66           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 67           KM    L= 2.17 mi.  Lca= 0.91 mi.  S= 36 ft/mi.  Kn= .045  LAG= 42.48 min.
 68           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 69           BA   1.348
 70           LG     .35     .28    8.28    .082    0.00
 71           UI    107.    107.    243.    413.    519.    599.    679.    792.    949.   1266.
 72           UI   1307.   1056.    909.    796.    679.    582.    500.    367.    241.    187.
 73           UI    176.    128.    107.     88.     33.     33.     33.     33.     33.     33.
 74           UI     33.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 75           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 76           KK   HC312
 77           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 312 WITH ROUTED FLOW FROM 311
 78           HC       2
```

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

 79           KK   RM312
 80           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 312 THROUGH 314
 81           KM           1) Reach Length = 4640 ft.
 82           RD
 83           RC     .05     .04     .05    4640   .0060
 84           RX       0       5     205     215     235     245     445     450
 85           RY       5       3       1       0       0       1       3       5

 86           KK    315S
 87           KM   RUNOFF GENERATED ON SUB-BASIN 315
 88           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 89           KM    L= 1.16 mi.  Lca= 0.37 mi.  S= 287 ft/mi.  Kn= .063  LAG= 22.44 min.
 90           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 91           BA    .508
 92           LG     .15     .30    8.05    .093    6.65
 93           UI     76.    213.    384.    497.    704.    907.    670.    510.    380.    218.
 94           UI    130.     89.     52.     23.     23.     23.      0.      0.      0.      0.
 95           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 96           KK   315RR
 97           KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.2
 98           RS       1    ELEV      13
 99           SV       0     0.3     3.0    10.2    25.3    51.6
100           SE      13      14      16      18      20      22
101           SL   14.84    4.59     0.6     0.5
102           SS      21      50     3.0     1.5

103           KK   RM315
104           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 316
105           KM           1) Reach Length = 7480 ft.
106           RD
107           RC     .05     .04     .05    7480   .0099
108           RX      60     140     190     200     210     220     270     350
109           RY       5       4       2       0       0       2       4       5

110           KK    316S
111           KM   RUNOFF GENERATED ON SUB-BASIN 316
112           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
113           KM    L= 1.36 mi.  Lca= 0.86 mi.  S= 55 ft/mi.  Kn= .045  LAG= 32.12 min.
114           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
115           BA    .672
116           LG     .25     .37    7.14     .14     .00
117           UI     70.     95.    260.    349.    417.    505.    644.    887.    732.    596.
118           UI    493.    402.    324.    218.    124.    116.     75.     68.     22.     22.
119           UI     22.     22.     22.      0.      0.      0.      0.      0.      0.      0.
120           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

121           KK   HC316
122           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 316 WITH ROUTED FLOW FROM 315
123           HC       2
```

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

 124          KK   RM316
 125          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 316 THROUGH 314
 126          KM           1) Reach Length = 4720 ft.
 127          RD
 128          RC     .05     .04     .05    4720   .0059
 129          RX       0       5     205     215     235     245     445     450
 130          RY       5       3       1       0       0       1       3       5

 131          KK    317S
 132          KM   RUNOFF GENERATED ON SUB-BASIN 317
 133          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 134          KM    L= 1.54 mi.  Lca= 0.58 mi.  S= 300 ft/mi.  Kn= .063  LAG= 29.40 min.
 135          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 136          BA    .704
 137          LG     .15     .35    7.50    .117    9.37
 138          UI     81.    138.    322.    425.    514.    643.    927.    917.    708.    579.
 139          UI    464.    363.    224.    140.    119.     81.     49.     25.     25.     25.
 140          UI     25.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 141          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 142          KK    318S
 143          KM   RUNOFF GENERATED ON SUB-BASIN 318
 144          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 145          KM    L= 1.94 mi.  Lca= 1.09 mi.  S= 288 ft/mi.  Kn= .063  LAG= 41.12 min.
 146          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 147          BA    .542
 148          LG     .15     .33    7.78    .105    7.49
 149          UI     44.     44.    109.    178.    220.    253.    291.    340.    428.    561.
 150          UI    500.    412.    359.    307.    264.    222.    184.    121.     79.     74.
 151          UI     62.     44.     44.     14.     14.     14.     14.     14.     14.     14.
 152          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 153          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 154          KK   HC317
 155          KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 317 & 318
 156          HC       2

 157          KK   317RR
 158          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.3
 159          RS       1    ELEV      13
 160          SV       0     1.3    13.2    41.3    90.4   159.6
 161          SE      13      14      16      18      20      22
 162          SL   15.42    9.62     0.6     0.5
 163          SS      21      50     3.0     1.5

 164          KK   RM317
 165          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 319
 166          KM           1) Reach Length = 5000 ft.
 167          RD
 168          RC     .05     .04     .05    5000   .0116
 169          RX      60     160     190     200     210     220     250     350
 170          RY       4       3       2       0       0       2       3       4
```

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

 171          KK   319S
 172          KM   RUNOFF GENERATED ON SUB-BASIN 319
 173          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 174          KM    L= 0.99 mi.  Lca= 0.51 mi.  S= 63 ft/mi.  Kn= .053  LAG= 26.79 min.
 175          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 176          BA   .339
 177          LG    .25     .39    5.98    .198     .00
 178          UI    43.     87.    186.    240.    299.    411.    519.    397.    318.    249.
 179          UI   191.    109.     73.     55.     42.     13.     13.     13.     13.      0.
 180          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 181          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 182          KK   HC319
 183          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 319 WITH ROUTED FLOW FROM 317
 184          HC      2

 185          KK   RM319
 186          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 319 THROUGH 314
 187          KM           1) Reach Length = 6360 ft.
 188          RD
 189          RC    .05     .04     .05    6360   .0066
 190          RX      0       5     205     215     235     245     445     450
 191          RY      5       3     1.5       0       0     1.5       3       5

 192          KK   314S
 193          KM   RUNOFF GENERATED ON SUB-BASIN 314
 194          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 195          KM    L= 1.81 mi.  Lca= 0.71 mi.  S= 41 ft/mi.  Kn= .045  LAG= 35.20 min.
 196          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 197          BA   .846
 198          LG   .339    .365    4.43    .256    2.78
 199          UI    81.     81.    277.    371.    450.    525.    631.    844.   1019.    806.
 200          UI   674.    567.    471.    392.    280.    168.    137.    115.     81.     63.
 201          UI    25.     25.     25.     25.     25.     25.      0.      0.      0.      0.
 202          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 203          KK   HC314
 204          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 314 WITH ROUTED FLOWS FROM 312, 316 & 319
 205          HC      4

 206          KK   314RR
 207          KM   ROUTE FLOW THROUGH PINNACLE PEAK ROAD CULVERTS
 208          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 209          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 210          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 211          RS      1    ELEV      11
 212          SV      0     .05     1.2     9.1    35.6      65    94.5     139
 213          SE     11      12      14      16      18      19      20      21
 214          SQ      0      54     254     528     936    2344    5278   10401
```

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

 215          KK   RM314
 216          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM SUB-BASIN 314 THROUGH 322
 217          KM           1) Reach Length = 1920 ft.
 218          RD
 219          RC     .05     .04     .05    1920   .0026
 220          RX       0      50     150     165     175     190     240     250
 221          RY       6       5       4       0       0       4       5       7

 222          KK    320S
 223          KM   RUNOFF GENERATED ON SUB-BASIN 320
 224          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 225          KM    L= 1.74 mi.  Lca= 0.72 mi.  S= 218 ft/mi.  Kn= .063  LAG= 35.53 min.
 226          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 227          BA   1.106
 228          LG    .149    .345    7.50    .116    7.45
 229          UI    105.    105.    353.    477.    579.    674.    808.   1076.   1318.   1064.
 230          UI    886.    750.    625.    516.    387.    234.    180.    160.    105.     95.
 231          UI     32.     32.     32.     32.     32.     32.      0.      0.      0.      0.
 232          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 233          KK   DT320
 234          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.8 AC-FT FROM SUB-BASIN 320
 235          KM                                             (Hydrograph identified as OR320)
 236          KM                                           2) Balance of runoff continues on.
 237          KM                                             (Hydrograph identified as DT320)
 238          DT   OR320     1.8
 239          DI       0   10000
 240          DQ       0   10000

 241          KK   320RR
 242          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURES NO. 4 & 5
 243          RS       1    ELEV      13
 244          SV       0     0.6    12.4    48.7   119.5   230.3
 245          SE      13      14      16      18      20      22
 246          SL   14.80   11.66     0.6     0.5
 247          SS      20     200     3.0     1.5

 248          KK   320RE
 249          KM   DIVERT OUTFLOW FROM STRUCTURE NO.5 INTO SUB-BASIN 325
 250          KM   REMAINING OUTFLOW INTO SUB-BASIN 321 IS FROM STRUCTURE NO.4
 251          DT    325D
 252          DI       0      13      63     102     128     150
 253          DQ       0       5      28      42      52      60

 254          KK   RM320
 255          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION FOR SUB-BASIN 320 THROUGH 321
 256          KM           1) Reach Length = 11,160 ft.
 257          RD
 258          RC     .05     .04     .05   11160   .0085
 259          RX       0       5     155     160     170     175     325     330
 260          RY       3       2       1       0       0       1       2       3
```

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

 261        KK   321S
 262        KM   RUNOFF GENERATED ON SUB-BASIN 321
 263        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 264        KM    L= 2.27 mi.  Lca= 1.24 mi.  S= 57 ft/mi.  Kn= .045  LAG= 44.54 min.
 265        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 266        BA   1.121
 267        LG    .298    .349    3.77    .349    1.42
 268        UI     85.     85.    170.    309.    400.    459.    518.    597.    688.    897.
 269        UI   1080.    928.    782.    688.    599.    516.    443.    380.    279.    181.
 270        UI    148.    139.    103.     85.     79.     26.     26.     26.     26.     26.
 271        UI     26.     26.     26.      0.      0.      0.      0.      0.      0.      0.
 272        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 273        KK   HC321
 274        KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 321 WITH ROUTED FLOW FROM 320
 275        HC       2

 276        KK   RM321
 277        KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 321 THROUGH 322
 278        KM            1) Reach Length = 2760 ft.
 279        RD
 280        RC     .05     .04     .05    2760   .0051
 281        RX       0      50     150     165     175     190     240     250
 282        RY       6       5       4       0       0       4       5       7

 283        KK    323S
 284        KM   RUNOFF GENERATED ON SUB-BASIN 323
 285        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 286        KM    L= 0.92 mi.  Lca= 0.34 mi.  S= 61 ft/mi.  Kn= .044  LAG= 18.66 min.
 287        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 288        BA     .11
 289        LG     .10     .25    4.24    .433   25.12
 290        UI     20.     74.    114.    162.    235.    170.    121.     79.     37.     24.
 291        UI     12.      6.      6.      0.      0.      0.      0.      0.      0.      0.
 292        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 293        KK   323RR
 294        KM   ROUTE FLOW THROUGH ON-SITE DETENTION
 295        RS       1    ELEV    36.1
 296        SV       0     0.5     3.9    12.8    29.3    57.8
 297        SE    36.1      38      40      42      44      46
 298        SL   37.65     6.6     0.6     0.5
 299        SS      45     100     3.0     1.5

 300        KK   RM323
 301        KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION THROUGH SUB-BASIN 322
 302        KM            1) Reach Length = 5200 ft.
 303        RD
 304        RC     .05     .04     .05    5200   .0063
 305        RX       0       5     205     215     225     235     435     440
 306        RY       5       3       1       0       0       1       3       5
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

307         KK   322S
308         KM   RUNOFF GENERATED ON SUB-BASIN 322
309         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
310         KM    L= 1.15 mi.  Lca= 0.44 mi.  S= 36 ft/mi.  Kn= .043  LAG= 24.19 min.
311         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
312         BA   .345
313         LG   .328    .341    3.77    .348    7.52
314         UI    48.    120.    227.    292.    381.    574.    486.    374.    286.    214.
315         UI   112.     81.     52.     32.     15.     15.     15.     15.      0.      0.
316         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

317         KK   DT322
318         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.2 AC-FT FROM SUB-BASIN 322
319         KM                                              (Hydrograph identified as OR322)
320         KM                                            2) Balance of runoff continues on.
321         KM                                              (Hydrograph identified as DT322)
322         DT   OR322     1.2
323         DI       0   10000
324         DQ       0   10000

325         KK   HC322
326         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 322 WITH ROUTED FLOW FROM 314, 321 & 323
327         HC       4

328         KK   322RR
329         KM   ROUTE FLOW THROUGH DETENTION BEHIND 2 - 8 x 7 RCBC AT I-17
330         KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
331         KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
332         KM            Management, ST-886366, September 1989, by Greiner, Inc.
333         RS       1    STOR      -1
334         SV       0    .001     .22    1.16    8.44      17      30      49      67      76
335         SE     3.8       4       6       8      10      11      12      13    13.7      14
336         SQ       0       1     176     414     680     880    1091    1593    2678    3746

337         KK   322RE
338         KM   DIVERT OVERFLOWS SOUTH TO SINGLE CULVERT AT MH PARK, AND WEST ONTO I-17.
339         KM   DQ IS DISCHARGE THROUGH 2-8x7 CULVERT (MAX. 1312 CFS); DI IS TOTAL DISCHARGE.
340         KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
341         KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
342         KM            Management, ST-886366, September 1989, by Greiner, Inc.
343         DT   333D1
344         DI       1     880    1091    1593    2678    3746
345         DQ       1     880    1060    1184    1296    1312

346         KK    326D
347         KM   SEPARATE OUT WEST OVERFLOWS ONTO THE FRONTAGE ROAD AND MAINLINE I-17.
348         KM   THESE FLOWS HEAD SOUTH AND EVENTUALLY ENTER THE DEER VALLEY ROAD INTERCHANGE.
349         KM   REMAINING FLOWS CONTINUE SOUTH TO 6x7 BOX CULVERT ON SCATTER WASH AT I-17.
350         KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
351         KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
352         KM            Management, ST-886366, September 1989, by Greiner, Inc.
353         DT    332D
354         DI      31     409    1382    2434
355         DQ       0       0     215     840
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 356          KK   325RD
 357          KM   RETRIEVE FLOW FROM C.A.P. STRUCTURE NO.5
 358          DR    325D

 359          KK   RM320
 360          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM STRUCTURE NO.5 THROUGH 325.
 361          KM            1) Reach Length = 8560 ft.
 362          RD
 363          RC     .05     .04     .05    8560   .0082
 364          RX       0      10     200     220     235     255     440     450
 365          RY       5       4       2       0       0       2       4       5

 366          KK    325S
 367          KM   RUNOFF GENERATED ON SUB-BASIN 325
 368          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 369          KM    L= 1.71 mi.  Lca= 0.65 mi.  S= 60 ft/mi.  Kn= .044  LAG= 30.30 min.
 370          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 371          BA    .502
 372          LG    .266    .333    3.87    .372    7.02
 373          UI     56.     89.    217.    288.    346.    426.    592.    676.    517.    426.
 374          UI    344.    275.    193.    108.     93.     63.     53.     17.     17.     17.
 375          UI     17.     17.      0.      0.      0.      0.      0.      0.      0.      0.
 376          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 377          KK   HC325
 378          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 325 WITH ROUTED FLOW FROM 320
 379          HC       2

 380          KK   RM325
 381          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 325 THROUGH 326
 382          KM            1) Reach Length = 6200 ft.
 383          RD
 384          RC     .05     .04     .05    6200   .0068
 385          RX      80     130     195     220     235     260     325     375
 386          RY       6       5       3       0       0       3       5       6

 387          KK    326S
 388          KM   RUNOFF GENERATED ON SUB-BASIN 326
 389          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 390          KM    L= 2.01 mi.  Lca= 0.90 mi.  S= 37 ft/mi.  Kn= .043  LAG= 39.06 min.
 391          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 392          BA    .498
 393          LG    .312    .335    4.14    .428   12.87
 394          UI     43.     43.    119.    181.    222.    254.    299.    353.    473.    540.
 395          UI    431.    365.    315.    265.    224.    185.    128.     76.     72.     59.
 396          UI     43.     38.     13.     13.     13.     13.     13.     13.     13.      0.
 397          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 398          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 399          KK   DT326
 400          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.7 AC-FT FROM SUB-BASIN 326
 401          KM                                             (Hydrograph identified as OR326)
 402          KM                                           2) Balance of runoff continues on.
 403          KM                                             (Hydrograph identified as DT326)
 404          DT   OR326     4.7
 405          DI       0   10000
 406          DQ       0   10000

 407          KK   HC326
 408          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 326 WITH ROUTED FLOW FROM 325 AND
 409          KM   OVERFLOW FROM 322.
 410          HC       3

 411          KK   326RE
 412          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x7 RCBC (MAX. Q = 510 CFS)
 413          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 414          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 415          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 416          DT   333D2
 417          DI       0       1     510     511    1000    2000
 418          DQ       0       1     510     510     510     510

 419          KK    327S
 420          KM   RUNOFF GENERATED ON SUB-BASIN 327
 421          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 422          KM    L= 1.21 mi.  Lca= 0.53 mi.  S= 38 ft/mi.  Kn= .036  LAG= 21.94 min.
 423          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 424          BA    .216
 425          LG    .193    .287    3.61    .305   47.32
 426          UI     33.     96.    170.    221.    317.    389.    281.    211.    153.     80.
 427          UI     55.     33.     16.     10.     10.     10.      0.      0.      0.      0.
 428          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 429          KK   DT327
 430          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.7 AC-FT FROM SUB-BASIN 327
 431          KM                                             (Hydrograph identified as OR327)
 432          KM                                           2) Balance of runoff continues on.
 433          KM                                             (Hydrograph identified as DT327)
 434          DT   OR327     1.7
 435          DI       0   10000
 436          DQ       0   10000

 437          KK   HC327
 438          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 327 WITH OVERFLOW FROM 326
 439          HC       2

 440          KK   327RE
 441          KM   DIVERT FLOW ACROSS I-17 THROUGH 65"x40" CMP AT ADOBE DR.
 442          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 443          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 444          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 445          DT   334D1
 446          DI       0     115     116    1000    3000
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 447          DQ       1     115     115     115     115

 448          KK    330S
 449          KM   RUNOFF GENERATED ON SUB-BASIN 330
 450          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 451          KM    L= 1.67 mi.  Lca= 0.87 mi.  S= 28 ft/mi  Kn= .029  LAG= 25.55 min.
 452          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 453          BA    .310
 454          LG    .192    .272    3.77    .325   36.43
 455          UI     41.     92.    185.    238.    302.    439.    468.    350.    276.    213.
 456          UI    146.     76.     62.     41.     21.     13.     13.     13.     13.      0.
 457          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 458          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 459          KK   DT330
 460          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.9 AC-FT FROM SUB-BASIN 330
 461          KM                                              (Hydrograph identified as OR330)
 462          KM                                            2) Balance of runoff continues on.
 463          KM                                              (Hydrograph identified as DT330)
 464          DT   OR330     1.9
 465          DI       0   10000
 466          DQ       0   10000

 467          KK   330R1
 468          KM   DIVERT FLOW SOUTH ALONG 19TH AVENUE AT DEER VALLEY RD.
 469          DT    341D
 470          DI       0     145     418    2248    4002
 471          DQ       0       0     121     550    1220

 472          KK   330R2
 473          KM   DIVERT FLOW SOUTH INTO SUB-BASIN 343.  THIS DIVERT IS USED TO SIMULATE
 474          KM   THE CROWN OVERTOPPING OF DEER VALLEY RD.
 475          DT    343D
 476          DI       0      55     328     746
 477          DQ       0       0     241     487

 478          KK   RM330
 479          KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 330 THROUGH 331
 480          KM           1) Reach Length = 3850 ft.
 481          RD
 482          RC    .020    .020    .030    3850   .0057
 483          RX       0      .5    45.5    45.5    50.5    55.5    60.5    60.5
 484          RY       5       3     2.3     2.8     2.8       3       4       5

 485          KK    331S
 486          KM   RUNOFF GENERATED ON SUB-BASIN 331
 487          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 488          KM    L= 1.25 mi.  Lca= 0.32 mi.  S= 35 ft/mi.  Kn= .032  LAG= 16.55 min.
 489          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 490          BA     .22
 491          LG    .141    .171    8.28    .078   68.37
 492          UI     50.    189.    285.    465.    448.    304.    195.     87.     53.     22.
 493          UI     14.     14.      0.      0.      0.      0.      0.      0.      0.      0.
 494          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

495         KK   DT331
496         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.6 AC-FT FROM SUB-BASIN 331
497         KM                                              (Hydrograph identified as OR331)
498         KM                                            2) Balance of runoff continues on.
499         KM                                              (Hydrograph identified as DT331)
500         DT   OR331     1.6
501         DI       0   10000
502         DQ       0   10000

503         KK   HC331
504         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 331 WITH OVERFLOW FROM 327 & 330
505         HC       3

506         KK   331RE
507         KM   DIVERT FLOW ACROSS I-17 THROUGH 6x3 RCBC AT LOUISE DR.
508         KM   DI REPRESENTS TOTAL FLOW TO DEPRESSED INTERCHANGE AT DEER VALLEY RD.
509         KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
510         KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
511         KM            Management, ST-886366, September 1989, by Greiner, Inc.
512         DT   334D2
513         DI       0       1     156     157    1000    3000
514         DQ       0       1     156     156     156     156

515         KK    R332
516         KM   RETRIEVE HYDROGRAPH OF OVERFLOW FROM SUB-BASIN 322 ONTO I-17 MEDIAN
517         DR    332D

518         KK    332S
519         KM   RUNOFF GENERATED ON SUB-BASIN 332
520         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
521         KM    L= 0.40 mi.  Lca= 0.07 mi.  S= 65 ft/mi.  Kn= .040  LAG= 6.00 min.
522         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
523         BA    .094
524         LG    .159    .189    8.20    .046   48.74
525         UI    190.    497.    185.     29.      0.      0.      0.      0.      0.      0.
526         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

527         KK   DT332
528         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.4 AC-FT FROM SUB-BASIN 332
529         KM                                              (Hydrograph identified as OR332)
530         KM                                            2) Balance of runoff continues on.
531         KM                                              (Hydrograph identified as DT332)
532         DT   OR332     0.4
533         DI       0   10000
534         DQ       0   10000

535         KK   HC332
536         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 332 WITH OVERFLOWS FROM SUB-BASIN 322
537         KM   AND 331 (TOTAL FLOW INTO DEER VALLEY RD. INTERCHANGE)
538         HC       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

539           KK   332RR
540           KM   ROUTE FLOW THROUGH DEPRESSED SECTION AT DEER VALLEY RD. INTERCHANGE TO
541           KM   WEST SIDE OF I-17.
542           RS       1    ELEV      82
543           SV       0     1.4    10.7    28.9    42.5    56.0    69.0    84.5   114.8
544           SE      82      84      88      92      94    95.6    96.8      98     100
545           SQ       0       0       0       0       0       1    1428    7646   26741
              * KK RM332
              * KM MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DEER VALLEY RD. INTERCHANGE
              * KM THROUGH SUB-BASIN 335.
              * KM          1) Reach Length = 5760 ft.
              * RD
              * RC  .045     .04    .045    5760   .0068
              * RX     0       5      55      60      70      75     125     130
              * RY     3       2       1       0       0       1       2       3

546           KK    R322
547           KM   RETRIEVE HYDROGRAPH FOR NORTH BRANCH OF SCATTER WASH
548           KM   (ALSO KNOWN AS FLOW THROUGH 2-8x7 RCBC)
549           DR   333D1

550           KK    R326
551           KM   RETRIEVE HYDROGRAPH FOR SOUTH BRANCH OF SCATTER WASH
552           KM   (ALSO KNOWN AS FLOW THROUGH 6x7 RCBC)
553           DR   333D2

554           KK    333S
555           KM   RUNOFF GENERATED ON SUB-BASIN 333
556           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
557           KM    L= 2.34 min.  Lca= 0.96 mi.  S= 27 ft/mi.  Kn= .045  LAG= 47.12 min.
558           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
559           BA    .533
560           LG    .311    .354    5.98    .198   10.71
561           UI     38.     38.     63.    135.    170.    198.    223.    251.    289.    344.
562           UI    447.    480.    392.    339.    302.    261.    230.    198.    172.    128.
563           UI     86.     67.     63.     54.     38.     38.     21.     12.     12.     12.
564           UI     12.     12.     12.     12.     12.      0.      0.      0.      0.      0.
565           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

566           KK   HC333
567           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 333 WITH DIVERTED FLOWS FROM 322 & 326.
568           HC       3

569           KK   RM333
570           KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 333 THROUGH 334
571           KM           1) Reach Length = 5160 ft.
572           RD
573           RC   .055    .045    .055    5160   .0056
574           RX      0      60     110     145     170     195     250     400
575           RY      7       6       2       0       0       2       6       7
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

576         KK   R327
577         KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 327
578         DR   334D1

579         KK   RM327
580         KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
581         KM           1) Reach Length = 5100 ft.
582         RD
583         RC     .05     .04     .05    5100   .0073
584         RX       0      10      30      33      48      51     151     200
585         RY       3       2     1.5       0       0     1.5       2       3

586         KK   R331
587         KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 331
588         DR   334D2

589         KK   RM331
590         KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
591         KM           1) Reach Length = 5000 ft.
592         RD
593         RC     .03    .045     .05    5000   .0070
594         RX       0      10      30      33      48      51     151     200
595         RY       3       2     1.5       0       0     1.5       2       3

596         KK   334S
597         KM   RUNOFF GENERATED ON SUB-BASIN 334
598         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
599         KM    L= 1.01 mi.  Lca= 0.51 mi.  S= 272 ft/mi.  Kn= .039  LAG= 15.04 min.
600         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
601         BA    .657
602         LG    .161    .229    8.28    .081   32.97
603         UI    193.    670.   1026.   1678.   1225.    804.    378.    199.     87.     45.
604         UI     45.      0.      0.      0.      0.      0.      0.      0.      0.      0.
605         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

606         KK   DT334
607         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.8 AC-FT FROM SUB-BASIN 334
608         KM                                             (Hydrograph identified as OR334)
609         KM                                           2) Balance of runoff continues on.
610         KM                                             (Hydrograph identified as DT334)
611         DT   OR334     0.8
612         DI       0   10000
613         DQ       0   10000

614         KK   HC334
615         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 334 WITH ROUTED FLOWS FROM 327, 331 & 333
616         HC       4

617         KK   RM334
618         KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 334 THROUGH 335
619         KM           1) Reach Length = 2980 ft.
620         RD
621         RC     .05    .045     .05    2980   .0044
622         RX       0     190     230     240     260     270     330     400
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 623          RY       7       4       2       0       0       2       6       7

 624          KK    335S
 625          KM   RUNOFF GENERATED ON SUB-BASIN 335
 626          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 627          KM    L= 1.11 mi.  Lca= 0.56 mi.  S= 38 ft/mi.  Kn= .039  LAG= 23.49 min.
 628          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 629          BA    .463
 630          LG    .206     .22    8.60     .07   14.96
 631          UI     66.    174.    322.    414.    554.    808.    633.    488.    370.    257.
 632          UI    131.    100.     66.     26.     20.     20.     20.      0.      0.      0.
 633          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 634          KK   DT335
 635          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.8 AC-FT FROM SUB-BASIN 335
 636          KM                                             (Hydrograph identified as OR335)
 637          KM                                           2) Balance of runoff continues on.
 638          KM                                             (Hydrograph identified as DT335)
 639          DT   OR335     4.8
 640          DI       0   10000
 641          DQ       0   10000

 642          KK   HC335
 643          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 335 WITH ROUTED FLOWS FROM 332 & 334
 644          HC       3

 645          KK   RM335
 646          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 335 THROUGH 345
 647          KM            1) Reach Length = 4240 ft.
 648          RD
 649          RC     .05     .04     .05    4240   .0061
 650          RX       0      10     280     285     335     340     500     510
 651          RY      10       8       4       2       2       4       8      10

 652          KK   330R2
 653          KM   RETRIEVE DIVERTED FLOW FROM DEER VALLEY RD.
 654          DR    343D

 655          KK    343S
 656          KM   RUNOFF GENERATED ON SUB-BASIN 343
 657          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 658          KM    L= 1.07 mi.  Lca= 0.55 mi.  S= 24 ft/mi.  Kn= .033  LAG= 21.24 min.
 659          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 660          BA     .32
 661          LG    .181    .179   10.10    .034   47.01
 662          UI     51.    156.    265.    349.    526.    561.    405.    299.    206.    101.
 663          UI     72.     46.     16.     16.     16.      0.      0.      0.      0.      0.
 664          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 665          KK   DT343
 666          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.5 AC-FT FROM SUB-BASIN 343
 667          KM                                             (Hydrograph identified as OR343)
 668          KM                                           2) Balance of runoff continues on.
 669          KM                                             (Hydrograph identified as DT343)
 670          DT   OR343     6.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  671         DI       0   10000
  672         DQ       0   10000

  673         KK   HC343
  674         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 343 WITH OVERFLOW FROM DEER VALLEY RD.
  675         HC       2

  676         KK   343RR
  677         KM   ROUTE FLOW THROUGH DETENTION BASIN D AT ROSE GARDEN LANE
  678         KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
  679         KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
  680         KM            Prepared by DeLeuw Cather & Co.
  681         RS       1    STOR       0
  682         SV       0      .7    25.4      30    34.6
  683         SE    1381  1382.5    1396    1398    1400
  684         SL    1381    2.41     0.6     0.5
  685         SS    1397     100     3.0     1.5

  686         KK   RM343
  687         KM   MUSKINGUM-CUNGE ROUTE FLOW FROM DETENTION BASIN D SOUTH
  688         KM            1) Reach Length = 2273 ft.
  689         RD    2273   .0078    .014            CIRC       3

  690         KK    349S
  691         KM   RUNOFF GENERATED ON SUB-BASIN 349
  692         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  693         KM    L= 1.03 mi.  Lca= 0.68 mi.  S= 27 ft/mi.  Kn= .034  LAG= 22.86 min.
  694         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
  695         BA    .372
  696         LG    .193    .097   12.40    .012   34.46
  697         UI     55.    149.    272.    351.    481.    666.    497.    381.    286.    182.
  698         UI     95.     71.     46.     17.     17.     17.     17.      0.      0.      0.
  699         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  700         KK   DT349
  701         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 7.4 AC-FT FROM SUB-BASIN 349
  702         KM                                              (Hydrograph identified as OR349)
  703         KM                                            2) Balance of runoff continues on.
  704         KM                                              (Hydrograph identified as DT349)
  705         DT   OR349     7.4
  706         DI       0   10000
  707         DQ       0   10000

  708         KK   349RR
  709         KM   ROUTE FLOW THROUGH SMALL DETENTION BASIN AT INTEL
  710         KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
  711         KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
  712         KM            Prepared by DeLeuw Cather & Co.
  713         RS       1    STOR       0
  714         SV       0     .35     1.9    3.07    4.56    6.00
  715         SE    1383    1384    1386    1388    1390    1392
  716         SL    1383    7.07     0.6     0.5
  717         SS    1390     100     3.0     1.5
```

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

 718        KK   349RE
 719        KM   DIVERT OUTFLOW INTO BEARDSLEY RD. INTERCHANGE.  REMAINING FLOW CONTINUES TO
 720        KM   SCATTER WASH AND REFLECTS DISCHARGE FROM INTEL BASIN LOW LEVEL OUTLET.
 721        DT   BEARD
 722        DI       0      90      91     100     200     500    1000
 723        DQ       0       0       1      10     110     410     910

 724        KK   HC349
 725        KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 349 WITH ROUTED DETENTION BASIN D OVERFL
 726        HC       2

 727        KK  RM344A
 728        KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH 96-IN. PIPE
 729        KM            1) Reach Length = 3244 ft.
 730        RD    3244   .0012    .014            CIRC       8

 731        KK  RM344B
 732        KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH TRAPEZOIDAL CHANNEL
 733        KM            1) Reach Length = 3550 ft.
 734        RD    3150   .0044    .014            TRAP       8       2

 735        KK    344S
 736        KM   RUNOFF GENERATED ON SUB-BASIN 344
 737        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 738        KM    L= 1.69 mi.  Lca= 0.98 mi.  S= 27 ft/mi.  Kn= .037  LAG= 34.50 min.
 739        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 740        BA    .554
 741        LG    .256    .162    9.40    .023   24.47
 742        UI     54.     56.    190.    253.    304.    359.    433.    594.    664.    518.
 743        UI    437.    361.    300.    244.    168.     96.     89.     65.     54.     27.
 744        UI     17.     17.     17.     17.     17.      0.      0.      0.      0.      0.
 745        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 746        KK   DT344
 747        KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.0 AC-FT FROM SUB-BASIN 344
 748        KM                                               (Hydrograph identified as OR344)
 749        KM                                             2) Balance of runoff continues on.
 750        KM                                               (Hydrograph identified as DT344)
 751        DT   OR344     6.0
 752        DI       0   10000
 753        DQ       0   10000

 754        KK  HC344U
 755        KM   COMBINE HYDROGRAPHS UPSTREAM OF DETENTION BASIN C FROM SUB-BASIN 344 WITH
 756        KM   ROUTED OUTFLOW FROM DETENTION BASIN AT INTEL
 757        HC       2

 758        KK    344D
 759        KM   DIVERT FLOW TO DETENTION BASIN C
 760        KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 761        KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 762        KM            Prepared by DeLeuw Cather & Co.
 763        DT   344RE
 764        DI       0     150     250     251     750
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

765           DQ       0     150     250     250     250

766           KK   344RR
767           KM   ROUTE FLOW THROUGH DETENTION BASIN C (33-IN. ORIFICE)
768           KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
769           KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
770           KM            Prepared by DeLeuw Cather & Co.
771           RS       1    STOR       0
772           SA    2.15    2.24    2.32    2.52    2.71    2.91    3.12    3.67
773           SE    1338    1339    1340    1342    1344    1346    1348    1353
774           SL    1339    5.94     0.6     0.5
775           SS    1352      40     2.7     1.5

776           KK  R344RE
777           KM   RETRIEVE DETENTION BASIN BYPASS FLOW
778           DR   344RE

779           KK  HC344D
780           KM   COMBINE HYDROGRAPHS DOWNSTREAM OF DETENTION BASIN C
781           HC       2

782           KK   RM344
783           KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION BASIN C THROUGH SUB-BASIN 345
784           KM            1) Reach Length = 2160 ft.
785           RD    2160   .0044    .014            TRAP       8       2

786           KK    345S
787           KM   RUNOFF GENERATED ON SUB-BASIN 345
788           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
789           KM    L= 1.11 mi.  Lca= 0.67 mi.  S= 32 ft/mi.  Kn= .033  LAG= 21.98 min.
790           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
791           BA    .296
792           LG    .194    .302    5.67     .21   35.40
793           UI     45.    131.    232.    302.    433.    533.    385.    290.    211.    112.
794           UI     76.     46.     23.     14.     14.     14.      0.      0.      0.      0.
795           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

796           KK   HC345
797           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 345 WITH ROUTED HYDROGRAPHS FROM 335 & 344
798           HC       3

799           KK   RM345
800           KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 345 THROUGH 346
801           KM            1) Reach Length = 6200 ft.
802           RD
803           RC    .055    .045    .055    6200   .0045
804           RX       0      20     175     180     200     205     310     330
805           RY      10       6       4       2       2       4       6      10

806           KK    346S
807           KM   RUNOFF GENERATED ON SUB-BASIN 346
808           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
809           KM    L= 1.51 mi.  Lca= 0.82 mi.  S= 27 ft/mi.  Kn= .040  LAG= 33.40 min.
810           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
811           BA    .401
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 812          LG    .227    .313    5.67     .21   24.66
 813          UI     40.     48.    143.    195.    231.    276.    340.    480.    458.    363.
 814          UI    306.    251.    206.    158.     93.     69.     60.     40.     31.     12.
 815          UI     12.     12.     12.     12.      0.      0.      0.      0.      0.      0.
 816          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 817          KK   HC346
 818          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 346 WITH ROUTED FLOW FROM 345
 819          HC      2

 820          KK    AD1
 821          KM   ADOBE DAM LOW LEVEL SPILLWAY OUTFLOW; ASSUME CONSTANT OUTFLOW OF
 822          KM   1370 CFS FOR 10-YEAR STORM.
 823          KM   SOURCE:  F.I.S., Maricopa County, Arizona and Incorporated Areas, FEMA.
 824          BA    0.1
 825          IN    120
 826          QI   1370    1370    1370    1370    1370    1370    1370    1370    1370    1370
 827          QI   1370    1370    1370    1370    1370    1370    1370    1370    1370    1370

 828          KK   RMAD1
 829          KM   NORMAL DEPTH STORAGE ROUTE ADOBE DAM OUTFLOW THROUGH SUB-BASIN 347
 830          KM           1) Reach Length = 3240 ft.
 831          RS      5    FLOW      -1
 832          RC   .055    .045    .055    3240   .0040
 833          RX     30      80     180     200     240     260     265     270
 834          RY      7       6       5       0       0       6       7       8

 835          KK   347S
 836          KM   RUNOFF GENERATED ON SUB-BASIN 347
 837          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 838          KM    L= 1.71 mi.  Lca= 0.73 mi.  S= 35 ft/mi.  Kn= .041  LAG= 32.69 min.
 839          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 840          BA   1.105
 841          LG   .215    .326    3.71     .34   20.32
 842          UI   114.    145.    413.    559.    664.    801.   1004.   1409.   1231.    990.
 843          UI   829.    677.    554.    389.    225.    191.    143.    114.     56.     35.
 844          UI    35.     35.     35.     35.      0.      0.      0.      0.      0.      0.
 845          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 846          KK   HC347
 847          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 347 WITH ROUTED OUTFLOW FROM ADOBE DAM
 848          HC      2

 849          KK   RM347
 850          KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 347 THROUGH 348
 851          KM           1) Reach Length = 3120 ft.
 852          RD
 853          RC    .05     .04     .05    3120   .0051
 854          RX    160     165     170     200     245     280     285     290
 855          RY      7     6.5       6       0       0       6     6.5       7
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 856          KK   348S
 857          KM  RUNOFF GENERATED ON SUB-BASIN 348
 858          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 859          KM   L= 0.59 mi.  Lca= 0.41 mi.  S= 27 ft/mi.  Kn= .036  LAG= 16.16 min.
 860          KM   PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 861          BA   .048
 862          LG    .20     .31    3.68    .769   21.67
 863          UI    12.     43.     65.    108.     95.     64.     40.     17.     11.      3.
 864          UI     3.      3.      0.      0.      0.      0.      0.      0.      0.      0.
 865          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 866          KK  HC348
 867          KM  COMBINE HYDROGRAPHS FROM SUB-BASIN 348 WITH ROUTED FLOW FROM 347
 868          HC      2

 869          KK  HCSKB
 870          KM  COMBINE HYDROGRAPHS FROM SKUNK CREEK WITH SCATTER WASH
 871          HC      2

 872          KK   R330
 873          KM  RETRIEVE DIVERTED HYDROGRAPH FROM DERR VALLEY ROAD AND 19TH AVENUE.   THIS
 874          KM  HYDROGRAPH WILL BE STORED IN FILENAME:  CCW324.DSS FOR RETRIEVAL AS PART OF
 875          KM  THE WATERSHED CONTRIBUTING TO SKUNK CREEK.
 876          DR   341D

 877          KK RBEARD
 878          KM  RETRIEVE DIVERTED FLOW INTO BEARDSLEY ROAD - I-17 INTERCHANGE
 879          DR  BEARD

 880          KK 349RR2
 881          KM  ROUTE FLOW THROUGH BEARDSLEY ROAD & I-17 INTERCHANGE
 882          RS      1    STOR       0
 883          SV      0      .5     3.5     8.3    23.1    46.0    62.3    82.1
 884          SE   1367    1368    1370    1372    1376    1380    1382    1384
 885          SQ      0       0       0       0       0       0    5804   31500
 886          ZZ
```

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****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*                                      *
*  RUN DATE  10/02/95  TIME  09:45:22  *
*                                      *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
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                    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
                    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
                    INDEX NO. ST-951350

                    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
                    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
                    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.

                    FILENAME:  344-10.DAT     KHE JOB NO. 0344
                    10-YEAR 24-HOUR DURATION STORM
                    SCS TYPE-II DISTRIBUTION WAS USED

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

   IT         HYDROGRAPH TIME DATA
                     NMIN          4  MINUTES IN COMPUTATION INTERVAL
                    IDATE     10OCT92  STARTING DATE
                    ITIME       1200  STARTING TIME
                       NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE     13OCT92  ENDING DATE
                   NDTIME       0636  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.07 HOURS
                   TOTAL TIME BASE   66.60 HOURS

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

 15 JD        INDEX STORM NO. 1
                    STRM       2.54  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 16 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

21 JD INDEX STORM NO. 2

STRM 2.49 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

22 JD INDEX STORM NO. 3

STRM 2.44 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

23 JD INDEX STORM NO. 4

STRM 2.34 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

24 JD INDEX STORM NO. 5

STRM 2.29 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

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

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	310S	514.	12.27	63.	16.	6.	0.68		
HYDROGRAPH AT	311S	360.	12.27	47.	12.	4.	0.57		
2 COMBINED AT	HC311	870.	12.27	109.	28.	10.	1.25		
ROUTED TO	311RR	79.	13.00	68.	23.	8.	1.25		
ROUTED TO	RM311	102.	13.00	68.	24.	8.	1.25		
HYDROGRAPH AT	312S	698.	12.47	102.	25.	9.	1.35		
2 COMBINED AT	HC312	695.	12.47	158.	49.	18.	2.60		
ROUTED TO	RM312	677.	12.93	157.	49.	18.	2.60		
HYDROGRAPH AT	315S	418.	12.13	44.	12.	4.	0.51		
ROUTED TO	315RR	45.	12.67	38.	11.	4.	0.51		
ROUTED TO	RM315	48.	13.00	38.	11.	4.	0.51		
HYDROGRAPH AT	316S	350.	12.33	41.	10.	4.	0.67		
2 COMBINED AT	HC316	348.	12.33	74.	21.	8.	1.18		
ROUTED TO	RM316	337.	12.80	73.	21.	8.	1.18		
HYDROGRAPH AT	317S	462.	12.27	58.	16.	6.	0.70		
HYDROGRAPH AT	318S	294.	12.47	45.	12.	4.	0.54		
2 COMBINED AT	HC317	727.	12.33	102.	28.	10.	1.25		
ROUTED TO	317RR	76.	13.13	64.	23.	8.	1.25		
ROUTED TO	RM317	76.	13.33	64.	23.	8.	1.25		
HYDROGRAPH AT	319S	173.	12.20	18.	5.	2.	0.34		
2 COMBINED AT	HC319	171.	12.20	76.	27.	10.	1.59		
ROUTED TO	RM319	168.	12.60	75.	27.	10.	1.59		
HYDROGRAPH AT	314S	350.	12.40	45.	12.	4.	0.85		
4 COMBINED AT	HC314	1217.	12.80	332.	106.	38.	6.21		
ROUTED TO	314RR	822.	13.13	331.	106.	38.	6.21		
ROUTED TO	RM314	810.	13.33	331.	106.	38.	6.21		

HYDROGRAPH AT	320S	640.	12.33	89.	24.	9.	1.11
DIVERSION TO	OR320	4.	10.00	3.	1.	0.	1.11
HYDROGRAPH AT	DT320	640.	12.33	89.	23.	8.	1.11
ROUTED TO	320RR	88.	13.00	71.	20.	7.	1.11
DIVERSION TO	325D	37.	13.00	31.	9.	3.	1.11
HYDROGRAPH AT	320RE	51.	13.00	40.	12.	4.	1.11
ROUTED TO	RM320	63.	13.33	40.	12.	4.	1.11
HYDROGRAPH AT	321S	349.	12.53	52.	13.	5.	1.12
2 COMBINED AT	HC321	347.	12.53	85.	25.	9.	2.23
ROUTED TO	RM321	344.	12.67	85.	25.	9.	2.23
HYDROGRAPH AT	323S	78.	12.07	9.	3.	1.	0.11
ROUTED TO	323RR	36.	12.33	9.	3.	1.	0.11
ROUTED TO	RM323	35.	13.00	9.	3.	1.	0.11
HYDROGRAPH AT	322S	174.	12.20	19.	5.	2.	0.34
DIVERSION TO	OR322	26.	11.73	2.	1.	0.	0.34
HYDROGRAPH AT	DT322	174.	12.20	18.	5.	2.	0.34
4 COMBINED AT	HC322	930.	13.20	430.	135.	49.	8.89
ROUTED TO	322RR	864.	13.60	430.	135.	49.	8.89
DIVERSION TO	333D1	864.	13.60	430.	135.	49.	8.89
HYDROGRAPH AT	322RE	0.	13.60	0.	0.	0.	8.89
DIVERSION TO	332D	0.	0.07	0.	0.	0.	8.89
HYDROGRAPH AT	326D	0.	13.60	0.	0.	0.	8.89
HYDROGRAPH AT	325RD	37.	13.00	31.	9.	3.	1.11
ROUTED TO	RM320	42.	13.47	30.	9.	3.	1.11
HYDROGRAPH AT	325S	216.	12.27	27.	8.	3.	0.50
2 COMBINED AT	HC325	216.	12.27	51.	16.	6.	0.50
ROUTED TO	RM325	216.	12.67	50.	16.	6.	0.50
HYDROGRAPH AT	326S	163.	12.47	27.	8.	3.	0.50
DIVERSION TO	OR326	106.	12.13	8.	2.	1.	0.50
HYDROGRAPH AT	DT326	163.	12.47	21.	6.	2.	0.50

3 COMBINED AT	HC326	333.	12.53	66.	20.	7.	9.89
DIVERSION TO	333D2	333.	12.53	66.	20.	7.	9.89
HYDROGRAPH AT	326RE	0.	0.07	0.	0.	0.	9.89
HYDROGRAPH AT	327S	183.	12.13	26.	9.	3.	0.22
DIVERSION TO	OR327	4.	8.47	3.	1.	0.	0.22
HYDROGRAPH AT	DT327	183.	12.13	26.	8.	3.	0.22
2 COMBINED AT	HC327	175.	12.13	25.	7.	3.	10.10
DIVERSION TO	334D1	115.	11.93	22.	7.	2.	10.10
HYDROGRAPH AT	327RE	60.	12.13	3.	1.	0.	10.10
HYDROGRAPH AT	330S	225.	12.20	33.	10.	4.	0.31
DIVERSION TO	OR330	5.	8.53	3.	1.	0.	0.31
HYDROGRAPH AT	DT330	225.	12.20	33.	10.	3.	0.31
DIVERSION TO	341D	36.	12.20	2.	0.	0.	0.31
HYDROGRAPH AT	330R1	190.	12.20	31.	9.	3.	0.31
DIVERSION TO	343D	119.	12.20	11.	3.	1.	0.31
HYDROGRAPH AT	330R2	71.	12.20	20.	6.	2.	0.31
ROUTED TO	RM330	71.	12.40	20.	6.	2.	0.31
HYDROGRAPH AT	331S	246.	12.07	35.	12.	4.	0.22
DIVERSION TO	OR331	4.	6.13	3.	1.	0.	0.22
HYDROGRAPH AT	DT331	246.	12.07	35.	11.	4.	0.22
3 COMBINED AT	HC331	343.	12.13	56.	17.	6.	10.63
DIVERSION TO	334D2	156.	11.80	46.	15.	5.	10.63
HYDROGRAPH AT	331RE	187.	12.13	11.	3.	1.	10.63
HYDROGRAPH AT	R332	0.	0.07	0.	0.	0.	8.89
HYDROGRAPH AT	332S	110.	12.00	14.	4.	2.	0.09
DIVERSION TO	OR332	1.	4.27	1.	0.	0.	0.09
HYDROGRAPH AT	DT332	110.	12.00	14.	4.	2.	0.09
3 COMBINED AT	HC332	263.	12.07	24.	7.	2.	10.73
ROUTED TO	332RR	0.	0.07	0.	0.	0.	10.73
HYDROGRAPH AT	R322	864.	13.60	430.	135.	49.	8.89

HYDROGRAPH AT	R326	333.	12.53	66.	20.	7.	9.89
HYDROGRAPH AT	333S	207.	12.53	36.	10.	4.	0.53
3 COMBINED AT	HC333	1203.	12.67	552.	174.	63.	0.53
ROUTED TO	RM333	1189.	12.93	552.	175.	63.	0.53
HYDROGRAPH AT	R327	115.	11.93	22.	7.	2.	10.10
ROUTED TO	RM327	117.	12.33	22.	7.	2.	10.10
HYDROGRAPH AT	R331	156.	11.80	46.	15.	5.	10.63
ROUTED TO	RM331	156.	12.87	46.	15.	5.	10.63
HYDROGRAPH AT	334S	683.	12.00	80.	24.	9.	0.66
DIVERSION TO	OR334	4.	2.67	2.	0.	0.	0.66
HYDROGRAPH AT	DT334	683.	12.00	80.	24.	9.	0.66
4 COMBINED AT	HC334	1425.	12.87	665.	219.	79.	1.19
ROUTED TO	RM334	1407.	13.07	664.	219.	79.	1.19
HYDROGRAPH AT	335S	412.	12.13	49.	14.	5.	0.46
DIVERSION TO	OR335	143.	11.80	8.	2.	1.	0.46
HYDROGRAPH AT	DT335	412.	12.13	43.	11.	4.	0.46
3 COMBINED AT	HC335	1407.	13.07	697.	227.	82.	12.38
ROUTED TO	RM335	1317.	13.33	661.	215.	78.	12.38
HYDROGRAPH AT	330R2	119.	12.20	11.	3.	1.	0.31
HYDROGRAPH AT	343S	331.	12.13	48.	15.	5.	0.32
DIVERSION TO	OR343	102.	11.73	10.	3.	1.	0.32
HYDROGRAPH AT	DT343	331.	12.13	43.	12.	4.	0.32
2 COMBINED AT	HC343	448.	12.13	54.	14.	5.	0.32
ROUTED TO	343RR	40.	12.93	35.	14.	5.	0.32
ROUTED TO	RM343	40.	12.93	35.	14.	5.	0.32
HYDROGRAPH AT	349S	387.	12.13	63.	19.	7.	0.37
DIVERSION TO	OR349	120.	11.73	12.	4.	1.	0.37
HYDROGRAPH AT	DT349	387.	12.13	56.	15.	5.	0.37
ROUTED TO	349RR	421.	12.13	55.	15.	5.	0.37
DIVERSION TO	BEARD	331.	12.13	18.	5.	2.	0.37

HYDROGRAPH AT	349RE	90.	12.07	37.	10.	4.	0.37
2 COMBINED AT	HC349	130.	12.80	71.	25.	9.	0.69
ROUTED TO	RM344A	129.	12.87	71.	25.	9.	0.69
ROUTED TO	RM344B	129.	12.93	71.	25.	9.	0.69
HYDROGRAPH AT	344S	453.	12.33	79.	22.	8.	0.55
DIVERSION TO	OR344	90.	11.73	10.	3.	1.	0.55
HYDROGRAPH AT	DT344	453.	12.33	74.	19.	7.	0.55
2 COMBINED AT	HC344U	564.	12.33	142.	44.	16.	1.25
DIVERSION TO	344RE	250.	12.00	113.	36.	13.	1.25
HYDROGRAPH AT	344D	314.	12.33	29.	7.	3.	1.25
ROUTED TO	344RR	57.	12.87	25.	6.	2.	1.25
HYDROGRAPH AT	R344RE	250.	12.00	113.	36.	13.	1.25
2 COMBINED AT	HC344D	307.	12.87	138.	43.	15.	1.25
ROUTED TO	RM344	307.	12.87	138.	43.	15.	1.25
HYDROGRAPH AT	345S	238.	12.13	32.	10.	4.	0.30
3 COMBINED AT	HC345	1538.	13.33	802.	261.	94.	13.92
ROUTED TO	RM345	1514.	13.80	801.	261.	94.	13.92
HYDROGRAPH AT	346S	234.	12.33	36.	11.	4.	0.40
2 COMBINED AT	HC346	1517.	13.80	818.	270.	98.	14.32
HYDROGRAPH AT	AD1	1370.	0.07	1370.	1370.	1370.	0.10
ROUTED TO	RMAD1	1370.	0.07	1370.	1370.	1370.	0.10
HYDROGRAPH AT	347S	577.	12.33	87.	26.	9.	1.11
2 COMBINED AT	HC347	1947.	12.33	1457.	1396.	1379.	1.21
ROUTED TO	RM347	1942.	12.40	1457.	1396.	1379.	1.21
HYDROGRAPH AT	348S	19.	12.07	2.	1.	0.	0.05
2 COMBINED AT	HC348	1947.	12.40	1460.	1397.	1380.	1.25
2 COMBINED AT	HCSKB	3032.	12.87	2253.	1662.	1476.	15.58
HYDROGRAPH AT	R330	36.	12.20	2.	0.	0.	0.31
HYDROGRAPH AT	RBEARD	331.	12.13	18.	5.	2.	0.37
ROUTED TO	349RR2	0.	0.07	0.	0.	0.	0.37

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)
FOR STORM = 1 STORM AREA (SQ MI) =				0.01					
RM311	MANE	3.00	103.49	780.00	0.72	4.00	103.49	780.00	0.73

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4791E+02 EXCESS=0.0000E+00 OUTFLOW=0.4819E+02 BASIN STORAGE=0.1971E-02 PERCENT ERROR= -0.6

FOR STORM = 2 STORM AREA (SQ MI) =				3.00					
RM311	MANE	3.00	101.94	780.00	0.70	4.00	101.94	780.00	0.70

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4613E+02 EXCESS=0.0000E+00 OUTFLOW=0.4643E+02 BASIN STORAGE=0.1979E-02 PERCENT ERROR= -0.6

FOR STORM = 3 STORM AREA (SQ MI) =				10.00					
RM311	MANE	3.00	96.69	780.00	0.67	4.00	96.69	780.00	0.67

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4435E+02 EXCESS=0.0000E+00 OUTFLOW=0.4464E+02 BASIN STORAGE=0.1747E-02 PERCENT ERROR= -0.6

FOR STORM = 4 STORM AREA (SQ MI) =				20.00					
RM311	MANE	3.00	87.68	783.00	0.62	4.00	77.68	792.00	0.62

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4081E+02 EXCESS=0.0000E+00 OUTFLOW=0.4109E+02 BASIN STORAGE=0.1969E-02 PERCENT ERROR= -0.7

FOR STORM = 5 STORM AREA (SQ MI) =				30.00					
RM311	MANE	3.00	94.49	783.00	0.59	4.00	81.94	784.00	0.59

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3902E+02 EXCESS=0.0000E+00 OUTFLOW=0.3930E+02 BASIN STORAGE=0.1977E-02 PERCENT ERROR= -0.7

FOR STORM = 1 STORM AREA (SQ MI) =				0.01					
RM312	MANE	3.00	704.01	774.00	0.73	4.00	699.96	772.00	0.73

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1005E+03 EXCESS=0.0000E+00 OUTFLOW=0.1007E+03 BASIN STORAGE=0.1050E-02 PERCENT ERROR= -0.2

FOR STORM = 2 STORM AREA (SQ MI) =				3.00					
RM312	MANE	3.00	679.60	774.00	0.70	4.00	675.90	776.00	0.70

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9675E+02 EXCESS=0.0000E+00 OUTFLOW=0.9691E+02 BASIN STORAGE=0.1022E-02 PERCENT ERROR= -0.2

FOR STORM = 3 STORM AREA (SQ MI) = 10.00

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   RM312  MANE        3.00    655.27    774.00      0.67      4.00    652.37    776.00        0.67

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9301E+02 EXCESS=0.0000E+00 OUTFLOW=0.9316E+02 BASIN STORAGE=0.1128E-02 PERCENT ERROR=  -0.2

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM312  MANE        3.00    606.79    774.00      0.62      4.00    605.57    776.00        0.62

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8575E+02 EXCESS=0.0000E+00 OUTFLOW=0.8592E+02 BASIN STORAGE=0.1048E-02 PERCENT ERROR=  -0.2

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM312  MANE        3.00    581.93    774.00      0.59      4.00    581.58    776.00        0.59

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8208E+02 EXCESS=0.0000E+00 OUTFLOW=0.8226E+02 BASIN STORAGE=0.1052E-02 PERCENT ERROR=  -0.2

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM315  MANE        3.00     57.60    762.00      0.82      4.00     47.17    780.00        0.82

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2210E+02 EXCESS=0.0000E+00 OUTFLOW=0.2225E+02 BASIN STORAGE=0.1223E-02 PERCENT ERROR=  -0.7

     FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM315  MANE        3.00     55.72    762.00      0.79      4.00     47.76    780.00        0.79

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2134E+02 EXCESS=0.0000E+00 OUTFLOW=0.2151E+02 BASIN STORAGE=0.1343E-02 PERCENT ERROR=  -0.8

     FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM315  MANE        3.00     52.59    762.00      0.77      4.00     47.49    780.00        0.77

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2061E+02 EXCESS=0.0000E+00 OUTFLOW=0.2077E+02 BASIN STORAGE=0.1273E-02 PERCENT ERROR=  -0.8

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM315  MANE        3.00     50.05    765.00      0.72      4.00     47.48    764.00        0.71

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1923E+02 EXCESS=0.0000E+00 OUTFLOW=0.1939E+02 BASIN STORAGE=0.1322E-02 PERCENT ERROR=  -0.8

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM315  MANE        3.00     54.73    765.00      0.69      4.00     46.98    764.00        0.69

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1855E+02 EXCESS=0.0000E+00 OUTFLOW=0.1870E+02 BASIN STORAGE=0.1248E-02 PERCENT ERROR=  -0.8

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM316  MANE        2.60    349.98    769.60      0.69      4.00    349.28    768.00        0.69

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4345E+02 EXCESS=0.0000E+00 OUTFLOW=0.4361E+02 BASIN STORAGE=0.1157E-02 PERCENT ERROR=  -0.4
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FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM316  MANE        2.60    336.01    769.60      0.67      4.00    334.90    768.00        0.67

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4180E+02 EXCESS=0.0000E+00 OUTFLOW=0.4197E+02 BASIN STORAGE=0.1106E-02 PERCENT ERROR=  -0.4

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM316  MANE        2.60    321.88    769.60      0.64      4.00    320.40    768.00        0.64

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4017E+02 EXCESS=0.0000E+00 OUTFLOW=0.4033E+02 BASIN STORAGE=0.1014E-02 PERCENT ERROR=  -0.4

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM316  MANE        2.60    293.61    769.60      0.59      4.00    291.48    772.00        0.59

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3700E+02 EXCESS=0.0000E+00 OUTFLOW=0.3716E+02 BASIN STORAGE=0.1034E-02 PERCENT ERROR=  -0.5

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM316  MANE        2.60    279.38    769.60      0.57      4.00    277.88    772.00        0.57

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3543E+02 EXCESS=0.0000E+00 OUTFLOW=0.3560E+02 BASIN STORAGE=0.1156E-02 PERCENT ERROR=  -0.5

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM317  MANE        3.60     77.58    792.00      0.70      4.00     77.58    792.00        0.70

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4661E+02 EXCESS=0.0000E+00 OUTFLOW=0.4672E+02 BASIN STORAGE=0.8887E-03 PERCENT ERROR=  -0.2

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM317  MANE        3.40     76.00    802.40      0.68      4.00     75.96    796.00        0.68

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4490E+02 EXCESS=0.0000E+00 OUTFLOW=0.4500E+02 BASIN STORAGE=0.8888E-03 PERCENT ERROR=  -0.2

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM317  MANE        3.40     75.14    802.40      0.65      4.00     75.10    796.00        0.65

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4318E+02 EXCESS=0.0000E+00 OUTFLOW=0.4327E+02 BASIN STORAGE=0.8964E-03 PERCENT ERROR=  -0.2

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM317  MANE        3.40     72.85    799.00      0.60      4.00     72.73    800.00        0.60

TINUITY SUMMARY (AC-FT) - INFLOW=0.3974E+02 EXCESS=0.0000E+00 OUTFLOW=0.3984E+02 BASIN STORAGE=0.8758E-03 PERCENT ERROR=  -0.3

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM317  MANE        3.20     71.07    803.20      0.57      4.00     71.05    804.00        0.57
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3799E+02 EXCESS=0.0000E+00 OUTFLOW=0.3808E+02 BASIN STORAGE=0.8702E-03 PERCENT ERROR=  -0.2

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM319  MANE         2.20    175.13    759.00      0.66      4.00    174.63    756.00        0.67

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5594E+02 EXCESS=0.0000E+00 OUTFLOW=0.5615E+02 BASIN STORAGE=0.1242E-02 PERCENT ERROR=  -0.4

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM319  MANE         2.00    167.68    758.00      0.64      4.00    167.64    756.00        0.64

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5377E+02 EXCESS=0.0000E+00 OUTFLOW=0.5393E+02 BASIN STORAGE=0.1272E-02 PERCENT ERROR=  -0.3

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM319  MANE         2.00    160.69    756.00      0.61      4.00    160.69    756.00        0.61

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5160E+02 EXCESS=0.0000E+00 OUTFLOW=0.5179E+02 BASIN STORAGE=0.1255E-02 PERCENT ERROR=  -0.4

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM319  MANE         2.20    148.28    752.40      0.56      4.00    142.97    760.00        0.56

TINUITY SUMMARY (AC-FT) - INFLOW=0.4732E+02 EXCESS=0.0000E+00 OUTFLOW=0.4750E+02 BASIN STORAGE=0.1354E-02 PERCENT ERROR=  -0.4

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM319  MANE         2.20    137.10    759.00      0.54      4.00    135.49    760.00        0.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4511E+02 EXCESS=0.0000E+00 OUTFLOW=0.4529E+02 BASIN STORAGE=0.1275E-02 PERCENT ERROR=  -0.4

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM314  MANE         4.00    857.94    800.00      0.68      4.00    857.94    800.00        0.68

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2247E+03 EXCESS=0.0000E+00 OUTFLOW=0.2245E+03 BASIN STORAGE=0.4917E-03 PERCENT ERROR=   0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM314  MANE         4.00    828.00    800.00      0.65      4.00    828.00    800.00        0.65

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2160E+03 EXCESS=0.0000E+00 OUTFLOW=0.2158E+03 BASIN STORAGE=0.5466E-03 PERCENT ERROR=   0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM314  MANE         4.00    798.65    800.00      0.63      4.00    798.65    800.00        0.63

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2072E+03 EXCESS=0.0000E+00 OUTFLOW=0.2071E+03 BASIN STORAGE=0.5434E-03 PERCENT ERROR=   0.1
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM314  MANE        4.00    742.23    800.00      0.57      4.00    742.23    800.00        0.57

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1903E+03 EXCESS=0.0000E+00 OUTFLOW=0.1901E+03 BASIN STORAGE=0.4961E-03 PERCENT ERROR=   0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM314  MANE        4.00    715.00    800.00      0.55      4.00    715.00    800.00        0.55

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1818E+03 EXCESS=0.0000E+00 OUTFLOW=0.1816E+03 BASIN STORAGE=0.5060E-03 PERCENT ERROR=   0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM320  MANE        3.20     61.58    800.00      0.41      4.00     61.58    800.00        0.41

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2368E+02 EXCESS=0.0000E+00 OUTFLOW=0.2398E+02 BASIN STORAGE=0.2975E-02 PERCENT ERROR=  -1.3

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM320  MANE        3.20     63.26    800.00      0.39      4.00     63.26    800.00        0.39

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2280E+02 EXCESS=0.0000E+00 OUTFLOW=0.2310E+02 BASIN STORAGE=0.2975E-02 PERCENT ERROR=  -1.4

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE        3.00     59.50    798.00      0.38      4.00     58.39    800.00        0.38

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2192E+02 EXCESS=0.0000E+00 OUTFLOW=0.2222E+02 BASIN STORAGE=0.2823E-02 PERCENT ERROR=  -1.4

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE        3.00     63.51    801.00      0.35      4.00     55.97    800.00        0.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2016E+02 EXCESS=0.0000E+00 OUTFLOW=0.2046E+02 BASIN STORAGE=0.2824E-02 PERCENT ERROR=  -1.5

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE        3.00     63.07    801.00      0.33      4.00     51.12    804.00        0.33

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1927E+02 EXCESS=0.0000E+00 OUTFLOW=0.1957E+02 BASIN STORAGE=0.2861E-02 PERCENT ERROR=  -1.6

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM321  MANE        4.00    361.65    760.00      0.44      4.00    361.65    760.00        0.44

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5183E+02 EXCESS=0.0000E+00 OUTFLOW=0.5183E+02 BASIN STORAGE=0.5251E-03 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM321  MANE        4.00    342.88    760.00      0.42      4.00    342.88    760.00        0.42
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4951E+02 EXCESS=0.0000E+00 OUTFLOW=0.4952E+02 BASIN STORAGE=0.5498E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM321  MANE         4.00    323.96    760.00      0.40      4.00    323.96    760.00        0.40

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4709E+02 EXCESS=0.0000E+00 OUTFLOW=0.4711E+02 BASIN STORAGE=0.5553E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM321  MANE         4.00    285.90    760.00      0.36      4.00    285.90    760.00        0.36

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4243E+02 EXCESS=0.0000E+00 OUTFLOW=0.4244E+02 BASIN STORAGE=0.5123E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM321  MANE         4.00    266.42    760.00      0.34      4.00    266.42    760.00        0.34

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4008E+02 EXCESS=0.0000E+00 OUTFLOW=0.4009E+02 BASIN STORAGE=0.5170E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM323  MANE         4.00     35.57    780.00      0.91      4.00     35.57    780.00        0.91

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5328E+01 EXCESS=0.0000E+00 OUTFLOW=0.5362E+01 BASIN STORAGE=0.1121E-02 PERCENT ERROR=  -0.7

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM323  MANE         4.00     34.71    780.00      0.88      4.00     34.71    780.00        0.88

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5158E+01 EXCESS=0.0000E+00 OUTFLOW=0.5192E+01 BASIN STORAGE=0.1826E-02 PERCENT ERROR=  -0.7

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM323  MANE         4.00     33.88    772.00      0.86      4.00     33.88    772.00        0.86

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4987E+01 EXCESS=0.0000E+00 OUTFLOW=0.5021E+01 BASIN STORAGE=0.1789E-02 PERCENT ERROR=  -0.7

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM323  MANE         4.00     32.61    772.00      0.80      4.00     32.61    772.00        0.80

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4647E+01 EXCESS=0.0000E+00 OUTFLOW=0.4683E+01 BASIN STORAGE=0.1653E-02 PERCENT ERROR=  -0.8

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM323  MANE         4.00     31.86    772.00      0.77      4.00     31.86    772.00        0.77

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4474E+01 EXCESS=0.0000E+00 OUTFLOW=0.4510E+01 BASIN STORAGE=0.1616E-02 PERCENT ERROR=  -0.8
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FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM320  MANE        3.20     49.28    806.40      0.30      4.00     42.80    808.00        0.30

TINUITY SUMMARY (AC-FT) - INFLOW=0.1763E+02 EXCESS=0.0000E+00 OUTFLOW=0.1787E+02 BASIN STORAGE=0.1649E-02 PERCENT ERROR=  -1.4

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM320  MANE        3.20     42.67    809.60      0.29      4.00     42.34    808.00        0.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1700E+02 EXCESS=0.0000E+00 OUTFLOW=0.1726E+02 BASIN STORAGE=0.1652E-02 PERCENT ERROR=  -1.5

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE        3.00     42.08    807.00      0.28      4.00     41.80    808.00        0.28

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1637E+02 EXCESS=0.0000E+00 OUTFLOW=0.1662E+02 BASIN STORAGE=0.1586E-02 PERCENT ERROR=  -1.5

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE        3.00     49.47    810.00      0.26      4.00     38.15    820.00        0.26

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1510E+02 EXCESS=0.0000E+00 OUTFLOW=0.1536E+02 BASIN STORAGE=0.1575E-02 PERCENT ERROR=  -1.7

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE        3.00     45.75    810.00      0.25      4.00     39.11    812.00        0.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1445E+02 EXCESS=0.0000E+00 OUTFLOW=0.1470E+02 BASIN STORAGE=0.1583E-02 PERCENT ERROR=  -1.8

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM325  MANE        4.00    223.13    760.00      1.25      4.00    223.13    760.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3323E+02 EXCESS=0.0000E+00 OUTFLOW=0.3338E+02 BASIN STORAGE=0.1209E-02 PERCENT ERROR=  -0.5

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM325  MANE        4.00    213.12    760.00      1.20      4.00    213.12    760.00        1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3193E+02 EXCESS=0.0000E+00 OUTFLOW=0.3209E+02 BASIN STORAGE=0.1207E-02 PERCENT ERROR=  -0.5

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM325  MANE        4.00    202.44    760.00      1.15      4.00    202.44    760.00        1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3060E+02 EXCESS=0.0000E+00 OUTFLOW=0.3073E+02 BASIN STORAGE=0.1178E-02 PERCENT ERROR=  -0.4

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM325  MANE        4.00    176.97    764.00      1.05      4.00    176.97    764.00        1.05
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2796E+02 EXCESS=0.0000E+00 OUTFLOW=0.2812E+02 BASIN STORAGE=0.1235E-02 PERCENT ERROR=  -0.6

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM325  MANE         4.00    168.05    764.00      1.00      4.00    168.05    764.00        1.00

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2661E+02 EXCESS=0.0000E+00 OUTFLOW=0.2678E+02 BASIN STORAGE=0.1117E-02 PERCENT ERROR=  -0.6

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM330  MANE         4.00     71.50    744.00      0.75      4.00     71.50    744.00        0.75

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1246E+02 EXCESS=0.0000E+00 OUTFLOW=0.1248E+02 BASIN STORAGE=0.1460E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM330  MANE         4.00     71.27    744.00      0.74      4.00     71.27    744.00        0.74

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1223E+02 EXCESS=0.0000E+00 OUTFLOW=0.1225E+02 BASIN STORAGE=0.1433E-02 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM330  MANE         4.00     71.00    744.00      0.73      4.00     71.00    744.00        0.73

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1200E+02 EXCESS=0.0000E+00 OUTFLOW=0.1202E+02 BASIN STORAGE=0.1391E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM330  MANE         4.00     70.37    744.00      0.70      4.00     70.37    744.00        0.70

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1154E+02 EXCESS=0.0000E+00 OUTFLOW=0.1156E+02 BASIN STORAGE=0.1326E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM330  MANE         4.00     70.00    744.00      0.68      4.00     70.00    744.00        0.68

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1131E+02 EXCESS=0.0000E+00 OUTFLOW=0.1132E+02 BASIN STORAGE=0.1298E-02 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM333  MANE         4.00   1221.83    772.00     12.57      4.00   1221.83    772.00       12.57

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3571E+03 EXCESS=0.0000E+00 OUTFLOW=0.3573E+03 BASIN STORAGE=0.1133E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM333  MANE         4.00   1175.61    776.00     12.06      4.00   1175.61    776.00       12.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3426E+03 EXCESS=0.0000E+00 OUTFLOW=0.3428E+03 BASIN STORAGE=0.1136E-02 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
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RM333  MANE        4.00   1127.98    776.00     11.54      4.00   1127.98    776.00       11.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3279E+03 EXCESS=0.0000E+00 OUTFLOW=0.3281E+03 BASIN STORAGE=0.1130E-02 PERCENT ERROR=  -0.1

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM333  MANE        4.00   1031.69    776.00     10.54      4.00   1031.69    776.00       10.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2994E+03 EXCESS=0.0000E+00 OUTFLOW=0.2996E+03 BASIN STORAGE=0.1132E-02 PERCENT ERROR=  -0.1

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM333  MANE        4.00    983.53    776.00     10.03      4.00    983.53    776.00       10.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2850E+03 EXCESS=0.0000E+00 OUTFLOW=0.2852E+03 BASIN STORAGE=0.1086E-02 PERCENT ERROR=  -0.1

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM327  MANE        4.00    116.88    740.00      0.03      4.00    116.88    740.00        0.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1368E+02 EXCESS=0.0000E+00 OUTFLOW=0.1372E+02 BASIN STORAGE=0.1646E-02 PERCENT ERROR=  -0.2

     FOR STORM = 2  STORM AREA (SQ MI) =       3.00
RM327  MANE        4.00    116.95    740.00      0.02      4.00    116.95    740.00        0.02

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1344E+02 EXCESS=0.0000E+00 OUTFLOW=0.1347E+02 BASIN STORAGE=0.1615E-02 PERCENT ERROR=  -0.2

     FOR STORM = 3  STORM AREA (SQ MI) =      10.00
RM327  MANE        4.00    117.08    740.00      0.02      4.00    117.08    740.00        0.02

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1319E+02 EXCESS=0.0000E+00 OUTFLOW=0.1322E+02 BASIN STORAGE=0.1542E-02 PERCENT ERROR=  -0.3

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM327  MANE        4.00    117.53    740.00      0.02      4.00    117.53    740.00        0.02

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1271E+02 EXCESS=0.0000E+00 OUTFLOW=0.1274E+02 BASIN STORAGE=0.1455E-02 PERCENT ERROR=  -0.3

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM327  MANE        4.00    117.82    740.00      0.02      4.00    117.82    740.00        0.02

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1246E+02 EXCESS=0.0000E+00 OUTFLOW=0.1249E+02 BASIN STORAGE=0.1426E-02 PERCENT ERROR=  -0.3

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM331  MANE        4.00    156.00    772.00      0.05      4.00    156.00    772.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3030E+02 EXCESS=0.0000E+00 OUTFLOW=0.3028E+02 BASIN STORAGE=0.2432E-02 PERCENT ERROR=   0.1
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        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM331  MANE         4.00    156.00    772.00      0.05      4.00    156.00    772.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2982E+02 EXCESS=0.0000E+00 OUTFLOW=0.2980E+02 BASIN STORAGE=0.2392E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM331  MANE         4.00    156.00    772.00      0.05      4.00    156.00    772.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2934E+02 EXCESS=0.0000E+00 OUTFLOW=0.2932E+02 BASIN STORAGE=0.2303E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM331  MANE         4.00    156.00    772.00      0.05      4.00    156.00    772.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2838E+02 EXCESS=0.0000E+00 OUTFLOW=0.2833E+02 BASIN STORAGE=0.2099E-02 PERCENT ERROR=   0.2

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM331  MANE         4.00    156.00    772.00      0.05      4.00    156.00    772.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2788E+02 EXCESS=0.0000E+00 OUTFLOW=0.2783E+02 BASIN STORAGE=0.2062E-02 PERCENT ERROR=   0.2

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM334  MANE         4.00   1450.56    784.00      7.08      4.00   1450.56    784.00        7.08

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4496E+03 EXCESS=0.0000E+00 OUTFLOW=0.4494E+03 BASIN STORAGE=0.6820E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM334  MANE         4.00   1399.16    784.00      6.82      4.00   1399.16    784.00        6.82

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4331E+03 EXCESS=0.0000E+00 OUTFLOW=0.4329E+03 BASIN STORAGE=0.6844E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM334  MANE         4.00   1345.43    784.00      6.56      4.00   1345.43    784.00        6.56

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4165E+03 EXCESS=0.0000E+00 OUTFLOW=0.4163E+03 BASIN STORAGE=0.6807E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM334  MANE         4.00   1237.33    788.00      6.05      4.00   1237.33    788.00        6.05

TINUITY SUMMARY (AC-FT) - INFLOW=0.3840E+03 EXCESS=0.0000E+00 OUTFLOW=0.3839E+03 BASIN STORAGE=0.6831E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM334  MANE         4.00   1183.13    788.00      5.79      4.00   1183.13    788.00        5.79
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3677E+03 EXCESS=0.0000E+00 OUTFLOW=0.3675E+03 BASIN STORAGE=0.6413E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM335  MANE         4.00   1456.26    800.00      0.72      4.00   1456.26    800.00        0.72

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4722E+03 EXCESS=0.0000E+00 OUTFLOW=0.4724E+03 BASIN STORAGE=0.6594E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM335  MANE         4.00   1404.87    800.00      0.69      4.00   1404.87    800.00        0.69

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4549E+03 EXCESS=0.0000E+00 OUTFLOW=0.4552E+03 BASIN STORAGE=0.6630E-03 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM335  MANE         4.00   1351.43    800.00      0.66      4.00   1351.43    800.00        0.66

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4375E+03 EXCESS=0.0000E+00 OUTFLOW=0.4377E+03 BASIN STORAGE=0.6331E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM335  MANE         4.00   1240.87    800.00      0.61      4.00   1240.87    800.00        0.61

TINUITY SUMMARY (AC-FT) - INFLOW=0.4036E+03 EXCESS=0.0000E+00 OUTFLOW=0.4038E+03 BASIN STORAGE=0.6481E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM335  MANE         4.00   1184.17    800.00      0.59      4.00   1184.17    800.00        0.59

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3864E+03 EXCESS=0.0000E+00 OUTFLOW=0.3866E+03 BASIN STORAGE=0.6980E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM343  MANE         3.92     40.23    779.71      1.72      4.00     40.22    780.00        1.72

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2928E+02 EXCESS=0.0000E+00 OUTFLOW=0.2928E+02 BASIN STORAGE=0.3391E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM343  MANE         3.93     39.55    778.44      1.66      4.00     39.54    776.00        1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2835E+02 EXCESS=0.0000E+00 OUTFLOW=0.2835E+02 BASIN STORAGE=0.3337E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM343  MANE         3.95     38.87    777.20      1.61      4.00     38.86    776.00        1.61

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2742E+02 EXCESS=0.0000E+00 OUTFLOW=0.2742E+02 BASIN STORAGE=0.3476E-03 PERCENT ERROR=   0.0
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM343  MANE        3.97    37.53   778.68     1.50     4.00    37.53   776.00       1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2558E+02 EXCESS=0.0000E+00 OUTFLOW=0.2559E+02 BASIN STORAGE=0.3220E-03 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM343  MANE        3.99    36.87   777.48     1.45     4.00    36.86   776.00       1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2466E+02 EXCESS=0.0000E+00 OUTFLOW=0.2467E+02 BASIN STORAGE=0.3112E-03 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
  RM344A  MANE        4.00   129.78   772.00     1.35     4.00   129.78   772.00       1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4979E+02 EXCESS=0.0000E+00 OUTFLOW=0.4969E+02 BASIN STORAGE=0.9203E-03 PERCENT ERROR=   0.2

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
  RM344A  MANE        4.00   129.08   772.00     1.31     4.00   129.08   772.00       1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4847E+02 EXCESS=0.0000E+00 OUTFLOW=0.4837E+02 BASIN STORAGE=0.8356E-03 PERCENT ERROR=   0.2

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
  RM344A  MANE        4.00   128.37   772.00     1.27     4.00   128.37   772.00       1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4714E+02 EXCESS=0.0000E+00 OUTFLOW=0.4703E+02 BASIN STORAGE=0.9395E-03 PERCENT ERROR=   0.2

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
  RM344A  MANE        4.00   126.95   768.00     1.20     4.00   126.95   768.00       1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4450E+02 EXCESS=0.0000E+00 OUTFLOW=0.4437E+02 BASIN STORAGE=0.8767E-03 PERCENT ERROR=   0.3

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
  RM344A  MANE        4.00   126.28   768.00     1.17     4.00   126.28   768.00       1.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4322E+02 EXCESS=0.0000E+00 OUTFLOW=0.4309E+02 BASIN STORAGE=0.9072E-03 PERCENT ERROR=   0.3

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
  RM344B  MANE        4.00   129.73   776.00     1.35     4.00   129.73   776.00       1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4969E+02 EXCESS=0.0000E+00 OUTFLOW=0.4970E+02 BASIN STORAGE=0.1693E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
  RM344B  MANE        4.00   129.03   776.00     1.31     4.00   129.03   776.00       1.31
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4837E+02 EXCESS=0.0000E+00 OUTFLOW=0.4837E+02 BASIN STORAGE=0.1808E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
          RM344B  MANE         4.00    128.34    776.00      1.27      4.00    128.34    776.00        1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4703E+02 EXCESS=0.0000E+00 OUTFLOW=0.4704E+02 BASIN STORAGE=0.1723E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
          RM344B  MANE         4.00    126.93    776.00      1.20      4.00    126.93    776.00        1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4437E+02 EXCESS=0.0000E+00 OUTFLOW=0.4439E+02 BASIN STORAGE=0.1857E-02 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
          RM344B  MANE         4.00    126.22    776.00      1.17      4.00    126.22    776.00        1.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4309E+02 EXCESS=0.0000E+00 OUTFLOW=0.4311E+02 BASIN STORAGE=0.1930E-02 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM344  MANE         3.28    308.24    774.89      1.31      4.00    308.21    772.00        1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8687E+02 EXCESS=0.0000E+00 OUTFLOW=0.8687E+02 BASIN STORAGE=0.1179E-02 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM344  MANE         3.29    306.61    772.84      1.27      4.00    306.56    772.00        1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8431E+02 EXCESS=0.0000E+00 OUTFLOW=0.8431E+02 BASIN STORAGE=0.1172E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM344  MANE         3.29    304.95    770.78      1.23      4.00    304.95    772.00        1.23

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8173E+02 EXCESS=0.0000E+00 OUTFLOW=0.8175E+02 BASIN STORAGE=0.1273E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM344  MANE         3.31    301.01    770.45      1.15      4.00    300.98    772.00        1.16

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7670E+02 EXCESS=0.0000E+00 OUTFLOW=0.7672E+02 BASIN STORAGE=0.1293E-02 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM344  MANE         3.31    299.29    771.79      1.12      4.00    299.27    772.00        1.12

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7425E+02 EXCESS=0.0000E+00 OUTFLOW=0.7427E+02 BASIN STORAGE=0.1322E-02 PERCENT ERROR=   0.0
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FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM345  MANE         4.00   1692.54    824.00      0.78      4.00   1692.54    824.00        0.78

TINUITY SUMMARY (AC-FT) - INFLOW=0.5795E+03 EXCESS=0.0000E+00 OUTFLOW=0.5796E+03 BASIN STORAGE=0.1418E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM345  MANE         4.00   1634.98    824.00      0.75      4.00   1634.98    824.00        0.75

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5592E+03 EXCESS=0.0000E+00 OUTFLOW=0.5593E+03 BASIN STORAGE=0.1429E-02 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM345  MANE         4.00   1574.34    824.00      0.73      4.00   1574.34    824.00        0.73

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5385E+03 EXCESS=0.0000E+00 OUTFLOW=0.5386E+03 BASIN STORAGE=0.1395E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM345  MANE         4.00   1452.12    828.00      0.67      4.00   1452.12    828.00        0.67

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4986E+03 EXCESS=0.0000E+00 OUTFLOW=0.4986E+03 BASIN STORAGE=0.1203E-02 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM345  MANE         4.00   1389.42    828.00      0.64      4.00   1389.42    828.00        0.64

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4783E+03 EXCESS=0.0000E+00 OUTFLOW=0.4783E+03 BASIN STORAGE=0.1315E-02 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM347  MANE         4.00   1960.27    744.00    118.17      4.00   1960.27    744.00      118.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7602E+04 EXCESS=0.0000E+00 OUTFLOW=0.7602E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM347  MANE         4.00   1938.36    744.00    118.14      4.00   1938.36    744.00      118.14

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7600E+04 EXCESS=0.0000E+00 OUTFLOW=0.7600E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM347  MANE         4.00   1916.39    744.00    118.11      4.00   1916.39    744.00      118.11

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7598E+04 EXCESS=0.0000E+00 OUTFLOW=0.7598E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM347  MANE         4.00   1872.54    744.00    118.06      4.00   1872.54    744.00      118.06
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7595E+04 EXCESS=0.0000E+00 OUTFLOW=0.7595E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM347  MANE        4.00   1850.22    744.00    118.03      4.00   1850.22    744.00      118.04


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7593E+04 EXCESS=0.0000E+00 OUTFLOW=0.7593E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0



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

HEC-1 Input and Output Data

50-Year 24-Hour Storm
(File Name: 344-50.DAT)

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*          VERSION 4.0.1E              *
*                                      *
* RUN DATE  10/02/95  TIME  10:06:53   *
*                                      *
****************************************
```

```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 551-1748              *
*                                      *
****************************************
```

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

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

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

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

  1           ID    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
  2           ID    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
  3           ID    INDEX NO. ST-951350
  4           ID
  5           ID    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
  6           ID    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
  7           ID    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.
  8           ID
  9           ID    FILENAME:  344-50.DAT     KHE JOB NO. 0344
 10           ID    50-YEAR 24-HOUR DURATION STORM
 11           ID    SCS TYPE-II DISTRIBUTION WAS USED
              *
              *  APRIL 11, 1992
              *
              *  Based on FCDMC comments dated March 17,1992 we adjusted the Mannings "n"
              *  coefficient to reflect weighted averaging in lieu of log averaging.
              *  We also changed the S-graph from Phoenix Mountain to Phoenix Valley.
              *
              *  REVISED:  JULY 6, 1994   Revised to address FEMA comments in a letter dated
              *                           November 15, 1993.
              *
              *  REVISED:  SEPTEMBER 12, 1994   Revised to address FEMA comments in a tele-
              *                                 phone conversation on August 10, 1994.
              *
              *  FINAL HEC-1 INPUT FILE - OCTOBER 24, 1994
              *
              *
              *DIAGRAM
 12           IT       4 10OCT92    1200    1000
 13           IO       5
 14           IN      30
 15           JD    3.56    0.01
              * KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
 16           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD   3.489     3.0
 22           JD   3.418    10.0
 23           JD   3.275    20.0
 24           JD   3.204    30.0

 25           KK    310S
 26           KM   RUNOFF GENERATED ON SUB-BASIN 310
 27           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 28           KM    L= 1.36 mi.  Lca= 0.64 mi.  S= 282 ft/mi.  Kn= .053  LAG= 24.78 min.
 29           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 30           BA    .679
 31           LG     .15     .25    8.60     .07    2.50
 32           UI     92.    221.    428.    550.    708.   1065.    985.    751.    583.    442.
 33           UI    263.    158.    118.     83.     28.     28.     28.     28.      0.      0.
 34           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 35           KK   311S
 36           KM   RUNOFF GENERATED ON SUB-BASIN 311
 37           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 38           KM    L= 1.52 mi.  Lca= 0.71 mi.  S=  260 ft/mi.  Kn= .053  LAG= 27.31 min.
 39           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 40           BA    .569
 41           LG     .15     .33    7.78    .105    6.53
 42           UI     70.    139.    300.    389.    483.    643.    867.    677.    543.    429.
 43           UI    334.    211.    122.    102.     70.     34.     22.     22.     22.     22.
 44           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 45           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 46           KK   HC311
 47           KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 310 & 311
 48           HC       2

 49           KK   311RR
              * KO     1
 50           KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO. 1
 51           RS       1    ELEV      12
 52           SV       0     2.2    11.6    35.4    81.1   156.4
 53           SE      12      14      16      18      20      22
 54           SL   15.62    9.62     0.6     0.5
 55           SS      20     200     3.0     1.5

 56           KK   RM311
 57           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 312
 58           KM            1) Reach Length = 8800 ft.
 59           RD
 60           RC     .05     .04     .05    8800   .0085
 61           RX       0     100     120     125     140     145     165     265
 62           RY       4       2       1       0       0       1       2       4

 63           KK    312S
 64           KM   RUNOFF GENERATED ON SUB-BASIN 312
 65           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 66           KM    L= 2.17 mi.  Lca= 0.91 mi.  S= 36 ft/mi.  Kn= .038  LAG= 35.87 min.
 67           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 68           BA   1.348
 69           LG     .35     .28    8.28    .082    0.00
 70           UI    127.    127.    419.    572.    694.    807.    963.   1277.   1587.   1311.
 71           UI   1086.    926.    770.    636.    497.    303.    220.    207.    127.    127.
 72           UI     43.     39.     39.     39.     39.     39.      0.      0.      0.      0.
 73           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 74           KK   HC312
 75           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 312 WITH ROUTED FLOW FROM 311
 76           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 77           KK   RM312
 78           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 312 THROUGH 314
 79           KM            1) Reach Length = 4640 ft.
 80           RD
 81           RC     .05     .04     .05    4640   .0060
 82           RX       0       5     205     215     235     245     445     450
 83           RY       5       3       1       0       0       1       3       5

 84           KK    315S
 85           KM   RUNOFF GENERATED ON SUB-BASIN 315
 86           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 87           KM    L= 1.16 mi.  Lca= 0.37 mi.  S= 287 ft/mi.  Kn= .053  LAG= 18.88 min.
 88           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 89           BA    .508
 90           LG     .15     .30    8.05    .093    6.65
 91           UI     91.    332.    515.    724.   1076.    791.    567.    379.    178.    118.
 92           UI     63.     28.     28.     28.      0.      0.      0.      0.      0.      0.
 93           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 94           KK   315RR
              * KO     1
 95           KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.2
 96           RS       1    ELEV      13
 97           SV       0     0.3     3.0    10.2    25.3    51.6
 98           SE      13      14      16      18      20      22
 99           SL   14.84    4.59     0.6     0.5
100           SS      21      50     3.0     1.5

101           KK   RM315
102           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 316
103           KM            1) Reach Length = 7480 ft.
104           RD
105           RC     .05     .04     .05    7480   .0099
106           RX      60     140     190     200     210     220     270     350
107           RY       5       4       2       0       0       2       4       5

108           KK    316S
109           KM   RUNOFF GENERATED ON SUB-BASIN 316
110           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
111           KM    L= 1.36 mi.  Lca= 0.86 mi.  S= 55 ft/mi.  Kn= .038  LAG= 27.12 min.
112           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
113           BA    .672
114           LG     .25     .37    7.14     .14     .00
115           UI     83.    167.    359.    466.    578.    781.   1024.    795.    637.    501.
116           UI    389.    237.    144.    116.     83.     35.     26.     26.     26.     26.
117           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
118           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

119           KK   HC316
120           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 316 WITH ROUTED FLOW FROM 315
121           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 122          KK   RM316
 123          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 316 THROUGH 314
 124          KM            1) Reach Length = 4720 ft.
 125          RD
 126          RC     .05     .04     .05    4720   .0059
 127          RX       0       5     205     215     235     245     445     450
 128          RY       5       3       1       0       0       1       3       5

 129          KK    317S
 130          KM   RUNOFF GENERATED ON SUB-BASIN 317
 131          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 132          KM    L= 1.54 mi.  Lca= 0.58 mi.  S= 300 ft/mi.  Kn= .053  LAG= 24.74 min.
 133          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 134          BA    .704
 135          LG     .15     .35    7.50    .117    9.37
 136          UI     96.    230.    445.    572.    737.   1109.   1019.    778.    603.    456.
 137          UI    270.    164.    121.     84.     29.     29.     29.     29.      0.      0.
 138          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 139          KK    318S
 140          KM   RUNOFF GENERATED ON SUB-BASIN 318
 141          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 142          KM    L= 1.94 mi.  Lca= 1.09 mi.  S= 288 ft/mi.  Kn= .053  LAG= 34.59 min.
 143          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 144          BA    .542
 145          LG     .15     .33    7.78    .105    7.49
 146          UI     53.     54.    185.    246.    296.    350.    421.    576.    651.    507.
 147          UI    428.    355.    295.    240.    168.     94.     88.     65.     53.     28.
 148          UI     16.     16.     16.     16.     16.      0.      0.      0.      0.      0.
 149          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 150          KK   HC317
 151          KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 317 & 318
 152          HC       2

 153          KK   317RR
              * KO     1
 154          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.3
 155          RS       1    ELEV      13
 156          SV       0     1.3    13.2    41.3    90.4   159.6
 157          SE      13      14      16      18      20      22
 158          SL   15.42    9.62     0.6     0.5
 159          SS      21      50     3.0     1.5

 160          KK   RM317
 161          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 319
 162          KM            1) Reach Length = 5000 ft.
 163          RD
 164          RC     .05     .04     .05    5000   .0116
 165          RX      60     160     190     200     210     220     250     350
 166          RY       4       3       2       0       0       2       3       4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 167          KK   319S
 168          KM   RUNOFF GENERATED ON SUB-BASIN 319
 169          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 170          KM    L= 0.99 mi.  Lca= 0.51 mi.  S= 63 ft/mi.  Kn= .045  LAG= 22.75 min.
 171          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 172          BA   .339
 173          LG    .25     .39    5.98    .198     .00
 174          UI    50.    138.    250.    323.    447.    606.    451.    346.    259.    160.
 175          UI    86.     63.     40.     15.     15.     15.      0.      0.      0.      0.
 176          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 177          KK   HC319
 178          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 319 WITH ROUTED FLOW FROM 317
 179          HC      2

 180          KK   RM319
 181          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 319 THROUGH 314
 182          KM           1) Reach Length = 6360 ft.
 183          RD
 184          RC    .05     .04     .05    6360   .0066
 185          RX      0       5     205     215     235     245     445     450
 186          RY      5       3     1.5       0       0     1.5       3       5

 187          KK    314S
 188          KM   RUNOFF GENERATED ON SUB-BASIN 314
 189          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 190          KM    L= 1.81 mi.  Lca= 0.71 mi.  S= 41 ft/mi.  Kn= .038  LAG= 29.72 min.
 191          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 192          BA    .846
 193          LG    .339    .365    4.43    .256    2.78
 194          UI     96.    160.    379.    501.    606.    751.   1073.   1118.    858.    705.
 195          UI    564.    449.    293.    168.    152.     96.     70.     29.     29.     29.
 196          UI     29.     29.      0.      0.      0.      0.      0.      0.      0.      0.
 197          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 198          KK   HC314
 199          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 314 WITH ROUTED FLOWS FROM 312, 316 & 319
 200          HC      4

 201          KK   314RR
              * KO     1
 202          KM   ROUTE FLOW THROUGH PINNACLE PEAK ROAD CULVERTS
 203          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 204          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 205          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 206          RS      1    ELEV      11
 207          SV      0     .05     1.2     9.1    35.6      65    94.5     139
 208          SE     11      12      14      16      18      19      20      21
 209          SQ      0      54     254     528     936    2344    5278   10401
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 210          KK   RM314
 211          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM SUB-BASIN 314 THROUGH 322
 212          KM           1) Reach Length = 1920 ft.
 213          RD
 214          RC     .05     .04     .05    1920   .0026
 215          RX       0      50     150     165     175     190     240     250
 216          RY       6       5       4       0       0       4       5       7

 217          KK    320S
 218          KM   RUNOFF GENERATED ON SUB-BASIN 320
 219          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 220          KM    L= 1.74 mi.  Lca= 0.72 mi.  S= 218 ft/mi.  Kn= .053  LAG= 29.89 min.
 221          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 222          BA   1.106
 223          LG    .149    .345    7.50    .116    7.45
 224          UI    125.    205.    491.    649.    783.    968.   1374.   1472.   1125.    928.
 225          UI    743.    595.    399.    220.    204.    125.     99.     38.     38.     38.
 226          UI     38.     38.      0.      0.      0.      0.      0.      0.      0.      0.
 227          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 228          KK   DT320
 229          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.8 AC-FT FROM SUB-BASIN 320
 230          KM                                             (Hydrograph identified as OR320)
 231          KM                                           2) Balance of runoff continues on.
 232          KM                                             (Hydrograph identified as DT320)
 233          DT   OR320     1.8
 234          DI       0   10000
 235          DQ       0   10000

 236          KK   320RR
              * KO     1
 237          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURES NO. 4 & 5
 238          RS       1    ELEV      13
 239          SV       0     0.6    12.4    48.7   119.5   230.3
 240          SE      13      14      16      18      20      22
 241          SL   14.80   11.66     0.6     0.5
 242          SS      20     200     3.0     1.5

 243          KK   320RE
 244          KM   DIVERT OUTFLOW FROM STRUCTURE NO.5 INTO SUB-BASIN 325
 245          KM   REMAINING OUTFLOW INTO SUB-BASIN 321 IS FROM STRUCTURE NO.4
 246          DT    325D
 247          DI       0      13      63     102     128     150
 248          DQ       0       5      28      42      52      60

 249          KK   RM320
 250          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION FOR SUB-BASIN 320 THROUGH 321
 251          KM           1) Reach Length = 11,160 ft.
 252          RD
 253          RC     .05     .04     .05   11160   .0085
 254          RX       0       5     155     160     170     175     325     330
 255          RY       3       2       1       0       0       1       2       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 256          KK   321S
 257          KM   RUNOFF GENERATED ON SUB-BASIN 321
 258          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 259          KM    L= 2.27 mi.  Lca= 1.24 mi.  S= 57 ft/mi.  Kn= .038  LAG= 37.61 min.
 260          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 261          BA   1.121
 262          LG    .298    .349    3.77    .349    1.42
 263          UI    100.    100.    302.    436.    531.    614.    726.    887.   1220.   1164.
 264          UI    934.    805.    675.    570.    481.    344.    213.    172.    156.    100.
 265          UI    100.     32.     31.     31.     31.     31.     31.     31.      0.      0.
 266          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 267          KK   HC321
 268          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 321 WITH ROUTED FLOW FROM 320
 269          HC       2

 270          KK   RM321
 271          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 321 THROUGH 322
 272          KM            1) Reach Length = 2760 ft.
 273          RD
 274          RC     .05     .04     .05    2760   .0051
 275          RX       0      50     150     165     175     190     240     250
 276          RY       6       5       4       0       0       4       5       7

 277          KK    323S
 278          KM   RUNOFF GENERATED ON SUB-BASIN 323
 279          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 280          KM    L= 0.92 mi.  Lca= 0.34 mi.  S= 61 ft/mi.  Kn= .038  LAG= 16.11 min.
 281          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 282          BA     .11
 283          LG     .10     .25    4.24    .433   25.12
 284          UI     27.     99.    150.    249.    218.    147.     90.     39.     24.      7.
 285          UI      7.      7.      0.      0.      0.      0.      0.      0.      0.      0.
 286          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 287          KK   323RR
              * KO     1
 288          KM   ROUTE FLOW THROUGH ON-SITE DETENTION
 289          RS       1    ELEV    36.1
 290          SV       0     0.5     3.9    12.8    29.3    57.8
 291          SE    36.1      38      40      42      44      46
 292          SL   37.65     6.6     0.6     0.5
 293          SS      45     100     3.0     1.5

 294          KK   RM323
 295          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION THROUGH SUB-BASIN 322
 296          KM            1) Reach Length = 5200 ft.
 297          RD
 298          RC     .05     .04     .05    5200   .0063
 299          RX       0       5     205     215     225     235     435     440
 300          RY       5       3       1       0       0       1       3       5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 301          KK   322S
 302          KM   RUNOFF GENERATED ON SUB-BASIN 322
 303          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 304          KM    L= 1.15 mi.  Lca= 0.44 mi.  S= 36 ft/mi.  Kn= .036  LAG= 20.26 min.
 305          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 306          BA    .345
 307          LG    .328    .341    3.77    .348    7.52
 308          UI     57.    190.    310.    415.    653.    571.    418.    303.    177.     97.
 309          UI     63.     31.     18.     18.     18.      0.      0.      0.      0.      0.
 310          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 311          KK   DT322
 312          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.2 AC-FT FROM SUB-BASIN 322
 313          KM                                              (Hydrograph identified as OR322)
 314          KM                                            2) Balance of runoff continues on.
 315          KM                                              (Hydrograph identified as DT322)
 316          DT   OR322     1.2
 317          DI       0   10000
 318          DQ       0   10000

 319          KK   HC322
 320          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 322 WITH ROUTED FLOW FROM 314, 321 & 323
 321          HC       4

 322          KK   322RR
 323          KM   ROUTE FLOW THROUGH DETENTION BEHIND 2 - 8 x 7 RCBC AT I-17
 324          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 325          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 326          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 327          RS       1    STOR      -1
 328          SV       0    .001     .22    1.16    8.44      17      30      49      67      76
 329          SE     3.8       4       6       8      10      11      12      13    13.7      14
 330          SQ       0       1     176     414     680     880    1091    1593    2678    3746

 331          KK   322RE
 332          KM   DIVERT OVERFLOWS SOUTH TO SINGLE CULVERT AT MH PARK, AND WEST ONTO I-17.
 333          KM   DQ IS DISCHARGE THROUGH 2-8x7 CULVERT (MAX. 1312 CFS); DI IS TOTAL DISCHARGE.
 334          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 335          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 336          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 337          DT   333D1
 338          DI       1     880    1091    1593    2678    3746
 339          DQ       1     880    1060    1184    1296    1312

 340          KK    326D
 341          KM   SEPARATE OUT WEST OVERFLOWS ONTO THE FRONTAGE ROAD AND MAINLINE I-17.
 342          KM   THESE FLOWS HEAD SOUTH AND EVENTUALLY ENTER THE DEER VALLEY ROAD INTERCHANGE.
 343          KM   REMAINING FLOWS CONTINUE SOUTH TO 6x7 BOX CULVERT ON SCATTER WASH AT I-17.
 344          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 345          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 346          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 347          DT    332D
 348          DI      31     409    1382    2434
 349          DQ       0       0     215     840
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 350          KK   325RD
 351          KM   RETRIEVE FLOW FROM C.A.P. STRUCTURE NO.5
 352          DR    325D

 353          KK   RM320
 354          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM STRUCTURE NO.5 THROUGH 325.
 355          KM            1) Reach Length = 8560 ft.
 356          RD
 357          RC     .05     .04     .05    8560   .0082
 358          RX       0      10     200     220     235     255     440     450
 359          RY       5       4       2       0       0       2       4       5

 360          KK    325S
 361          KM   RUNOFF GENERATED ON SUB-BASIN 325
 362          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 363          KM    L= 1.71 mi.  Lca= 0.65 mi.  S= 60 ft/mi.  Kn= .037  LAG= 25.48 min.
 364          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 365          BA    .502
 366          LG    .266    .333    3.87    .372    7.02
 367          UI     66.    151.    300.    388.    491.    718.    756.    566.    445.    343.
 368          UI    234.    121.    100.     66.     32.     20.     20.     20.     20.      0.
 369          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 370          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 371          KK   HC325
 372          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 325 WITH ROUTED FLOW FROM 320
 373          HC       2

 374          KK   RM325
 375          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 325 THROUGH 326
 376          KM            1) Reach Length = 6200 ft.
 377          RD
 378          RC     .05     .04     .05    6200   .0068
 379          RX      80     130     195     220     235     260     325     375
 380          RY       6       5       3       0       0       3       5       6

 381          KK    326S
 382          KM   RUNOFF GENERATED ON SUB-BASIN 326
 383          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 384          KM    L= 2.01 mi.  Lca= 0.90 mi.  S= 37 ft/mi.  Kn= .036  LAG= 32.70 min.
 385          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 386          BA    .498
 387          LG    .312    .335    4.14    .428   12.87
 388          UI     51.     65.    186.    252.    299.    361.    452.    635.    555.    446.
 389          UI    374.    305.    250.    176.    102.     86.     64.     51.     26.     16.
 390          UI     16.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 391          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 392          KK   DT326
 393          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.7 AC-FT FROM SUB-BASIN 326
 394          KM                                               (Hydrograph identified as OR326)
 395          KM                                             2) Balance of runoff continues on.
 396          KM                                               (Hydrograph identified as DT326)
 397          DT   OR326     4.7
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          DI       0   10000
 399          DQ       0   10000

 400          KK   HC326
 401          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 326 WITH ROUTED FLOW FROM 325 AND
 402          KM   OVERFLOW FROM 322.
 403          HC       3

 404          KK   326RE
 405          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x7 RCBC (MAX. Q = 510 CFS)
 406          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 407          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 408          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 409          DT   333D2
 410          DI       0       1     510     511    1000    2000
 411          DQ       0       1     510     510     510     510

 412          KK    327S
 413          KM   RUNOFF GENERATED ON SUB-BASIN 327
 414          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 415          KM    L= 1.21 mi.  Lca= 0.53 mi.  S= 38 ft/mi.  Kn= .030  LAG= 18.28 min.
 416          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 417          BA    .216
 418          LG    .193    .287    3.61    .305   47.32
 419          UI     40.    152.    232.    336.    466.    328.    231.    143.     68.     44.
 420          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 421          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 422          KK   DT327
 423          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.7 AC-FT FROM SUB-BASIN 327
 424          KM                                              (Hydrograph identified as OR327)
 425          KM                                            2) Balance of runoff continues on.
 426          KM                                              (Hydrograph identified as DT327)
 427          DT   OR327     1.7
 428          DI       0   10000
 429          DQ       0   10000

 430          KK   HC327
 431          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 327 WITH OVERFLOW FROM 326
 432          HC       2

 433          KK   327RE
 434          KM   DIVERT FLOW ACROSS I-17 THROUGH 65"x40" CMP AT ADOBE DR.
 435          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 436          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 437          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 438          DT   334D1
 439          DI       0     115     116    1000    3000
 440          DQ       1     115     115     115     115
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 441          KK    330S
 442          KM   RUNOFF GENERATED ON SUB-BASIN 330
 443          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 444          KM    L= 1.67 mi.  Lca= 0.87 mi.  S= 28 ft/mi  Kn= .024  LAG= 21.15 min.
 445          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 446          BA    .310
 447          LG    .192    .272    3.77    .325   36.43
 448          UI     49.    153.    259.    341.    517.    541.    390.    288.    197.     96.
 449          UI     69.     43.     15.     15.     15.      0.      0.      0.      0.      0.
 450          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 451          KK   DT330
 452          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.9 AC-FT FROM SUB-BASIN 330
 453          KM                                             (Hydrograph identified as OR330)
 454          KM                                            2) Balance of runoff continues on.
 455          KM                                             (Hydrograph identified as DT330)
 456          DT   OR330     1.9
 457          DI       0   10000
 458          DQ       0   10000

 459          KK   330R1
 460          KM   DIVERT FLOW SOUTH ALONG 19TH AVENUE AT DEER VALLEY RD.
 461          DT    341D
 462          DI       0     145     418    2248    4002
 463          DQ       0       0     121     550    1220

 464          KK   330R2
 465          KM   DIVERT FLOW SOUTH INTO SUB-BASIN 343.  THIS DIVERT IS USED TO SIMULATE
 466          KM   THE CROWN OVERTOPPING OF DEER VALLEY RD.
 467          DT    343D
 468          DI       0      55     328     746
 469          DQ       0       0     241     487

 470          KK   RM330
 471          KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 330 THROUGH 331
 472          KM            1) Reach Length = 3850 ft.
 473          RD
 474          RC    .020    .020    .030    3850   .0057
 475          RX       0      .5    45.5    45.5    50.5    55.5    60.5    60.5
 476          RY       5       3     2.3     2.8     2.8       3       4       5

 477          KK    331S
 478          KM   RUNOFF GENERATED ON SUB-BASIN 331
 479          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 480          KM    L= 1.25 mi.  Lca= 0.32 mi.  S= 35 ft/mi.  Kn= .027  LAG= 13.97 min.
 481          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 482          BA     .22
 483          LG    .141    .171    8.28    .078   68.37
 484          UI     77.    256.    409.    596.    384.    228.     94.     46.     16.     16.
 485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 486          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 487          KK   DT331
 488          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.6 AC-FT FROM SUB-BASIN 331
 489          KM                                            (Hydrograph identified as OR331)
 490          KM                                          2) Balance of runoff continues on.
 491          KM                                            (Hydrograph identified as DT331)
 492          DT   OR331     1.6
 493          DI       0   10000
 494          DQ       0   10000

 495          KK   HC331
 496          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 331 WITH OVERFLOW FROM 327 & 330.
 497          HC       3

 498          KK   331RE
 499          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x3 RCBC AT LOUISE DR.
 500          KM   DI REPRESENTS TOTAL FLOW TO DEPRESSED INTERCHANGE AT DEER VALLEY RD.
 501          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 502          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 503          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 504          DT   334D2
 505          DI       0       1     156     157    1000    3000
 506          DQ       0       1     156     156     156     156

 507          KK    R332
 508          KM   RETRIEVE HYDROGRAPH OF OVERFLOW FROM SUB-BASIN 322 ONTO I-17 MEDIAN
 509          DR    332D

 510          KK    332S
 511          KM   RUNOFF GENERATED ON SUB-BASIN 332
 512          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 513          KM    L= 0.40 mi.  Lca= 0.07 mi.  S= 65 ft/mi.  Kn= .027  LAG= 6.00 min.
 514          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 515          BA    .094
 516          LG    .159    .189    8.20    .046   48.74
 517          UI    190.    497.    185.     29.      0.      0.      0.      0.      0.      0.
 518          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 519          KK   DT332
 520          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.4 AC-FT FROM SUB-BASIN 332
 521          KM                                            (Hydrograph identified as OR332)
 522          KM                                          2) Balance of runoff continues on.
 523          KM                                            (Hydrograph identified as DT332)
 524          DT   OR332     0.4
 525          DI       0   10000
 526          DQ       0   10000

 527          KK   HC332
 528          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 332 WITH OVERFLOWS FROM SUB-BASIN 322
 529          KM   AND 331 (TOTAL FLOW INTO DEER VALLEY RD. INTERCHANGE)
 530          HC       3
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

531         KK   332RR
532         KM   ROUTE FLOW THROUGH DEPRESSED SECTION AT DEER VALLEY RD. INTERCHANGE TO
533         KM   WEST SIDE OF I-17.
            * KO     1
534         RS       1    ELEV     82
535         SV       0     1.4    10.7    28.9    42.5      56      69    84.5   114.8
536         SE      82      84      88      92      94    95.6    96.8      98     100
537         SQ       0       0       0       0       0       1    1428    7646   26741
            *
            * THE FOLLOWING HEC-1 COMMAND WAS REMOVED FROM THE FILE SINCE NO OUTFLOW
            * OCCURRED FROM THE DEER VALLEY RD. INTERCHANGE.
            *
            * KK RM332
            * KM MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DEER VALLEY RD. INTERCHANGE
            * KM THROUGH SUB-BASIN 335.
            * KM          1) Reach Length = 5760 ft.
            * RD
            * RC  .045     .04    .045    5760   .0068
            * RX     0       5      55      60      70      75     125     130
            * RY     3       2       1       0       0       1       2       3

538         KK    R322
539         KM   RETRIEVE HYDROGRAPH FOR NORTH BRANCH OF SCATTER WASH
540         KM   (ALSO KNOWN AS FLOW THROUGH 2-8x7 RCBC)
541         DR   333D1

542         KK    R326
543         KM   RETRIEVE HYDROGRAPH FOR SOUTH BRANCH OF SCATTER WASH
544         KM   (ALSO KNOWN AS FLOW THROUGH 6x7 RCBC)
545         DR   333D2

546         KK    333S
547         KM   RUNOFF GENERATED ON SUB-BASIN 333
548         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
549         KM    L= 2.34 min.  Lca= 0.96 mi.  S= 27 ft/mi.  Kn= .038  LAG= 39.79 min.
550         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
551         BA    .533
552         LG    .311    .354    5.98    .198   10.71
553         UI     45.     45.    119.    187.    229.    264.    307.    360.    476.    574.
554         UI    471.    395.    345.    289.    247.    208.    150.     93.     77.     73.
555         UI     45.     45.     21.     14.     14.     14.     14.     14.     14.      0.
556         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
557         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

558         KK   HC333
559         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 333 WITH DIVERTED FLOWS FROM 322 & 326.
560         HC       3

561         KK   RM333
562         KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 333 THROUGH 334
563         KM           1) Reach Length = 5160 ft.
564         RD
565         RC    .055    .045    .055    5160   .0056
566         RX       0      60     110     145     170     195     250     400
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 567          RY       7       6       2       0       0       2       6       7

 568          KK    R327
 569          KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 327
 570          DR   334D1

 571          KK   RM327
 572          KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
 573          KM            1) Reach Length = 5100 ft.
 574          RD
 575          RC     .05     .04     .05    5100   .0073
 576          RX       0      10      30      33      48      51     151     200
 577          RY       3       2     1.5       0       0     1.5       2       3

 578          KK    R331
 579          KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 331
 580          DR   334D2

 581          KK   RM331
 582          KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
 583          KM            1) Reach Length = 5000 ft.
 584          RD
 585          RC     .03    .045    .045    5000   .0070
 586          RX       0      10      30      33      48      51     151     200
 587          RY       3       2     1.5       0       0     1.5       2       3

 588          KK    334S
 589          KM   RUNOFF GENERATED ON SUB-BASIN 334
 590          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 591          KM    L= 1.01 mi.  Lca= 0.51 mi.  S= 272 ft/mi.  Kn= .033  LAG= 12.73 min.
 592          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 593          BA    .657
 594          LG    .161    .229    8.28    .081   32.97
 595          UI    285.    902.   1587.   1729.   1031.    462.    217.     67.     53.      0.
 596          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 597          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 598          KK   DT334
 599          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.8 AC-FT FROM SUB-BASIN 334
 600          KM                                              (Hydrograph identified as OR334)
 601          KM                                            2) Balance of runoff continues on.
 602          KM                                              (Hydrograph identified as DT334)
 603          DT   OR334     0.8
 604          DI       0   10000
 605          DQ       0   10000

 606          KK   HC334
 607          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 334 WITH ROUTED FLOWS FROM 327, 331 & 333
 608          HC       4
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 609        KK   RM334
 610        KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 334 THROUGH 335
 611        KM           1) Reach Length = 2980 ft.
 612        RD
 613        RC     .05    .045     .05    2980   .0044
 614        RX       0     190     230     240     260     270     330     400
 615        RY       7       4       2       0       0       2       6       7

 616        KK    335S
 617        KM   RUNOFF GENERATED ON SUB-BASIN 335
 618        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 619        KM    L= 1.11 mi.  Lca= 0.56 mi.  S= 38 ft/mi.  Kn= .033  LAG= 19.87 min.
 620        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 621        BA    .463
 622        LG    .206     .22    8.60     .07   14.96
 623        UI     78.    267.    430.    581.    914.    751.    550.    394.    210.    130.
 624        UI     78.     30.     24.     24.      0.      0.      0.      0.      0.      0.
 625        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 626        KK   DT335
 627        KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.8 AC-FT FROM SUB-BASIN 335
 628        KM                                              (Hydrograph identified as OR335)
 629        KM                                            2) Balance of runoff continues on.
 630        KM                                              (Hydrograph identified as DT335)
 631        DT   OR335     4.8
 632        DI       0   10000
 633        DQ       0   10000

 634        KK   HC335
 635        KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 335 WITH ROUTED FLOWS FROM 332 & 334
 636        HC       3

 637        KK   RM335
 638        KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 335 THROUGH 345
 639        KM           1) Reach Length = 4240 ft.
 640        RD
 641        RC     .05     .04     .05    4240   .0061
 642        RX       0      10     280     285     335     340     500     510
 643        RY      10       8       4       2       2       4       8      10

 644        KK   330R2
 645        KM   RETRIEVE DIVERTED FLOW FROM DEER VALLEY RD.
 646        DR    343D

 647        KK    343S
 648        KM   RUNOFF GENERATED ON SUB-BASIN 343
 649        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 650        KM    L= 1.07 mi.  Lca= 0.55 mi.  S= 24 ft/mi.  Kn= .027  LAG= 17.38 min.
 651        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 652        BA     .32
 653        LG    .181    .179   10.10    .034   47.01
 654        UI     62.    252.    378.    580.    686.    464.    319.    158.     91.     50.
 655        UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 656        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 657          KK   DT343
 658          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.5 AC-FT FROM SUB-BASIN 343
 659          KM                                             (Hydrograph identified as OR343)
 660          KM                                            2) Balance of runoff continues on.
 661          KM                                             (Hydrograph identified as DT343)
 662          DT   OR343     6.5
 663          DI       0   10000
 664          DQ       0   10000

 665          KK   HC343
 666          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 343 WITH OVERFLOW FROM DEER VALLEY RD.
 667          HC       2

 668          KK   343RR
 669          KM   ROUTE FLOW THROUGH DETENTION BASIN D AT ROSE GARDEN LANE
 670          KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 671          KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 672          KM            Prepared by DeLeuw Cather & Co.
              * KO     1
 673          RS       1    STOR       0
 674          SV       0      .7    25.4      30    34.6
 675          SE    1381  1382.5    1396    1398    1400
 676          SL    1381    2.41     0.6     0.5
 677          SS    1397     100     3.0     1.5

 678          KK   RM343
 679          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM DETENTION BASIN D SOUTH
 680          KM            1) Reach Length = 2273 ft.
 681          RD    2273   .0078    .014            CIRC       3

 682          KK    349S
 683          KM   RUNOFF GENERATED ON SUB-BASIN 349
 684          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 685          KM    L= 1.03 mi.  Lca= 0.68 mi.  S= 27 ft/mi.  Kn= .028  LAG= 18.83 min.
 686          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 687          BA    .372
 688          LG    .193    .097   12.40    .012   34.46
 689          UI     67.    244.    379.    534.    790.    578.    414.    275.    129.     85.
 690          UI     45.     20.     20.     20.      0.      0.      0.      0.      0.      0.
 691          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 692          KK   DT349
 693          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 7.4 AC-FT FROM SUB-BASIN 349
 694          KM                                             (Hydrograph identified as OR349)
 695          KM                                            2) Balance of runoff continues on.
 696          KM                                             (Hydrograph identified as DT349)
 697          DT   OR349     7.4
 698          DI       0   10000
 699          DQ       0   10000
```

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

700           KK   349RR
701           KM   ROUTE FLOW THROUGH SMALL DETENTION BASIN AT INTEL
702           KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
703           KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
704           KM            Prepared by DeLeuw Cather & Co.
              * KO     1
705           RS       1    STOR       0
706           SV       0     .35     1.9    3.07    4.56    6.00
707           SE    1383    1384    1386    1388    1390    1392
708           SL    1383    7.07     0.6     0.5
709           SS    1390     100     3.0     1.5

710           KK   349RE
711           KM   DIVERT OUTFLOW INTO BEARDSLEY RD. INTERCHANGE.  REMAINING FLOW CONTINUES TO
712           KM   SCATTER WASH AND REFLECTS DISCHARGE FROM INTEL BASIN LOW LEVEL OUTLET.
713           DT   BEARD
714           DI       0      90      91     100     200     500    1000
715           DQ       0       0       1      10     110     410     910

716           KK   HC349
717           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 349 WITH ROUTED DETENTION BASIN D OVERFL
718           HC       2

719           KK  RM344A
720           KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH 96-IN. PIPE
721           KM            1) Reach Length = 3244 ft.
722           RD    3244   .0012    .014            CIRC       8

723           KK  RM344B
724           KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH TRAPEZOIDAL CHANNEL
725           KM            1) Reach Length = 3550 ft.
726           RD    3150   .0044    .014            TRAP       8       2

727           KK    344S
728           KM   RUNOFF GENERATED ON SUB-BASIN 344
729           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
730           KM    L= 1.69 mi.  Lca= 0.98 mi.  S= 27 ft/mi.  Kn= .031  LAG= 28.91 min.
731           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
732           BA    .554
733           LG    .256    .162    9.40    .023   24.47
734           UI     65.    114.    262.    344.    418.    527.    769.    704.    551.    447.
735           UI    356.    275.    153.    110.     85.     65.     27.     20.     20.     20.
736           UI     20.      0.      0.      0.      0.      0.      0.      0.      0.      0.
737           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

738           KK   DT344
739           KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.0 AC-FT FROM SUB-BASIN 344
740           KM                                               (Hydrograph identified as OR344)
741           KM                                             2) Balance of runoff continues on.
742           KM                                               (Hydrograph identified as DT344)
743           DT   OR344     6.0
744           DI       0   10000
745           DQ       0   10000
```

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

 746          KK  HC344U
 747          KM   COMBINE HYDROGRAPHS UPSTREAM OF DETENTION BASIN C FROM SUB-BASIN 344 WITH
 748          KM   ROUTED OUTFLOW FROM DETENTION BASIN AT INTEL
 749          HC       2

 750          KK     344
 751          KM   DIVERT FLOW TO DETENTION BASIN C
 752          KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 753          KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 754          KM            Prepared by DeLeuw Cather & Co.
 755          DT   344RE
 756          DI       0     150     250     251     750
 757          DQ       0     150     250     250     250

 758          KK   344RR
 759          KM   ROUTE FLOW THROUGH DETENTION BASIN C (33-IN. ORIFICE)
 760          KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 761          KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 762          KM            Prepared by DeLeuw Cather & Co.
              * KO     1
 763          RS       1    STOR       0
 764          SA    2.15    2.24    2.32    2.52    2.71    2.91    3.12    3.67
 765          SE    1338    1339    1340    1342    1344    1346    1348    1353
 766          SL    1339    5.94     0.6     0.5
 767          SS    1352      40     2.7     1.5

 768          KK  R344RE
 769          KM   RETRIEVE DETENTION BASIN BYPASS FLOW
 770          DR   344RE

 771          KK  HC344D
 772          KM   COMBINE HYDROGRAPHS DOWNSTREAM OF DETENTION BASIN C
 773          HC       2

 774          KK   RM344
 775          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION BASIN C THROUGH SUB-BASIN 345
 776          KM            1) Reach Length = 2160 ft.
 777          RD    2160   .0044    .014            TRAP       8       2

 778          KK    345S
 779          KM   RUNOFF GENERATED ON SUB-BASIN 345
 780          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 781          KM    L= 1.11 mi.  Lca= 0.67 mi.  S= 32 ft/mi.  Kn= .027  LAG= 17.98 min.
 782          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 783          BA    .296
 784          LG    .194    .302    5.67     .21   35.40
 785          UI     55.    216.    328.    489.    636.    443.    310.    178.     94.     56.
 786          UI     19.     17.     17.      0.      0.      0.      0.      0.      0.      0.
 787          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

 788          KK   HC345
 789          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 345 WITH ROUTED HYDROGRAPHS FROM 335 & 344
 790          HC      3

 791          KK   RM345
 792          KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 345 THROUGH 346
 793          KM           1) Reach Length = 6200 ft.
 794          RD
 795          RC   .055    .045    .055    6200   .0045
 796          RX      0      20     175     180     200     205     310     330
 797          RY     10       6       4       2       2       4       6      10

 798          KK    346S
 799          KM   RUNOFF GENERATED ON SUB-BASIN 346
 800          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 801          KM    L= 1.51 mi.  Lca= 0.82 mi.  S= 27 ft/mi.  Kn= .033  LAG= 27.55 min.
 802          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 803          BA    .401
 804          LG   .227    .313    5.67     .21   24.66
 805          UI    49.     95.    207.    269.    333.    435.    607.    479.    384.    304.
 806          UI   239.    157.     85.     74.     49.     28.     15.     15.     15.     15.
 807          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 808          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 809          KK   HC346
 810          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 346 WITH ROUTED FLOW FROM 345
 811          HC      2

 812          KK     AD1
 813          KM   ADOBE DAM LOW LEVEL SPILLWAY OUTFLOW; ASSUME CONSTANT OUTFLOW OF
 814          KM   1730 CFS FOR 100-YEAR STORM.
 815          KM   SOURCE:  F.I.S., Maricopa County, Arizona and Incorporated Areas, FEMA.
 816          BA     0.1
 817          IN     120
 818          QI   1730    1730    1730    1730    1730    1730    1730    1730    1730    1730
 819          QI   1730    1730    1730    1730    1730    1730    1730    1730    1730    1730

 820          KK   RMAD1
 821          KM   NORMAL DEPTH STORAGE ROUTE ADOBE DAM OUTFLOW THROUGH SUB-BASIN 347
 822          KM           1) Reach Length = 3240 ft.
 823          RS      5    FLOW      -1
 824          RC   .055    .045    .055    3240   .0040
 825          RX     30      80     180     200     240     260     265     270
 826          RY      7       6       5       0       0       6       7       8

 827          KK    347S
 828          KM   RUNOFF GENERATED ON SUB-BASIN 347
 829          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 830          KM    L= 1.71 mi.  Lca= 0.73 mi.  S= 35 ft/mi.  Kn= .035  LAG= 27.90 min.
 831          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 832          BA   1.105
 833          LG   .215    .326    3.71     .34   20.32
 834          UI   133.    254.    560.    728.    898.   1163.   1650.   1344.   1074.    853.
 835          UI   675.    467.    252.    219.    133.     96.     41.     41.     41.     41.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 836          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 837          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 838          KK   HC347
 839          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 347 WITH ROUTED OUTFLOW FROM ADOBE DAM
 840          HC       2

 841          KK   RM347
 842          KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 347 THROUGH 348
 843          KM            1) Reach Length = 3120 ft.
 844          RD
 845          RC     .05     .04     .05    3120   .0051
 846          RX     160     165     170     200     245     280     285     290
 847          RY       7     6.5       6       0       0       6     6.5       7

 848          KK    348S
 849          KM   RUNOFF GENERATED ON SUB-BASIN 348
 850          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 851          KM    L= 0.59 mi.  Lca= 0.41 mi.  S= 27 ft/mi.  Kn= .030  LAG= 13.47 min.
 852          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 853          BA    .048
 854          LG     .20     .31    3.68    .769   21.67
 855          UI     18.     60.     99.    130.     81.     43.     18.      8.      4.      4.
 856          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 857          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 858          KK   HC348
 859          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 348 WITH ROUTED FLOW FROM 347
 860          HC       2

 861          KK   HCSKB
 862          KM   COMBINE HYDROGRAPHS FROM SKUNK CREEK WITH SCATTER WASH
 863          HC       2

 864          KK    R330
 865          KM   RETRIEVE DIVERTED HYDROGRAPH FROM DEER VALLEY ROAD AND 19TH AVENUE.   THIS
 866          KM   HYDROGRAPH WILL BE STORED IN FILENAME:  CCW324.DSS FOR RETRIEVAL AS PART OF
 867          KM   THE WATERSHED CONTRIBUTING TO SKUNK CREEK.
 868          DR    341D

 869          KK  RBEARD
 870          KM   RETRIEVE DIVERTED FLOW INTO BEARDSLEY ROAD - I-17 INTERCHANGE
 871          DR   BEARD

 872          KK  349RR2
 873          KM   ROUTE FLOW THROUGH BEARDSLEY ROAD & I-17 INTERCHANGE
              * KO     1
 874          RS       1    STOR       0
 875          SV       0      .5     3.5     8.3    23.1    46.0    62.3    82.1
 876          SE    1367    1368    1370    1372    1376    1380    1382    1384
 877          SQ       0       0       0       0       0       0    5804   31500
 878          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

  25       310S
              .
              .
  35          .        311S
              .           .
              .           .
  46      HC311............
              V
              V
  49      311RR
              V
              V
  56      RM311
              .
              .
  63          .        312S
              .           .
              .           .
  74      HC312............
              V
              V
  77      RM312
              .
              .
  84          .        315S
              .           V
              .           V
  94          .       315RR
              .           V
              .           V
 101          .       RM315
              .           .
              .           .
 108          .           .        316S
              .           .           .
              .           .           .
 119          .       HC316............
              .           V
              .           V
 122          .       RM316
              .           .
              .           .
 129          .           .        317S
              .           .           .
              .           .           .
 139          .           .           .        318S
              .           .           .           .
              .           .           .           .
 150          .           .       HC317............
              .           .           V
              .           .           V
 153          .           .       317RR
              .           .           V
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        .         .         V
160     .         .      RM317
        .         .         .
        .         .         .
167     .         .         .       319S
        .         .         .         .
        .         .         .         .
177     .         .      HC319............
        .         .         V
        .         .         V
180     .         .      RM319
        .         .         .
        .         .         .
187     .         .         .       314S
        .         .         .         .
        .         .         .         .
198   HC314.................................
        V
        V
201   314RR
        V
        V
210   RM314
        .
        .
217     .       320S
        .         .
        .         .
233     .         .-------->   OR320
228     .      DT320
        .         V
        .         V
236     .      320RR
        .         .
        .         .
246     .         .-------->    325D
243     .      320RE
        .         V
        .         V
249     .      RM320
        .         .
        .         .
256     .         .       321S
        .         .         .
        .         .         .
267     .      HC321............
        .         V
        .         V
270     .      RM321
        .         .
        .         .
277     .         .       323S
        .         .         V
        .         .         V
287     .         .      323RR
        .         .         V
        .         .         V
294     .         .      RM323
        .         .         .
        .         .         .
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301          .          .          .       322S
             .          .          .          .
             .          .          .          .
316          .          .          .          .-------->   OR322
311          .          .          .      DT322
             .          .          .          .
             .          .          .          .
319      HC322.................................
             V
             V
322      322RR
             .
             .
337          .-------->   333D1
331      322RE
             .
             .
347          .-------->    332D
340       326D
             .
             .
352          .          .<-------    325D
350          .      325RD
             .          V
             .          V
353          .      RM320
             .          .
             .          .
360          .          .       325S
             .          .          .
             .          .          .
371          .      HC325............
             .          V
             .          V
374          .      RM325
             .          .
             .          .
381          .          .       326S
             .          .          .
             .          .          .
397          .          .          .-------->   OR326
392          .          .      DT326
             .          .          .
             .          .          .
400      HC326........................
             .
             .
409          .-------->   333D2
404      326RE
             .
             .
412          .        327S
             .          .
             .          .
427          .          .-------->   OR327
422          .      DT327
             .          .
             .          .
430      HC327............
             .
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          .
438       .-------> 334D1
433   327RE
          .
          .
441       .       330S
          .          .
          .          .
456       .          .-------> OR330
451       .      DT330
          .          .
          .          .
461       .          .-------> 341D
459       .      330R1
          .          .
          .          .
467       .          .-------> 343D
464       .      330R2
          .          V
          .          V
470       .      RM330
          .          .
          .          .
477       .          .       331S
          .          .          .
          .          .          .
492       .          .          .-------> OR331
487       .          .      DT331
          .          .          .
          .          .          .
495   HC331.......................
          .
          .
504       .-------> 334D2
498   331RE
          .
          .
509       .          .<-------  332D
507       .       R332
          .          .
          .          .
510       .          .       332S
          .          .          .
          .          .          .
524       .          .          .-------> OR332
519       .          .      DT332
          .          .          .
          .          .          .
527   HC332.......................
          V
          V
531   332RR
          .
          .
541       .          .<-------  333D1
538       .       R322
          .          .
          .          .
545       .          .          .<-------  333D2
542       .          .       R326
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                .          .          .
                .          .          .
546             .          .          .       333S
                .          .          .          .
                .          .          .          .
558             .      HC333.......................
                .          V
                .          V
561             .      RM333
                .          .
                .          .
570             .          .          .<-------   334D1
568             .          .       R327
                .          .          V
                .          .          V
571             .          .      RM327
                .          .          .
                .          .          .
580             .          .          .          .<-------   334D2
578             .          .          .       R331
                .          .          .          V
                .          .          .          V
581             .          .          .      RM331
                .          .          .          .
                .          .          .          .
588             .          .          .          .       334S
                .          .          .          .          .
                .          .          .          .          .
603             .          .          .          .          .------->   OR334
598             .          .          .          .      DT334
                .          .          .          .          .
                .          .          .          .          .
606             .      HC334.................................
                .          V
                .          V
609             .      RM334
                .          .
                .          .
616             .          .       335S
                .          .          .
                .          .          .
631             .          .          .------->   OR335
626             .          .      DT335
                .          .          .
                .          .          .
634         HC335.......................
                V
                V
637         RM335
                .
                .
646             .          .<-------    343D
644             .      330R2
                .          .
                .          .
7               .          .       343S
                .          .          .
                .          .          .
662             .          .          .------->   OR343
657             .          .      DT343
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          .          .          .
          .          .          .
665       .      HC343............
          .          V
          .          V
668       .      343RR
          .          V
          .          V
678       .      RM343
          .          .
          .          .
682       .          .       349S
          .          .          .
          .          .          .
697       .          .          .-------->   OR349
692       .          .      DT349
          .          .          V
          .          .          V
700       .          .      349RR
          .          .          .
          .          .          .
713       .          .          .-------->   BEARD
710       .          .      349RE
          .          .          .
          .          .          .
716       .      HC349............
          .          V
          .          V
719       .     RM344A
          .          V
          .          V
723       .     RM344B
          .          .
          .          .
727       .          .       344S
          .          .          .
          .          .          .
743       .          .          .-------->   OR344
738       .          .      DT344
          .          .          .
          .          .          .
746       .     HC344U............
          .          .
          .          .
755       .          .-------->   344RE
750       .        344
          .          V
          .          V
758       .      344RR
          .          .
          .          .
770       .          .          .<--------   344RE
768       .          .     R344RE
          .          .          .
          .          .          .
71        .     HC344D............
          .          V
          .          V
774       .      RM344
          .          .
```

```
            .          .
778         .          .        345S
            .          .          .
            .          .          .
788     HC345.......................
            V
            V
791     RM345
            .
            .
798         .       346S
            .          .
            .          .
809     HC346............
            .
            .
812         .        AD1
            .          V
            .          V
820         .      RMAD1
            .          .
            .          .
827         .          .        347S
            .          .          .
            .          .          .
838         .      HC347............
            .          V
            .          V
841         .      RM347
            .          .
            .          .
848         .          .        348S
            .          .          .
            .          .          .
858         .      HC348............
            .          .
            .          .
861     HCSKB............
            .
            .
868         .          .<-------    341D
864         .       R330
            .          .
            .          .
871         .          .          .<-------   BEARD
869         .          .     RBEARD
            .          .          V
            .          .          V
872         .          .     349RR2
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*                                       *
*  RUN DATE  10/02/95  TIME  10:06:53   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

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                    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
                    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
                    INDEX NO. ST-951350

                    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
                    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
                    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.

                    FILENAME:  344-50.DAT     KHE JOB NO. 0344
                    50-YEAR 24-HOUR DURATION STORM
                    SCS TYPE-II DISTRIBUTION WAS USED

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

   IT         HYDROGRAPH TIME DATA
                     NMIN          4  MINUTES IN COMPUTATION INTERVAL
                    IDATE     10OCT92  STARTING DATE
                    ITIME       1200  STARTING TIME
                       NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE     13OCT92  ENDING DATE
                   NDTIME       0636  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.07 HOURS
                   TOTAL TIME BASE   66.60 HOURS

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

 15 JD        INDEX STORM NO. 1
                    STRM       3.56  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 16 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

21 JD INDEX STORM NO. 2

STRM 3.49 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

22 JD INDEX STORM NO. 3

STRM 3.42 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

23 JD INDEX STORM NO. 4

STRM 3.28 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

24 JD INDEX STORM NO. 5

STRM 3.20 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

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

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	310S	867.	12.13	105.	27.	10.	0.68		
HYDROGRAPH AT	311S	650.	12.20	79.	21.	8.	0.57		
2 COMBINED AT	HC311	1508.	12.20	183.	47.	17.	1.25		
ROUTED TO	311RR	100.	13.07	89.	42.	15.	1.25		
ROUTED TO	RM311	100.	13.67	89.	43.	15.	1.25		
HYDROGRAPH AT	312S	1312.	12.33	182.	46.	16.	1.35		
2 COMBINED AT	HC312	1308.	12.33	255.	88.	32.	2.60		
ROUTED TO	RM312	1284.	12.73	254.	88.	32.	2.60		
HYDROGRAPH AT	315S	704.	12.07	74.	19.	7.	0.51		
ROUTED TO	315RR	53.	12.80	48.	19.	7.	0.51		
ROUTED TO	RM315	63.	12.60	48.	19.	7.	0.51		
HYDROGRAPH AT	316S	698.	12.20	77.	19.	7.	0.67		
2 COMBINED AT	HC316	695.	12.20	118.	38.	14.	1.18		
ROUTED TO	RM316	669.	12.67	117.	38.	14.	1.18		
HYDROGRAPH AT	317S	833.	12.13	97.	26.	9.	0.70		
HYDROGRAPH AT	318S	539.	12.33	76.	20.	7.	0.54		
2 COMBINED AT	HC317	1328.	12.20	173.	46.	17.	1.25		
ROUTED TO	317RR	93.	13.13	86.	41.	15.	1.25		
ROUTED TO	RM317	93.	13.33	86.	41.	15.	1.25		
HYDROGRAPH AT	319S	363.	12.13	35.	9.	3.	0.34		
2 COMBINED AT	HC319	359.	12.13	112.	50.	18.	1.59		
ROUTED TO	RM319	340.	12.80	110.	50.	18.	1.59		
HYDROGRAPH AT	314S	760.	12.27	90.	23.	8.	0.85		
4 COMBINED AT	HC314	2432.	12.67	545.	194.	70.	6.21		
ROUTED TO	314RR	1925.	12.93	544.	194.	70.	6.21		
ROUTED TO	RM314	1876.	13.07	544.	194.	70.	6.21		

HYDROGRAPH AT	320S	1175.	12.27	151.	40.	14.	1.11
DIVERSION TO	OR320	4.	8.27	3.	1.	0.	1.11
HYDROGRAPH AT	DT320	1175.	12.27	151.	39.	14.	1.11
ROUTED TO	320RR	107.	13.00	96.	36.	13.	1.11
DIVERSION TO	325D	44.	13.00	40.	15.	6.	1.11
HYDROGRAPH AT	320RE	63.	13.00	56.	21.	8.	1.11
ROUTED TO	RM320	66.	13.13	56.	21.	8.	1.11
HYDROGRAPH AT	321S	807.	12.40	109.	28.	10.	1.12
2 COMBINED AT	HC321	804.	12.40	153.	49.	18.	2.23
ROUTED TO	RM321	792.	12.60	153.	49.	18.	2.23
HYDROGRAPH AT	323S	138.	12.07	15.	5.	2.	0.11
ROUTED TO	323RR	49.	12.33	15.	4.	2.	0.11
ROUTED TO	RM323	49.	12.87	15.	4.	2.	0.11
HYDROGRAPH AT	322S	368.	12.07	37.	10.	4.	0.34
DIVERSION TO	OR322	5.	11.40	2.	1.	0.	0.34
HYDROGRAPH AT	DT322	368.	12.07	37.	9.	3.	0.34
4 COMBINED AT	HC322	2149.	13.00	732.	252.	91.	8.89
ROUTED TO	322RR	1818.	13.27	731.	252.	91.	8.89
DIVERSION TO	333D1	1207.	13.27	651.	232.	84.	8.89
HYDROGRAPH AT	322RE	611.	13.27	80.	20.	7.	8.89
DIVERSION TO	332D	45.	13.27	2.	1.	0.	8.89
HYDROGRAPH AT	326D	566.	13.27	78.	19.	7.	8.89
HYDROGRAPH AT	325RD	44.	13.00	40.	15.	6.	1.11
ROUTED TO	RM320	52.	13.27	40.	15.	6.	1.11
HYDROGRAPH AT	325S	473.	12.20	53.	14.	5.	0.50
2 COMBINED AT	HC325	473.	12.20	83.	30.	11.	0.50
ROUTED TO	RM325	470.	12.47	83.	30.	11.	0.50
HYDROGRAPH AT	326S	383.	12.33	53.	15.	5.	0.50
DIVERSION TO	OR326	116.	11.87	8.	2.	1.	0.50
HYDROGRAPH AT	DT326	383.	12.33	49.	13.	5.	0.50

3 COMBINED AT	HC326	779.	12.47	201.	60.	22.	9.89
DIVERSION TO	333D2	510.	12.27	181.	55.	20.	9.89
HYDROGRAPH AT	326RE	269.	12.47	20.	5.	2.	9.89
HYDROGRAPH AT	327S	302.	12.07	40.	13.	5.	0.22
DIVERSION TO	OR327	4.	6.40	3.	1.	0.	0.22
HYDROGRAPH AT	DT327	302.	12.07	40.	12.	4.	0.22
2 COMBINED AT	HC327	369.	12.33	58.	16.	6.	10.10
DIVERSION TO	334D1	115.	11.80	35.	11.	4.	10.10
HYDROGRAPH AT	327RE	254.	12.33	23.	6.	2.	10.10
HYDROGRAPH AT	330S	391.	12.13	51.	16.	6.	0.31
DIVERSION TO	OR330	5.	6.53	4.	1.	0.	0.31
HYDROGRAPH AT	DT330	391.	12.13	51.	15.	5.	0.31
DIVERSION TO	341D	109.	12.13	8.	2.	1.	0.31
HYDROGRAPH AT	330R1	282.	12.13	43.	13.	5.	0.31
DIVERSION TO	343D	200.	12.13	19.	5.	2.	0.31
HYDROGRAPH AT	330R2	82.	12.13	24.	8.	3.	0.31
ROUTED TO	RM330	83.	12.27	24.	8.	3.	0.31
HYDROGRAPH AT	331S	361.	12.00	51.	17.	6.	0.22
DIVERSION TO	OR331	5.	4.53	3.	1.	0.	0.22
HYDROGRAPH AT	DT331	361.	12.00	51.	16.	6.	0.22
3 COMBINED AT	HC331	590.	12.07	95.	29.	11.	10.63
DIVERSION TO	334D2	156.	11.73	56.	19.	7.	10.63
HYDROGRAPH AT	331RE	434.	12.07	40.	10.	4.	10.63
HYDROGRAPH AT	R332	45.	13.27	2.	1.	0.	8.89
HYDROGRAPH AT	332S	157.	12.00	21.	6.	2.	0.09
DIVERSION TO	OR332	1.	2.80	1.	0.	0.	0.09
HYDROGRAPH AT	DT332	157.	12.00	21.	6.	2.	0.09
3 COMBINED AT	HC332	560.	12.00	61.	16.	6.	10.73
ROUTED TO	332RR	0.	0.07	0.	0.	0.	10.73
HYDROGRAPH AT	R322	1207.	13.27	651.	232.	84.	8.89

HYDROGRAPH AT	R326	510.	12.27	181.	55.	20.	9.89
HYDROGRAPH AT	333S	424.	12.40	65.	18.	6.	0.53
3 COMBINED AT	HC333	1889.	12.60	911.	313.	113.	0.53
ROUTED TO	RM333	1884.	12.80	909.	313.	113.	0.53
HYDROGRAPH AT	R327	115.	11.80	35.	11.	4.	10.10
ROUTED TO	RM327	124.	13.53	35.	11.	4.	10.10
HYDROGRAPH AT	R331	156.	11.73	56.	19.	7.	10.63
ROUTED TO	RM331	156.	12.93	56.	19.	7.	10.63
HYDROGRAPH AT	334S	1040.	12.00	123.	37.	13.	0.66
DIVERSION TO	OR334	6.	1.00	2.	0.	0.	0.66
HYDROGRAPH AT	DT334	1040.	12.00	123.	36.	13.	0.66
4 COMBINED AT	HC334	2231.	12.73	1092.	379.	138.	1.19
ROUTED TO	RM334	2221.	12.93	1090.	379.	138.	1.19
HYDROGRAPH AT	335S	662.	12.07	79.	22.	8.	0.46
DIVERSION TO	OR335	121.	11.67	8.	2.	1.	0.46
HYDROGRAPH AT	DT335	662.	12.07	74.	19.	7.	0.46
3 COMBINED AT	HC335	2221.	12.87	1117.	380.	138.	12.38
ROUTED TO	RM335	2206.	13.13	1109.	378.	137.	12.38
HYDROGRAPH AT	330R2	200.	12.13	19.	5.	2.	0.31
HYDROGRAPH AT	343S	506.	12.07	72.	22.	8.	0.32
DIVERSION TO	OR343	28.	11.00	10.	3.	1.	0.32
HYDROGRAPH AT	DT343	506.	12.07	70.	19.	7.	0.32
2 COMBINED AT	HC343	705.	12.07	89.	24.	9.	0.32
ROUTED TO	343RR	270.	12.40	55.	24.	9.	0.32
ROUTED TO	RM343	260.	12.47	55.	24.	9.	0.32
HYDROGRAPH AT	349S	585.	12.07	92.	28.	10.	0.37
DIVERSION TO	OR349	40.	10.87	12.	4.	1.	0.37
HYDROGRAPH AT	DT349	585.	12.07	89.	25.	9.	0.37
ROUTED TO	349RR	587.	12.07	89.	25.	9.	0.37
DIVERSION TO	BEARD	497.	12.07	40.	10.	4.	0.37

HYDROGRAPH AT	349RE	90.	11.87	49.	14.	5.	0.37
2 COMBINED AT	HC349	346.	12.47	100.	38.	14.	0.69
ROUTED TO	RM344A	290.	12.60	100.	38.	14.	0.69
ROUTED TO	RM344B	290.	12.67	100.	38.	14.	0.69
HYDROGRAPH AT	344S	713.	12.20	124.	35.	13.	0.55
DIVERSION TO	OR344	36.	10.93	9.	3.	1.	0.55
HYDROGRAPH AT	DT344	713.	12.20	122.	32.	12.	0.55
2 COMBINED AT	HC344U	834.	12.27	219.	70.	25.	1.25
DIVERSION TO	344RE	250.	11.80	145.	52.	19.	1.25
HYDROGRAPH AT	344	584.	12.27	74.	18.	7.	1.25
ROUTED TO	344RR	91.	13.00	64.	17.	6.	1.25
HYDROGRAPH AT	R344RE	250.	11.80	145.	52.	19.	1.25
2 COMBINED AT	HC344D	341.	13.00	206.	69.	25.	1.25
ROUTED TO	RM344	341.	13.00	206.	69.	25.	1.25
HYDROGRAPH AT	345S	407.	12.07	49.	15.	5.	0.30
3 COMBINED AT	HC345	2545.	13.13	1327.	452.	164.	13.92
ROUTED TO	RM345	2520.	13.47	1326.	453.	164.	13.92
HYDROGRAPH AT	346S	436.	12.20	59.	17.	6.	0.40
2 COMBINED AT	HC346	2531.	13.47	1357.	467.	170.	14.32
HYDROGRAPH AT	AD1	1730.	0.07	1730.	1730.	1730.	0.10
ROUTED TO	RMAD1	1730.	0.07	1730.	1730.	1730.	0.10
HYDROGRAPH AT	347S	1107.	12.20	148.	43.	16.	1.11
2 COMBINED AT	HC347	2837.	12.20	1878.	1773.	1746.	1.21
ROUTED TO	RM347	2826.	12.33	1877.	1773.	1746.	1.21
HYDROGRAPH AT	348S	46.	12.00	5.	2.	1.	0.05
2 COMBINED AT	HC348	2838.	12.27	1882.	1775.	1746.	1.25
2 COMBINED AT	HCSKB	4309.	12.67	3210.	2233.	1913.	15.58
HYDROGRAPH AT	R330	109.	12.13	8.	2.	1.	0.31
HYDROGRAPH AT	RBEARD	497.	12.07	40.	10.	4.	0.37
ROUTED TO	349RR2	0.	0.07	0.	0.	0.	0.37

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)
FOR STORM = 1 STORM AREA (SQ MI) =				0.01					
RM311	MANE	3.80	109.94	767.60	1.30	4.00	109.39	816.00	1.30

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8641E+02 EXCESS=0.0000E+00 OUTFLOW=0.8672E+02 BASIN STORAGE=0.2062E-02 PERCENT ERROR= -0.4

FOR STORM = 2 STORM AREA (SQ MI) =				3.00					
RM311	MANE	3.80	103.77	771.40	1.26	4.00	97.90	820.00	1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8363E+02 EXCESS=0.0000E+00 OUTFLOW=0.8395E+02 BASIN STORAGE=0.2044E-02 PERCENT ERROR= -0.4

FOR STORM = 3 STORM AREA (SQ MI) =				10.00					
RM311	MANE	3.80	111.47	771.40	1.22	4.00	103.94	772.00	1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8083E+02 EXCESS=0.0000E+00 OUTFLOW=0.8114E+02 BASIN STORAGE=0.2028E-02 PERCENT ERROR= -0.4

FOR STORM = 4 STORM AREA (SQ MI) =				20.00					
RM311	MANE	3.40	102.10	771.80	1.13	4.00	99.81	772.00	1.13

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7517E+02 EXCESS=0.0000E+00 OUTFLOW=0.7548E+02 BASIN STORAGE=0.2011E-02 PERCENT ERROR= -0.4

FOR STORM = 5 STORM AREA (SQ MI) =				30.00					
RM311	MANE	3.40	107.75	771.80	1.09	4.00	105.09	772.00	1.09

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7236E+02 EXCESS=0.0000E+00 OUTFLOW=0.7265E+02 BASIN STORAGE=0.2009E-02 PERCENT ERROR= -0.4

FOR STORM = 1 STORM AREA (SQ MI) =				0.01					
RM312	MANE	2.60	1319.54	764.40	1.30	4.00	1318.40	764.00	1.30

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1795E+03 EXCESS=0.0000E+00 OUTFLOW=0.1795E+03 BASIN STORAGE=0.1121E-02 PERCENT ERROR= 0.0

FOR STORM = 2 STORM AREA (SQ MI) =				3.00					
RM312	MANE	2.60	1284.15	764.40	1.26	4.00	1282.89	764.00	1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1739E+03 EXCESS=0.0000E+00 OUTFLOW=0.1740E+03 BASIN STORAGE=0.1001E-02 PERCENT ERROR= 0.0

FOR STORM = 3 STORM AREA (SQ MI) = 10.00

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   RM312  MANE        2.60   1248.55    764.40      1.22      4.00   1247.17    764.00        1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1684E+03 EXCESS=0.0000E+00 OUTFLOW=0.1684E+03 BASIN STORAGE=0.1148E-02 PERCENT ERROR=   0.0

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM312  MANE        2.60   1176.15    764.40      1.14      4.00   1174.55    764.00        1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1572E+03 EXCESS=0.0000E+00 OUTFLOW=0.1573E+03 BASIN STORAGE=0.1151E-02 PERCENT ERROR=   0.0

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM312  MANE        2.60   1139.84    764.40      1.10      4.00   1138.15    764.00        1.10

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1516E+03 EXCESS=0.0000E+00 OUTFLOW=0.1517E+03 BASIN STORAGE=0.1188E-02 PERCENT ERROR=  -0.1

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM315  MANE        4.00     62.25    756.00      1.40      4.00     62.25    756.00        1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3769E+02 EXCESS=0.0000E+00 OUTFLOW=0.3784E+02 BASIN STORAGE=0.1245E-02 PERCENT ERROR=  -0.4

     FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM315  MANE        4.00     64.04    756.00      1.36      4.00     64.04    756.00        1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3663E+02 EXCESS=0.0000E+00 OUTFLOW=0.3678E+02 BASIN STORAGE=0.1256E-02 PERCENT ERROR=  -0.4

     FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM315  MANE        4.00     64.04    756.00      1.32      4.00     64.04    756.00        1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3557E+02 EXCESS=0.0000E+00 OUTFLOW=0.3573E+02 BASIN STORAGE=0.1307E-02 PERCENT ERROR=  -0.4

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM315  MANE        4.00     61.70    756.00      1.24      4.00     61.70    756.00        1.24

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3343E+02 EXCESS=0.0000E+00 OUTFLOW=0.3358E+02 BASIN STORAGE=0.1326E-02 PERCENT ERROR=  -0.5

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM315  MANE        4.00     59.10    756.00      1.20      4.00     59.10    756.00        1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3235E+02 EXCESS=0.0000E+00 OUTFLOW=0.3251E+02 BASIN STORAGE=0.1285E-02 PERCENT ERROR=  -0.5

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM316  MANE        2.20    687.60    759.00      1.22      4.00    685.87    760.00        1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7693E+02 EXCESS=0.0000E+00 OUTFLOW=0.7703E+02 BASIN STORAGE=0.1052E-02 PERCENT ERROR=  -0.1
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FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM316  MANE         2.20    666.50    759.00      1.19      4.00    665.22    760.00        1.18

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7450E+02 EXCESS=0.0000E+00 OUTFLOW=0.7460E+02 BASIN STORAGE=0.1126E-02 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM316  MANE         2.20    645.41    759.00      1.15      4.00    644.58    760.00        1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7208E+02 EXCESS=0.0000E+00 OUTFLOW=0.7218E+02 BASIN STORAGE=0.1087E-02 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM316  MANE         2.20    603.56    761.20      1.07      4.00    603.37    760.00        1.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6732E+02 EXCESS=0.0000E+00 OUTFLOW=0.6743E+02 BASIN STORAGE=0.1029E-02 PERCENT ERROR=  -0.2

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM316  MANE         2.40    584.29    760.80      1.04      4.00    582.85    760.00        1.04

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6506E+02 EXCESS=0.0000E+00 OUTFLOW=0.6518E+02 BASIN STORAGE=0.1119E-02 PERCENT ERROR=  -0.2

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM317  MANE         4.00     94.05    800.00      1.27      4.00     94.05    800.00        1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8409E+02 EXCESS=0.0000E+00 OUTFLOW=0.8420E+02 BASIN STORAGE=0.8974E-03 PERCENT ERROR=  -0.1

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM317  MANE         4.00     92.93    800.00      1.23      4.00     92.93    800.00        1.23

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8142E+02 EXCESS=0.0000E+00 OUTFLOW=0.8152E+02 BASIN STORAGE=0.9214E-03 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM317  MANE         3.80     91.76    798.00      1.19      4.00     91.73    800.00        1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7873E+02 EXCESS=0.0000E+00 OUTFLOW=0.7884E+02 BASIN STORAGE=0.9159E-03 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM317  MANE         3.80     89.66    782.80      1.10      4.00     89.48    800.00        1.10

TINUITY SUMMARY (AC-FT) - INFLOW=0.7333E+02 EXCESS=0.0000E+00 OUTFLOW=0.7342E+02 BASIN STORAGE=0.8784E-03 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM317  MANE         3.60     88.39    795.60      1.06      4.00     88.38    796.00        1.06
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7064E+02 EXCESS=0.0000E+00 OUTFLOW=0.7074E+02 BASIN STORAGE=0.9385E-03 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM319  MANE         2.00    349.52    768.00      1.21      4.00    349.52    768.00        1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1021E+03 EXCESS=0.0000E+00 OUTFLOW=0.1022E+03 BASIN STORAGE=0.1360E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM319  MANE         2.00    338.79    768.00      1.17      4.00    338.79    768.00        1.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9880E+02 EXCESS=0.0000E+00 OUTFLOW=0.9894E+02 BASIN STORAGE=0.1298E-02 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM319  MANE         2.00    327.96    768.00      1.13      4.00    327.96    768.00        1.13

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9554E+02 EXCESS=0.0000E+00 OUTFLOW=0.9567E+02 BASIN STORAGE=0.1351E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM319  MANE         2.00    306.52    766.00      1.05      4.00    304.69    768.00        1.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8894E+02 EXCESS=0.0000E+00 OUTFLOW=0.8905E+02 BASIN STORAGE=0.1361E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM319  MANE         2.00    295.66    766.00      1.01      4.00    293.93    764.00        1.01

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8567E+02 EXCESS=0.0000E+00 OUTFLOW=0.8580E+02 BASIN STORAGE=0.1365E-02 PERCENT ERROR=  -0.2

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM314  MANE         4.00   1988.07    784.00      1.23      4.00   1988.07    784.00        1.23

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4056E+03 EXCESS=0.0000E+00 OUTFLOW=0.4057E+03 BASIN STORAGE=0.5083E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM314  MANE         4.00   1918.41    784.00      1.19      4.00   1918.41    784.00        1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3928E+03 EXCESS=0.0000E+00 OUTFLOW=0.3929E+03 BASIN STORAGE=0.5453E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM314  MANE         4.00   1848.87    784.00      1.15      4.00   1848.87    784.00        1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3801E+03 EXCESS=0.0000E+00 OUTFLOW=0.3802E+03 BASIN STORAGE=0.5567E-03 PERCENT ERROR=   0.0
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM314  MANE        4.00   1704.62    784.00      1.07      4.00   1704.62    784.00        1.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3544E+03 EXCESS=0.0000E+00 OUTFLOW=0.3544E+03 BASIN STORAGE=0.5107E-03 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM314  MANE        4.00   1628.83    784.00      1.03      4.00   1628.83    784.00        1.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3417E+03 EXCESS=0.0000E+00 OUTFLOW=0.3418E+03 BASIN STORAGE=0.5747E-03 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM320  MANE        3.80     67.45    786.60      0.73      4.00     65.66    788.00        0.73

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4297E+02 EXCESS=0.0000E+00 OUTFLOW=0.4328E+02 BASIN STORAGE=0.2869E-02 PERCENT ERROR=  -0.7

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM320  MANE        3.60     67.50    788.40      0.71      4.00     66.13    788.00        0.71

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4158E+02 EXCESS=0.0000E+00 OUTFLOW=0.4189E+02 BASIN STORAGE=0.2986E-02 PERCENT ERROR=  -0.7

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE        3.60     68.67    788.40      0.69      4.00     66.22    788.00        0.69

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4019E+02 EXCESS=0.0000E+00 OUTFLOW=0.4050E+02 BASIN STORAGE=0.3080E-02 PERCENT ERROR=  -0.8

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE        3.60     67.87    788.40      0.64      4.00     63.79    788.00        0.64

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3737E+02 EXCESS=0.0000E+00 OUTFLOW=0.3768E+02 BASIN STORAGE=0.2919E-02 PERCENT ERROR=  -0.8

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE        3.60     66.77    788.40      0.62      4.00     62.02    788.00        0.62

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3598E+02 EXCESS=0.0000E+00 OUTFLOW=0.3629E+02 BASIN STORAGE=0.2704E-02 PERCENT ERROR=  -0.9

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM321  MANE        4.00    818.55    756.00      0.84      4.00    818.55    756.00        0.84

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9997E+02 EXCESS=0.0000E+00 OUTFLOW=0.9991E+02 BASIN STORAGE=0.5798E-03 PERCENT ERROR=   0.1

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM321  MANE        4.00    790.56    756.00      0.81      4.00    790.56    756.00        0.81
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9662E+02 EXCESS=0.0000E+00 OUTFLOW=0.9659E+02 BASIN STORAGE=0.5595E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM321  MANE         4.00    762.10    756.00      0.79      4.00    762.10    756.00        0.79

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9325E+02 EXCESS=0.0000E+00 OUTFLOW=0.9325E+02 BASIN STORAGE=0.5068E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM321  MANE         4.00    706.63    752.00      0.73      4.00    706.63    752.00        0.73

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8642E+02 EXCESS=0.0000E+00 OUTFLOW=0.8645E+02 BASIN STORAGE=0.5179E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM321  MANE         4.00    678.85    752.00      0.70      4.00    678.85    752.00        0.70

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8302E+02 EXCESS=0.0000E+00 OUTFLOW=0.8307E+02 BASIN STORAGE=0.5042E-03 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM323  MANE         4.00     49.49    772.00      1.51      4.00     49.49    772.00        1.51

TINUITY SUMMARY (AC-FT) - INFLOW=0.8844E+01 EXCESS=0.0000E+00 OUTFLOW=0.8874E+01 BASIN STORAGE=0.1767E-02 PERCENT ERROR=  -0.4

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM323  MANE         4.00     49.13    772.00      1.47      4.00     49.13    772.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8604E+01 EXCESS=0.0000E+00 OUTFLOW=0.8634E+01 BASIN STORAGE=0.1732E-02 PERCENT ERROR=  -0.4

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM323  MANE         4.00     48.47    772.00      1.43      4.00     48.47    772.00        1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8364E+01 EXCESS=0.0000E+00 OUTFLOW=0.8393E+01 BASIN STORAGE=0.1695E-02 PERCENT ERROR=  -0.4

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM323  MANE         4.00     46.68    772.00      1.35      4.00     46.68    772.00        1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7878E+01 EXCESS=0.0000E+00 OUTFLOW=0.7907E+01 BASIN STORAGE=0.1592E-02 PERCENT ERROR=  -0.4

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM323  MANE         4.00     45.77    772.00      1.31      4.00     45.77    772.00        1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7636E+01 EXCESS=0.0000E+00 OUTFLOW=0.7666E+01 BASIN STORAGE=0.1557E-02 PERCENT ERROR=  -0.4
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FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM320  MANE         3.80     60.95    794.20      0.53      4.00     49.85    796.00        0.53

TINUITY SUMMARY (AC-FT) - INFLOW=0.3111E+02 EXCESS=0.0000E+00 OUTFLOW=0.3138E+02 BASIN STORAGE=0.1576E-02 PERCENT ERROR=  -0.9

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM320  MANE         3.60     55.44    795.60      0.52      4.00     52.60    796.00        0.52

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3015E+02 EXCESS=0.0000E+00 OUTFLOW=0.3041E+02 BASIN STORAGE=0.1667E-02 PERCENT ERROR=  -0.9

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE         3.60     57.66    795.60      0.50      4.00     54.63    796.00        0.50

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2918E+02 EXCESS=0.0000E+00 OUTFLOW=0.2944E+02 BASIN STORAGE=0.1682E-02 PERCENT ERROR=  -0.9

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE         3.60     58.61    795.60      0.47      4.00     56.30    796.00        0.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2722E+02 EXCESS=0.0000E+00 OUTFLOW=0.2749E+02 BASIN STORAGE=0.1621E-02 PERCENT ERROR=  -1.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE         3.60     54.32    795.60      0.45      4.00     53.10    796.00        0.45

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2625E+02 EXCESS=0.0000E+00 OUTFLOW=0.2651E+02 BASIN STORAGE=0.1697E-02 PERCENT ERROR=  -1.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM325  MANE         4.00    479.48    748.00      2.26      4.00    479.48    748.00        2.26

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6041E+02 EXCESS=0.0000E+00 OUTFLOW=0.6054E+02 BASIN STORAGE=0.1218E-02 PERCENT ERROR=  -0.2

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM325  MANE         4.00    465.85    748.00      2.19      4.00    465.85    748.00        2.19

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5852E+02 EXCESS=0.0000E+00 OUTFLOW=0.5864E+02 BASIN STORAGE=0.1190E-02 PERCENT ERROR=  -0.2

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM325  MANE         4.00    449.51    748.00      2.12      4.00    449.51    748.00        2.12

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5661E+02 EXCESS=0.0000E+00 OUTFLOW=0.5672E+02 BASIN STORAGE=0.1255E-02 PERCENT ERROR=  -0.2

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM325  MANE         4.00    415.46    748.00      1.98      4.00    415.46    748.00        1.98
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5274E+02 EXCESS=0.0000E+00 OUTFLOW=0.5289E+02 BASIN STORAGE=0.1099E-02 PERCENT ERROR=  -0.3

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM325  MANE         4.00    398.00    748.00      1.90      4.00    398.00    748.00        1.90

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5080E+02 EXCESS=0.0000E+00 OUTFLOW=0.5094E+02 BASIN STORAGE=0.1221E-02 PERCENT ERROR=  -0.3

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM330  MANE         4.00     83.21    736.00      0.98      4.00     83.21    736.00        0.98

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1626E+02 EXCESS=0.0000E+00 OUTFLOW=0.1627E+02 BASIN STORAGE=0.1158E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM330  MANE         4.00     82.56    736.00      0.97      4.00     82.56    736.00        0.97

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1598E+02 EXCESS=0.0000E+00 OUTFLOW=0.1599E+02 BASIN STORAGE=0.1138E-02 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM330  MANE         4.00     81.89    736.00      0.95      4.00     81.89    736.00        0.95

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1570E+02 EXCESS=0.0000E+00 OUTFLOW=0.1571E+02 BASIN STORAGE=0.1118E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM330  MANE         4.00     80.45    736.00      0.92      4.00     80.45    736.00        0.92

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1512E+02 EXCESS=0.0000E+00 OUTFLOW=0.1514E+02 BASIN STORAGE=0.1077E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM330  MANE         4.00     79.72    736.00      0.90      4.00     79.72    736.00        0.90

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1484E+02 EXCESS=0.0000E+00 OUTFLOW=0.1486E+02 BASIN STORAGE=0.1057E-02 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM333  MANE         4.00   1901.68    768.00     22.29      4.00   1901.68    768.00       22.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6335E+03 EXCESS=0.0000E+00 OUTFLOW=0.6337E+03 BASIN STORAGE=0.1076E-02 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM333  MANE         4.00   1875.72    768.00     21.78      4.00   1875.72    768.00       21.78

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6188E+03 EXCESS=0.0000E+00 OUTFLOW=0.6191E+03 BASIN STORAGE=0.1181E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
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RM333  MANE        4.00   1848.94   768.00    21.24     4.00   1848.94   768.00      21.24

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6035E+03 EXCESS=0.0000E+00 OUTFLOW=0.6038E+03 BASIN STORAGE=0.1082E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM333  MANE        4.00   1791.52   768.00    19.98     4.00   1791.52   768.00      19.98

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5676E+03 EXCESS=0.0000E+00 OUTFLOW=0.5679E+03 BASIN STORAGE=0.1051E-02 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM333  MANE        4.00   1761.48   768.00    19.27     4.00   1761.48   768.00      19.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5475E+03 EXCESS=0.0000E+00 OUTFLOW=0.5478E+03 BASIN STORAGE=0.1109E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM327  MANE        4.00    120.69   728.00     0.05     4.00    120.69   728.00       0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2495E+02 EXCESS=0.0000E+00 OUTFLOW=0.2496E+02 BASIN STORAGE=0.1417E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
RM327  MANE        4.00    120.51   728.00     0.04     4.00    120.51   728.00       0.04

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2324E+02 EXCESS=0.0000E+00 OUTFLOW=0.2326E+02 BASIN STORAGE=0.1393E-02 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
RM327  MANE        4.00    126.12   812.00     0.04     4.00    126.12   812.00       0.04

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2109E+02 EXCESS=0.0000E+00 OUTFLOW=0.2113E+02 BASIN STORAGE=0.1368E-02 PERCENT ERROR=  -0.2

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM327  MANE        4.00    120.33   728.00     0.03     4.00    120.33   728.00       0.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1754E+02 EXCESS=0.0000E+00 OUTFLOW=0.1756E+02 BASIN STORAGE=0.1318E-02 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM327  MANE        4.00    120.24   728.00     0.03     4.00    120.24   728.00       0.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1715E+02 EXCESS=0.0000E+00 OUTFLOW=0.1717E+02 BASIN STORAGE=0.1293E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM331  MANE        4.00    156.00   780.00     0.07     4.00    156.00   780.00       0.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4267E+02 EXCESS=0.0000E+00 OUTFLOW=0.4250E+02 BASIN STORAGE=0.1462E-02 PERCENT ERROR=   0.4
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        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM331  MANE         4.00    156.00    776.00      0.07      4.00    156.00    776.00        0.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4076E+02 EXCESS=0.0000E+00 OUTFLOW=0.4057E+02 BASIN STORAGE=0.2568E-02 PERCENT ERROR=   0.5

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM331  MANE         4.00    156.00    776.00      0.07      4.00    156.00    776.00        0.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3833E+02 EXCESS=0.0000E+00 OUTFLOW=0.3836E+02 BASIN STORAGE=0.2531E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM331  MANE         4.00    156.00    776.00      0.06      4.00    156.00    776.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3662E+02 EXCESS=0.0000E+00 OUTFLOW=0.3664E+02 BASIN STORAGE=0.2454E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM331  MANE         4.00    156.00    776.00      0.06      4.00    156.00    776.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3592E+02 EXCESS=0.0000E+00 OUTFLOW=0.3590E+02 BASIN STORAGE=0.2263E-02 PERCENT ERROR=   0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM334  MANE         4.00   2246.26    776.00     12.20      4.00   2246.26    776.00       12.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7744E+03 EXCESS=0.0000E+00 OUTFLOW=0.7742E+03 BASIN STORAGE=0.6570E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM334  MANE         4.00   2216.46    776.00     11.88      4.00   2216.46    776.00       11.88

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7543E+03 EXCESS=0.0000E+00 OUTFLOW=0.7541E+03 BASIN STORAGE=0.7307E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM334  MANE         4.00   2184.75    776.00     11.54      4.00   2184.75    776.00       11.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7329E+03 EXCESS=0.0000E+00 OUTFLOW=0.7326E+03 BASIN STORAGE=0.6631E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM334  MANE         4.00   2117.15    776.00     10.84      4.00   2117.15    776.00       10.84

INUITY SUMMARY (AC-FT) - INFLOW=0.6880E+03 EXCESS=0.0000E+00 OUTFLOW=0.6878E+03 BASIN STORAGE=0.6457E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM334  MANE         4.00   2081.51    776.00     10.47      4.00   2081.51    776.00       10.47
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6650E+03 EXCESS=0.0000E+00 OUTFLOW=0.6648E+03 BASIN STORAGE=0.6695E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM335  MANE         4.00   2297.59    788.00      1.23      4.00   2297.59    788.00        1.23

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8130E+03 EXCESS=0.0000E+00 OUTFLOW=0.8130E+03 BASIN STORAGE=0.6742E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM335  MANE         4.00   2264.67    788.00      1.20      4.00   2264.67    788.00        1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7917E+03 EXCESS=0.0000E+00 OUTFLOW=0.7917E+03 BASIN STORAGE=0.6114E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM335  MANE         4.00   2229.61    788.00      1.16      4.00   2229.61    788.00        1.16

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7691E+03 EXCESS=0.0000E+00 OUTFLOW=0.7691E+03 BASIN STORAGE=0.6871E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM335  MANE         4.00   2154.36    788.00      1.09      4.00   2154.36    788.00        1.09

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7219E+03 EXCESS=0.0000E+00 OUTFLOW=0.7219E+03 BASIN STORAGE=0.6595E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM335  MANE         4.00   2113.65    788.00      1.06      4.00   2113.65    788.00        1.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6977E+03 EXCESS=0.0000E+00 OUTFLOW=0.6978E+03 BASIN STORAGE=0.6839E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM343  MANE         2.62    282.53    748.07      2.81      4.00    282.34    748.00        2.81

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4804E+02 EXCESS=0.0000E+00 OUTFLOW=0.4801E+02 BASIN STORAGE=0.3275E-03 PERCENT ERROR=   0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM343  MANE         2.72    252.05    749.53      2.73      4.00    246.22    748.00        2.74

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4670E+02 EXCESS=0.0000E+00 OUTFLOW=0.4668E+02 BASIN STORAGE=0.3204E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM343  MANE         2.78    220.31    750.26      2.66      4.00    211.05    752.00        2.66

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4537E+02 EXCESS=0.0000E+00 OUTFLOW=0.4535E+02 BASIN STORAGE=0.3102E-03 PERCENT ERROR=   0.0
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```
FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM343  MANE        3.01    147.50    753.55      2.50      4.00    141.94    756.00        2.50

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4272E+02 EXCESS=0.0000E+00 OUTFLOW=0.4271E+02 BASIN STORAGE=0.3134E-03 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM343  MANE        3.20    111.27    757.75      2.43      4.00    106.56    760.00        2.43

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4141E+02 EXCESS=0.0000E+00 OUTFLOW=0.4140E+02 BASIN STORAGE=0.3116E-03 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
  RM344A  MANE        4.00    306.15    756.00      2.08      4.00    306.15    756.00        2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7715E+02 EXCESS=0.0000E+00 OUTFLOW=0.7688E+02 BASIN STORAGE=0.9414E-03 PERCENT ERROR=   0.4

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
  RM344A  MANE        4.00    284.95    756.00      2.03      4.00    284.95    756.00        2.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7520E+02 EXCESS=0.0000E+00 OUTFLOW=0.7498E+02 BASIN STORAGE=0.8314E-03 PERCENT ERROR=   0.3

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
  RM344A  MANE        4.00    259.85    756.00      1.98      4.00    259.85    756.00        1.98

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7323E+02 EXCESS=0.0000E+00 OUTFLOW=0.7305E+02 BASIN STORAGE=0.8419E-03 PERCENT ERROR=   0.2

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
  RM344A  MANE        4.00    210.02    764.00      1.87      4.00    210.02    764.00        1.87

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6924E+02 EXCESS=0.0000E+00 OUTFLOW=0.6914E+02 BASIN STORAGE=0.8829E-03 PERCENT ERROR=   0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
  RM344A  MANE        4.00    184.12    768.00      1.82      4.00    184.12    768.00        1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6728E+02 EXCESS=0.0000E+00 OUTFLOW=0.6720E+02 BASIN STORAGE=0.9008E-03 PERCENT ERROR=   0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
  RM344B  MANE        4.00    305.61    760.00      2.08      4.00    305.61    760.00        2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7688E+02 EXCESS=0.0000E+00 OUTFLOW=0.7689E+02 BASIN STORAGE=0.1909E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
  RM344B  MANE        4.00    284.74    760.00      2.03      4.00    284.74    760.00        2.03
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7498E+02 EXCESS=0.0000E+00 OUTFLOW=0.7499E+02 BASIN STORAGE=0.1690E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
          RM344B  MANE         4.00    259.72    760.00      1.98      4.00    259.72    760.00        1.98

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7305E+02 EXCESS=0.0000E+00 OUTFLOW=0.7306E+02 BASIN STORAGE=0.1708E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
          RM344B  MANE         4.00    210.30    768.00      1.87      4.00    210.30    768.00        1.87

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6914E+02 EXCESS=0.0000E+00 OUTFLOW=0.6915E+02 BASIN STORAGE=0.1766E-02 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
          RM344B  MANE         4.00    184.55    772.00      1.82      4.00    184.55    772.00        1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6720E+02 EXCESS=0.0000E+00 OUTFLOW=0.6721E+02 BASIN STORAGE=0.1935E-02 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
            RM344  MANE         3.18    342.55    782.72      2.10      4.00    342.51    780.00        2.10

NTINUITY SUMMARY (AC-FT) - INFLOW=0.1397E+03 EXCESS=0.0000E+00 OUTFLOW=0.1397E+03 BASIN STORAGE=0.1199E-02 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
            RM344  MANE         3.19    340.26    781.09      2.05      4.00    340.22    780.00        2.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1360E+03 EXCESS=0.0000E+00 OUTFLOW=0.1360E+03 BASIN STORAGE=0.1192E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
            RM344  MANE         3.19    337.96    779.49      1.99      4.00    337.96    780.00        1.99

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1322E+03 EXCESS=0.0000E+00 OUTFLOW=0.1322E+03 BASIN STORAGE=0.1144E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
            RM344  MANE         3.21    332.70    779.93      1.88      4.00    332.70    780.00        1.88

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1246E+03 EXCESS=0.0000E+00 OUTFLOW=0.1246E+03 BASIN STORAGE=0.1156E-02 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
            RM344  MANE         3.22    329.89    778.68      1.82      4.00    329.87    776.00        1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1209E+03 EXCESS=0.0000E+00 OUTFLOW=0.1209E+03 BASIN STORAGE=0.1177E-02 PERCENT ERROR=   0.0
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FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM345  MANE        4.00   2643.02    808.00      1.32      4.00   2643.02    808.00        1.32

INUITY SUMMARY (AC-FT) - INFLOW=0.9833E+03 EXCESS=0.0000E+00 OUTFLOW=0.9839E+03 BASIN STORAGE=0.1445E-02 PERCENT ERROR=  -0.1

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM345  MANE        4.00   2604.69    808.00      1.29      4.00   2604.69    808.00        1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9576E+03 EXCESS=0.0000E+00 OUTFLOW=0.9581E+03 BASIN STORAGE=0.1281E-02 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM345  MANE        4.00   2563.69    808.00      1.25      4.00   2563.69    808.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9304E+03 EXCESS=0.0000E+00 OUTFLOW=0.9310E+03 BASIN STORAGE=0.1487E-02 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM345  MANE        4.00   2473.20    808.00      1.18      4.00   2473.20    808.00        1.18

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8742E+03 EXCESS=0.0000E+00 OUTFLOW=0.8747E+03 BASIN STORAGE=0.1397E-02 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM345  MANE        4.00   2422.80    808.00      1.14      4.00   2422.80    808.00        1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8457E+03 EXCESS=0.0000E+00 OUTFLOW=0.8461E+03 BASIN STORAGE=0.1187E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM347  MANE        4.00   2853.42    740.00    149.53      4.00   2853.42    740.00      149.53

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9619E+04 EXCESS=0.0000E+00 OUTFLOW=0.9619E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM347  MANE        4.00   2821.30    740.00    149.49      4.00   2821.30    740.00      149.49

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9617E+04 EXCESS=0.0000E+00 OUTFLOW=0.9617E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM347  MANE        4.00   2789.07    740.00    149.45      4.00   2789.07    740.00      149.45

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9614E+04 EXCESS=0.0000E+00 OUTFLOW=0.9614E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM347  MANE        4.00   2723.80    740.00    149.38      4.00   2723.80    740.00      149.38
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9610E+04 EXCESS=0.0000E+00 OUTFLOW=0.9610E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM347  MANE        4.00   2691.20    740.00    149.34      4.00   2691.20    740.00      149.34

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9607E+04 EXCESS=0.0000E+00 OUTFLOW=0.9607E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0



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

HEC-1 Input and Output Data

100-Year 24-Hour Storm
(File Name: 344-100.DAT)

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  10/02/95  TIME  10:49:22   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

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

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

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

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

  1           ID    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
  2           ID    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
  3           ID    INDEX NO. ST-951350
  4           ID
  5           ID    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
  6           ID    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
  7           ID    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.
  8           ID
  9           ID    FILENAME:  344-100.DAT     KHE JOB NO. 0344
 10           ID    100-YEAR 24-HOUR DURATION STORM
 11           ID    SCS TYPE-II DISTRIBUTION WAS USED
              *
              *  APRIL 11, 1992
              *
              *  Based on FCDMC comments dated March 17,1992 we adjusted the Mannings "n"
              *  coefficient to reflect weighted averaging in lieu of log averaging.
              *  We also changed the S-graph from Phoenix Mountain to Phoenix Valley.
              *
              *  REVISED:  JULY 6, 1994   Revised to address FEMA comments in a letter dated
              *                           November 15, 1993.
              *
              *  REVISED:  SEPTEMBER 12, 1994   Revised to address FEMA comments in a tele-
              *                                 phone conversation on August 10, 1994.
              *
              *  FINAL HEC-1 INPUT FILE - OCTOBER 24, 1994
              *
              *
              *DIAGRAM
 12           IT       4 10OCT92    1200    1000
 13           IO       5
 14           IN      30
 15           JD    4.00    0.01
              * KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
 16           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD    3.92     3.0
 22           JD    3.84    10.0
 23           JD    3.68    20.0
 24           JD    3.60    30.0

 25           KK    310S
 26           KM   RUNOFF GENERATED ON SUB-BASIN 310
 27           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 28           KM    L= 1.36 mi.  Lca= 0.64 mi.  S= 282 ft/mi.  Kn= .053  LAG= 24.78 min.
 29           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 30           BA    .679
 31           LG     .15     .25    8.60     .07    2.50
 32           UI     92.    221.    428.    550.    708.   1065.    985.    751.    583.    442.
 33           UI    263.    158.    118.     83.     28.     28.     28.     28.      0.      0.
 34           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 35           KK    311S
 36           KM   RUNOFF GENERATED ON SUB-BASIN 311
 37           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 38           KM    L= 1.52 mi.  Lca= 0.71 mi.  S=  260 ft/mi.  Kn= .053  LAG= 27.31 min.
 39           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 40           BA    .569
 41           LG     .15     .33    7.78    .105    6.53
 42           UI     70.    139.    300.    389.    483.    643.    867.    677.    543.    429.
 43           UI    334.    211.    122.    102.     70.     34.     22.     22.     22.     22.
 44           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 45           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 46           KK   HC311
 47           KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 310 & 311
 48           HC       2

 49           KK   311RR
              * KO     1
 50           KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO. 1
 51           RS       1    ELEV      12
 52           SV       0     2.2    11.6    35.4    81.1   156.4
 53           SE      12      14      16      18      20      22
 54           SL   15.62    9.62     0.6     0.5
 55           SS      20     200     3.0     1.5

 56           KK   RM311
 57           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 312
 58           KM            1) Reach Length = 8800 ft.
 59           RD
 60           RC     .05     .04     .05    8800   .0085
 61           RX       0     100     120     125     140     145     165     265
 62           RY       4       2       1       0       0       1       2       4

 63           KK    312S
 64           KM   RUNOFF GENERATED ON SUB-BASIN 312
 65           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 66           KM    L= 2.17 mi.  Lca= 0.91 mi.  S= 36 ft/mi.  Kn= .038  LAG= 35.87 min.
 67           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 68           BA   1.348
 69           LG     .35     .28    8.28    .082    0.00
 70           UI    127.    127.    419.    572.    694.    807.    963.   1277.   1587.   1311.
 71           UI   1086.    926.    770.    636.    497.    303.    220.    207.    127.    127.
 72           UI     43.     39.     39.     39.     39.     39.      0.      0.      0.      0.
 73           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 74           KK   HC312
 75           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 312 WITH ROUTED FLOW FROM 311
 76           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  77          KK   RM312
  78          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 312 THROUGH 314
  79          KM            1) Reach Length = 4640 ft.
  80          RD
  81          RC     .05     .04     .05    4640   .0060
  82          RX       0       5     205     215     235     245     445     450
  83          RY       5       3       1       0       0       1       3       5

  84          KK    315S
  85          KM   RUNOFF GENERATED ON SUB-BASIN 315
  86          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  87          KM    L= 1.16 mi.  Lca= 0.37 mi.  S= 287 ft/mi.  Kn= .053  LAG= 18.88 min.
  88          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
  89          BA    .508
  90          LG     .15     .30    8.05    .093    6.65
  91          UI     91.    332.    515.    724.   1076.    791.    567.    379.    178.    118.
  92          UI     63.     28.     28.     28.      0.      0.      0.      0.      0.      0.
  93          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  94          KK   315RR
              * KO     1
  95          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.2
  96          RS       1    ELEV      13
  97          SV       0     0.3     3.0    10.2    25.3    51.6
  98          SE      13      14      16      18      20      22
  99          SL   14.84    4.59     0.6     0.5
 100          SS      21      50     3.0     1.5

 101          KK   RM315
 102          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 316
 103          KM            1) Reach Length = 7480 ft.
 104          RD
 105          RC     .05     .04     .05    7480   .0099
 106          RX      60     140     190     200     210     220     270     350
 107          RY       5       4       2       0       0       2       4       5

 108          KK    316S
 109          KM   RUNOFF GENERATED ON SUB-BASIN 316
 110          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 111          KM    L= 1.36 mi.  Lca= 0.86 mi.  S= 55 ft/mi.  Kn= .038  LAG= 27.12 min.
 112          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 113          BA    .672
 114          LG     .25     .37    7.14     .14     .00
 115          UI     83.    167.    359.    466.    578.    781.   1024.    795.    637.    501.
 116          UI    389.    237.    144.    116.     83.     35.     26.     26.     26.     26.
 117          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 118          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 119          KK   HC316
 120          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 316 WITH ROUTED FLOW FROM 315
 121          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 122          KK   RM316
 123          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 316 THROUGH 314
 124          KM            1) Reach Length = 4720 ft.
 125          RD
 126          RC     .05     .04     .05    4720   .0059
 127          RX       0       5     205     215     235     245     445     450
 128          RY       5       3       1       0       0       1       3       5

 129          KK    317S
 130          KM   RUNOFF GENERATED ON SUB-BASIN 317
 131          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 132          KM    L= 1.54 mi.  Lca= 0.58 mi.  S= 300 ft/mi.  Kn= .053  LAG= 24.74 min.
 133          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 134          BA    .704
 135          LG     .15     .35    7.50    .117    9.37
 136          UI     96.    230.    445.    572.    737.   1109.   1019.    778.    603.    456.
 137          UI    270.    164.    121.     84.     29.     29.     29.     29.      0.      0.
 138          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 139          KK    318S
 140          KM   RUNOFF GENERATED ON SUB-BASIN 318
 141          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 142          KM    L= 1.94 mi.  Lca= 1.09 mi.  S= 288 ft/mi.  Kn= .053  LAG= 34.59 min.
 143          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 144          BA    .542
 145          LG     .15     .33    7.78    .105    7.49
 146          UI     53.     54.    185.    246.    296.    350.    421.    576.    651.    507.
 147          UI    428.    355.    295.    240.    168.     94.     88.     65.     53.     28.
 148          UI     16.     16.     16.     16.     16.      0.      0.      0.      0.      0.
 149          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 150          KK   HC317
 151          KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 317 & 318
 152          HC       2

 153          KK   317RR
              * KO     1
 154          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.3
 155          RS       1    ELEV      13
 156          SV       0     1.3    13.2    41.3    90.4   159.6
 157          SE      13      14      16      18      20      22
 158          SL   15.42    9.62     0.6     0.5
 159          SS      21      50     3.0     1.5

 160          KK   RM317
 161          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 319
 162          KM            1) Reach Length = 5000 ft.
 163          RD
 164          RC     .05     .04     .05    5000   .0116
 165          RX      60     160     190     200     210     220     250     350
 166          RY       4       3       2       0       0       2       3       4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 167          KK   319S
 168          KM   RUNOFF GENERATED ON SUB-BASIN 319
 169          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 170          KM    L= 0.99 mi.  Lca= 0.51 mi.  S= 63 ft/mi.  Kn= .045  LAG= 22.75 min.
 171          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 172          BA   .339
 173          LG    .25     .39    5.98    .198     .00
 174          UI    50.    138.    250.    323.    447.    606.    451.    346.    259.    160.
 175          UI    86.     63.     40.     15.     15.     15.      0.      0.      0.      0.
 176          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 177          KK   HC319
 178          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 319 WITH ROUTED FLOW FROM 317
 179          HC      2

 180          KK   RM319
 181          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 319 THROUGH 314
 182          KM           1) Reach Length = 6360 ft.
 183          RD
 184          RC    .05     .04     .05    6360   .0066
 185          RX      0       5     205     215     235     245     445     450
 186          RY      5       3     1.5       0       0     1.5       3       5

 187          KK   314S
 188          KM   RUNOFF GENERATED ON SUB-BASIN 314
 189          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 190          KM    L= 1.81 mi.  Lca= 0.71 mi.  S= 41 ft/mi.  Kn= .038  LAG= 29.72 min.
 191          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 192          BA   .846
 193          LG   .339    .365    4.43    .256    2.78
 194          UI    96.    160.    379.    501.    606.    751.   1073.   1118.    858.    705.
 195          UI   564.    449.    293.    168.    152.     96.     70.     29.     29.     29.
 196          UI    29.     29.      0.      0.      0.      0.      0.      0.      0.      0.
 197          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 198          KK   HC314
 199          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 314 WITH ROUTED FLOWS FROM 312, 316 & 319
 200          HC      4

 201          KK   314RR
              * KO     1
 202          KM   ROUTE FLOW THROUGH PINNACLE PEAK ROAD CULVERTS
 203          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 204          KM           Prepared for the City of Phoenix Engineering Dept., Floodplain
 205          KM           Management, ST-886366, September 1989, by Greiner, Inc.
 206          RS      1    ELEV      11
 207          SV      0     .05     1.2     9.1    35.6      65    94.5     139
 208          SE     11      12      14      16      18      19      20      21
 209          SQ      0      54     254     528     936    2344    5278   10401
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 210          KK   RM314
 211          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM SUB-BASIN 314 THROUGH 322
 212          KM           1) Reach Length = 1920 ft.
 213          RD
 214          RC     .05     .04     .05    1920   .0026
 215          RX       0      50     150     165     175     190     240     250
 216          RY       6       5       4       0       0       4       5       7

 217          KK    320S
 218          KM   RUNOFF GENERATED ON SUB-BASIN 320
 219          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 220          KM    L= 1.74 mi.  Lca= 0.72 mi.  S= 218 ft/mi.  Kn= .053  LAG= 29.89 min.
 221          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 222          BA   1.106
 223          LG    .149    .345    7.50    .116    7.45
 224          UI    125.    205.    491.    649.    783.    968.   1374.   1472.   1125.    928.
 225          UI    743.    595.    399.    220.    204.    125.     99.     38.     38.     38.
 226          UI     38.     38.      0.      0.      0.      0.      0.      0.      0.      0.
 227          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 228          KK   DT320
 229          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.8 AC-FT FROM SUB-BASIN 320
 230          KM                                              (Hydrograph identified as OR320)
 231          KM                                            2) Balance of runoff continues on.
 232          KM                                              (Hydrograph identified as DT320)
 233          DT   OR320     1.8
 234          DI       0   10000
 235          DQ       0   10000

 236          KK   320RR
              * KO     1
 237          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURES NO. 4 & 5
 238          RS       1    ELEV      13
 239          SV       0     0.6    12.4    48.7   119.5   230.3
 240          SE      13      14      16      18      20      22
 241          SL   14.80   11.66     0.6     0.5
 242          SS      20     200     3.0     1.5

 243          KK   320RE
 244          KM   DIVERT OUTFLOW FROM STRUCTURE NO.5 INTO SUB-BASIN 325
 245          KM   REMAINING OUTFLOW INTO SUB-BASIN 321 IS FROM STRUCTURE NO.4
 246          DT    325D
 247          DI       0      13      63     102     128     150
 248          DQ       0       5      28      42      52      60

 249          KK   RM320
 250          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION FOR SUB-BASIN 320 THROUGH 321
 251          KM           1) Reach Length = 11,160 ft.
 252          RD
 253          RC     .05     .04     .05   11160   .0085
 254          RX       0       5     155     160     170     175     325     330
 255          RY       3       2       1       0       0       1       2       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 256          KK   321S
 257          KM   RUNOFF GENERATED ON SUB-BASIN 321
 258          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 259          KM    L= 2.27 mi.  Lca= 1.24 mi.  S= 57 ft/mi.  Kn= .038  LAG= 37.61 min.
 260          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 261          BA   1.121
 262          LG    .298    .349    3.77    .349    1.42
 263          UI    100.    100.    302.    436.    531.    614.    726.    887.   1220.   1164.
 264          UI    934.    805.    675.    570.    481.    344.    213.    172.    156.    100.
 265          UI    100.     32.     31.     31.     31.     31.     31.     31.      0.      0.
 266          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 267          KK   HC321
 268          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 321 WITH ROUTED FLOW FROM 320
 269          HC       2

 270          KK   RM321
 271          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 321 THROUGH 322
 272          KM           1) Reach Length = 2760 ft.
 273          RD
 274          RC     .05     .04     .05    2760   .0051
 275          RX       0      50     150     165     175     190     240     250
 276          RY       6       5       4       0       0       4       5       7

 277          KK    323S
 278          KM   RUNOFF GENERATED ON SUB-BASIN 323
 279          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 280          KM    L= 0.92 mi.  Lca= 0.34 mi.  S= 61 ft/mi.  Kn= .038  LAG= 16.11 min.
 281          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 282          BA     .11
 283          LG     .10     .25    4.24    .433   25.12
 284          UI     27.     99.    150.    249.    218.    147.     90.     39.     24.      7.
 285          UI      7.      7.      0.      0.      0.      0.      0.      0.      0.      0.
 286          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 287          KK   323RR
              * KO     1
 288          KM   ROUTE FLOW THROUGH ON-SITE DETENTION
 289          RS       1    ELEV    36.1
 290          SV       0     0.5     3.9    12.8    29.3    57.8
 291          SE    36.1      38      40      42      44      46
 292          SL   37.65     6.6     0.6     0.5
 293          SS      45     100     3.0     1.5

 294          KK   RM323
 295          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION THROUGH SUB-BASIN 322
 296          KM           1) Reach Length = 5200 ft.
 297          RD
 298          RC     .05     .04     .05    5200   .0063
 299          RX       0       5     205     215     225     235     435     440
 300          RY       5       3       1       0       0       1       3       5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 301          KK   322S
 302          KM   RUNOFF GENERATED ON SUB-BASIN 322
 303          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 304          KM    L= 1.15 mi.  Lca= 0.44 mi.  S= 36 ft/mi.  Kn= .036  LAG= 20.26 min.
 305          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 306          BA   .345
 307          LG   .328    .341    3.77    .348    7.52
 308          UI    57.    190.    310.    415.    653.    571.    418.    303.    177.     97.
 309          UI    63.     31.     18.     18.     18.      0.      0.      0.      0.      0.
 310          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 311          KK   DT322
 312          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.2 AC-FT FROM SUB-BASIN 322
 313          KM                                              (Hydrograph identified as OR322)
 314          KM                                            2) Balance of runoff continues on.
 315          KM                                              (Hydrograph identified as DT322)
 316          DT   OR322     1.2
 317          DI       0   10000
 318          DQ       0   10000

 319          KK   HC322
 320          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 322 WITH ROUTED FLOW FROM 314, 321 & 323
 321          HC       4

 322          KK   322RR
 323          KM   ROUTE FLOW THROUGH DETENTION BEHIND 2 - 8 x 7 RCBC AT I-17
 324          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 325          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 326          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 327          RS       1    STOR      -1
 328          SV       0    .001     .22    1.16    8.44      17      30      49      67      76
 329          SE     3.8       4       6       8      10      11      12      13    13.7      14
 330          SQ       0       1     176     414     680     880    1091    1593    2678    3746

 331          KK   322RE
 332          KM   DIVERT OVERFLOWS SOUTH TO SINGLE CULVERT AT MH PARK, AND WEST ONTO I-17.
 333          KM   DQ IS DISCHARGE THROUGH 2-8x7 CULVERT (MAX. 1312 CFS); DI IS TOTAL DISCHARGE.
 334          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 335          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 336          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 337          DT   333D1
 338          DI       1     880    1091    1593    2678    3746
 339          DQ       1     880    1060    1184    1296    1312

 340          KK    326D
 341          KM   SEPARATE OUT WEST OVERFLOWS ONTO THE FRONTAGE ROAD AND MAINLINE I-17.
 342          KM   THESE FLOWS HEAD SOUTH AND EVENTUALLY ENTER THE DEER VALLEY ROAD INTERCHANGE.
 343          KM   REMAINING FLOWS CONTINUE SOUTH TO 6x7 BOX CULVERT ON SCATTER WASH AT I-17.
 344          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 345          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 346          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 347          DT    332D
 348          DI      31     409    1382    2434
 349          DQ       0       0     215     840
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 350          KK   325RD
 351          KM   RETRIEVE FLOW FROM C.A.P. STRUCTURE NO.5
 352          DR    325D

 353          KK   RM320
 354          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM STRUCTURE NO.5 THROUGH 325.
 355          KM            1) Reach Length = 8560 ft.
 356          RD
 357          RC     .05     .04     .05    8560   .0082
 358          RX       0      10     200     220     235     255     440     450
 359          RY       5       4       2       0       0       2       4       5

 360          KK    325S
 361          KM   RUNOFF GENERATED ON SUB-BASIN 325
 362          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 363          KM    L= 1.71 mi.  Lca= 0.65 mi.  S= 60 ft/mi.  Kn= .037  LAG= 25.48 min.
 364          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 365          BA    .502
 366          LG    .266    .333    3.87    .372    7.02
 367          UI     66.    151.    300.    388.    491.    718.    756.    566.    445.    343.
 368          UI    234.    121.    100.     66.     32.     20.     20.     20.     20.      0.
 369          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 370          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 371          KK   HC325
 372          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 325 WITH ROUTED FLOW FROM 320
 373          HC       2

 374          KK   RM325
 375          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 325 THROUGH 326
 376          KM            1) Reach Length = 6200 ft.
 377          RD
 378          RC     .05     .04     .05    6200   .0068
 379          RX      80     130     195     220     235     260     325     375
 380          RY       6       5       3       0       0       3       5       6

 381          KK    326S
 382          KM   RUNOFF GENERATED ON SUB-BASIN 326
 383          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 384          KM    L= 2.01 mi.  Lca= 0.90 mi.  S= 37 ft/mi.  Kn= .036  LAG= 32.70 min.
 385          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 386          BA    .498
 387          LG    .312    .335    4.14    .428   12.87
 388          UI     51.     65.    186.    252.    299.    361.    452.    635.    555.    446.
 389          UI    374.    305.    250.    176.    102.     86.     64.     51.     26.     16.
 390          UI     16.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 391          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 392          KK   DT326
 393          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.7 AC-FT FROM SUB-BASIN 326
 394          KM                                               (Hydrograph identified as OR326)
 395          KM                                             2) Balance of runoff continues on.
 396          KM                                               (Hydrograph identified as DT326)
 397          DT   OR326     4.7
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          DI       0   10000
 399          DQ       0   10000

 400          KK   HC326
 401          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 326 WITH ROUTED FLOW FROM 325 AND
 402          KM   OVERFLOW FROM 322.
 403          HC       3

 404          KK   326RE
 405          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x7 RCBC (MAX. Q = 510 CFS)
 406          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 407          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 408          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 409          DT   333D2
 410          DI       0       1     510     511    1000    2000
 411          DQ       0       1     510     510     510     510

 412          KK    327S
 413          KM   RUNOFF GENERATED ON SUB-BASIN 327
 414          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 415          KM    L= 1.21 mi.  Lca= 0.53 mi.  S= 38 ft/mi.  Kn= .030  LAG= 18.28 min.
 416          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 417          BA    .216
 418          LG    .193    .287    3.61    .305   47.32
 419          UI     40.    152.    232.    336.    466.    328.    231.    143.     68.     44.
 420          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 421          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 422          KK   DT327
 423          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.7 AC-FT FROM SUB-BASIN 327
 424          KM                                              (Hydrograph identified as OR327)
 425          KM                                            2) Balance of runoff continues on.
 426          KM                                              (Hydrograph identified as DT327)
 427          DT   OR327     1.7
 428          DI       0   10000
 429          DQ       0   10000

 430          KK   HC327
 431          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 327 WITH OVERFLOW FROM 326
 432          HC       2

 433          KK   327RE
 434          KM   DIVERT FLOW ACROSS I-17 THROUGH 65"x40" CMP AT ADOBE DR.
 435          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 436          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 437          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 438          DT   334D1
 439          DI       0     115     116    1000    3000
 440          DQ       1     115     115     115     115
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

441         KK   330S
442         KM   RUNOFF GENERATED ON SUB-BASIN 330
443         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
444         KM    L= 1.67 mi.  Lca= 0.87 mi.  S= 28 ft/mi  Kn= .024  LAG= 21.15 min.
445         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
446         BA    .310
447         LG   .192    .272    3.77    .325   36.43
448         UI    49.    153.    259.    341.    517.    541.    390.    288.    197.     96.
449         UI    69.     43.     15.     15.     15.      0.      0.      0.      0.      0.
450         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

451         KK   DT330
452         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.9 AC-FT FROM SUB-BASIN 330
453         KM                                              (Hydrograph identified as OR330)
454         KM                                            2) Balance of runoff continues on.
455         KM                                              (Hydrograph identified as DT330)
456         DT   OR330     1.9
457         DI       0   10000
458         DQ       0   10000

459         KK   330R1
460         KM   DIVERT FLOW SOUTH ALONG 19TH AVENUE AT DEER VALLEY RD.
461         DT    341D
462         DI       0     145     418    2248    4002
463         DQ       0       0     121     550    1220

464         KK   330R2
465         KM   DIVERT FLOW SOUTH INTO SUB-BASIN 343.  THIS DIVERT IS USED TO SIMULATE
466         KM   THE CROWN OVERTOPPING OF DEER VALLEY RD.
467         DT    343D
468         DI       0      55     328     746
469         DQ       0       0     241     487

470         KK   RM330
471         KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 330 THROUGH 331
472         KM           1) Reach Length = 3850 ft.
473         RD
474         RC   .020    .020    .030    3850   .0057
475         RX       0      .5    45.5    45.5    50.5    55.5    60.5    60.5
476         RY       5       3     2.3     2.8     2.8       3       4       5

477         KK    331S
478         KM   RUNOFF GENERATED ON SUB-BASIN 331
479         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
480         KM    L= 1.25 mi.  Lca= 0.32 mi.  S= 35 ft/mi.  Kn= .027  LAG= 13.97 min.
481         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
482         BA     .22
483         LG   .141    .171    8.28    .078   68.37
484         UI    77.    256.    409.    596.    384.    228.     94.     46.     16.     16.
485         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
486         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 487          KK   DT331
 488          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.6 AC-FT FROM SUB-BASIN 331
 489          KM                                             (Hydrograph identified as OR331)
 490          KM                                           2) Balance of runoff continues on.
 491          KM                                             (Hydrograph identified as DT331)
 492          DT   OR331     1.6
 493          DI       0   10000
 494          DQ       0   10000

 495          KK   HC331
 496          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 331 WITH OVERFLOW FROM 327 & 330.
 497          HC       3

 498          KK   331RE
 499          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x3 RCBC AT LOUISE DR.
 500          KM   DI REPRESENTS TOTAL FLOW TO DEPRESSED INTERCHANGE AT DEER VALLEY RD.
 501          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 502          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 503          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 504          DT   334D2
 505          DI       0       1     156     157    1000    3000
 506          DQ       0       1     156     156     156     156

 507          KK    R332
 508          KM   RETRIEVE HYDROGRAPH OF OVERFLOW FROM SUB-BASIN 322 ONTO I-17 MEDIAN
 509          DR    332D

 510          KK    332S
 511          KM   RUNOFF GENERATED ON SUB-BASIN 332
 512          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 513          KM    L= 0.40 mi.  Lca= 0.07 mi.  S= 65 ft/mi.  Kn= .027  LAG= 6.00 min.
 514          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 515          BA    .094
 516          LG    .159    .189    8.20    .046   48.74
 517          UI    190.    497.    185.     29.      0.      0.      0.      0.      0.      0.
 518          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 519          KK   DT332
 520          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.4 AC-FT FROM SUB-BASIN 332
 521          KM                                             (Hydrograph identified as OR332)
 522          KM                                           2) Balance of runoff continues on.
 523          KM                                             (Hydrograph identified as DT332)
 524          DT   OR332     0.4
 525          DI       0   10000
 526          DQ       0   10000

 527          KK   HC332
 528          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 332 WITH OVERFLOWS FROM SUB-BASIN 322
 529          KM   AND 331 (TOTAL FLOW INTO DEER VALLEY RD. INTERCHANGE)
 530          HC       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

531           KK   332RR
532           KM   ROUTE FLOW THROUGH DEPRESSED SECTION AT DEER VALLEY RD. INTERCHANGE TO
533           KM   WEST SIDE OF I-17.
              * KO     1
534           RS       1    ELEV      82
535           SV       0     1.4    10.7    28.9    42.5      56      69    84.5   114.8
536           SE      82      84      88      92      94    95.6    96.8      98     100
537           SQ       0       0       0       0       0       1    1428    7646   26741

538           KK   RM332
539           KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DEER VALLEY RD. INTERCHANGE
540           KM   THROUGH SUB-BASIN 335.
541           KM            1) Reach Length = 5760 ft.
542           RD
543           RC    .045     .04    .045    5760   .0068
544           RX       0       5      55      60      70      75     125     130
545           RY       3       2       1       0       0       1       2       3

546           KK    R322
547           KM   RETRIEVE HYDROGRAPH FOR NORTH BRANCH OF SCATTER WASH
548           KM   (ALSO KNOWN AS FLOW THROUGH 2-8x7 RCBC)
549           DR   333D1

550           KK    R326
551           KM   RETRIEVE HYDROGRAPH FOR SOUTH BRANCH OF SCATTER WASH
552           KM   (ALSO KNOWN AS FLOW THROUGH 6x7 RCBC)
553           DR   333D2

554           KK    333S
555           KM   RUNOFF GENERATED ON SUB-BASIN 333
556           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
557           KM    L= 2.34 min.  Lca= 0.96 mi.  S= 27 ft/mi.  Kn= .038  LAG= 39.79 min.
558           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
559           BA    .533
560           LG    .311    .354    5.98    .198   10.71
561           UI     45.     45.    119.    187.    229.    264.    307.    360.    476.    574.
562           UI    471.    395.    345.    289.    247.    208.    150.     93.     77.     73.
563           UI     45.     45.     21.     14.     14.     14.     14.     14.     14.      0.
564           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
565           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

566           KK   HC333
567           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 333 WITH DIVERTED FLOWS FROM 322 & 326.
568           HC       3

569           KK   RM333
570           KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 333 THROUGH 334
571           KM            1) Reach Length = 5160 ft.
572           RD
573           RC    .055    .045    .055    5160   .0056
574           RX       0      60     110     145     170     195     250     400
575           RY       7       6       2       0       0       2       6       7
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

576         KK    R327
577         KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 327
578         DR   334D1

579         KK   RM327
580         KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
581         KM            1) Reach Length = 5100 ft.
582         RD
583         RC     .05     .04     .05    5100   .0073
584         RX       0      10      30      33      48      51     151     200
585         RY       3       2     1.5       0       0     1.5       2       3

586         KK    R331
587         KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 331
588         DR   334D2

589         KK   RM331
590         KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
591         KM            1) Reach Length = 5000 ft.
592         RD
593         RC     .03    .045    .045    5000   .0070
594         RX       0      10      30      33      48      51     151     200
595         RY       3       2     1.5       0       0     1.5       2       3

596         KK    334S
597         KM   RUNOFF GENERATED ON SUB-BASIN 334
598         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
599         KM    L= 1.01 mi.  Lca= 0.51 mi.  S= 272 ft/mi.  Kn= .033  LAG= 12.73 min.
600         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
601         BA    .657
602         LG    .161    .229    8.28    .081   32.97
603         UI    285.    902.   1587.   1729.   1031.    462.    217.     67.     53.      0.
604         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
605         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

606         KK   DT334
607         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.8 AC-FT FROM SUB-BASIN 334
608         KM                                              (Hydrograph identified as OR334)
609         KM                                            2) Balance of runoff continues on.
610         KM                                              (Hydrograph identified as DT334)
611         DT   OR334     0.8
612         DI       0   10000
613         DQ       0   10000

614         KK   HC334
615         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 334 WITH ROUTED FLOWS FROM 327, 331 & 333
616         HC       4

617         KK   RM334
618         KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 334 THROUGH 335
619         KM            1) Reach Length = 2980 ft.
620         RD
621         RC     .05    .045     .05    2980   .0044
622         RX       0     190     230     240     260     270     330     400
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 623          RY       7       4       2       0       0       2       6       7

 624          KK    335S
 625          KM   RUNOFF GENERATED ON SUB-BASIN 335
 626          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 627          KM    L= 1.11 mi.  Lca= 0.56 mi.  S= 38 ft/mi.  Kn= .033  LAG= 19.87 min.
 628          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 629          BA    .463
 630          LG    .206     .22    8.60     .07   14.96
 631          UI     78.    267.    430.    581.    914.    751.    550.    394.    210.    130.
 632          UI     78.     30.     24.     24.      0.      0.      0.      0.      0.      0.
 633          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 634          KK   DT335
 635          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.8 AC-FT FROM SUB-BASIN 335
 636          KM                                             (Hydrograph identified as OR335)
 637          KM                                           2) Balance of runoff continues on.
 638          KM                                             (Hydrograph identified as DT335)
 639          DT   OR335     4.8
 640          DI       0   10000
 641          DQ       0   10000

 642          KK   HC335
 643          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 335 WITH ROUTED FLOWS FROM 332 & 334
 644          HC       3

 645          KK   RM335
 646          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 335 THROUGH 345
 647          KM            1) Reach Length = 4240 ft.
 648          RD
 649          RC     .05     .04     .05    4240   .0061
 650          RX       0      10     280     285     335     340     500     510
 651          RY      10       8       4       2       2       4       8      10

 652          KK   330R2
 653          KM   RETRIEVE DIVERTED FLOW FROM DEER VALLEY RD.
 654          DR    343D

 655          KK    343S
 656          KM   RUNOFF GENERATED ON SUB-BASIN 343
 657          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 658          KM    L= 1.07 mi.  Lca= 0.55 mi.  S= 24 ft/mi.  Kn= .027  LAG= 17.38 min.
 659          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 660          BA     .32
 661          LG    .181    .179   10.10    .034   47.01
 662          UI     62.    252.    378.    580.    686.    464.    319.    158.     91.     50.
 663          UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 664          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 665          KK   DT343
 666          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.5 AC-FT FROM SUB-BASIN 343
 667          KM                                             (Hydrograph identified as OR343)
 668          KM                                           2) Balance of runoff continues on.
 669          KM                                             (Hydrograph identified as DT343)
 670          DT   OR343     6.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 671          DI       0   10000
 672          DQ       0   10000

 673          KK   HC343
 674          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 343 WITH OVERFLOW FROM DEER VALLEY RD.
 675          HC       2

 676          KK   343RR
 677          KM   ROUTE FLOW THROUGH DETENTION BASIN D AT ROSE GARDEN LANE
 678          KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 679          KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 680          KM            Prepared by DeLeuw Cather & Co.
              * KO     1
 681          RS       1    STOR       0
 682          SV       0      .7    25.4      30    34.6
 683          SE    1381  1382.5    1396    1398    1400
 684          SL    1381    2.41     0.6     0.5
 685          SS    1397     100     3.0     1.5

 686          KK   RM343
 687          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM DETENTION BASIN D SOUTH
 688          KM            1) Reach Length = 2273 ft.
 689          RD    2273   .0078    .014            CIRC       3

 690          KK    349S
 691          KM   RUNOFF GENERATED ON SUB-BASIN 349
 692          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 693          KM    L= 1.03 mi.  Lca= 0.68 mi.  S= 27 ft/mi.  Kn= .028  LAG= 18.83 min.
 694          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 695          BA    .372
 696          LG    .193    .097   12.40    .012   34.46
 697          UI     67.    244.    379.    534.    790.    578.    414.    275.    129.     85.
 698          UI     45.     20.     20.     20.      0.      0.      0.      0.      0.      0.
 699          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 700          KK   DT349
 701          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 7.4 AC-FT FROM SUB-BASIN 349
 702          KM                                              (Hydrograph identified as OR349)
 703          KM                                            2) Balance of runoff continues on.
 704          KM                                              (Hydrograph identified as DT349)
 705          DT   OR349     7.4
 706          DI       0   10000
 707          DQ       0   10000

 708          KK   349RR
 709          KM   ROUTE FLOW THROUGH SMALL DETENTION BASIN AT INTEL
 710          KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 711          KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 712          KM            Prepared by DeLeuw Cather & Co.
              * KO     1
 713          RS       1    STOR       0
 714          SV       0     .35     1.9    3.07    4.56    6.00
 715          SE    1383    1384    1386    1388    1390    1392
 716          SL    1383    7.07     0.6     0.5
 717          SS    1390     100     3.0     1.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 718          KK   349RE
 719          KM   DIVERT OUTFLOW INTO BEARDSLEY RD. INTERCHANGE.  REMAINING FLOW CONTINUES TO
 720          KM   SCATTER WASH AND REFLECTS DISCHARGE FROM INTEL BASIN LOW LEVEL OUTLET.
 721          DT   BEARD
 722          DI       0      90      91     100     200     500    1000
 723          DQ       0       0       1      10     110     410     910

 724          KK   HC349
 725          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 349 WITH ROUTED DETENTION BASIN D OVERFL
 726          HC       2

 727          KK  RM344A
 728          KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH 96-IN. PIPE
 729          KM            1) Reach Length = 3244 ft.
 730          RD    3244   .0012    .014            CIRC       8

 731          KK  RM344B
 732          KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH TRAPEZOIDAL CHANNEL
 733          KM            1) Reach Length = 3550 ft.
 734          RD    3150   .0044    .014            TRAP       8       2

 735          KK    344S
 736          KM   RUNOFF GENERATED ON SUB-BASIN 344
 737          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 738          KM    L= 1.69 mi.  Lca= 0.98 mi.  S= 27 ft/mi.  Kn= .031  LAG= 28.91 min.
 739          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 740          BA    .554
 741          LG    .256    .162    9.40    .023   24.47
 742          UI     65.    114.    262.    344.    418.    527.    769.    704.    551.    447.
 743          UI    356.    275.    153.    110.     85.     65.     27.     20.     20.     20.
 744          UI     20.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 745          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 746          KK   DT344
 747          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.0 AC-FT FROM SUB-BASIN 344
 748          KM                                               (Hydrograph identified as OR344)
 749          KM                                            2) Balance of runoff continues on.
 750          KM                                               (Hydrograph identified as DT344)
 751          DT   OR344     6.0
 752          DI       0   10000
 753          DQ       0   10000

 754          KK  HC344U
 755          KM   COMBINE HYDROGRAPHS UPSTREAM OF DETENTION BASIN C FROM SUB-BASIN 344 WITH
 756          KM   ROUTED OUTFLOW FROM DETENTION BASIN AT INTEL
 757          HC       2

 758          KK     344
 759          KM   DIVERT FLOW TO DETENTION BASIN C
 760          KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 761          KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 762          KM            Prepared by DeLeuw Cather & Co.
 763          DT   344RE
 764          DI       0     150     250     251     750
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

765           DQ       0     150     250     250     250

766           KK   344RR
767           KM   ROUTE FLOW THROUGH DETENTION BASIN C (33-IN. ORIFICE)
768           KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
769           KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
770           KM            Prepared by DeLeuw Cather & Co.
              * KO     1
771           RS       1    STOR       0
772           SA    2.15    2.24    2.32    2.52    2.71    2.91    3.12    3.67
773           SE    1338    1339    1340    1342    1344    1346    1348    1353
774           SL    1339    5.94     0.6     0.5
775           SS    1352      40     2.7     1.5

776           KK  R344RE
777           KM   RETRIEVE DETENTION BASIN BYPASS FLOW
778           DR   344RE

779           KK  HC344D
780           KM   COMBINE HYDROGRAPHS DOWNSTREAM OF DETENTION BASIN C
781           HC       2

782           KK   RM344
783           KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION BASIN C THROUGH SUB-BASIN 345
784           KM            1) Reach Length = 2160 ft.
785           RD    2160   .0044    .014            TRAP       8       2

786           KK    345S
787           KM   RUNOFF GENERATED ON SUB-BASIN 345
788           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
789           KM    L= 1.11 mi.  Lca= 0.67 mi.  S= 32 ft/mi.  Kn= .027  LAG= 17.98 min.
790           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
791           BA    .296
792           LG    .194    .302    5.67     .21   35.40
793           UI     55.    216.    328.    489.    636.    443.    310.    178.     94.     56.
794           UI     19.     17.     17.      0.      0.      0.      0.      0.      0.      0.
795           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

796           KK   HC345
797           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 345 WITH ROUTED HYDROGRAPHS FROM 335 & 344
798           HC       3

799           KK   RM345
800           KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 345 THROUGH 346
801           KM            1) Reach Length = 6200 ft.
802           RD
803           RC    .055    .045    .055    6200   .0045
804           RX       0      20     175     180     200     205     310     330
805           RY      10       6       4       2       2       4       6      10
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

806           KK   346S
807           KM   RUNOFF GENERATED ON SUB-BASIN 346
808           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
809           KM    L= 1.51 mi.  Lca= 0.82 mi.  S= 27 ft/mi.  Kn= .033  LAG= 27.55 min.
810           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
811           BA   .401
812           LG   .227    .313    5.67     .21   24.66
813           UI    49.     95.    207.    269.    333.    435.    607.    479.    384.    304.
814           UI   239.    157.     85.     74.     49.     28.     15.     15.     15.     15.
815           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
816           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

817           KK   HC346
818           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 346 WITH ROUTED FLOW FROM 345
819           HC      2

820           KK    AD1
821           KM   ADOBE DAM LOW LEVEL SPILLWAY OUTFLOW; ASSUME CONSTANT OUTFLOW OF
822           KM   1730 CFS FOR 100-YEAR STORM.
823           KM   SOURCE:  F.I.S., Maricopa County, Arizona and Incorporated Areas, FEMA.
824           BA    0.1
825           IN    120
826           QI   1730    1730    1730    1730    1730    1730    1730    1730    1730    1730
827           QI   1730    1730    1730    1730    1730    1730    1730    1730    1730    1730

828           KK   RMAD1
829           KM   NORMAL DEPTH STORAGE ROUTE ADOBE DAM OUTFLOW THROUGH SUB-BASIN 347
830           KM           1) Reach Length = 3240 ft.
831           RS      5    FLOW      -1
832           RC   .055    .045    .055    3240   .0040
833           RX     30      80     180     200     240     260     265     270
834           RY      7       6       5       0       0       6       7       8

835           KK   347S
836           KM   RUNOFF GENERATED ON SUB-BASIN 347
837           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
838           KM    L= 1.71 mi.  Lca= 0.73 mi.  S= 35 ft/mi.  Kn= .035  LAG= 27.90 min.
839           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
840           BA   1.105
841           LG   .215    .326    3.71     .34   20.32
842           UI   133.    254.    560.    728.    898.   1163.   1650.   1344.   1074.    853.
843           UI   675.    467.    252.    219.    133.     96.     41.     41.     41.     41.
844           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
845           UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

846           KK   HC347
847           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 347 WITH ROUTED OUTFLOW FROM ADOBE DAM
848           HC      2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

849           KK   RM347
850           KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 347 THROUGH 348
851           KM            1) Reach Length = 3120 ft.
852           RD
853           RC     .05     .04     .05    3120   .0051
854           RX     160     165     170     200     245     280     285     290
855           RY       7     6.5       6       0       0       6     6.5       7

856           KK    348S
857           KM   RUNOFF GENERATED ON SUB-BASIN 348
858           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
859           KM    L= 0.59 mi.  Lca= 0.41 mi.  S= 27 ft/mi.  Kn= .030  LAG= 13.47 min.
860           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
861           BA    .048
862           LG     .20     .31    3.68    .769   21.67
863           UI     18.     60.     99.    130.     81.     43.     18.      8.      4.      4.
864           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
865           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

866           KK   HC348
867           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 348 WITH ROUTED FLOW FROM 347
868           HC       2

869           KK   HCSKB
870           KM   COMBINE HYDROGRAPHS FROM SKUNK CREEK WITH SCATTER WASH
871           HC       2

872           KK    R330
873           KM   RETRIEVE DIVERTED HYDROGRAPH FROM DEER VALLEY ROAD AND 19TH AVENUE.   THIS
874           KM   HYDROGRAPH WILL BE STORED IN FILENAME:  CCW324.DSS FOR RETRIEVAL AS PART OF
875           KM   THE WATERSHED CONTRIBUTING TO SKUNK CREEK.
876           DR    341D

877           KK  RBEARD
878           KM   RETRIEVE DIVERTED FLOW INTO BEARDSLEY ROAD - I-17 INTERCHANGE
879           DR   BEARD

880           KK  349RR2
881           KM   ROUTE FLOW THROUGH BEARDSLEY ROAD & I-17 INTERCHANGE
              * KO     1
882           RS       1    STOR       0
883           SV       0      .5     3.5     8.3    23.1    46.0    62.3    82.1
884           SE    1367    1368    1370    1372    1376    1380    1382    1384
885           SQ       0       0       0       0       0       0    5804   31500
886           ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

  25      310S
            .
            .
  35        .        311S
            .          .
            .          .
  46     HC311............
            V
            V
  49     311RR
            V
            V
  56     RM311
            .
            .
  63        .        312S
            .          .
            .          .
  74     HC312............
            V
            V
  77     RM312
            .
            .
  84        .        315S
            .          V
            .          V
  94        .       315RR
            .          V
            .          V
 101        .       RM315
            .          .
            .          .
 108        .          .       316S
            .          .         .
            .          .         .
 119        .       HC316............
            .          V
            .          V
 122        .       RM316
            .          .
            .          .
 129        .          .       317S
            .          .         .
            .          .         .
 139        .          .         .       318S
            .          .         .         .
            .          .         .         .
 150        .          .      HC317............
            .          .         V
            .          .         V
 153        .          .      317RR
            .          .         V
```

```
          .          .          V
160       .          .       RM317
          .          .          .
          .          .          .
167       .          .          .        319S
          .          .          .          .
          .          .          .          .
177       .          .       HC319............
          .          .          V
          .          .          V
180       .          .       RM319
          .          .          .
          .          .          .
187       .          .          .        314S
          .          .          .          .
          .          .          .          .
198    HC314.................................
          V
          V
201    314RR
          V
          V
210    RM314
          .
          .
217       .        320S
          .          .
          .          .
233       .          .-------->   OR320
228       .       DT320
          .          V
          .          V
236       .       320RR
          .          .
          .          .
246       .          .-------->    325D
243       .       320RE
          .          V
          .          V
249       .       RM320
          .          .
          .          .
256       .          .        321S
          .          .          .
          .          .          .
267       .       HC321............
          .          V
          .          V
270       .       RM321
          .          .
          .          .
277       .          .        323S
          .          .          V
          .          .          V
287       .          .       323RR
          .          .          V
          .          .          V
294       .          .       RM323
          .          .          .
          .          .          .
```

```
301          .          .          .       322S
             .          .          .          .
             .          .          .          .
316          .          .          .          .-------->   OR322
[illegible]1 .          .          .      DT322
             .          .          .          .
             .          .          .          .
319      HC322.................................
             V
             V
322      322RR
             .
             .
337          .-------->   333D1
331      322RE
             .
             .
347          .-------->    332D
340       326D
             .
             .
352          .          .<-------    325D
350          .      325RD
             .          V
             .          V
353          .      RM320
             .          .
             .          .
360          .          .       325S
             .          .          .
             .          .          .
371          .      HC325............
             .          V
             .          V
374          .      RM325
             .          .
             .          .
381          .          .       326S
             .          .          .
             .          .          .
397          .          .          .-------->   OR326
392          .          .      DT326
             .          .          .
             .          .          .
400      HC326........................
             .
             .
409          .-------->   333D2
404      326RE
             .
             .
412          .       327S
             .          .
             .          .
427          .          .-------->   OR327
[illegible]22 .      DT327
             .          .
             .          .
430      HC327............
             .
```

```
            .
438         .------->   334D1
433     327RE
            .
            .
441         .       330S
            .          .
            .          .
456         .          .------->   OR330
451         .      DT330
            .          .
            .          .
461         .          .------->    341D
459         .      330R1
            .          .
            .          .
467         .          .------->    343D
464         .      330R2
            .          V
            .          V
470         .      RM330
            .          .
            .          .
477         .          .       331S
            .          .          .
            .          .          .
492         .          .          .------->   OR331
487         .          .      DT331
            .          .          .
            .          .          .
495     HC331.......................
            .
            .
504         .------->   334D2
498     331RE
            .
            .
509         .          .<-------    332D
507         .       R332
            .          .
            .          .
510         .          .       332S
            .          .          .
            .          .          .
524         .          .          .------->   OR332
519         .          .      DT332
            .          .          .
            .          .          .
527     HC332.......................
            V
            V
531     332RR
            V
            V
538     RM332
            .
            .
549         .          .<-------   333D1
546         .       R322
            .          .
```

```
          .          .
553       .          .          .<-------   333D2
550       .          .       R326
          .          .          .
          .          .          .
554       .          .          .       333S
          .          .          .          .
          .          .          .          .
566       .      HC333........................
          .          V
          .          V
569       .      RM333
          .          .
          .          .
578       .          .          .<-------   334D1
576       .          .       R327
          .          .          V
          .          .          V
579       .          .      RM327
          .          .          .
          .          .          .
588       .          .          .          .<-------   334D2
586       .          .          .       R331
          .          .          .          V
          .          .          .          V
589       .          .          .      RM331
          .          .          .          .
          .          .          .          .
596       .          .          .          .       334S
          .          .          .          .          .
          .          .          .          .          .
611       .          .          .          .          .------->   OR334
606       .          .          .          .      DT334
          .          .          .          .          .
          .          .          .          .          .
614       .      HC334....................................
          .          V
          .          V
617       .      RM334
          .          .
          .          .
624       .          .       335S
          .          .          .
          .          .          .
639       .          .          .------->   OR335
634       .          .      DT335
          .          .          .
          .          .          .
642   HC335........................
          V
          V
645   RM335
          .
          .
654       .          .<-------    343D
652       .      330R2
          .          .
          .          .
655       .          .       343S
          .          .          .
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```
         .          .          .
670      .          .          .-------->   OR343
665      .          .      DT343
         .          .          .
         .          .          .
673      .      HC343............
         .          V
         .          V
676      .      343RR
         .          V
         .          V
686      .      RM343
         .          .
         .          .
690      .          .       349S
         .          .          .
         .          .          .
705      .          .          .-------->   OR349
700      .          .      DT349
         .          .          V
         .          .          V
708      .          .      349RR
         .          .          .
         .          .          .
721      .          .          .-------->   BEARD
718      .          .      349RE
         .          .          .
         .          .          .
724      .      HC349............
         .          V
         .          V
727      .     RM344A
         .          V
         .          V
731      .     RM344B
         .          .
         .          .
735      .          .       344S
         .          .          .
         .          .          .
751      .          .          .-------->   OR344
746      .          .      DT344
         .          .          .
         .          .          .
754      .     HC344U............
         .          .
         .          .
763      .          .-------->   344RE
758      .        344
         .          V
         .          V
766      .      344RR
         .          .
         .          .
778      .          .          .<--------   344RE
776      .          .     R344RE
         .          .          .
         .          .          .
779      .     HC344D............
         .          V
```

```
            .          V
782         .       RM344
            .          .
            .          .
86          .          .        345S
            .          .          .
            .          .          .
796      HC345.......................
            V
            V
799      RM345
            .
            .
806         .        346S
            .          .
            .          .
817      HC346............
            .
            .
820         .         AD1
            .          V
            .          V
828         .       RMAD1
            .          .
            .          .
835         .          .        347S
            .          .          .
            .          .          .
846         .       HC347............
            .          V
            .          V
849         .       RM347
            .          .
            .          .
856         .          .        348S
            .          .          .
            .          .          .
866         .       HC348............
            .          .
            .          .
869      HCSKB............
            .
            .
876         .          .<-------    341D
872         .        R330
            .          .
            .          .
879         .          .          .<-------   BEARD
877         .          .      RBEARD
            .          .          V
            .          .          V
880         .          .      349RR2
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY   1991              *
*           VERSION 4.0.1E             *
*                                      *
*  RUN DATE  10/02/95  TIME  10:49:22  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
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                    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
                    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
                    INDEX NO. ST-951350

                    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
                    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
                    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.

                    FILENAME:  344-100.DAT     KHE JOB NO. 0344
                    100-YEAR 24-HOUR DURATION STORM
                    SCS TYPE-II DISTRIBUTION WAS USED

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

   IT         HYDROGRAPH TIME DATA
                     NMIN          4  MINUTES IN COMPUTATION INTERVAL
                    IDATE     10OCT92  STARTING DATE
                    ITIME       1200  STARTING TIME
                       NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE     13OCT92  ENDING DATE
                   NDTIME       0636  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.07 HOURS
                   TOTAL TIME BASE   66.60 HOURS

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

 15 JD        INDEX STORM NO. 1
                    STRM       4.00  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 16 PI          PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

21 JD INDEX STORM NO. 2

STRM 3.92 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

22 JD INDEX STORM NO. 3

STRM 3.84 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

23 JD INDEX STORM NO. 4

STRM 3.68 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

24 JD INDEX STORM NO. 5

STRM 3.60 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

****** WARNING ****** THE FLOW RATE THAT YOU ARE ROUTING IS GREATER THAN WHAT CAN BE CALCULATE FROM THE 8 POINT CROSS SECTION YOU ENTERED ON RC, RX, AND RY RECORDS. THE PROGRAM HAD TO EXTRAPOLATE BEYOND THE MAXIMUM STORAGE-DISCHARGE VALUE CALCULATED. INCREASE ELMAX ON THE RC RECORD OR MAKE THE CROSS SECTION LARGER.

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

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	310S	994.	12.13	125.	32.	11.	0.68		
HYDROGRAPH AT	311S	754.	12.20	93.	24.	9.	0.57		
2 COMBINED AT	HC311	1737.	12.20	217.	56.	20.	1.25		
ROUTED TO	311RR	214.	12.93	110.	51.	18.	1.25		
ROUTED TO	RM311	213.	13.47	110.	51.	18.	1.25		
HYDROGRAPH AT	312S	1529.	12.33	218.	55.	20.	1.35		
2 COMBINED AT	HC312	1525.	12.33	312.	105.	38.	2.60		
ROUTED TO	RM312	1497.	12.73	311.	105.	38.	2.60		
HYDROGRAPH AT	315S	811.	12.07	87.	23.	8.	0.51		
ROUTED TO	315RR	55.	12.87	51.	22.	8.	0.51		
ROUTED TO	RM315	58.	12.53	51.	22.	8.	0.51		
HYDROGRAPH AT	316S	827.	12.20	94.	23.	8.	0.67		
2 COMBINED AT	HC316	825.	12.20	137.	45.	16.	1.18		
ROUTED TO	RM316	798.	12.67	136.	46.	16.	1.18		
HYDROGRAPH AT	317S	968.	12.13	115.	31.	11.	0.70		
HYDROGRAPH AT	318S	626.	12.33	90.	24.	9.	0.54		
2 COMBINED AT	HC317	1543.	12.20	204.	54.	20.	1.25		
ROUTED TO	317RR	100.	13.13	92.	49.	18.	1.25		
ROUTED TO	RM317	100.	13.40	92.	49.	18.	1.25		
HYDROGRAPH AT	319S	433.	12.13	43.	11.	4.	0.34		
2 COMBINED AT	HC319	430.	12.13	125.	60.	22.	1.59		
ROUTED TO	RM319	406.	12.80	123.	60.	22.	1.59		
HYDROGRAPH AT	314S	912.	12.27	108.	28.	10.	0.85		
4 COMBINED AT	HC314	2866.	12.67	647.	233.	84.	6.21		
ROUTED TO	314RR	2336.	12.93	646.	233.	84.	6.21		
ROUTED TO	RM314	2297.	13.00	646.	233.	84.	6.21		

HYDROGRAPH AT	320S	1369.	12.27	178.	47.	17.	1.11
DIVERSION TO	OR320	4.	7.67	3.	1.	0.	1.11
HYDROGRAPH AT	DT320	1369.	12.27	178.	46.	17.	1.11
ROUTED TO	320RR	112.	13.07	103.	44.	16.	1.11
DIVERSION TO	325D	46.	13.07	43.	18.	7.	1.11
HYDROGRAPH AT	320RE	66.	13.07	61.	25.	9.	1.11
ROUTED TO	RM320	68.	13.13	61.	25.	9.	1.11
HYDROGRAPH AT	321S	978.	12.40	133.	34.	12.	1.12
2 COMBINED AT	HC321	975.	12.40	180.	59.	21.	2.23
ROUTED TO	RM321	960.	12.60	179.	59.	21.	2.23
HYDROGRAPH AT	323S	162.	12.07	18.	5.	2.	0.11
ROUTED TO	323RR	51.	12.33	18.	5.	2.	0.11
ROUTED TO	RM323	51.	12.87	18.	5.	2.	0.11
HYDROGRAPH AT	322S	443.	12.07	45.	12.	4.	0.34
DIVERSION TO	OR322	4.	11.00	2.	1.	0.	0.34
HYDROGRAPH AT	DT322	443.	12.07	45.	11.	4.	0.34
4 COMBINED AT	HC322	2642.	12.93	867.	304.	110.	8.89
ROUTED TO	322RR	2360.	13.20	867.	304.	110.	8.89
DIVERSION TO	333D1	1263.	13.20	712.	265.	96.	8.89
HYDROGRAPH AT	322RE	1097.	13.20	155.	39.	14.	8.89
DIVERSION TO	332D	152.	13.20	14.	3.	1.	8.89
HYDROGRAPH AT	326D	945.	13.20	141.	35.	13.	8.89
HYDROGRAPH AT	325RD	46.	13.07	43.	18.	7.	1.11
ROUTED TO	RM320	62.	13.20	43.	18.	7.	1.11
HYDROGRAPH AT	325S	570.	12.20	64.	17.	6.	0.50
2 COMBINED AT	HC325	570.	12.20	96.	35.	13.	0.50
ROUTED TO	RM325	566.	12.47	95.	35.	13.	0.50
HYDROGRAPH AT	326S	467.	12.33	65.	18.	7.	0.50
DIVERSION TO	OR326	103.	11.80	8.	2.	1.	0.50
HYDROGRAPH AT	DT326	467.	12.33	61.	16.	6.	0.50

3 COMBINED AT	HC326	1071.	13.13	288.	84.	30.	9.89
DIVERSION TO	333D2	510.	12.20	201.	62.	23.	9.89
HYDROGRAPH AT	326RE	561.	13.13	87.	22.	8.	9.89
HYDROGRAPH AT	327S	347.	12.07	45.	15.	5.	0.22
DIVERSION TO	OR327	5.	6.13	3.	1.	0.	0.22
HYDROGRAPH AT	DT327	347.	12.07	45.	14.	5.	0.22
2 COMBINED AT	HC327	578.	12.40	130.	35.	13.	10.10
DIVERSION TO	334D1	115.	11.80	45.	14.	5.	10.10
HYDROGRAPH AT	327RE	463.	12.40	85.	21.	8.	10.10
HYDROGRAPH AT	330S	452.	12.13	59.	18.	7.	0.31
DIVERSION TO	OR330	5.	6.27	4.	1.	0.	0.31
HYDROGRAPH AT	DT330	452.	12.13	59.	17.	6.	0.31
DIVERSION TO	341D	129.	12.13	10.	2.	1.	0.31
HYDROGRAPH AT	330R1	323.	12.13	49.	15.	5.	0.31
DIVERSION TO	343D	237.	12.13	23.	6.	2.	0.31
HYDROGRAPH AT	330R2	87.	12.13	26.	9.	3.	0.31
ROUTED TO	RM330	87.	12.27	26.	9.	3.	0.31
HYDROGRAPH AT	331S	407.	12.00	58.	19.	7.	0.22
DIVERSION TO	OR331	6.	4.33	3.	1.	0.	0.22
HYDROGRAPH AT	DT331	407.	12.00	58.	18.	7.	0.22
3 COMBINED AT	HC331	684.	12.27	164.	47.	17.	10.63
DIVERSION TO	334D2	156.	11.73	70.	24.	9.	10.63
HYDROGRAPH AT	331RE	528.	12.27	94.	23.	8.	10.63
HYDROGRAPH AT	R332	152.	13.20	14.	3.	1.	8.89
HYDROGRAPH AT	332S	177.	12.00	24.	7.	3.	0.09
DIVERSION TO	OR332	2.	2.80	1.	0.	0.	0.09
HYDROGRAPH AT	DT332	177.	12.00	24.	7.	3.	0.09
3 COMBINED AT	HC332	674.	12.00	130.	34.	12.	10.73
ROUTED TO	332RR	311.	13.33	21.	6.	3.	10.73
ROUTED TO	RM332	273.	13.87	21.	6.	3.	10.73

HYDROGRAPH AT	R322	1263.	13.20	712.	265.	96.	8.89
HYDROGRAPH AT	R326	510.	12.20	201.	62.	23.	9.89
HYDROGRAPH AT	333S	504.	12.40	78.	21.	8.	0.53
3 COMBINED AT	HC333	2050.	12.53	1007.	357.	129.	0.53
ROUTED TO	RM333	2031.	12.73	1005.	357.	129.	0.53
HYDROGRAPH AT	R327	115.	11.80	45.	14.	5.	10.10
ROUTED TO	RM327	122.	12.13	45.	14.	5.	10.10
HYDROGRAPH AT	R331	156.	11.73	70.	24.	9.	10.63
ROUTED TO	RM331	156.	12.80	70.	24.	9.	10.63
HYDROGRAPH AT	334S	1182.	12.00	142.	42.	15.	0.66
DIVERSION TO	OR334	7.	1.00	2.	0.	0.	0.66
HYDROGRAPH AT	DT334	1182.	12.00	142.	42.	15.	0.66
4 COMBINED AT	HC334	2411.	12.67	1221.	433.	158.	1.19
ROUTED TO	RM334	2399.	12.87	1220.	433.	158.	1.19
HYDROGRAPH AT	335S	756.	12.07	93.	25.	9.	0.46
DIVERSION TO	OR335	72.	11.60	8.	2.	1.	0.46
HYDROGRAPH AT	DT335	756.	12.07	89.	23.	8.	0.46
3 COMBINED AT	HC335	2410.	12.87	1276.	442.	161.	12.38
ROUTED TO	RM335	2404.	13.07	1274.	442.	161.	12.38
HYDROGRAPH AT	330R2	237.	12.13	23.	6.	2.	0.31
HYDROGRAPH AT	343S	570.	12.07	83.	25.	9.	0.32
DIVERSION TO	OR343	23.	10.60	10.	3.	1.	0.32
HYDROGRAPH AT	DT343	570.	12.07	82.	22.	8.	0.32
2 COMBINED AT	HC343	806.	12.07	105.	28.	10.	0.32
ROUTED TO	343RR	495.	12.33	68.	28.	10.	0.32
ROUTED TO	RM343	451.	12.40	68.	28.	10.	0.32
HYDROGRAPH AT	349S	658.	12.07	105.	32.	12.	0.37
DIVERSION TO	OR349	34.	10.47	12.	4.	1.	0.37
HYDROGRAPH AT	DT349	658.	12.07	103.	29.	10.	0.37
ROUTED TO	349RR	657.	12.07	103.	29.	10.	0.37

DIVERSION TO	BEARD	567.	12.07	49.	12.	4.	0.37
HYDROGRAPH AT	349RE	90.	11.87	54.	17.	6.	0.37
2 COMBINED AT	HC349	538.	12.40	117.	44.	16.	0.69
ROUTED TO	RM344A	426.	12.47	116.	44.	16.	0.69
ROUTED TO	RM344B	426.	12.53	116.	44.	16.	0.69
HYDROGRAPH AT	344S	805.	12.20	144.	41.	15.	0.55
DIVERSION TO	OR344	31.	10.53	9.	3.	1.	0.55
HYDROGRAPH AT	DT344	805.	12.20	143.	38.	14.	0.55
2 COMBINED AT	HC344U	1001.	12.47	255.	82.	29.	1.25
DIVERSION TO	344RE	250.	11.73	157.	57.	21.	1.25
HYDROGRAPH AT	344	751.	12.47	99.	25.	9.	1.25
ROUTED TO	344RR	124.	13.00	80.	24.	8.	1.25
HYDROGRAPH AT	R344RE	250.	11.73	157.	57.	21.	1.25
2 COMBINED AT	HC344D	374.	13.00	230.	81.	29.	1.25
ROUTED TO	RM344	372.	13.07	230.	81.	29.	1.25
HYDROGRAPH AT	345S	470.	12.07	57.	18.	6.	0.30
3 COMBINED AT	HC345	2760.	13.07	1522.	529.	193.	13.92
ROUTED TO	RM345	2743.	13.47	1521.	529.	193.	13.92
HYDROGRAPH AT	346S	509.	12.20	69.	20.	7.	0.40
2 COMBINED AT	HC346	2756.	13.47	1558.	546.	199.	14.32
HYDROGRAPH AT	AD1	1730.	0.07	1730.	1730.	1730.	0.10
ROUTED TO	RMAD1	1730.	0.07	1730.	1730.	1730.	0.10
HYDROGRAPH AT	347S	1305.	12.20	173.	50.	18.	1.11
2 COMBINED AT	HC347	3035.	12.20	1903.	1780.	1748.	1.21
ROUTED TO	RM347	3020.	12.33	1903.	1780.	1748.	1.21
HYDROGRAPH AT	348S	58.	12.00	6.	2.	1.	0.05
2 COMBINED AT	HC348	3039.	12.27	1909.	1782.	1749.	1.25
2 COMBINED AT	HCSKB	4715.	12.60	3434.	2318.	1945.	15.58
HYDROGRAPH AT	R330	129.	12.13	10.	2.	1.	0.31
HYDROGRAPH AT	RBEARD	567.	12.07	49.	12.	4.	0.37

ROUTED TO	349RR2	0.	0.07	0.	0.	0.	0.37

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)
FOR STORM = 1	STORM AREA (SQ MI) =			0.01					
RM311	MANE	3.40	236.08	805.80	1.57	4.00	235.83	808.00	1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1040E+03 EXCESS=0.0000E+00 OUTFLOW=0.1042E+03 BASIN STORAGE=0.1743E-02 PERCENT ERROR= -0.2

FOR STORM = 2	STORM AREA (SQ MI) =			3.00					
RM311	MANE	3.40	208.93	809.20	1.52	4.00	208.72	808.00	1.52

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1008E+03 EXCESS=0.0000E+00 OUTFLOW=0.1010E+03 BASIN STORAGE=0.1839E-02 PERCENT ERROR= -0.2

FOR STORM = 3	STORM AREA (SQ MI) =			10.00					
RM311	MANE	3.40	185.26	809.20	1.47	4.00	184.77	812.00	1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9759E+02 EXCESS=0.0000E+00 OUTFLOW=0.9783E+02 BASIN STORAGE=0.1840E-02 PERCENT ERROR= -0.2

FOR STORM = 4	STORM AREA (SQ MI) =			20.00					
RM311	MANE	3.60	138.35	813.60	1.37	4.00	137.87	812.00	1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9119E+02 EXCESS=0.0000E+00 OUTFLOW=0.9145E+02 BASIN STORAGE=0.2073E-02 PERCENT ERROR= -0.3

FOR STORM = 5	STORM AREA (SQ MI) =			30.00					
RM311	MANE	3.60	118.18	813.60	1.33	4.00	117.71	816.00	1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8800E+02 EXCESS=0.0000E+00 OUTFLOW=0.8827E+02 BASIN STORAGE=0.1941E-02 PERCENT ERROR= -0.3

FOR STORM = 1	STORM AREA (SQ MI) =			0.01					
RM312	MANE	3.80	1539.63	763.80	1.56	4.00	1537.65	764.00	1.56

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2155E+03 EXCESS=0.0000E+00 OUTFLOW=0.2157E+03 BASIN STORAGE=0.1012E-02 PERCENT ERROR= -0.1

FOR STORM = 2	STORM AREA (SQ MI) =			3.00					
RM312	MANE	3.40	1498.25	761.60	1.51	4.00	1495.56	764.00	1.51

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2089E+03 EXCESS=0.0000E+00 OUTFLOW=0.2090E+03 BASIN STORAGE=0.1065E-02 PERCENT ERROR= 0.0

FOR STORM = 3 STORM AREA (SQ MI) = 10.00

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   RM312  MANE        3.20   1456.58    761.60      1.46      4.00   1456.47    764.00        1.46

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2022E+03 EXCESS=0.0000E+00 OUTFLOW=0.2023E+03 BASIN STORAGE=0.1135E-02 PERCENT ERROR=   0.0

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM312  MANE        2.60   1378.92    764.40      1.37      4.00   1377.99    764.00        1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1891E+03 EXCESS=0.0000E+00 OUTFLOW=0.1892E+03 BASIN STORAGE=0.1083E-02 PERCENT ERROR=   0.0

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM312  MANE        2.60   1339.39    764.40      1.32      4.00   1338.32    764.00        1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1826E+03 EXCESS=0.0000E+00 OUTFLOW=0.1827E+03 BASIN STORAGE=0.1166E-02 PERCENT ERROR=   0.0

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM315  MANE        4.00     58.80    752.00      1.66      4.00     58.80    752.00        1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4490E+02 EXCESS=0.0000E+00 OUTFLOW=0.4499E+02 BASIN STORAGE=0.1400E-02 PERCENT ERROR=  -0.2

     FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM315  MANE        4.00     58.02    752.00      1.61      4.00     58.02    752.00        1.61

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4352E+02 EXCESS=0.0000E+00 OUTFLOW=0.4361E+02 BASIN STORAGE=0.1240E-02 PERCENT ERROR=  -0.2

     FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM315  MANE        4.00     57.38    764.00      1.56      4.00     57.38    764.00        1.56

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4215E+02 EXCESS=0.0000E+00 OUTFLOW=0.4225E+02 BASIN STORAGE=0.1334E-02 PERCENT ERROR=  -0.2

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM315  MANE        4.00     59.28    756.00      1.46      4.00     59.28    756.00        1.46

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3952E+02 EXCESS=0.0000E+00 OUTFLOW=0.3964E+02 BASIN STORAGE=0.1226E-02 PERCENT ERROR=  -0.3

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM315  MANE        4.00     60.89    756.00      1.42      4.00     60.89    756.00        1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3829E+02 EXCESS=0.0000E+00 OUTFLOW=0.3843E+02 BASIN STORAGE=0.1290E-02 PERCENT ERROR=  -0.4

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM316  MANE        3.60    814.61    759.60      1.47      4.00    811.67    760.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9253E+02 EXCESS=0.0000E+00 OUTFLOW=0.9270E+02 BASIN STORAGE=0.1128E-02 PERCENT ERROR=  -0.2
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FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM316  MANE        4.00    795.91    760.00      1.43      4.00    795.91    760.00        1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8961E+02 EXCESS=0.0000E+00 OUTFLOW=0.8982E+02 BASIN STORAGE=0.1147E-02 PERCENT ERROR=  -0.2

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM316  MANE        2.20    769.21    759.00      1.38      4.00    765.79    760.00        1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8671E+02 EXCESS=0.0000E+00 OUTFLOW=0.8681E+02 BASIN STORAGE=0.1060E-02 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM316  MANE        2.20    722.92    759.00      1.29      4.00    720.42    760.00        1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8105E+02 EXCESS=0.0000E+00 OUTFLOW=0.8115E+02 BASIN STORAGE=0.1060E-02 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM316  MANE        2.20    699.42    759.00      1.25      4.00    697.44    760.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7830E+02 EXCESS=0.0000E+00 OUTFLOW=0.7840E+02 BASIN STORAGE=0.1084E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM317  MANE        4.00    100.22    804.00      1.51      4.00    100.22    804.00        1.51

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1005E+03 EXCESS=0.0000E+00 OUTFLOW=0.1006E+03 BASIN STORAGE=0.9078E-03 PERCENT ERROR=  -0.1

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM317  MANE        4.00     99.38    804.00      1.47      4.00     99.38    804.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9753E+02 EXCESS=0.0000E+00 OUTFLOW=0.9763E+02 BASIN STORAGE=0.9066E-03 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM317  MANE        4.00     98.35    808.00      1.42      4.00     98.35    808.00        1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9456E+02 EXCESS=0.0000E+00 OUTFLOW=0.9466E+02 BASIN STORAGE=0.9061E-03 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM317  MANE        4.00     95.91    800.00      1.33      4.00     95.91    800.00        1.33

TINUITY SUMMARY (AC-FT) - INFLOW=0.8859E+02 EXCESS=0.0000E+00 OUTFLOW=0.8869E+02 BASIN STORAGE=0.8812E-03 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM317  MANE        4.00     94.67    800.00      1.29      4.00     94.67    800.00        1.29
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8560E+02 EXCESS=0.0000E+00 OUTFLOW=0.8570E+02 BASIN STORAGE=0.8636E-03 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM319  MANE         2.00    416.59    768.00      1.45      4.00    416.59    768.00        1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1223E+03 EXCESS=0.0000E+00 OUTFLOW=0.1225E+03 BASIN STORAGE=0.1342E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM319  MANE         2.00    404.20    768.00      1.40      4.00    404.20    768.00        1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1186E+03 EXCESS=0.0000E+00 OUTFLOW=0.1187E+03 BASIN STORAGE=0.1306E-02 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM319  MANE         2.00    391.97    768.00      1.36      4.00    391.97    768.00        1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1149E+03 EXCESS=0.0000E+00 OUTFLOW=0.1150E+03 BASIN STORAGE=0.1273E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM319  MANE         2.00    367.56    768.00      1.27      4.00    367.56    768.00        1.27

TINUITY SUMMARY (AC-FT) - INFLOW=0.1075E+03 EXCESS=0.0000E+00 OUTFLOW=0.1076E+03 BASIN STORAGE=0.1347E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM319  MANE         2.00    355.53    768.00      1.23      4.00    355.53    768.00        1.23

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1039E+03 EXCESS=0.0000E+00 OUTFLOW=0.1040E+03 BASIN STORAGE=0.1248E-02 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM314  MANE         4.00   2461.72    780.00      1.47      4.00   2461.72    780.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4873E+03 EXCESS=0.0000E+00 OUTFLOW=0.4876E+03 BASIN STORAGE=0.5429E-03 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM314  MANE         4.00   2355.49    780.00      1.43      4.00   2355.49    780.00        1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4721E+03 EXCESS=0.0000E+00 OUTFLOW=0.4723E+03 BASIN STORAGE=0.5830E-03 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM314  MANE         4.00   2258.64    780.00      1.38      4.00   2258.64    780.00        1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4570E+03 EXCESS=0.0000E+00 OUTFLOW=0.4572E+03 BASIN STORAGE=0.5170E-03 PERCENT ERROR=  -0.1
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM314  MANE        4.00   2101.77    780.00      1.29      4.00   2101.77    780.00        1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4275E+03 EXCESS=0.0000E+00 OUTFLOW=0.4277E+03 BASIN STORAGE=0.5505E-03 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM314  MANE        4.00   2026.11    784.00      1.25      4.00   2026.11    784.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4128E+03 EXCESS=0.0000E+00 OUTFLOW=0.4130E+03 BASIN STORAGE=0.5791E-03 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM320  MANE        4.00     66.48    860.00      0.88      4.00     66.48    860.00        0.88

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5152E+02 EXCESS=0.0000E+00 OUTFLOW=0.5183E+02 BASIN STORAGE=0.2874E-02 PERCENT ERROR=  -0.6

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM320  MANE        4.00     68.76    788.00      0.85      4.00     68.76    788.00        0.85

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4998E+02 EXCESS=0.0000E+00 OUTFLOW=0.5029E+02 BASIN STORAGE=0.2705E-02 PERCENT ERROR=  -0.6

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE        3.80     69.82    786.60      0.83      4.00     65.43    788.00        0.83

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4843E+02 EXCESS=0.0000E+00 OUTFLOW=0.4873E+02 BASIN STORAGE=0.2969E-02 PERCENT ERROR=  -0.6

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE        3.80     68.73    786.60      0.77      4.00     65.62    788.00        0.77

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4532E+02 EXCESS=0.0000E+00 OUTFLOW=0.4562E+02 BASIN STORAGE=0.2880E-02 PERCENT ERROR=  -0.7

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE        3.80     67.92    786.60      0.75      4.00     65.72    788.00        0.75

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4376E+02 EXCESS=0.0000E+00 OUTFLOW=0.4406E+02 BASIN STORAGE=0.2715E-02 PERCENT ERROR=  -0.7

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM321  MANE        4.00    989.15    756.00      1.01      4.00    989.15    756.00        1.01

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1205E+03 EXCESS=0.0000E+00 OUTFLOW=0.1203E+03 BASIN STORAGE=0.5530E-03 PERCENT ERROR=   0.2

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM321  MANE        4.00    958.44    756.00      0.98      4.00    958.44    756.00        0.98
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1168E+03 EXCESS=0.0000E+00 OUTFLOW=0.1167E+03 BASIN STORAGE=0.5170E-03 PERCENT ERROR=   0.2

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM321  MANE         4.00    927.59    756.00      0.95      4.00    927.59    756.00        0.95

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1131E+03 EXCESS=0.0000E+00 OUTFLOW=0.1129E+03 BASIN STORAGE=0.5445E-03 PERCENT ERROR=   0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM321  MANE         4.00    865.51    756.00      0.89      4.00    865.51    756.00        0.89

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1056E+03 EXCESS=0.0000E+00 OUTFLOW=0.1055E+03 BASIN STORAGE=0.5561E-03 PERCENT ERROR=   0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM321  MANE         4.00    834.32    756.00      0.86      4.00    834.32    756.00        0.86

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1019E+03 EXCESS=0.0000E+00 OUTFLOW=0.1018E+03 BASIN STORAGE=0.5431E-03 PERCENT ERROR=   0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM323  MANE         4.00     51.21    772.00      1.76      4.00     51.21    772.00        1.76

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1032E+02 EXCESS=0.0000E+00 OUTFLOW=0.1035E+02 BASIN STORAGE=0.1149E-02 PERCENT ERROR=  -0.3

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM323  MANE         4.00     50.86    772.00      1.72      4.00     50.86    772.00        1.72

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1005E+02 EXCESS=0.0000E+00 OUTFLOW=0.1008E+02 BASIN STORAGE=0.1126E-02 PERCENT ERROR=  -0.3

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM323  MANE         4.00     50.57    772.00      1.67      4.00     50.57    772.00        1.67

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9787E+01 EXCESS=0.0000E+00 OUTFLOW=0.9815E+01 BASIN STORAGE=0.1916E-02 PERCENT ERROR=  -0.3

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM323  MANE         4.00     49.99    772.00      1.58      4.00     49.99    772.00        1.58

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9249E+01 EXCESS=0.0000E+00 OUTFLOW=0.9279E+01 BASIN STORAGE=0.1835E-02 PERCENT ERROR=  -0.3

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM323  MANE         4.00     49.67    772.00      1.54      4.00     49.67    772.00        1.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8979E+01 EXCESS=0.0000E+00 OUTFLOW=0.9009E+01 BASIN STORAGE=0.1793E-02 PERCENT ERROR=  -0.4
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FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM320  MANE        4.00     63.12    792.00      0.63      4.00     63.12    792.00        0.63

INUITY SUMMARY (AC-FT) - INFLOW=0.3703E+02 EXCESS=0.0000E+00 OUTFLOW=0.3730E+02 BASIN STORAGE=0.1698E-02 PERCENT ERROR=  -0.7

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM320  MANE        4.00     61.55    792.00      0.61      4.00     61.55    792.00        0.61

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3597E+02 EXCESS=0.0000E+00 OUTFLOW=0.3623E+02 BASIN STORAGE=0.1614E-02 PERCENT ERROR=  -0.7

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM320  MANE        3.80     58.87    794.20      0.60      4.00     47.98    804.00        0.60

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3489E+02 EXCESS=0.0000E+00 OUTFLOW=0.3517E+02 BASIN STORAGE=0.1596E-02 PERCENT ERROR=  -0.8

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM320  MANE        3.80     62.01    794.20      0.56      4.00     48.50    796.00        0.56

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3274E+02 EXCESS=0.0000E+00 OUTFLOW=0.3301E+02 BASIN STORAGE=0.1590E-02 PERCENT ERROR=  -0.8

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM320  MANE        3.80     61.43    794.20      0.54      4.00     49.51    796.00        0.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3166E+02 EXCESS=0.0000E+00 OUTFLOW=0.3192E+02 BASIN STORAGE=0.1681E-02 PERCENT ERROR=  -0.9

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM325  MANE        4.00    578.13    748.00      2.70      4.00    578.13    748.00        2.70

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7205E+02 EXCESS=0.0000E+00 OUTFLOW=0.7217E+02 BASIN STORAGE=0.1215E-02 PERCENT ERROR=  -0.2

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM325  MANE        4.00    560.80    748.00      2.62      4.00    560.80    748.00        2.62

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6995E+02 EXCESS=0.0000E+00 OUTFLOW=0.7006E+02 BASIN STORAGE=0.1113E-02 PERCENT ERROR=  -0.2

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM325  MANE        4.00    542.99    748.00      2.54      4.00    542.99    748.00        2.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6785E+02 EXCESS=0.0000E+00 OUTFLOW=0.6796E+02 BASIN STORAGE=0.1117E-02 PERCENT ERROR=  -0.2

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM325  MANE        4.00    506.49    748.00      2.38      4.00    506.49    748.00        2.38
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6361E+02 EXCESS=0.0000E+00 OUTFLOW=0.6374E+02 BASIN STORAGE=0.1179E-02 PERCENT ERROR=  -0.2


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM325  MANE         4.00    488.45    748.00      2.30      4.00    488.45    748.00        2.30


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6148E+02 EXCESS=0.0000E+00 OUTFLOW=0.6161E+02 BASIN STORAGE=0.1136E-02 PERCENT ERROR=  -0.2


        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM330  MANE         4.00     87.50    736.00      1.09      4.00     87.50    736.00        1.09


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1802E+02 EXCESS=0.0000E+00 OUTFLOW=0.1804E+02 BASIN STORAGE=0.1306E-02 PERCENT ERROR=  -0.1


        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM330  MANE         4.00     86.62    736.00      1.07      4.00     86.62    736.00        1.07


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1768E+02 EXCESS=0.0000E+00 OUTFLOW=0.1770E+02 BASIN STORAGE=0.1272E-02 PERCENT ERROR=  -0.1


        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM330  MANE         4.00     85.84    736.00      1.05      4.00     85.84    736.00        1.05


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1736E+02 EXCESS=0.0000E+00 OUTFLOW=0.1737E+02 BASIN STORAGE=0.1235E-02 PERCENT ERROR=  -0.1


        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM330  MANE         4.00     84.28    736.00      1.01      4.00     84.28    736.00        1.01


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1673E+02 EXCESS=0.0000E+00 OUTFLOW=0.1674E+02 BASIN STORAGE=0.1191E-02 PERCENT ERROR=  -0.1


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM330  MANE         4.00     83.57    736.00      0.99      4.00     83.57    736.00        0.99


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1641E+02 EXCESS=0.0000E+00 OUTFLOW=0.1643E+02 BASIN STORAGE=0.1169E-02 PERCENT ERROR=  -0.1


        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM332  MANE         2.20    756.21    809.60      0.06      4.00    651.34    812.00        0.06


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3446E+02 EXCESS=0.0000E+00 OUTFLOW=0.3464E+02 BASIN STORAGE=0.1197E+00 PERCENT ERROR=  -0.9


        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM332  MANE         2.20    565.40    818.40      0.04      4.00    499.36    820.00        0.04


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2474E+02 EXCESS=0.0000E+00 OUTFLOW=0.2488E+02 BASIN STORAGE=0.1198E+00 PERCENT ERROR=  -1.1


        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
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RM332  MANE        2.00    327.94    830.00      0.03      4.00    303.29    832.00        0.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1538E+02 EXCESS=0.0000E+00 OUTFLOW=0.1540E+02 BASIN STORAGE=0.1198E+00 PERCENT ERROR=  -0.9

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM332  MANE        4.00      0.62   1028.00      0.00      4.00      0.62   1028.00        0.00

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2341E+01 EXCESS=0.0000E+00 OUTFLOW=0.2197E+01 BASIN STORAGE=0.7162E-01 PERCENT ERROR=   3.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM332  MANE        4.00      0.09   1704.00      0.00      4.00      0.09   1704.00        0.00

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3099E+00 EXCESS=0.0000E+00 OUTFLOW=0.2844E+00 BASIN STORAGE=0.1063E-01 PERCENT ERROR=   4.8

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM333  MANE        4.00   2050.45    764.00     25.41      4.00   2050.45    764.00       25.41

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7220E+03 EXCESS=0.0000E+00 OUTFLOW=0.7223E+03 BASIN STORAGE=0.1147E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
RM333  MANE        4.00   2023.26    768.00     24.86      4.00   2023.26    768.00       24.86

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7063E+03 EXCESS=0.0000E+00 OUTFLOW=0.7066E+03 BASIN STORAGE=0.1044E-02 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
RM333  MANE        4.00   1996.71    768.00     24.30      4.00   1996.71    768.00       24.30

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6904E+03 EXCESS=0.0000E+00 OUTFLOW=0.6907E+03 BASIN STORAGE=0.1164E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM333  MANE        4.00   1944.69    768.00     23.16      4.00   1944.69    768.00       23.16

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6581E+03 EXCESS=0.0000E+00 OUTFLOW=0.6584E+03 BASIN STORAGE=0.1072E-02 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM333  MANE        4.00   1916.09    768.00     22.58      4.00   1916.09    768.00       22.58

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6417E+03 EXCESS=0.0000E+00 OUTFLOW=0.6419E+03 BASIN STORAGE=0.1178E-02 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM327  MANE        4.00    121.12    724.00      0.05      4.00    121.12    724.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2768E+02 EXCESS=0.0000E+00 OUTFLOW=0.2769E+02 BASIN STORAGE=0.1619E-02 PERCENT ERROR=   0.0
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        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM327  MANE         4.00    121.28    728.00      0.05      4.00    121.28    728.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2728E+02 EXCESS=0.0000E+00 OUTFLOW=0.2728E+02 BASIN STORAGE=0.1540E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM327  MANE         4.00    121.66    728.00      0.05      4.00    121.66    728.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2686E+02 EXCESS=0.0000E+00 OUTFLOW=0.2688E+02 BASIN STORAGE=0.1513E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM327  MANE         4.00    121.36    728.00      0.05      4.00    121.36    728.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2592E+02 EXCESS=0.0000E+00 OUTFLOW=0.2594E+02 BASIN STORAGE=0.1459E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM327  MANE         4.00    120.84    728.00      0.05      4.00    120.84    728.00        0.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2545E+02 EXCESS=0.0000E+00 OUTFLOW=0.2546E+02 BASIN STORAGE=0.1431E-02 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM331  MANE         4.00    156.00    780.00      0.09      4.00    156.00    780.00        0.09

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4887E+02 EXCESS=0.0000E+00 OUTFLOW=0.4872E+02 BASIN STORAGE=0.1626E-02 PERCENT ERROR=   0.3

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM331  MANE         4.00    156.00    780.00      0.08      4.00    156.00    780.00        0.08

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4807E+02 EXCESS=0.0000E+00 OUTFLOW=0.4783E+02 BASIN STORAGE=0.1600E-02 PERCENT ERROR=   0.5

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM331  MANE         4.00    156.00    780.00      0.08      4.00    156.00    780.00        0.08

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4725E+02 EXCESS=0.0000E+00 OUTFLOW=0.4705E+02 BASIN STORAGE=0.1543E-02 PERCENT ERROR=   0.4

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM331  MANE         4.00    156.00    780.00      0.08      4.00    156.00    780.00        0.08

TINUITY SUMMARY (AC-FT) - INFLOW=0.4547E+02 EXCESS=0.0000E+00 OUTFLOW=0.4528E+02 BASIN STORAGE=0.1497E-02 PERCENT ERROR=   0.4

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM331  MANE         4.00    156.00    780.00      0.08      4.00    156.00    780.00        0.08
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4372E+02 EXCESS=0.0000E+00 OUTFLOW=0.4349E+02 BASIN STORAGE=0.1474E-02 PERCENT ERROR=   0.5

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM334  MANE         4.00   2425.93    772.00     13.92      4.00   2425.93    772.00       13.92

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8835E+03 EXCESS=0.0000E+00 OUTFLOW=0.8832E+03 BASIN STORAGE=0.6702E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM334  MANE         4.00   2394.15    772.00     13.61      4.00   2394.15    772.00       13.61

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8643E+03 EXCESS=0.0000E+00 OUTFLOW=0.8640E+03 BASIN STORAGE=0.7575E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM334  MANE         4.00   2361.38    772.00     13.31      4.00   2361.38    772.00       13.31

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8451E+03 EXCESS=0.0000E+00 OUTFLOW=0.8448E+03 BASIN STORAGE=0.7140E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM334  MANE         4.00   2296.04    772.00     12.69      4.00   2296.04    772.00       12.69

TINUITY SUMMARY (AC-FT) - INFLOW=0.8059E+03 EXCESS=0.0000E+00 OUTFLOW=0.8056E+03 BASIN STORAGE=0.6525E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM334  MANE         4.00   2262.75    776.00     12.37      4.00   2262.75    776.00       12.37

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7851E+03 EXCESS=0.0000E+00 OUTFLOW=0.7848E+03 BASIN STORAGE=0.7268E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM335  MANE         4.00   2839.89    828.00      1.46      4.00   2839.89    828.00        1.46

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9641E+03 EXCESS=0.0000E+00 OUTFLOW=0.9638E+03 BASIN STORAGE=0.4704E-01 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM335  MANE         4.00   2624.48    836.00      1.41      4.00   2624.48    836.00        1.41

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9340E+03 EXCESS=0.0000E+00 OUTFLOW=0.9338E+03 BASIN STORAGE=0.4709E-01 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM335  MANE         4.00   2426.40    784.00      1.37      4.00   2426.40    784.00        1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9038E+03 EXCESS=0.0000E+00 OUTFLOW=0.9037E+03 BASIN STORAGE=0.4712E-01 PERCENT ERROR=   0.0
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM335  MANE        4.00   2352.56    784.00      1.29      4.00   2352.56    784.00        1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8487E+03 EXCESS=0.0000E+00 OUTFLOW=0.8486E+03 BASIN STORAGE=0.2832E-01 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM335  MANE        4.00   2315.80    788.00      1.25      4.00   2315.80    788.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8247E+03 EXCESS=0.0000E+00 OUTFLOW=0.8246E+03 BASIN STORAGE=0.4226E-02 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM343  MANE        2.36    493.43    742.22      3.30      4.00    483.45    740.00        3.30

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5643E+02 EXCESS=0.0000E+00 OUTFLOW=0.5635E+02 BASIN STORAGE=0.3204E-03 PERCENT ERROR=   0.1

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM343  MANE        2.38    456.20    743.00      3.21      4.00    442.11    744.00        3.21

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5490E+02 EXCESS=0.0000E+00 OUTFLOW=0.5483E+02 BASIN STORAGE=0.3214E-03 PERCENT ERROR=   0.1

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM343  MANE        2.43    413.14    742.06      3.12      4.00    412.29    744.00        3.12

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5330E+02 EXCESS=0.0000E+00 OUTFLOW=0.5324E+02 BASIN STORAGE=0.3090E-03 PERCENT ERROR=   0.1

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM343  MANE        2.54    346.44    745.24      2.95      4.00    332.65    744.00        2.94

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5031E+02 EXCESS=0.0000E+00 OUTFLOW=0.5027E+02 BASIN STORAGE=0.3337E-03 PERCENT ERROR=   0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM343  MANE        2.59    305.34    745.19      2.86      4.00    298.25    748.00        2.86

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4882E+02 EXCESS=0.0000E+00 OUTFLOW=0.4878E+02 BASIN STORAGE=0.3190E-03 PERCENT ERROR=   0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
  RM344A  MANE        4.00    444.94    748.00      2.41      4.00    444.94    748.00        2.41

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8963E+02 EXCESS=0.0000E+00 OUTFLOW=0.8897E+02 BASIN STORAGE=0.8879E-03 PERCENT ERROR=   0.7

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
  RM344A  MANE        4.00    419.09    748.00      2.35      4.00    419.09    748.00        2.35
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8727E+02 EXCESS=0.0000E+00 OUTFLOW=0.8669E+02 BASIN STORAGE=0.8819E-03 PERCENT ERROR=   0.7

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
          RM344A  MANE         4.00    391.96    748.00      2.29      4.00    391.96    748.00        2.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8503E+02 EXCESS=0.0000E+00 OUTFLOW=0.8452E+02 BASIN STORAGE=0.8800E-03 PERCENT ERROR=   0.6

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
          RM344A  MANE         4.00    346.45    752.00      2.17      4.00    346.45    752.00        2.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8053E+02 EXCESS=0.0000E+00 OUTFLOW=0.8016E+02 BASIN STORAGE=0.8781E-03 PERCENT ERROR=   0.5

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
          RM344A  MANE         4.00    318.77    752.00      2.11      4.00    318.77    752.00        2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7826E+02 EXCESS=0.0000E+00 OUTFLOW=0.7795E+02 BASIN STORAGE=0.8834E-03 PERCENT ERROR=   0.4

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
          RM344B  MANE         4.00    442.72    752.00      2.41      4.00    442.72    752.00        2.41

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8897E+02 EXCESS=0.0000E+00 OUTFLOW=0.8898E+02 BASIN STORAGE=0.1819E-02 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
          RM344B  MANE         4.00    420.37    752.00      2.35      4.00    420.37    752.00        2.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8669E+02 EXCESS=0.0000E+00 OUTFLOW=0.8670E+02 BASIN STORAGE=0.1765E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
          RM344B  MANE         4.00    395.86    752.00      2.29      4.00    395.86    752.00        2.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8452E+02 EXCESS=0.0000E+00 OUTFLOW=0.8453E+02 BASIN STORAGE=0.1761E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
          RM344B  MANE         4.00    346.34    756.00      2.17      4.00    346.34    756.00        2.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8016E+02 EXCESS=0.0000E+00 OUTFLOW=0.8017E+02 BASIN STORAGE=0.1759E-02 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
          RM344B  MANE         4.00    320.05    756.00      2.11      4.00    320.05    756.00        2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7795E+02 EXCESS=0.0000E+00 OUTFLOW=0.7796E+02 BASIN STORAGE=0.1766E-02 PERCENT ERROR=   0.0
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FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM344  MANE         3.01    409.81    780.48      2.46      4.00    409.60    780.00        2.46

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1637E+03 EXCESS=0.0000E+00 OUTFLOW=0.1637E+03 BASIN STORAGE=0.1160E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM344  MANE         3.12    367.01    782.13      2.40      4.00    366.07    784.00        2.40

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1592E+03 EXCESS=0.0000E+00 OUTFLOW=0.1592E+03 BASIN STORAGE=0.1203E-02 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM344  MANE         3.16    351.75    782.88      2.33      4.00    351.72    784.00        2.33

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1549E+03 EXCESS=0.0000E+00 OUTFLOW=0.1549E+03 BASIN STORAGE=0.1238E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM344  MANE         3.17    346.53    783.21      2.20      4.00    346.49    784.00        2.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1462E+03 EXCESS=0.0000E+00 OUTFLOW=0.1462E+03 BASIN STORAGE=0.1188E-02 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM344  MANE         3.18    343.82    781.85      2.13      4.00    343.78    784.00        2.14

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1419E+03 EXCESS=0.0000E+00 OUTFLOW=0.1419E+03 BASIN STORAGE=0.1279E-02 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM345  MANE         4.00   3050.41    848.00      1.57      4.00   3050.41    848.00        1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1163E+04 EXCESS=0.0000E+00 OUTFLOW=0.1163E+04 BASIN STORAGE=0.9252E-01 PERCENT ERROR=  -0.1

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM345  MANE         4.00   2832.70    856.00      1.52      4.00   2832.70    856.00        1.52

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1128E+04 EXCESS=0.0000E+00 OUTFLOW=0.1128E+04 BASIN STORAGE=0.9262E-01 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM345  MANE         4.00   2779.59    808.00      1.47      4.00   2779.59    808.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1092E+04 EXCESS=0.0000E+00 OUTFLOW=0.1093E+04 BASIN STORAGE=0.9271E-01 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM345  MANE         4.00   2703.79    808.00      1.38      4.00   2703.79    808.00        1.38
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1027E+04 EXCESS=0.0000E+00 OUTFLOW=0.1027E+04 BASIN STORAGE=0.5573E-01 PERCENT ERROR=  -0.1


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM345  MANE         4.00   2663.42    808.00      1.34      4.00   2663.42    808.00        1.34


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9975E+03 EXCESS=0.0000E+00 OUTFLOW=0.9981E+03 BASIN STORAGE=0.8317E-02 PERCENT ERROR=  -0.1


        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM347  MANE         4.00   3050.26    740.00    149.75      4.00   3050.26    740.00      149.75


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9633E+04 EXCESS=0.0000E+00 OUTFLOW=0.9633E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM347  MANE         4.00   3014.73    740.00    149.71      4.00   3014.73    740.00      149.71


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9631E+04 EXCESS=0.0000E+00 OUTFLOW=0.9631E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM347  MANE         4.00   2979.10    740.00    149.67      4.00   2979.10    740.00      149.67


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9628E+04 EXCESS=0.0000E+00 OUTFLOW=0.9628E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM347  MANE         4.00   2907.47    740.00    149.59      4.00   2907.47    740.00      149.59


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9623E+04 EXCESS=0.0000E+00 OUTFLOW=0.9623E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM347  MANE         4.00   2871.47    740.00    149.55      4.00   2871.47    740.00      149.55


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9620E+04 EXCESS=0.0000E+00 OUTFLOW=0.9620E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


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

HEC-1 Input and Output Data

500-Year 24-Hour Storm
(File Name: 344-500.DAT)

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*                                       *
* RUN DATE  10/02/95  TIME  10:24:52    *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*          (916) 551-1748               *
*                                       *
*****************************************
```

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

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

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

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

  1           ID    SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
  2           ID    CITY OF PHOENIX, ARIZONA   FLOODPLAIN MANAGEMENT
  3           ID    INDEX NO. ST-951350
  4           ID
  5           ID    HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY
  6           ID    REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1"
  7           ID    DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.
  8           ID
  9           ID    FILENAME:  344-500.DAT     KHE JOB NO. 0344
 10           ID    500-YEAR 24-HOUR DURATION STORM
 11           ID    SCS TYPE-II DISTRIBUTION WAS USED
              *
              *  APRIL 11, 1992
              *
              *  Based on FCDMC comments dated March 17,1992 we adjusted the Mannings "n"
              *  coefficient to reflect weighted averaging in lieu of log averaging.
              *  We also changed the S-graph from Phoenix Mountain to Phoenix Valley.
              *
              *  REVISED:  JULY 6, 1994   Revised to address FEMA comments in a letter dated
              *                           November 15, 1993.
              *
              *  REVISED:  SEPTEMBER 12, 1994   Revised to address FEMA comments in a tele-
              *                                 phone conversation on August 10, 1994.
              *
              *  FINAL HEC-1 INPUT FILE - OCTOBER 24, 1994
              *
              *
              *DIAGRAM
 12           IT       4 10OCT92    1200    1000
 13           IO       5
 14           IN      30
 15           JD    5.02    0.01
              * KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
 16           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 17           PC    .063    .071    .080    .089    .098    .109    .120    .133    .147    .163
 18           PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 19           PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
 20           PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
 21           JD    4.92     3.0
 22           JD   4.819    10.0
 23           JD   4.618    20.0
 24           JD   4.518    30.0

 25           KK    310S
 26           KM   RUNOFF GENERATED ON SUB-BASIN 310
 27           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 28           KM    L= 1.36 mi.  Lca= 0.64 mi.  S= 282 ft/mi.  Kn= .053  LAG= 24.78 min.
 29           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 30           BA    .679
 31           LG     .15     .25    8.60     .07    2.50
 32           UI     92.    221.    428.    550.    708.   1065.    985.    751.    583.    442.
 33           UI    263.    158.    118.     83.     28.     28.     28.     28.      0.      0.
 34           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

  35          KK    311S
  36          KM   RUNOFF GENERATED ON SUB-BASIN 311
  37          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  38          KM    L= 1.52 mi.  Lca= 0.71 mi.  S=  260 ft/mi.  Kn= .053  LAG= 27.31 min.
  39          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
  40          BA    .569
  41          LG     .15     .33    7.78    .105    6.53
  42          UI     70.    139.    300.    389.    483.    643.    867.    677.    543.    429.
  43          UI    334.    211.    122.    102.     70.     34.     22.     22.     22.     22.
  44          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  45          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  46          KK   HC311
  47          KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 310 & 311
  48          HC       2

  49          KK   311RR
              * KO     1
  50          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO. 1
  51          RS       1    ELEV      12
  52          SV       0     2.2    11.6    35.4    81.1   156.4
  53          SE      12      14      16      18      20      22
  54          SL   15.62    9.62     0.6     0.5
  55          SS      20     200     3.0     1.5

  56          KK   RM311
  57          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 312
  58          KM           1) Reach Length = 8800 ft.
  59          RD
  60          RC     .05     .04     .05    8800   .0085
  61          RX       0     100     120     125     140     145     165     265
  62          RY       4       2       1       0       0       1       2       4

  63          KK    312S
  64          KM   RUNOFF GENERATED ON SUB-BASIN 312
  65          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  66          KM    L= 2.17 mi.  Lca= 0.91 mi.  S= 36 ft/mi.  Kn= .038  LAG= 35.87 min.
  67          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
  68          BA   1.348
  69          LG     .35     .28    8.28    .082    0.00
  70          UI    127.    127.    419.    572.    694.    807.    963.   1277.   1587.   1311.
  71          UI   1086.    926.    770.    636.    497.    303.    220.    207.    127.    127.
  72          UI     43.     39.     39.     39.     39.     39.      0.      0.      0.      0.
  73          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

  74          KK   HC312
  75          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 312 WITH ROUTED FLOW FROM 311
  76          HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 77           KK   RM312
 78           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 312 THROUGH 314
 79           KM            1) Reach Length = 4640 ft.
 80           RD
 81           RC     .05     .04     .05    4640   .0060
 82           RX       0       5     205     215     235     245     445     450
 83           RY       5       3       1       0       0       1       3       5

 84           KK    315S
 85           KM   RUNOFF GENERATED ON SUB-BASIN 315
 86           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 87           KM    L= 1.16 mi.  Lca= 0.37 mi.  S= 287 ft/mi.  Kn= .053  LAG= 18.88 min.
 88           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 89           BA    .508
 90           LG     .15     .30    8.05    .093    6.65
 91           UI     91.    332.    515.    724.   1076.    791.    567.    379.    178.    118.
 92           UI     63.     28.     28.     28.      0.      0.      0.      0.      0.      0.
 93           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 94           KK   315RR
              * KO     1
 95           KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.2
 96           RS       1    ELEV      13
 97           SV       0     0.3     3.0    10.2    25.3    51.6
 98           SE      13      14      16      18      20      22
 99           SL   14.84    4.59     0.6     0.5
100           SS      21      50     3.0     1.5

101           KK   RM315
102           KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 316
103           KM            1) Reach Length = 7480 ft.
104           RD
105           RC     .05     .04     .05    7480   .0099
106           RX      60     140     190     200     210     220     270     350
107           RY       5       4       2       0       0       2       4       5

108           KK    316S
109           KM   RUNOFF GENERATED ON SUB-BASIN 316
110           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
111           KM    L= 1.36 mi.  Lca= 0.86 mi.  S= 55 ft/mi.  Kn= .038  LAG= 27.12 min.
112           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
113           BA    .672
114           LG     .25     .37    7.14     .14     .00
115           UI     83.    167.    359.    466.    578.    781.   1024.    795.    637.    501.
116           UI    389.    237.    144.    116.     83.     35.     26.     26.     26.     26.
117           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
118           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

119           KK   HC316
120           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 316 WITH ROUTED FLOW FROM 315
121           HC       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 122          KK   RM316
 123          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 316 THROUGH 314
 124          KM            1) Reach Length = 4720 ft.
 125          RD
 126          RC     .05     .04     .05    4720   .0059
 127          RX       0       5     205     215     235     245     445     450
 128          RY       5       3       1       0       0       1       3       5

 129          KK    317S
 130          KM   RUNOFF GENERATED ON SUB-BASIN 317
 131          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 132          KM    L= 1.54 mi.  Lca= 0.58 mi.  S= 300 ft/mi.  Kn= .053  LAG= 24.74 min.
 133          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 134          BA    .704
 135          LG     .15     .35    7.50    .117    9.37
 136          UI     96.    230.    445.    572.    737.   1109.   1019.    778.    603.    456.
 137          UI    270.    164.    121.     84.     29.     29.     29.     29.      0.      0.
 138          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 139          KK    318S
 140          KM   RUNOFF GENERATED ON SUB-BASIN 318
 141          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 142          KM    L= 1.94 mi.  Lca= 1.09 mi.  S= 288 ft/mi.  Kn= .053  LAG= 34.59 min.
 143          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 144          BA    .542
 145          LG     .15     .33    7.78    .105    7.49
 146          UI     53.     54.    185.    246.    296.    350.    421.    576.    651.    507.
 147          UI    428.    355.    295.    240.    168.     94.     88.     65.     53.     28.
 148          UI     16.     16.     16.     16.     16.      0.      0.      0.      0.      0.
 149          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 150          KK   HC317
 151          KM   COMBINE HYDROGRAPHS FROM SUB-BASINS 317 & 318
 152          HC       2

 153          KK   317RR
              * KO     1
 154          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURE NO.3
 155          RS       1    ELEV      13
 156          SV       0     1.3    13.2    41.3    90.4   159.6
 157          SE      13      14      16      18      20      22
 158          SL   15.42    9.62     0.6     0.5
 159          SS      21      50     3.0     1.5

 160          KK   RM317
 161          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM DETENTION THROUGH SUB-BASIN 319
 162          KM            1) Reach Length = 5000 ft.
 163          RD
 164          RC     .05     .04     .05    5000   .0116
 165          RX      60     160     190     200     210     220     250     350
 166          RY       4       3       2       0       0       2       3       4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 167          KK   319S
 168          KM   RUNOFF GENERATED ON SUB-BASIN 319
 169          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 170          KM    L= 0.99 mi.  Lca= 0.51 mi.  S= 63 ft/mi.  Kn= .045  LAG= 22.75 min.
 171          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 172          BA   .339
 173          LG    .25     .39    5.98    .198     .00
 174          UI    50.    138.    250.    323.    447.    606.    451.    346.    259.    160.
 175          UI    86.     63.     40.     15.     15.     15.      0.      0.      0.      0.
 176          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 177          KK   HC319
 178          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 319 WITH ROUTED FLOW FROM 317
 179          HC      2

 180          KK   RM319
 181          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 319 THROUGH 314
 182          KM           1) Reach Length = 6360 ft.
 183          RD
 184          RC    .05     .04     .05    6360   .0066
 185          RX      0       5     205     215     235     245     445     450
 186          RY      5       3     1.5       0       0     1.5       3       5

 187          KK   314S
 188          KM   RUNOFF GENERATED ON SUB-BASIN 314
 189          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 190          KM    L= 1.81 mi.  Lca= 0.71 mi.  S= 41 ft/mi.  Kn= .038  LAG= 29.72 min.
 191          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 192          BA   .846
 193          LG   .339    .365    4.43    .256    2.78
 194          UI    96.    160.    379.    501.    606.    751.   1073.   1118.    858.    705.
 195          UI   564.    449.    293.    168.    152.     96.     70.     29.     29.     29.
 196          UI    29.     29.      0.      0.      0.      0.      0.      0.      0.      0.
 197          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 198          KK   HC314
 199          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 314 WITH ROUTED FLOWS FROM 312, 316 & 319
 200          HC      4

 201          KK   314RR
              * KO     1
 202          KM   ROUTE FLOW THROUGH PINNACLE PEAK ROAD CULVERTS
 203          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 204          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 205          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 206          RS      1    ELEV      11
 207          SV      0     .05     1.2     9.1    35.6      65    94.5     139
 208          SE     11      12      14      16      18      19      20      21
 209          SQ      0      54     254     528     936    2344    5278   10401
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 210          KK   RM314
 211          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM SUB-BASIN 314 THROUGH 322
 212          KM           1) Reach Length = 1920 ft.
 213          RD
 214          RC     .05     .04     .05    1920   .0026
 215          RX       0      50     150     165     175     190     240     250
 216          RY       6       5       4       0       0       4       5       7

 217          KK    320S
 218          KM   RUNOFF GENERATED ON SUB-BASIN 320
 219          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 220          KM    L= 1.74 mi.  Lca= 0.72 mi.  S= 218 ft/mi.  Kn= .053  LAG= 29.89 min.
 221          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 222          BA   1.106
 223          LG    .149    .345    7.50    .116    7.45
 224          UI    125.    205.    491.    649.    783.    968.   1374.   1472.   1125.    928.
 225          UI    743.    595.    399.    220.    204.    125.     99.     38.     38.     38.
 226          UI     38.     38.      0.      0.      0.      0.      0.      0.      0.      0.
 227          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 228          KK   DT320
 229          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.8 AC-FT FROM SUB-BASIN 320
 230          KM                                              (Hydrograph identified as OR320)
 231          KM                                            2) Balance of runoff continues on.
 232          KM                                              (Hydrograph identified as DT320)
 233          DT   OR320     1.8
 234          DI       0   10000
 235          DQ       0   10000

 236          KK   320RR
              * KO     1
 237          KM   ROUTE FLOW THROUGH DETENTION BEHIND C.A.P. STRUCTURES NO. 4 & 5
 238          RS       1    ELEV      13
 239          SV       0     0.6    12.4    48.7   119.5   230.3
 240          SE      13      14      16      18      20      22
 241          SL   14.80   11.66     0.6     0.5
 242          SS      20     200     3.0     1.5

 243          KK   320RE
 244          KM   DIVERT OUTFLOW FROM STRUCTURE NO.5 INTO SUB-BASIN 325
 245          KM   REMAINING OUTFLOW INTO SUB-BASIN 321 IS FROM STRUCTURE NO.4
 246          DT    325D
 247          DI       0      13      63     102     128     150
 248          DQ       0       5      28      42      52      60

 249          KK   RM320
 250          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION FOR SUB-BASIN 320 THROUGH 321
 251          KM           1) Reach Length = 11,160 ft.
 252          RD
 253          RC     .05     .04     .05   11160   .0085
 254          RX       0       5     155     160     170     175     325     330
 255          RY       3       2       1       0       0       1       2       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 256          KK   321S
 257          KM   RUNOFF GENERATED ON SUB-BASIN 321
 258          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 259          KM    L= 2.27 mi.  Lca= 1.24 mi.  S= 57 ft/mi.  Kn= .038  LAG= 37.61 min.
 260          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 261          BA   1.121
 262          LG    .298    .349    3.77    .349    1.42
 263          UI    100.    100.    302.    436.    531.    614.    726.    887.   1220.   1164.
 264          UI    934.    805.    675.    570.    481.    344.    213.    172.    156.    100.
 265          UI    100.     32.     31.     31.     31.     31.     31.     31.      0.      0.
 266          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 267          KK   HC321
 268          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 321 WITH ROUTED FLOW FROM 320
 269          HC       2

 270          KK   RM321
 271          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 321 THROUGH 322
 272          KM            1) Reach Length = 2760 ft.
 273          RD
 274          RC     .05     .04     .05    2760   .0051
 275          RX       0      50     150     165     175     190     240     250
 276          RY       6       5       4       0       0       4       5       7

 277          KK    323S
 278          KM   RUNOFF GENERATED ON SUB-BASIN 323
 279          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 280          KM    L= 0.92 mi.  Lca= 0.34 mi.  S= 61 ft/mi.  Kn= .038  LAG= 16.11 min.
 281          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 282          BA     .11
 283          LG     .10     .25    4.24    .433   25.12
 284          UI     27.     99.    150.    249.    218.    147.     90.     39.     24.      7.
 285          UI      7.      7.      0.      0.      0.      0.      0.      0.      0.      0.
 286          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 287          KK   323RR
              * KO     1
 288          KM   ROUTE FLOW THROUGH ON-SITE DETENTION
 289          RS       1    ELEV    36.1
 290          SV       0     0.5     3.9    12.8    29.3    57.8
 291          SE    36.1      38      40      42      44      46
 292          SL   37.65     6.6     0.6     0.5
 293          SS      45     100     3.0     1.5

 294          KK   RM323
 295          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION THROUGH SUB-BASIN 322
 296          KM            1) Reach Length = 5200 ft.
 297          RD
 298          RC     .05     .04     .05    5200   .0063
 299          RX       0       5     205     215     225     235     435     440
 300          RY       5       3       1       0       0       1       3       5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 301          KK   322S
 302          KM   RUNOFF GENERATED ON SUB-BASIN 322
 303          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 304          KM    L= 1.15 mi.  Lca= 0.44 mi.  S= 36 ft/mi.  Kn= .036  LAG= 20.26 min.
 305          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 306          BA    .345
 307          LG    .328    .341    3.77    .348    7.52
 308          UI     57.    190.    310.    415.    653.    571.    418.    303.    177.     97.
 309          UI     63.     31.     18.     18.     18.      0.      0.      0.      0.      0.
 310          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 311          KK   DT322
 312          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.2 AC-FT FROM SUB-BASIN 322
 313          KM                                             (Hydrograph identified as OR322)
 314          KM                                           2) Balance of runoff continues on.
 315          KM                                             (Hydrograph identified as DT322)
 316          DT   OR322     1.2
 317          DI       0   10000
 318          DQ       0   10000

 319          KK   HC322
 320          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 322 WITH ROUTED FLOW FROM 314, 321 & 323
 321          HC       4

 322          KK   322RR
 323          KM   ROUTE FLOW THROUGH DETENTION BEHIND 2 - 8 x 7 RCBC AT I-17
 324          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 325          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 326          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 327          RS       1    STOR      -1
 328          SV       0    .001     .22    1.16    8.44      17      30      49      67      76
 329          SE     3.8       4       6       8      10      11      12      13    13.7      14
 330          SQ       0       1     176     414     680     880    1091    1593    2678    3746

 331          KK   322RE
 332          KM   DIVERT OVERFLOWS SOUTH TO SINGLE CULVERT AT MH PARK, AND WEST ONTO I-17.
 333          KM   DQ IS DISCHARGE THROUGH 2-8x7 CULVERT (MAX. 1312 CFS); DI IS TOTAL DISCHARGE.
 334          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 335          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 336          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 337          DT   333D1
 338          DI       1     880    1091    1593    2678    3746
 339          DQ       1     880    1060    1184    1296    1312

 340          KK    326D
 341          KM   SEPARATE OUT WEST OVERFLOWS ONTO THE FRONTAGE ROAD AND MAINLINE I-17.
 342          KM   THESE FLOWS HEAD SOUTH AND EVENTUALLY ENTER THE DEER VALLEY ROAD INTERCHANGE.
 343          KM   REMAINING FLOWS CONTINUE SOUTH TO 6x7 BOX CULVERT ON SCATTER WASH AT I-17.
 344          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 345          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 346          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 347          DT    332D
 348          DI      31     409    1382    2434
 349          DQ       0       0     215     840
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 350          KK   325RD
 351          KM   RETRIEVE FLOW FROM C.A.P. STRUCTURE NO.5
 352          DR    325D

 353          KK   RM320
 354          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM STRUCTURE NO.5 THROUGH 325.
 355          KM            1) Reach Length = 8560 ft.
 356          RD
 357          RC     .05     .04     .05    8560   .0082
 358          RX       0      10     200     220     235     255     440     450
 359          RY       5       4       2       0       0       2       4       5

 360          KK    325S
 361          KM   RUNOFF GENERATED ON SUB-BASIN 325
 362          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 363          KM    L= 1.71 mi.  Lca= 0.65 mi.  S= 60 ft/mi.  Kn= .037  LAG= 25.48 min.
 364          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 365          BA    .502
 366          LG    .266    .333    3.87    .372    7.02
 367          UI     66.    151.    300.    388.    491.    718.    756.    566.    445.    343.
 368          UI    234.    121.    100.     66.     32.     20.     20.     20.     20.      0.
 369          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 370          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 371          KK   HC325
 372          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 325 WITH ROUTED FLOW FROM 320
 373          HC       2

 374          KK   RM325
 375          KM   MUSKINGUM-CUNGE ROUTE IN CHANNEL FROM SUB-BASIN 325 THROUGH 326
 376          KM            1) Reach Length = 6200 ft.
 377          RD
 378          RC     .05     .04     .05    6200   .0068
 379          RX      80     130     195     220     235     260     325     375
 380          RY       6       5       3       0       0       3       5       6

 381          KK    326S
 382          KM   RUNOFF GENERATED ON SUB-BASIN 326
 383          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 384          KM    L= 2.01 mi.  Lca= 0.90 mi.  S= 37 ft/mi.  Kn= .036  LAG= 32.70 min.
 385          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 386          BA    .498
 387          LG    .312    .335    4.14    .428   12.87
 388          UI     51.     65.    186.    252.    299.    361.    452.    635.    555.    446.
 389          UI    374.    305.    250.    176.    102.     86.     64.     51.     26.     16.
 390          UI     16.     16.     16.     16.      0.      0.      0.      0.      0.      0.
 391          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 392          KK   DT326
 393          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.7 AC-FT FROM SUB-BASIN 326
 394          KM                                               (Hydrograph identified as OR326)
 395          KM                                             2) Balance of runoff continues on.
 396          KM                                               (Hydrograph identified as DT326)
 397          DT   OR326     4.7
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          DI       0   10000
 399          DQ       0   10000

 400          KK   HC326
 401          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 326 WITH ROUTED FLOW FROM 325 AND
 402          KM   OVERFLOW FROM 322.
 403          HC       3

 404          KK   326RE
 405          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x7 RCBC (MAX. Q = 510 CFS)
 406          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 407          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 408          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 409          DT   333D2
 410          DI       0       1     510     511    1000    2000
 411          DQ       0       1     510     510     510     510

 412          KK    327S
 413          KM   RUNOFF GENERATED ON SUB-BASIN 327
 414          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 415          KM    L= 1.21 mi.  Lca= 0.53 mi.  S= 38 ft/mi.  Kn= .030  LAG= 18.28 min.
 416          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 417          BA    .216
 418          LG    .193    .287    3.61    .305   47.32
 419          UI     40.    152.    232.    336.    466.    328.    231.    143.     68.     44.
 420          UI     18.     12.     12.      0.      0.      0.      0.      0.      0.      0.
 421          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 422          KK   DT327
 423          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.7 AC-FT FROM SUB-BASIN 327
 424          KM                                              (Hydrograph identified as OR327)
 425          KM                                            2) Balance of runoff continues on.
 426          KM                                              (Hydrograph identified as DT327)
 427          DT   OR327     1.7
 428          DI       0   10000
 429          DQ       0   10000

 430          KK   HC327
 431          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 327 WITH OVERFLOW FROM 326
 432          HC       2

 433          KK   327RE
 434          KM   DIVERT FLOW ACROSS I-17 THROUGH 65"x40" CMP AT ADOBE DR.
 435          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 436          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 437          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 438          DT   334D1
 439          DI       0     115     116    1000    3000
 440          DQ       1     115     115     115     115
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 441          KK   330S
 442          KM   RUNOFF GENERATED ON SUB-BASIN 330
 443          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 444          KM    L= 1.67 mi.  Lca= 0.87 mi.  S= 28 ft/mi  Kn= .024  LAG= 21.15 min.
 445          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 446          BA    .310
 447          LG    .192    .272    3.77    .325   36.43
 448          UI     49.    153.    259.    341.    517.    541.    390.    288.    197.     96.
 449          UI     69.     43.     15.     15.     15.      0.      0.      0.      0.      0.
 450          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 451          KK   DT330
 452          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.9 AC-FT FROM SUB-BASIN 330
 453          KM                                             (Hydrograph identified as OR330)
 454          KM                                            2) Balance of runoff continues on.
 455          KM                                             (Hydrograph identified as DT330)
 456          DT   OR330     1.9
 457          DI       0   10000
 458          DQ       0   10000

 459          KK   330R1
 460          KM   DIVERT FLOW SOUTH ALONG 19TH AVENUE AT DEER VALLEY RD.
 461          DT    341D
 462          DI       0     145     418    2248    4002
 463          DQ       0       0     121     550    1220

 464          KK   330R2
 465          KM   DIVERT FLOW SOUTH INTO SUB-BASIN 343.  THIS DIVERT IS USED TO SIMULATE
 466          KM   THE CROWN OVERTOPPING OF DEER VALLEY RD.
 467          DT    343D
 468          DI       0      55     328     746
 469          DQ       0       0     241     487

 470          KK   RM330
 471          KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 330 THROUGH 331
 472          KM           1) Reach Length = 3850 ft.
 473          RD
 474          RC    .020    .020    .030    3850   .0057
 475          RX       0      .5    45.5    45.5    50.5    55.5    60.5    60.5
 476          RY       5       3     2.3     2.8     2.8       3       4       5

 477          KK    331S
 478          KM   RUNOFF GENERATED ON SUB-BASIN 331
 479          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 480          KM    L= 1.25 mi.  Lca= 0.32 mi.  S= 35 ft/mi.  Kn= .027  LAG= 13.97 min.
 481          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 482          BA     .22
 483          LG    .141    .171    8.28    .078   68.37
 484          UI     77.    256.    409.    596.    384.    228.     94.     46.     16.     16.
 485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 486          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 487          KK   DT331
 488          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 1.6 AC-FT FROM SUB-BASIN 331
 489          KM                                             (Hydrograph identified as OR331)
 490          KM                                           2) Balance of runoff continues on.
 491          KM                                             (Hydrograph identified as DT331)
 492          DT   OR331     1.6
 493          DI       0   10000
 494          DQ       0   10000

 495          KK   HC331
 496          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 331 WITH OVERFLOW FROM 327 & 330.
 497          HC       3

 498          KK   331RE
 499          KM   DIVERT FLOW ACROSS I-17 THROUGH 6x3 RCBC AT LOUISE DR.
 500          KM   DI REPRESENTS TOTAL FLOW TO DEPRESSED INTERCHANGE AT DEER VALLEY RD.
 501          KM   SOURCE:  Scatter Wash Drainage and Storm Drain Study - Conceptual Plan
 502          KM            Prepared for the City of Phoenix Engineering Dept., Floodplain
 503          KM            Management, ST-886366, September 1989, by Greiner, Inc.
 504          DT   334D2
 505          DI       0       1     156     157    1000    3000
 506          DQ       0       1     156     156     156     156

 507          KK    R332
 508          KM   RETRIEVE HYDROGRAPH OF OVERFLOW FROM SUB-BASIN 322 ONTO I-17 MEDIAN
 509          DR    332D

 510          KK    332S
 511          KM   RUNOFF GENERATED ON SUB-BASIN 332
 512          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 513          KM    L= 0.40 mi.  Lca= 0.07 mi.  S= 65 ft/mi.  Kn= .027  LAG= 6.00 min.
 514          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 515          BA    .094
 516          LG    .159    .189    8.20    .046   48.74
 517          UI    190.    497.    185.     29.      0.      0.      0.      0.      0.      0.
 518          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 519          KK   DT332
 520          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.4 AC-FT FROM SUB-BASIN 332
 521          KM                                             (Hydrograph identified as OR332)
 522          KM                                           2) Balance of runoff continues on.
 523          KM                                             (Hydrograph identified as DT332)
 524          DT   OR332     0.4
 525          DI       0   10000
 526          DQ       0   10000

 527          KK   HC332
 528          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 332 WITH OVERFLOWS FROM SUB-BASIN 322
 529          KM   AND 331 (TOTAL FLOW INTO DEER VALLEY RD. INTERCHANGE)
 530          HC       3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 531          KK   332RR
 532          KM   ROUTE FLOW THROUGH DEPRESSED SECTION AT DEER VALLEY RD. INTERCHANGE TO
 533          KM   WEST SIDE OF I-17.
              * KO     1
 534          RS       1    ELEV      82
 535          SV       0     1.4    10.7    28.9    42.5      56      69    84.5   114.8
 536          SE      82      84      88      92      94    95.6    96.8      98     100
 537          SQ       0       0       0       0       0       1    1428    7646   26741

 538          KK   RM332
 539          KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DEER VALLEY RD. INTERCHANGE
 540          KM   THROUGH SUB-BASIN 335.
 541          KM            1) Reach Length = 5760 ft.
 542          RD
 543          RC    .045     .04    .045    5760   .0068
 544          RX       0       5      55      60      70      75     125     130
 545          RY       3       2       1       0       0       1       2       3

 546          KK    R322
 547          KM   RETRIEVE HYDROGRAPH FOR NORTH BRANCH OF SCATTER WASH
 548          KM   (ALSO KNOWN AS FLOW THROUGH 2-8x7 RCBC)
 549          DR   333D1

 550          KK    R326
 551          KM   RETRIEVE HYDROGRAPH FOR SOUTH BRANCH OF SCATTER WASH
 552          KM   (ALSO KNOWN AS FLOW THROUGH 6x7 RCBC)
 553          DR   333D2

 554          KK    333S
 555          KM   RUNOFF GENERATED ON SUB-BASIN 333
 556          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 557          KM    L= 2.34 min.  Lca= 0.96 mi.  S= 27 ft/mi.  Kn= .038  LAG= 39.79 min.
 558          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 559          BA    .533
 560          LG    .311    .354    5.98    .198   10.71
 561          UI     45.     45.    119.    187.    229.    264.    307.    360.    476.    574.
 562          UI    471.    395.    345.    289.    247.    208.    150.     93.     77.     73.
 563          UI     45.     45.     21.     14.     14.     14.     14.     14.     14.      0.
 564          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 565          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 566          KK   HC333
 567          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 333 WITH DIVERTED FLOWS FROM 322 & 326.
 568          HC       3

 569          KK   RM333
 570          KM   MUSKINGUM-CUNGE ROUTE OVERFLOW FROM SUB-BASIN 333 THROUGH 334
 571          KM            1) Reach Length = 5160 ft.
 572          RD
 573          RC    .055    .045    .055    5160   .0056
 574          RX       0      60     110     145     170     195     250     400
 575          RY       7       6       2       0       0       2       6       7
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

576           KK   R327
577           KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 327
578           DR   334D1

579           KK   RM327
580           KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
581           KM           1) Reach Length = 5100 ft.
582           RD
583           RC     .05     .04     .05    5100   .0073
584           RX       0      10      30      33      48      51     151     200
585           RY       3       2     1.5       0       0     1.5       2       3

586           KK   R331
587           KM   RETRIEVE HYDROGRAPH FOR DIVERTED FLOW FROM SUB-BASIN 331
588           DR   334D2

589           KK   RM331
590           KM   MUSKINGUM-CUNGE ROUTE DIVERTED FLOW THROUGH SUB-BASIN 334
591           KM           1) Reach Length = 5000 ft.
592           RD
593           RC     .03    .045    .045    5000   .0070
594           RX       0      10      30      33      48      51     151     200
595           RY       3       2     1.5       0       0     1.5       2       3

596           KK   334S
597           KM   RUNOFF GENERATED ON SUB-BASIN 334
598           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
599           KM    L= 1.01 mi.  Lca= 0.51 mi.  S= 272 ft/mi.  Kn= .033  LAG= 12.73 min.
600           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
601           BA    .657
602           LG    .161    .229    8.28    .081   32.97
603           UI    285.    902.   1587.   1729.   1031.    462.    217.     67.     53.      0.
604           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
605           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

606           KK   DT334
607           KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 0.8 AC-FT FROM SUB-BASIN 334
608           KM                                              (Hydrograph identified as OR334)
609           KM                                            2) Balance of runoff continues on.
610           KM                                              (Hydrograph identified as DT334)
611           DT   OR334     0.8
612           DI       0   10000
613           DQ       0   10000

614           KK   HC334
615           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 334 WITH ROUTED FLOWS FROM 327, 331 & 333
616           HC       4

617           KK   RM334
618           KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 334 THROUGH 335
619           KM           1) Reach Length = 2980 ft.
620           RD
621           RC     .05    .045     .05    2980   .0044
622           RX       0     190     230     240     260     270     330     400
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 623          RY       7       4       2       0       0       2       6       7

 624          KK    335S
 625          KM   RUNOFF GENERATED ON SUB-BASIN 335
 626          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 627          KM    L= 1.11 mi.  Lca= 0.56 mi.  S= 38 ft/mi.  Kn= .033  LAG= 19.87 min.
 628          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 629          BA    .463
 630          LG    .206     .22    8.60     .07   14.96
 631          UI     78.    267.    430.    581.    914.    751.    550.    394.    210.    130.
 632          UI     78.     30.     24.     24.      0.      0.      0.      0.      0.      0.
 633          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 634          KK   DT335
 635          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 4.8 AC-FT FROM SUB-BASIN 335
 636          KM                                              (Hydrograph identified as OR335)
 637          KM                                            2) Balance of runoff continues on.
 638          KM                                              (Hydrograph identified as DT335)
 639          DT   OR335     4.8
 640          DI       0   10000
 641          DQ       0   10000

 642          KK   HC335
 643          KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 335 WITH ROUTED FLOWS FROM 332 & 334
 644          HC       3

 645          KK   RM335
 646          KM   MUSKINGUM-CUNGE ROUTE FLOW FROM SUB-BASIN 335 THROUGH 345
 647          KM            1) Reach Length = 4240 ft.
 648          RD
 649          RC     .05     .04     .05    4240   .0061
 650          RX       0      10     280     285     335     340     500     510
 651          RY      10       8       4       2       2       4       8      10

 652          KK   330R2
 653          KM   RETRIEVE DIVERTED FLOW FROM DEER VALLEY RD.
 654          DR    343D

 655          KK    343S
 656          KM   RUNOFF GENERATED ON SUB-BASIN 343
 657          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 658          KM    L= 1.07 mi.  Lca= 0.55 mi.  S= 24 ft/mi.  Kn= .027  LAG= 17.38 min.
 659          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 660          BA     .32
 661          LG    .181    .179   10.10    .034   47.01
 662          UI     62.    252.    378.    580.    686.    464.    319.    158.     91.     50.
 663          UI     19.     19.      0.      0.      0.      0.      0.      0.      0.      0.
 664          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 665          KK   DT343
 666          KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.5 AC-FT FROM SUB-BASIN 343
 667          KM                                              (Hydrograph identified as OR343)
 668          KM                                            2) Balance of runoff continues on.
 669          KM                                              (Hydrograph identified as DT343)
 670          DT   OR343     6.5
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

671         DI       0   10000
672         DQ       0   10000

673         KK   HC343
674         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 343 WITH OVERFLOW FROM DEER VALLEY RD.
675         HC       2

676         KK   343RR
677         KM   ROUTE FLOW THROUGH DETENTION BASIN D AT ROSE GARDEN LANE
678         KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
679         KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
680         KM            Prepared by DeLeuw Cather & Co.
            * KO     1
681         RS       1    STOR       0
682         SV       0      .7    25.4      30    34.6
683         SE    1381  1382.5    1396    1398    1400
684         SL    1381    2.41     0.6     0.5
685         SS    1397     100     3.0     1.5

686         KK   RM343
687         KM   MUSKINGUM-CUNGE ROUTE FLOW FROM DETENTION BASIN D SOUTH
688         KM            1) Reach Length = 2273 ft.
689         RD    2273   .0078    .014            CIRC       3

690         KK    349S
691         KM   RUNOFF GENERATED ON SUB-BASIN 349
692         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
693         KM    L= 1.03 mi.  Lca= 0.68 mi.  S= 27 ft/mi.  Kn= .028  LAG= 18.83 min.
694         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
695         BA    .372
696         LG    .193    .097   12.40    .012   34.46
697         UI     67.    244.    379.    534.    790.    578.    414.    275.    129.     85.
698         UI     45.     20.     20.     20.      0.      0.      0.      0.      0.      0.
699         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

700         KK   DT349
701         KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 7.4 AC-FT FROM SUB-BASIN 349
702         KM                                              (Hydrograph identified as OR349)
703         KM                                            2) Balance of runoff continues on.
704         KM                                              (Hydrograph identified as DT349)
705         DT   OR349     7.4
706         DI       0   10000
707         DQ       0   10000

708         KK   349RR
709         KM   ROUTE FLOW THROUGH SMALL DETENTION BASIN AT INTEL
710         KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
711         KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
712         KM            Prepared by DeLeuw Cather & Co.
            * KO     1
713         RS       1    STOR       0
714         SV       0     .35     1.9    3.07    4.56    6.00
715         SE    1383    1384    1386    1388    1390    1392
716         SL    1383    7.07     0.6     0.5
717         SS    1390     100     3.0     1.5
```

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

 718        KK   349RE
 719        KM   DIVERT OUTFLOW INTO BEARDSLEY RD. INTERCHANGE.  REMAINING FLOW CONTINUES TO
 720        KM   SCATTER WASH AND REFLECTS DISCHARGE FROM INTEL BASIN LOW LEVEL OUTLET.
 721        DT   BEARD
 722        DI       0      90      91     100     200     500    1000
 723        DQ       0       0       1      10     110     410     910

 724        KK   HC349
 725        KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 349 WITH ROUTED DETENTION BASIN D OVERFL
 726        HC       2

 727        KK  RM344A
 728        KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH 96-IN. PIPE
 729        KM            1) Reach Length = 3244 ft.
 730        RD    3244   .0012    .014            CIRC       8

 731        KK  RM344B
 732        KM   MUSKINGUM-CUNGE ROUTE FLOW WEST THROUGH TRAPEZOIDAL CHANNEL
 733        KM            1) Reach Length = 3550 ft.
 734        RD    3150   .0044    .014            TRAP       8       2

 735        KK    344S
 736        KM   RUNOFF GENERATED ON SUB-BASIN 344
 737        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 738        KM    L= 1.69 mi.  Lca= 0.98 mi.  S= 27 ft/mi.  Kn= .031  LAG= 28.91 min.
 739        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 740        BA    .554
 741        LG    .256    .162    9.40    .023   24.47
 742        UI     65.    114.    262.    344.    418.    527.    769.    704.    551.    447.
 743        UI    356.    275.    153.    110.     85.     65.     27.     20.     20.     20.
 744        UI     20.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 745        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 746        KK   DT344
 747        KM   THROW AWAY 10-YR 2-HR RETENTION VOLUME:  1) 6.0 AC-FT FROM SUB-BASIN 344
 748        KM                                               (Hydrograph identified as OR344)
 749        KM                                             2) Balance of runoff continues on.
 750        KM                                               (Hydrograph identified as DT344)
 751        DT   OR344     6.0
 752        DI       0   10000
 753        DQ       0   10000

 754        KK  HC344U
 755        KM   COMBINE HYDROGRAPHS UPSTREAM OF DETENTION BASIN C FROM SUB-BASIN 344 WITH
 756        KM   ROUTED OUTFLOW FROM DETENTION BASIN AT INTEL
 757        HC       2

 758        KK     344
 759        KM   DIVERT FLOW TO DETENTION BASIN C
 760        KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 761        KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 762        KM            Prepared by DeLeuw Cather & Co.
 763        DT   344RE
 764        DI       0     150     250     251     750
```

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

 765        DQ       0     150     250     250     250

 766        KK   344RR
 767        KM   ROUTE FLOW THROUGH DETENTION BASIN C (33-IN. ORIFICE)
 768        KM   SOURCE:  Drainage Report, Scatter Wash Hydrology and Outer Loop Highway
 769        KM            Interceptor Drain, 39th Avenue to 7th Street, November 1989.
 770        KM            Prepared by DeLeuw Cather & Co.
            * KO     1
 771        RS       1    STOR       0
 772        SA    2.15    2.24    2.32    2.52    2.71    2.91    3.12    3.67
 773        SE    1338    1339    1340    1342    1344    1346    1348    1353
 774        SL    1339    5.94     0.6     0.5
 775        SS    1352      40     2.7     1.5

 776        KK  R344RE
 777        KM   RETRIEVE DETENTION BASIN BYPASS FLOW
 778        DR   344RE

 779        KK  HC344D
 780        KM   COMBINE HYDROGRAPHS DOWNSTREAM OF DETENTION BASIN C
 781        HC       2

 782        KK   RM344
 783        KM   MUSKINGUM-CUNGE ROUTE OUTFLOW FROM DETENTION BASIN C THROUGH SUB-BASIN 345
 784        KM            1) Reach Length = 2160 ft.
 785        RD    2160   .0044    .014            TRAP       8       2

 786        KK    345S
 787        KM   RUNOFF GENERATED ON SUB-BASIN 345
 788        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 789        KM    L= 1.11 mi.  Lca= 0.67 mi.  S= 32 ft/mi.  Kn= .027  LAG= 17.98 min.
 790        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 791        BA    .296
 792        LG    .194    .302    5.67     .21   35.40
 793        UI     55.    216.    328.    489.    636.    443.    310.    178.     94.     56.
 794        UI     19.     17.     17.      0.      0.      0.      0.      0.      0.      0.
 795        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 796        KK   HC345
 797        KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 345 WITH ROUTED HYDROGRAPHS FROM 335 & 344
 798        HC       3

 799        KK   RM345
 800        KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 345 THROUGH 346
 801        KM            1) Reach Length = 6200 ft.
 802        RD
 803        RC    .055    .045    .055    6200   .0045
 804        RX       0      20     175     180     200     205     310     330
 805        RY      10       6       4       2       2       4       6      10
```

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

806         KK   346S
807         KM   RUNOFF GENERATED ON SUB-BASIN 346
808         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
809         KM    L= 1.51 mi.  Lca= 0.82 mi.  S= 27 ft/mi.  Kn= .033  LAG= 27.55 min.
810         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
811         BA   .401
812         LG   .227    .313    5.67     .21   24.66
813         UI    49.     95.    207.    269.    333.    435.    607.    479.    384.    304.
814         UI   239.    157.     85.     74.     49.     28.     15.     15.     15.     15.
815         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
816         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

817         KK   HC346
818         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 346 WITH ROUTED FLOW FROM 345
819         HC      2

820         KK    AD1
821         KM   ADOBE DAM LOW LEVEL SPILLWAY OUTFLOW; ASSUME CONSTANT OUTFLOW OF
822         KM   1730 CFS FOR 100-YEAR STORM.
823         KM   SOURCE:  F.I.S., Maricopa County, Arizona and Incorporated Areas, FEMA.
824         BA    0.1
825         IN    120
826         QI   1730    1730    1730    1730    1730    1730    1730    1730    1730    1730
827         QI   1730    1730    1730    1730    1730    1730    1730    1730    1730    1730

828         KK   RMAD1
829         KM   NORMAL DEPTH STORAGE ROUTE ADOBE DAM OUTFLOW THROUGH SUB-BASIN 347
830         KM            1) Reach Length = 3240 ft.
831         RS      5    FLOW      -1
832         RC   .055    .045    .055    3240   .0040
833         RX     30      80     180     200     240     260     265     270
834         RY      7       6       5       0       0       6       7       8

835         KK   347S
836         KM   RUNOFF GENERATED ON SUB-BASIN 347
837         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
838         KM    L= 1.71 mi.  Lca= 0.73 mi.  S= 35 ft/mi.  Kn= .035  LAG= 27.90 min.
839         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
840         BA  1.105
841         LG   .215    .326    3.71     .34   20.32
842         UI   133.    254.    560.    728.    898.   1163.   1650.   1344.   1074.    853.
843         UI   675.    467.    252.    219.    133.     96.     41.     41.     41.     41.
844         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
845         UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

846         KK   HC347
847         KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 347 WITH ROUTED OUTFLOW FROM ADOBE DAM
848         HC      2
```

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

849           KK   RM347
850           KM   MUSKINGUM-CUNGE ROUTE FROM SUB-BASIN 347 THROUGH 348
851           KM            1) Reach Length = 3120 ft.
852           RD
853           RC     .05     .04     .05    3120   .0051
854           RX     160     165     170     200     245     280     285     290
855           RY       7     6.5       6       0       0       6     6.5       7

856           KK    348S
857           KM   RUNOFF GENERATED ON SUB-BASIN 348
858           KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
859           KM    L= 0.59 mi.  Lca= 0.41 mi.  S= 27 ft/mi.  Kn= .030  LAG= 13.47 min.
860           KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
861           BA    .048
862           LG     .20     .31    3.68    .769   21.67
863           UI     18.     60.     99.    130.     81.     43.     18.      8.      4.      4.
864           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
865           UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

866           KK   HC348
867           KM   COMBINE HYDROGRAPHS FROM SUB-BASIN 348 WITH ROUTED FLOW FROM 347
868           HC       2

869           KK   HCSKB
870           KM   COMBINE HYDROGRAPHS FROM SKUNK CREEK WITH SCATTER WASH
871           HC       2

872           KK    R330
873           KM   RETRIEVE DIVERTED HYDROGRAPH FROM DEER VALLEY ROAD AND 19TH AVENUE.   THIS
874           KM   HYDROGRAPH WILL BE STORED IN FILENAME:  CCW324.DSS FOR RETRIEVAL AS PART OF
875           KM   THE WATERSHED CONTRIBUTING TO SKUNK CREEK.
876           DR    341D

877           KK  RBEARD
878           KM   RETRIEVE DIVERTED FLOW INTO BEARDSLEY ROAD - I-17 INTERCHANGE
879           DR   BEARD

880           KK  349RR2
881           KM   ROUTE FLOW THROUGH BEARDSLEY ROAD & I-17 INTERCHANGE
              * KO     1
882           RS       1    STOR       0
883           SV       0      .5     3.5     8.3    23.1    46.0    62.3    82.1
884           SE    1367    1368    1370    1372    1376    1380    1382    1384
885           SQ       0       0       0       0       0       0    5804   31500
886           ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

  25       310S
              .
              .
  35          .        311S
              .           .
              .           .
  46      HC311............
              V
              V
  49      311RR
              V
              V
  56      RM311
              .
              .
  63          .        312S
              .           .
              .           .
  74      HC312............
              V
              V
  77      RM312
              .
              .
  84          .        315S
              .           V
              .           V
  94          .       315RR
              .           V
              .           V
 101          .       RM315
              .           .
              .           .
 108          .           .       316S
              .           .          .
              .           .          .
 119          .       HC316............
              .           V
              .           V
 122          .       RM316
              .           .
              .           .
 129          .           .       317S
              .           .          .
              .           .          .
 139          .           .          .       318S
              .           .          .          .
              .           .          .          .
 150          .           .      HC317............
              .           .          V
              .           .          V
 153          .           .      317RR
              .           .          V
```

```
            .          .          V
160         .          .       RM317
            .          .          .
            .          .          .
167         .          .          .        319S
            .          .          .          .
            .          .          .          .
177         .          .       HC319............
            .          .          V
            .          .          V
180         .          .       RM319
            .          .          .
            .          .          .
187         .          .          .        314S
            .          .          .          .
            .          .          .          .
198      HC314.................................
            V
            V
201      314RR
            V
            V
210      RM314
            .
            .
217         .       320S
            .          .
            .          .
233         .          .-------->   OR320
228         .       DT320
            .          V
            .          V
236         .       320RR
            .          .
            .          .
246         .          .-------->    325D
243         .       320RE
            .          V
            .          V
249         .       RM320
            .          .
            .          .
256         .          .       321S
            .          .          .
            .          .          .
267         .       HC321............
            .          V
            .          V
270         .       RM321
            .          .
            .          .
277         .          .       323S
            .          .          V
            .          .          V
287         .          .      323RR
            .          .          V
            .          .          V
294         .          .      RM323
            .          .          .
            .          .          .
```

```
301          .          .          .       322S
             .          .          .          .
             .          .          .          .
316          .          .          .          .-------->   OR322
311          .          .          .      DT322
             .          .          .          .
             .          .          .          .
319      HC322.................................
             V
             V
322      322RR
             .
             .
337          .-------->   333D1
331      322RE
             .
             .
347          .-------->    332D
340       326D
             .
             .
352          .          .<-------    325D
350          .      325RD
             .          V
             .          V
353          .      RM320
             .          .
             .          .
360          .          .       325S
             .          .          .
             .          .          .
371          .      HC325............
             .          V
             .          V
374          .      RM325
             .          .
             .          .
381          .          .       326S
             .          .          .
             .          .          .
397          .          .          .-------->   OR326
392          .          .      DT326
             .          .          .
             .          .          .
400      HC326........................
             .
             .
409          .-------->   333D2
404      326RE
             .
             .
412          .       327S
             .          .
             .          .
427          .          .-------->   OR327
422          .      DT327
             .          .
             .          .
430      HC327............
             .
```

```
          .
438       .-------> 334D1
433   327RE
          .
          .
441       .       330S
          .          .
          .          .
456       .          .-------> OR330
451       .      DT330
          .          .
          .          .
461       .          .-------> 341D
459       .      330R1
          .          .
          .          .
467       .          .-------> 343D
464       .      330R2
          .          V
          .          V
470       .      RM330
          .          .
          .          .
477       .          .       331S
          .          .          .
          .          .          .
492       .          .          .-------> OR331
487       .          .      DT331
          .          .          .
          .          .          .
495   HC331.......................
          .
          .
504       .-------> 334D2
498   331RE
          .
          .
509       .          .<-------  332D
507       .       R332
          .          .
          .          .
510       .          .       332S
          .          .          .
          .          .          .
524       .          .          .-------> OR332
519       .          .      DT332
          .          .          .
          .          .          .
527   HC332.......................
          V
          V
531   332RR
          V
          V
538   RM332
          .
          .
549       .          .<-------  333D1
546       .       R322
          .          .
```

```
          .          .
553       .          .          .<-------   333D2
550       .          .       R326
          .          .          .
          .          .          .
554       .          .          .       333S
          .          .          .          .
          .          .          .          .
566       .      HC333.......................
          .          V
          .          V
569       .      RM333
          .          .
          .          .
578       .          .          .<-------   334D1
576       .          .       R327
          .          .          V
          .          .          V
579       .          .      RM327
          .          .          .
          .          .          .
588       .          .          .          .<-------   334D2
586       .          .          .       R331
          .          .          .          V
          .          .          .          V
589       .          .          .      RM331
          .          .          .          .
          .          .          .          .
596       .          .          .          .       334S
          .          .          .          .          .
          .          .          .          .          .
611       .          .          .          .          .-------->   OR334
606       .          .          .          .      DT334
          .          .          .          .          .
          .          .          .          .          .
614       .      HC334.................................
          .          V
          .          V
617       .      RM334
          .          .
          .          .
624       .          .       335S
          .          .          .
          .          .          .
639       .          .          .-------->   OR335
634       .          .      DT335
          .          .          .
          .          .          .
642     HC335.......................
          V
          V
645     RM335
          .
          .
654       .          .<-------    343D
652       .      330R2
          .          .
          .          .
655       .          .       343S
          .          .          .
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```
          .          .          .
670       .          .          .-------->  OR343
665       .          .      DT343
          .          .          .
          .          .          .
673       .      HC343............
          .          V
          .          V
676       .      343RR
          .          V
          .          V
686       .      RM343
          .          .
          .          .
690       .          .       349S
          .          .          .
          .          .          .
705       .          .          .-------->  OR349
700       .          .      DT349
          .          .          V
          .          .          V
708       .          .      349RR
          .          .          .
          .          .          .
721       .          .          .-------->  BEARD
718       .          .      349RE
          .          .          .
          .          .          .
724       .      HC349............
          .          V
          .          V
727       .     RM344A
          .          V
          .          V
731       .     RM344B
          .          .
          .          .
735       .          .       344S
          .          .          .
          .          .          .
751       .          .          .-------->  OR344
746       .          .      DT344
          .          .          .
          .          .          .
754       .     HC344U............
          .          .
          .          .
763       .          .-------->  344RE
758       .        344
          .          V
          .          V
766       .      344RR
          .          .
          .          .
778       .          .          .<--------  344RE
76        .          .     R344RE
          .          .          .
          .          .          .
779       .     HC344D............
          .          V
```

```
            .          V
782         .       RM344
            .          .
            .          .
86          .          .        345S
            .          .          .
            .          .          .
796      HC345........................
            V
            V
799      RM345
            .
            .
806         .       346S
            .          .
            .          .
817      HC346............
            .
            .
820         .        AD1
            .          V
            .          V
828         .       RMAD1
            .          .
            .          .
835         .          .        347S
            .          .          .
            .          .          .
846         .       HC347............
            .          V
            .          V
849         .       RM347
            .          .
            .          .
856         .          .        348S
            .          .          .
            .          .          .
866         .       HC348............
            .          .
            .          .
869      HCSKB............
            .
            .
876         .          .<-------    341D
872         .       R330
            .          .
            .          .
879         .          .          .<-------   BEARD
877         .          .      RBEARD
            .          .          V
            .          .          V
880         .          .      349RR2
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*          VERSION 4.0.1E              *
*                                      *
* RUN DATE  10/02/95  TIME  10:24:52   *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*         609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616        *
*          (916) 551-1748              *
*                                      *
****************************************
```

SCATTER WASH - PREPARATION OF LETTER OF MAP REVISION
CITY OF PHOENIX, ARIZONA FLOODPLAIN MANAGEMENT
INDEX NO. ST-951350

HYDROLOGY AS PER THE REPORT ENTITLED "SCATTER WASH WATERSHED, HYDROLOGY REPORT, ARIZONA CANAL DIVERSION CHANNEL AREA DRAINAGE MASTER STUDY, PHASE 1" DEVELOPED BY KAMINSKI-HUBBARD ENGINEERING, INC.

FILENAME: 344-500.DAT KHE JOB NO. 0344
500-YEAR 24-HOUR DURATION STORM
SCS TYPE-II DISTRIBUTION WAS USED

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

   IT        HYDROGRAPH TIME DATA
                   NMIN          4  MINUTES IN COMPUTATION INTERVAL
                  IDATE     10OCT92  STARTING DATE
                  ITIME       1200  STARTING TIME
                     NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                 NDDATE     13OCT92  ENDING DATE
                 NDTIME       0636  ENDING TIME
                  ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.07 HOURS
                 TOTAL TIME BASE   66.60 HOURS

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

15 JD        INDEX STORM NO. 1
                  STRM       5.02  PRECIPITATION DEPTH
                  TRDA       0.01  TRANSPOSITION DRAINAGE AREA

16 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

21 JD INDEX STORM NO. 2

STRM 4.92 PRECIPITATION DEPTH

TRDA 3.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

22 JD INDEX STORM NO. 3

STRM 4.82 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

23 JD INDEX STORM NO. 4

STRM 4.62 PRECIPITATION DEPTH

TRDA 20.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

24 JD INDEX STORM NO. 5

STRM 4.52 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

****** WARNING ****** THE FLOW RATE THAT YOU ARE ROUTING IS GREATER THAN WHAT CAN BE CALCULATE FROM THE 8 POINT CROSS SECTION YOU ENTERED ON RC, RX, AND RY RECORDS. THE PROGRAM HAD TO EXTRAPOLATE BEYOND THE MAXIMUM STORAGE-DISCHARGE VALUE CALCULATED. INCREASE ELMAX ON THE RC RECORD OR MAKE THE CROSS SECTION LARGER.

****** WARNING ****** THE FLOW RATE THAT YOU ARE ROUTING IS GREATER THAN WHAT CAN BE CALCULATE FROM THE 8 POINT CROSS SECTION YOU ENTERED ON RC, RX, AND RY RECORDS. THE PROGRAM HAD TO EXTRAPOLATE BEYOND THE MAXIMUM STORAGE-DISCHARGE VALUE CALCULATED. INCREASE ELMAX ON THE RC RECORD OR MAKE THE CROSS SECTION LARGER.

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WARNING --- ROUTED OUTFLOW (4002.) IS GREATER THAN MAXIMUM OUTFLOW (3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (4391.) IS GREATER THAN MAXIMUM OUTFLOW (3746.) IN STORAGE-OUTFLOW TABLE

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WARNING --- ROUTED OUTFLOW (   4165.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   3902.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   3757.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   4183.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   4319.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   4230.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   4030.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   3787.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   3967.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   4128.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   4066.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   3894.) IS GREATER THAN MAXIMUM OUTFLOW (   3746.) IN STORAGE-OUTFLOW TABLE

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DISCHARGE VALUE CALCULATED. INCREASE ELMAX ON THE RC RECORD OR MAKE THE CROSS SECTION LARGER.

WARNING --- ROUTED OUTFLOW (351.) IS GREATER THAN MAXIMUM OUTFLOW (215.) IN STORAGE-OUTFLOW TABLE

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WARNING --- ROUTED OUTFLOW (562.) IS GREATER THAN MAXIMUM OUTFLOW (215.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (510.) IS GREATER THAN MAXIMUM OUTFLOW (215.) IN STORAGE-OUTFLOW TABLE

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WARNING --- ROUTED OUTFLOW (558.) IS GREATER THAN MAXIMUM OUTFLOW (215.) IN STORAGE-OUTFLOW TABLE

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WARNING --- ROUTED OUTFLOW (498.) IS GREATER THAN MAXIMUM OUTFLOW (215.) IN STORAGE-OUTFLOW TABLE

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

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	310S	1284.	12.13	174.	44.	16.	0.68		
HYDROGRAPH AT	311S	992.	12.20	130.	34.	12.	0.57		
2 COMBINED AT	HC311	2261.	12.20	304.	78.	28.	1.25		
ROUTED TO	311RR	608.	12.73	186.	73.	26.	1.25		
ROUTED TO	RM311	601.	13.33	186.	73.	26.	1.25		
HYDROGRAPH AT	312S	2026.	12.33	311.	78.	28.	1.35		
2 COMBINED AT	HC312	2021.	12.33	478.	150.	54.	2.60		
ROUTED TO	RM312	2008.	12.60	477.	150.	54.	2.60		
HYDROGRAPH AT	315S	1053.	12.07	122.	32.	11.	0.51		
ROUTED TO	315RR	163.	12.67	72.	31.	11.	0.51		
ROUTED TO	RM315	163.	13.07	72.	31.	11.	0.51		
HYDROGRAPH AT	316S	1116.	12.20	132.	33.	12.	0.67		
2 COMBINED AT	HC316	1122.	12.20	197.	64.	23.	1.18		
ROUTED TO	RM316	1098.	12.60	196.	64.	23.	1.18		
HYDROGRAPH AT	317S	1275.	12.13	159.	42.	15.	0.70		
HYDROGRAPH AT	318S	828.	12.33	125.	33.	12.	0.54		
2 COMBINED AT	HC317	2039.	12.20	283.	75.	27.	1.25		
ROUTED TO	317RR	115.	13.33	106.	70.	25.	1.25		
ROUTED TO	RM317	115.	13.53	106.	70.	25.	1.25		
HYDROGRAPH AT	319S	594.	12.13	62.	15.	6.	0.34		
2 COMBINED AT	HC319	591.	12.27	156.	85.	31.	1.59		
ROUTED TO	RM319	569.	12.80	154.	85.	31.	1.59		
HYDROGRAPH AT	314S	1262.	12.27	155.	40.	14.	0.85		
4 COMBINED AT	HC314	4027.	12.60	944.	331.	120.	6.21		
ROUTED TO	314RR	3626.	12.80	943.	331.	120.	6.21		
ROUTED TO	RM314	3554.	12.87	944.	331.	120.	6.21		

HYDROGRAPH AT	320S	1811.	12.27	248.	65.	23.	1.11
DIVERSION TO	OR320	5.	6.53	4.	1.	0.	1.11
HYDROGRAPH AT	DT320	1811.	12.27	248.	64.	23.	1.11
ROUTED TO	320RR	124.	13.27	116.	62.	22.	1.11
DIVERSION TO	325D	50.	13.20	48.	26.	9.	1.11
HYDROGRAPH AT	320RE	73.	13.20	69.	36.	13.	1.11
ROUTED TO	RM320	73.	14.67	69.	36.	13.	1.11
HYDROGRAPH AT	321S	1371.	12.40	190.	48.	17.	1.12
2 COMBINED AT	HC321	1366.	12.40	242.	84.	30.	2.23
ROUTED TO	RM321	1347.	12.53	242.	84.	30.	2.23
HYDROGRAPH AT	323S	217.	12.07	24.	7.	3.	0.11
ROUTED TO	323RR	56.	12.40	24.	7.	2.	0.11
ROUTED TO	RM323	56.	12.87	24.	7.	2.	0.11
HYDROGRAPH AT	322S	612.	12.07	63.	17.	6.	0.34
DIVERSION TO	OR322	3.	10.07	2.	1.	0.	0.34
HYDROGRAPH AT	DT322	612.	12.07	63.	16.	6.	0.34
4 COMBINED AT	HC322	4472.	12.80	1244.	431.	156.	8.89
ROUTED TO	322RR	4147.	12.93	1244.	431.	156.	8.89
DIVERSION TO	333D1	1318.	12.93	849.	332.	120.	8.89
HYDROGRAPH AT	322RE	2829.	12.93	395.	99.	36.	8.89
DIVERSION TO	332D	1075.	12.93	93.	23.	8.	8.89
HYDROGRAPH AT	326D	1754.	12.93	302.	76.	27.	8.89
HYDROGRAPH AT	325RD	50.	13.20	48.	26.	9.	1.11
ROUTED TO	RM320	62.	13.13	48.	26.	9.	1.11
HYDROGRAPH AT	325S	788.	12.20	90.	24.	9.	0.50
2 COMBINED AT	HC325	788.	12.20	126.	49.	18.	0.50
ROUTED TO	RM325	781.	12.40	125.	49.	18.	0.50
HYDROGRAPH AT	326S	657.	12.27	91.	25.	9.	0.50
DIVERSION TO	OR326	55.	11.67	7.	2.	1.	0.50
HYDROGRAPH AT	DT326	657.	12.27	88.	23.	8.	0.50

3 COMBINED AT	HC326	2103.	12.87	503.	144.	52.	9.89
DIVERSION TO	333D2	510.	12.13	245.	80.	29.	9.89
HYDROGRAPH AT	326RE	1593.	12.87	258.	64.	23.	9.89
HYDROGRAPH AT	327S	450.	12.07	59.	19.	7.	0.22
DIVERSION TO	OR327	5.	4.53	3.	1.	0.	0.22
HYDROGRAPH AT	DT327	450.	12.07	59.	18.	6.	0.22
2 COMBINED AT	HC327	1623.	12.87	315.	82.	29.	10.10
DIVERSION TO	334D1	115.	11.73	52.	16.	6.	10.10
HYDROGRAPH AT	327RE	1508.	12.87	262.	66.	24.	10.10
HYDROGRAPH AT	330S	594.	12.13	78.	24.	9.	0.31
DIVERSION TO	OR330	6.	4.60	4.	1.	0.	0.31
HYDROGRAPH AT	DT330	594.	12.13	78.	23.	8.	0.31
DIVERSION TO	341D	162.	12.13	14.	4.	1.	0.31
HYDROGRAPH AT	330R1	431.	12.13	64.	19.	7.	0.31
DIVERSION TO	343D	302.	12.13	32.	8.	3.	0.31
HYDROGRAPH AT	330R2	130.	12.13	32.	11.	4.	0.31
ROUTED TO	RM330	131.	12.33	32.	11.	4.	0.31
HYDROGRAPH AT	331S	514.	12.00	75.	25.	9.	0.22
DIVERSION TO	OR331	7.	3.00	3.	1.	0.	0.22
HYDROGRAPH AT	DT331	514.	12.00	75.	24.	9.	0.22
3 COMBINED AT	HC331	1604.	12.87	362.	99.	36.	10.63
DIVERSION TO	334D2	156.	11.67	81.	29.	10.	10.63
HYDROGRAPH AT	331RE	1448.	12.87	281.	70.	25.	10.63
HYDROGRAPH AT	R332	1075.	12.93	93.	23.	8.	8.89
HYDROGRAPH AT	332S	224.	12.00	32.	10.	3.	0.09
DIVERSION TO	OR332	2.	2.80	1.	0.	0.	0.09
HYDROGRAPH AT	DT332	224.	12.00	32.	10.	3.	0.09
3 COMBINED AT	HC332	2468.	12.93	400.	102.	37.	10.73
ROUTED TO	332RR	2441.	12.93	292.	74.	27.	10.73
ROUTED TO	RM332	2389.	13.13	292.	74.	27.	10.73

HYDROGRAPH AT	R322	1318.	12.93	849.	332.	120.	8.89
HYDROGRAPH AT	R326	510.	12.13	245.	80.	29.	9.89
HYDROGRAPH AT	333S	691.	12.40	109.	30.	11.	0.53
3 COMBINED AT	HC333	2341.	12.53	1221.	450.	164.	0.53
ROUTED TO	RM333	2331.	12.73	1219.	450.	164.	0.53
HYDROGRAPH AT	R327	115.	11.73	52.	16.	6.	10.10
ROUTED TO	RM327	122.	12.07	52.	16.	6.	10.10
HYDROGRAPH AT	R331	156.	11.67	81.	29.	10.	10.63
ROUTED TO	RM331	156.	12.80	81.	28.	10.	10.63
HYDROGRAPH AT	334S	1508.	12.00	190.	56.	20.	0.66
DIVERSION TO	OR334	8.	1.00	2.	0.	0.	0.66
HYDROGRAPH AT	DT334	1508.	12.00	190.	56.	20.	0.66
4 COMBINED AT	HC334	2780.	12.67	1495.	542.	200.	1.19
ROUTED TO	RM334	2758.	12.87	1493.	542.	200.	1.19
HYDROGRAPH AT	335S	969.	12.07	127.	35.	12.	0.46
DIVERSION TO	OR335	38.	11.13	7.	2.	1.	0.46
HYDROGRAPH AT	DT335	969.	12.07	125.	32.	12.	0.46
3 COMBINED AT	HC335	4912.	13.13	1834.	624.	229.	12.38
ROUTED TO	RM335	4804.	13.33	1833.	624.	229.	12.38
HYDROGRAPH AT	330R2	302.	12.13	32.	8.	3.	0.31
HYDROGRAPH AT	343S	720.	12.07	108.	33.	12.	0.32
DIVERSION TO	OR343	18.	9.67	10.	3.	1.	0.32
HYDROGRAPH AT	DT343	720.	12.07	108.	30.	11.	0.32
2 COMBINED AT	HC343	1021.	12.07	140.	38.	14.	0.32
ROUTED TO	343RR	894.	12.20	100.	38.	14.	0.32
ROUTED TO	RM343	852.	12.27	99.	38.	14.	0.32
HYDROGRAPH AT	349S	828.	12.07	134.	42.	15.	0.37
DIVERSION TO	OR349	29.	9.40	12.	4.	1.	0.37
HYDROGRAPH AT	DT349	828.	12.07	134.	39.	14.	0.37
ROUTED TO	349RR	824.	12.07	133.	39.	14.	0.37

DIVERSION TO	BEARD	734.	12.07	70.	17.	6.	0.37
HYDROGRAPH AT	349RE	90.	11.80	64.	21.	8.	0.37
2 COMBINED AT	HC349	938.	12.27	157.	59.	21.	0.69
ROUTED TO	RM344A	716.	12.33	154.	58.	21.	0.69
ROUTED TO	RM344B	707.	12.40	154.	58.	21.	0.69
HYDROGRAPH AT	344S	1019.	12.20	188.	55.	20.	0.55
DIVERSION TO	OR344	25.	9.47	9.	3.	1.	0.55
HYDROGRAPH AT	DT344	1019.	12.20	188.	52.	19.	0.55
2 COMBINED AT	HC344U	1647.	12.33	338.	110.	40.	1.25
DIVERSION TO	344RE	250.	11.67	180.	70.	25.	1.25
HYDROGRAPH AT	344	1397.	12.33	159.	40.	14.	1.25
ROUTED TO	344RR	606.	12.73	136.	39.	14.	1.25
HYDROGRAPH AT	R344RE	250.	11.67	180.	70.	25.	1.25
2 COMBINED AT	HC344D	856.	12.73	305.	109.	39.	1.25
ROUTED TO	RM344	855.	12.73	305.	109.	39.	1.25
HYDROGRAPH AT	345S	614.	12.07	76.	23.	8.	0.30
3 COMBINED AT	HC345	5148.	13.40	2161.	740.	271.	13.92
ROUTED TO	RM345	5020.	13.67	2159.	740.	271.	13.92
HYDROGRAPH AT	346S	675.	12.20	94.	27.	10.	0.40
2 COMBINED AT	HC346	5016.	13.67	2215.	762.	280.	14.32
HYDROGRAPH AT	AD1	1730.	0.07	1730.	1730.	1730.	0.10
ROUTED TO	RMAD1	1730.	0.07	1730.	1730.	1730.	0.10
HYDROGRAPH AT	347S	1759.	12.20	235.	68.	24.	1.11
2 COMBINED AT	HC347	3488.	12.20	1965.	1797.	1754.	1.21
ROUTED TO	RM347	3476.	12.27	1965.	1797.	1754.	1.21
HYDROGRAPH AT	348S	83.	12.00	9.	3.	1.	0.05
2 COMBINED AT	HC348	3507.	12.27	1974.	1800.	1755.	1.25
2 COMBINED AT	HCSKB	6726.	13.67	4143.	2549.	2031.	15.58
HYDROGRAPH AT	R330	162.	12.13	14.	4.	1.	0.31
HYDROGRAPH AT	RBEARD	734.	12.07	70.	17.	6.	0.37

ROUTED TO	349RR2	0.	0.07	0.	0.	0.	0.37

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)
FOR STORM = 1 STORM AREA (SQ MI) =				0.01					
RM311	MANE	3.20	636.33	796.80	2.24	4.00	635.74	800.00	2.24

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1489E+03 EXCESS=0.0000E+00 OUTFLOW=0.1490E+03 BASIN STORAGE=0.2052E-02 PERCENT ERROR= -0.1

FOR STORM = 2 STORM AREA (SQ MI) =				3.00					
RM311	MANE	3.20	594.90	800.00	2.17	4.00	594.90	800.00	2.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1443E+03 EXCESS=0.0000E+00 OUTFLOW=0.1444E+03 BASIN STORAGE=0.1974E-02 PERCENT ERROR= -0.1

FOR STORM = 3 STORM AREA (SQ MI) =				10.00					
RM311	MANE	3.20	552.01	800.00	2.10	4.00	552.01	800.00	2.10

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1398E+03 EXCESS=0.0000E+00 OUTFLOW=0.1399E+03 BASIN STORAGE=0.1965E-02 PERCENT ERROR= -0.1

FOR STORM = 4 STORM AREA (SQ MI) =				20.00					
RM311	MANE	3.00	466.51	804.00	1.97	4.00	466.51	804.00	1.97

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1308E+03 EXCESS=0.0000E+00 OUTFLOW=0.1309E+03 BASIN STORAGE=0.2040E-02 PERCENT ERROR= -0.1

FOR STORM = 5 STORM AREA (SQ MI) =				30.00					
RM311	MANE	3.20	427.80	803.20	1.90	4.00	427.55	804.00	1.90

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1263E+03 EXCESS=0.0000E+00 OUTFLOW=0.1265E+03 BASIN STORAGE=0.1784E-02 PERCENT ERROR= -0.1

FOR STORM = 1 STORM AREA (SQ MI) =				0.01					
RM312	MANE	4.00	2058.13	756.00	2.22	4.00	2058.13	756.00	2.22

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3073E+03 EXCESS=0.0000E+00 OUTFLOW=0.3074E+03 BASIN STORAGE=0.1100E-02 PERCENT ERROR= 0.0

FOR STORM = 2 STORM AREA (SQ MI) =				3.00					
RM312	MANE	4.00	2006.36	756.00	2.15	4.00	2006.36	756.00	2.15

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2981E+03 EXCESS=0.0000E+00 OUTFLOW=0.2982E+03 BASIN STORAGE=0.1115E-02 PERCENT ERROR= 0.0

FOR STORM = 3 STORM AREA (SQ MI) = 10.00

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RM312  MANE        4.00   1952.41    760.00      2.09      4.00   1952.41    760.00        2.09

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2889E+03 EXCESS=0.0000E+00 OUTFLOW=0.2890E+03 BASIN STORAGE=0.1141E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM312  MANE        4.00   1858.56    760.00      1.95      4.00   1858.56    760.00        1.95

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2706E+03 EXCESS=0.0000E+00 OUTFLOW=0.2706E+03 BASIN STORAGE=0.1191E-02 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM312  MANE        4.00   1810.49    760.00      1.89      4.00   1810.49    760.00        1.89

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2615E+03 EXCESS=0.0000E+00 OUTFLOW=0.2616E+03 BASIN STORAGE=0.1007E-02 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM315  MANE        4.00    172.38    784.00      2.32      4.00    172.38    784.00        2.32

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6278E+02 EXCESS=0.0000E+00 OUTFLOW=0.6280E+02 BASIN STORAGE=0.1304E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
RM315  MANE        4.00    158.15    784.00      2.25      4.00    158.15    784.00        2.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6100E+02 EXCESS=0.0000E+00 OUTFLOW=0.6103E+02 BASIN STORAGE=0.1297E-02 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
RM315  MANE        4.00    145.28    788.00      2.19      4.00    145.28    788.00        2.19

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5920E+02 EXCESS=0.0000E+00 OUTFLOW=0.5922E+02 BASIN STORAGE=0.1264E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
RM315  MANE        4.00    118.83    792.00      2.05      4.00    118.83    792.00        2.05

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5563E+02 EXCESS=0.0000E+00 OUTFLOW=0.5566E+02 BASIN STORAGE=0.1333E-02 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
RM315  MANE        4.00    106.23    792.00      1.99      4.00    106.23    792.00        1.99

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5385E+02 EXCESS=0.0000E+00 OUTFLOW=0.5388E+02 BASIN STORAGE=0.1417E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
RM316  MANE        4.00   1122.05    756.00      2.06      4.00   1122.05    756.00        2.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1296E+03 EXCESS=0.0000E+00 OUTFLOW=0.1297E+03 BASIN STORAGE=0.1204E-02 PERCENT ERROR=  -0.1
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FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM316  MANE        4.00   1092.90    756.00      2.00      4.00   1092.90    756.00        2.00

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1258E+03 EXCESS=0.0000E+00 OUTFLOW=0.1260E+03 BASIN STORAGE=0.1186E-02 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM316  MANE        4.00   1061.39    756.00      1.94      4.00   1061.39    756.00        1.94

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1221E+03 EXCESS=0.0000E+00 OUTFLOW=0.1223E+03 BASIN STORAGE=0.1173E-02 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM316  MANE        4.00   1001.07    756.00      1.83      4.00   1001.07    756.00        1.83

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1148E+03 EXCESS=0.0000E+00 OUTFLOW=0.1150E+03 BASIN STORAGE=0.1008E-02 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM316  MANE        4.00    971.43    756.00      1.77      4.00    971.43    756.00        1.77

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1112E+03 EXCESS=0.0000E+00 OUTFLOW=0.1114E+03 BASIN STORAGE=0.1089E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM317  MANE        4.00    122.57    812.00      2.15      4.00    122.57    812.00        2.15

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1426E+03 EXCESS=0.0000E+00 OUTFLOW=0.1427E+03 BASIN STORAGE=0.9439E-03 PERCENT ERROR=  -0.1

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM317  MANE        4.00    113.41    812.00      2.08      4.00    113.41    812.00        2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1383E+03 EXCESS=0.0000E+00 OUTFLOW=0.1384E+03 BASIN STORAGE=0.8922E-03 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM317  MANE        4.00    109.02    812.00      2.02      4.00    109.02    812.00        2.02

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1340E+03 EXCESS=0.0000E+00 OUTFLOW=0.1341E+03 BASIN STORAGE=0.9351E-03 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM317  MANE        4.00    106.76    812.00      1.89      4.00    106.76    812.00        1.89

TINUITY SUMMARY (AC-FT) - INFLOW=0.1254E+03 EXCESS=0.0000E+00 OUTFLOW=0.1255E+03 BASIN STORAGE=0.8981E-03 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM317  MANE        4.00    105.64    812.00      1.83      4.00    105.64    812.00        1.83
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1212E+03 EXCESS=0.0000E+00 OUTFLOW=0.1213E+03 BASIN STORAGE=0.9182E-03 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM319  MANE         2.20    585.32    770.00      2.06      4.00    584.20    768.00        2.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1740E+03 EXCESS=0.0000E+00 OUTFLOW=0.1743E+03 BASIN STORAGE=0.1382E-02 PERCENT ERROR=  -0.2

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM319  MANE         2.20    567.87    770.00      2.00      4.00    566.60    768.00        2.00

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1687E+03 EXCESS=0.0000E+00 OUTFLOW=0.1690E+03 BASIN STORAGE=0.1358E-02 PERCENT ERROR=  -0.2

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM319  MANE         2.00    551.22    770.00      1.94      4.00    550.04    768.00        1.94

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1635E+03 EXCESS=0.0000E+00 OUTFLOW=0.1638E+03 BASIN STORAGE=0.1314E-02 PERCENT ERROR=  -0.2

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM319  MANE         2.00    516.17    770.00      1.81      4.00    515.64    768.00        1.81

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1531E+03 EXCESS=0.0000E+00 OUTFLOW=0.1533E+03 BASIN STORAGE=0.1351E-02 PERCENT ERROR=  -0.2

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM319  MANE         2.00    499.39    770.00      1.75      4.00    499.19    768.00        1.75

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1479E+03 EXCESS=0.0000E+00 OUTFLOW=0.1481E+03 BASIN STORAGE=0.1244E-02 PERCENT ERROR=  -0.2

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM314  MANE         4.00   3757.25    772.00      2.09      4.00   3757.25    772.00        2.09

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6921E+03 EXCESS=0.0000E+00 OUTFLOW=0.6927E+03 BASIN STORAGE=0.5536E-03 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM314  MANE         4.00   3633.11    772.00      2.03      4.00   3633.11    772.00        2.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6714E+03 EXCESS=0.0000E+00 OUTFLOW=0.6719E+03 BASIN STORAGE=0.4927E-03 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM314  MANE         4.00   3502.33    772.00      1.97      4.00   3502.33    772.00        1.97

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6509E+03 EXCESS=0.0000E+00 OUTFLOW=0.6513E+03 BASIN STORAGE=0.4988E-03 PERCENT ERROR=  -0.1
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM314  MANE        4.00   3267.35    776.00      1.84      4.00   3267.35    776.00        1.84

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6100E+03 EXCESS=0.0000E+00 OUTFLOW=0.6104E+03 BASIN STORAGE=0.5619E-03 PERCENT ERROR=  -0.1

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM314  MANE        4.00   3149.08    776.00      1.78      4.00   3149.08    776.00        1.78

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5896E+03 EXCESS=0.0000E+00 OUTFLOW=0.5900E+03 BASIN STORAGE=0.5763E-03 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM320  MANE        4.00     73.87    880.00      1.25      4.00     73.87    880.00        1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7324E+02 EXCESS=0.0000E+00 OUTFLOW=0.7353E+02 BASIN STORAGE=0.2859E-02 PERCENT ERROR=  -0.4

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM320  MANE        4.00     73.14    880.00      1.21      4.00     73.14    880.00        1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7103E+02 EXCESS=0.0000E+00 OUTFLOW=0.7131E+02 BASIN STORAGE=0.2848E-02 PERCENT ERROR=  -0.4

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE        4.00     72.40    876.00      1.17      4.00     72.40    876.00        1.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6878E+02 EXCESS=0.0000E+00 OUTFLOW=0.6908E+02 BASIN STORAGE=0.2714E-02 PERCENT ERROR=  -0.4

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE        4.00     70.92    872.00      1.10      4.00     70.92    872.00        1.10

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6429E+02 EXCESS=0.0000E+00 OUTFLOW=0.6459E+02 BASIN STORAGE=0.2983E-02 PERCENT ERROR=  -0.5

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE        4.00     70.18    868.00      1.06      4.00     70.18    868.00        1.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6206E+02 EXCESS=0.0000E+00 OUTFLOW=0.6236E+02 BASIN STORAGE=0.2850E-02 PERCENT ERROR=  -0.5

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM321  MANE        4.00   1384.98    752.00      1.44      4.00   1384.98    752.00        1.44

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1715E+03 EXCESS=0.0000E+00 OUTFLOW=0.1713E+03 BASIN STORAGE=0.5727E-03 PERCENT ERROR=   0.1

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM321  MANE        4.00   1344.40    752.00      1.40      4.00   1344.40    752.00        1.40
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1662E+03 EXCESS=0.0000E+00 OUTFLOW=0.1660E+03 BASIN STORAGE=0.5707E-03 PERCENT ERROR=   0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM321  MANE        4.00   1303.24    752.00      1.35      4.00   1303.24    752.00        1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1608E+03 EXCESS=0.0000E+00 OUTFLOW=0.1607E+03 BASIN STORAGE=0.5463E-03 PERCENT ERROR=   0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM321  MANE        4.00   1223.05    756.00      1.26      4.00   1223.05    756.00        1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1501E+03 EXCESS=0.0000E+00 OUTFLOW=0.1499E+03 BASIN STORAGE=0.5094E-03 PERCENT ERROR=   0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM321  MANE        4.00   1184.99    756.00      1.22      4.00   1184.99    756.00        1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1450E+03 EXCESS=0.0000E+00 OUTFLOW=0.1448E+03 BASIN STORAGE=0.5710E-03 PERCENT ERROR=   0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM323  MANE        4.00     55.82    772.00      2.35      4.00     55.82    772.00        2.35

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1378E+02 EXCESS=0.0000E+00 OUTFLOW=0.1380E+02 BASIN STORAGE=0.1462E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM323  MANE        4.00     55.34    772.00      2.29      4.00     55.34    772.00        2.29

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1342E+02 EXCESS=0.0000E+00 OUTFLOW=0.1344E+02 BASIN STORAGE=0.1432E-02 PERCENT ERROR=  -0.2

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM323  MANE        4.00     54.87    772.00      2.23      4.00     54.87    772.00        2.23

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1306E+02 EXCESS=0.0000E+00 OUTFLOW=0.1308E+02 BASIN STORAGE=0.1397E-02 PERCENT ERROR=  -0.2

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM323  MANE        4.00     53.96    772.00      2.11      4.00     53.96    772.00        2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1237E+02 EXCESS=0.0000E+00 OUTFLOW=0.1239E+02 BASIN STORAGE=0.1338E-02 PERCENT ERROR=  -0.2

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM323  MANE        4.00     53.50    772.00      2.06      4.00     53.50    772.00        2.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1204E+02 EXCESS=0.0000E+00 OUTFLOW=0.1206E+02 BASIN STORAGE=0.1304E-02 PERCENT ERROR=  -0.2
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FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM320  MANE         4.00     58.00    788.00      0.88      4.00     58.00    788.00        0.88

TINUITY SUMMARY (AC-FT) - INFLOW=0.5193E+02 EXCESS=0.0000E+00 OUTFLOW=0.5218E+02 BASIN STORAGE=0.1692E-02 PERCENT ERROR=  -0.5

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM320  MANE         4.00     62.55    788.00      0.86      4.00     62.55    788.00        0.86

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5041E+02 EXCESS=0.0000E+00 OUTFLOW=0.5067E+02 BASIN STORAGE=0.1679E-02 PERCENT ERROR=  -0.5

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM320  MANE         4.00     65.44    788.00      0.83      4.00     65.44    788.00        0.83

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4888E+02 EXCESS=0.0000E+00 OUTFLOW=0.4914E+02 BASIN STORAGE=0.1644E-02 PERCENT ERROR=  -0.5

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM320  MANE         4.00     61.36    788.00      0.78      4.00     61.36    788.00        0.78

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4581E+02 EXCESS=0.0000E+00 OUTFLOW=0.4608E+02 BASIN STORAGE=0.1560E-02 PERCENT ERROR=  -0.6

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM320  MANE         4.00     54.55    788.00      0.76      4.00     54.55    788.00        0.76

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.4428E+02 EXCESS=0.0000E+00 OUTFLOW=0.4455E+02 BASIN STORAGE=0.1674E-02 PERCENT ERROR=  -0.6

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM325  MANE         4.00    794.21    744.00      3.76      4.00    794.21    744.00        3.76

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1005E+03 EXCESS=0.0000E+00 OUTFLOW=0.1007E+03 BASIN STORAGE=0.1174E-02 PERCENT ERROR=  -0.2

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM325  MANE         4.00    774.63    744.00      3.65      4.00    774.63    744.00        3.65

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9755E+02 EXCESS=0.0000E+00 OUTFLOW=0.9772E+02 BASIN STORAGE=0.1169E-02 PERCENT ERROR=  -0.2

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM325  MANE         4.00    754.95    744.00      3.54      4.00    754.95    744.00        3.54

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9455E+02 EXCESS=0.0000E+00 OUTFLOW=0.9473E+02 BASIN STORAGE=0.1116E-02 PERCENT ERROR=  -0.2

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM325  MANE         4.00    715.94    744.00      3.32      4.00    715.94    744.00        3.32
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8869E+02 EXCESS=0.0000E+00 OUTFLOW=0.8885E+02 BASIN STORAGE=0.1190E-02 PERCENT ERROR=  -0.2

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM325  MANE         4.00    699.20    744.00      3.21      4.00    699.20    744.00        3.21

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8587E+02 EXCESS=0.0000E+00 OUTFLOW=0.8605E+02 BASIN STORAGE=0.1175E-02 PERCENT ERROR=  -0.2

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM330  MANE         4.00    133.21    740.00      1.39      4.00    133.21    740.00        1.39

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2290E+02 EXCESS=0.0000E+00 OUTFLOW=0.2292E+02 BASIN STORAGE=0.1427E-02 PERCENT ERROR=  -0.1

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM330  MANE         4.00    129.52    740.00      1.36      4.00    129.52    740.00        1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2240E+02 EXCESS=0.0000E+00 OUTFLOW=0.2242E+02 BASIN STORAGE=0.1403E-02 PERCENT ERROR=  -0.1

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM330  MANE         4.00    125.66    740.00      1.33      4.00    125.66    740.00        1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2190E+02 EXCESS=0.0000E+00 OUTFLOW=0.2192E+02 BASIN STORAGE=0.1349E-02 PERCENT ERROR=  -0.1

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM330  MANE         4.00    116.11    740.00      1.27      4.00    116.11    740.00        1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2093E+02 EXCESS=0.0000E+00 OUTFLOW=0.2095E+02 BASIN STORAGE=0.1287E-02 PERCENT ERROR=  -0.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM330  MANE         4.00    110.23    740.00      1.24      4.00    110.23    740.00        1.24

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2046E+02 EXCESS=0.0000E+00 OUTFLOW=0.2048E+02 BASIN STORAGE=0.1388E-02 PERCENT ERROR=  -0.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM332  MANE         2.20   2866.91    783.20      0.32      4.00   2864.95    784.00        0.32

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1847E+03 EXCESS=0.0000E+00 OUTFLOW=0.1857E+03 BASIN STORAGE=0.1196E+00 PERCENT ERROR=  -0.6

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM332  MANE         2.20   2671.40    785.40      0.30      4.00   2671.03    784.00        0.30

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1682E+03 EXCESS=0.0000E+00 OUTFLOW=0.1689E+03 BASIN STORAGE=0.1196E+00 PERCENT ERROR=  -0.5

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
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   RM332  MANE        2.20   2512.62    785.40      0.27      4.00   2442.56    788.00        0.27

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1519E+03 EXCESS=0.0000E+00 OUTFLOW=0.1524E+03 BASIN STORAGE=0.1196E+00 PERCENT ERROR=  -0.5

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM332  MANE        2.20   2044.08    789.80      0.21      4.00   2013.95    792.00        0.21

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1203E+03 EXCESS=0.0000E+00 OUTFLOW=0.1204E+03 BASIN STORAGE=0.1196E+00 PERCENT ERROR=  -0.2

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM332  MANE        2.20   1794.92    794.20      0.18      4.00   1761.14    792.00        0.18

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1052E+03 EXCESS=0.0000E+00 OUTFLOW=0.1051E+03 BASIN STORAGE=0.1196E+00 PERCENT ERROR=   0.0

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM333  MANE        4.00   2351.00    764.00     32.14      4.00   2351.00    764.00       32.14

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9134E+03 EXCESS=0.0000E+00 OUTFLOW=0.9137E+03 BASIN STORAGE=0.1216E-02 PERCENT ERROR=   0.0

     FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM333  MANE        4.00   2322.41    764.00     31.51      4.00   2322.41    764.00       31.51

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8955E+03 EXCESS=0.0000E+00 OUTFLOW=0.8957E+03 BASIN STORAGE=0.1100E-02 PERCENT ERROR=   0.0

     FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM333  MANE        4.00   2293.63    764.00     30.87      4.00   2293.63    764.00       30.87

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8772E+03 EXCESS=0.0000E+00 OUTFLOW=0.8774E+03 BASIN STORAGE=0.1150E-02 PERCENT ERROR=   0.0

     FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM333  MANE        4.00   2236.55    764.00     29.55      4.00   2236.55    764.00       29.55

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8399E+03 EXCESS=0.0000E+00 OUTFLOW=0.8401E+03 BASIN STORAGE=0.1054E-02 PERCENT ERROR=   0.0

     FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM333  MANE        4.00   2207.39    764.00     28.89      4.00   2207.39    764.00       28.89

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.8209E+03 EXCESS=0.0000E+00 OUTFLOW=0.8212E+03 BASIN STORAGE=0.1079E-02 PERCENT ERROR=   0.0

     FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM327  MANE        4.00    121.91    724.00      0.06      4.00    121.91    724.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3331E+02 EXCESS=0.0000E+00 OUTFLOW=0.3332E+02 BASIN STORAGE=0.2121E-02 PERCENT ERROR=   0.0
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FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM327  MANE        4.00    121.79    724.00      0.06      4.00    121.79    724.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3257E+02 EXCESS=0.0000E+00 OUTFLOW=0.3258E+02 BASIN STORAGE=0.2086E-02 PERCENT ERROR=  -0.1

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM327  MANE        4.00    121.59    724.00      0.06      4.00    121.59    724.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3196E+02 EXCESS=0.0000E+00 OUTFLOW=0.3197E+02 BASIN STORAGE=0.2050E-02 PERCENT ERROR=  -0.1

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM327  MANE        4.00    121.32    724.00      0.06      4.00    121.32    724.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3079E+02 EXCESS=0.0000E+00 OUTFLOW=0.3080E+02 BASIN STORAGE=0.1917E-02 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM327  MANE        4.00    121.34    724.00      0.06      4.00    121.34    724.00        0.06

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.3031E+02 EXCESS=0.0000E+00 OUTFLOW=0.3033E+02 BASIN STORAGE=0.1881E-02 PERCENT ERROR=  -0.1

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM331  MANE        4.00    156.00    848.00      0.10      4.00    156.00    848.00        0.10

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5885E+02 EXCESS=0.0000E+00 OUTFLOW=0.5863E+02 BASIN STORAGE=0.1995E-02 PERCENT ERROR=   0.4

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM331  MANE        4.00    156.00    776.00      0.10      4.00    156.00    776.00        0.10

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5781E+02 EXCESS=0.0000E+00 OUTFLOW=0.5768E+02 BASIN STORAGE=0.1966E-02 PERCENT ERROR=   0.2

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM331  MANE        4.00    156.00    776.00      0.10      4.00    156.00    776.00        0.10

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5673E+02 EXCESS=0.0000E+00 OUTFLOW=0.5654E+02 BASIN STORAGE=0.1874E-02 PERCENT ERROR=   0.3

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM331  MANE        4.00    156.00    776.00      0.10      4.00    156.00    776.00        0.10

TINUITY SUMMARY (AC-FT) - INFLOW=0.5476E+02 EXCESS=0.0000E+00 OUTFLOW=0.5452E+02 BASIN STORAGE=0.1813E-02 PERCENT ERROR=   0.4

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM331  MANE        4.00    156.00    780.00      0.09      4.00    156.00    780.00        0.09
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.5384E+02 EXCESS=0.0000E+00 OUTFLOW=0.5368E+02 BASIN STORAGE=0.1818E-02 PERCENT ERROR=   0.3

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM334  MANE         4.00   2786.32    772.00     17.61      4.00   2786.32    772.00       17.61

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1118E+04 EXCESS=0.0000E+00 OUTFLOW=0.1118E+04 BASIN STORAGE=0.7240E-03 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM334  MANE         4.00   2752.62    772.00     17.25      4.00   2752.62    772.00       17.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1096E+04 EXCESS=0.0000E+00 OUTFLOW=0.1095E+04 BASIN STORAGE=0.6449E-03 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM334  MANE         4.00   2718.63    772.00     16.90      4.00   2718.63    772.00       16.90

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1073E+04 EXCESS=0.0000E+00 OUTFLOW=0.1072E+04 BASIN STORAGE=0.6626E-03 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM334  MANE         4.00   2651.05    772.00     16.17      4.00   2651.05    772.00       16.17

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1027E+04 EXCESS=0.0000E+00 OUTFLOW=0.1026E+04 BASIN STORAGE=0.7595E-03 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM334  MANE         4.00   2615.88    772.00     15.81      4.00   2615.88    772.00       15.81

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1004E+04 EXCESS=0.0000E+00 OUTFLOW=0.1003E+04 BASIN STORAGE=0.6445E-03 PERCENT ERROR=   0.0

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM335  MANE         4.00   5551.06    796.00      2.07      4.00   5551.06    796.00        2.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1368E+04 EXCESS=0.0000E+00 OUTFLOW=0.1368E+04 BASIN STORAGE=0.4693E-01 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM335  MANE         4.00   5299.26    800.00      2.01      4.00   5299.26    800.00        2.01

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1327E+04 EXCESS=0.0000E+00 OUTFLOW=0.1327E+04 BASIN STORAGE=0.4693E-01 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM335  MANE         4.00   5038.58    800.00      1.95      4.00   5038.58    800.00        1.95

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1286E+04 EXCESS=0.0000E+00 OUTFLOW=0.1285E+04 BASIN STORAGE=0.4693E-01 PERCENT ERROR=   0.0
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FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM335  MANE        4.00   4466.82    804.00      1.82      4.00   4466.82    804.00        1.82

TINUITY SUMMARY (AC-FT) - INFLOW=0.1204E+04 EXCESS=0.0000E+00 OUTFLOW=0.1204E+04 BASIN STORAGE=0.4694E-01 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM335  MANE        4.00   4187.43    808.00      1.76      4.00   4187.43    808.00        1.76

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1164E+04 EXCESS=0.0000E+00 OUTFLOW=0.1164E+04 BASIN STORAGE=0.4696E-01 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
   RM343  MANE        2.10    871.96    735.93      4.48      4.00    870.76    736.00        4.48

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7665E+02 EXCESS=0.0000E+00 OUTFLOW=0.7645E+02 BASIN STORAGE=0.3120E-03 PERCENT ERROR=   0.3

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
   RM343  MANE        2.11    843.08    735.73      4.36      4.00    839.60    736.00        4.36

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7464E+02 EXCESS=0.0000E+00 OUTFLOW=0.7447E+02 BASIN STORAGE=0.3148E-03 PERCENT ERROR=   0.2

FOR STORM = 3  STORM AREA (SQ MI) =      10.00
   RM343  MANE        2.14    804.41    735.49      4.24      4.00    802.04    736.00        4.25

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.7260E+02 EXCESS=0.0000E+00 OUTFLOW=0.7244E+02 BASIN STORAGE=0.3283E-03 PERCENT ERROR=   0.2

FOR STORM = 4  STORM AREA (SQ MI) =      20.00
   RM343  MANE        2.17    737.81    737.05      4.01      4.00    721.43    736.00        4.01

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6855E+02 EXCESS=0.0000E+00 OUTFLOW=0.6842E+02 BASIN STORAGE=0.3240E-03 PERCENT ERROR=   0.2

FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RM343  MANE        2.19    708.30    737.91      3.90      4.00    681.34    736.00        3.90

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.6667E+02 EXCESS=0.0000E+00 OUTFLOW=0.6654E+02 BASIN STORAGE=0.3174E-03 PERCENT ERROR=   0.2

FOR STORM = 1  STORM AREA (SQ MI) =       0.01
  RM344A  MANE        4.00    735.99    740.00      3.18      4.00    735.99    740.00        3.18

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1190E+03 EXCESS=0.0000E+00 OUTFLOW=0.1174E+03 BASIN STORAGE=0.8910E-03 PERCENT ERROR=   1.4

FOR STORM = 2  STORM AREA (SQ MI) =       3.00
  RM344A  MANE        4.00    708.51    740.00      3.11      4.00    708.51    740.00        3.11
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1161E+03 EXCESS=0.0000E+00 OUTFLOW=0.1146E+03 BASIN STORAGE=0.8571E-03 PERCENT ERROR=   1.3

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
          RM344A  MANE         4.00    678.59    740.00      3.03      4.00    678.59    740.00        3.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1132E+03 EXCESS=0.0000E+00 OUTFLOW=0.1118E+03 BASIN STORAGE=0.8216E-03 PERCENT ERROR=   1.2

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
          RM344A  MANE         4.00    623.44    744.00      2.88      4.00    623.44    744.00        2.88

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1073E+03 EXCESS=0.0000E+00 OUTFLOW=0.1061E+03 BASIN STORAGE=0.8696E-03 PERCENT ERROR=   1.1

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
          RM344A  MANE         4.00    600.29    744.00      2.80      4.00    600.29    744.00        2.80

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1045E+03 EXCESS=0.0000E+00 OUTFLOW=0.1034E+03 BASIN STORAGE=0.8422E-03 PERCENT ERROR=   1.1

        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
          RM344B  MANE         3.69    719.10    742.54      3.18      4.00    717.68    744.00        3.18

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1173E+03 EXCESS=0.0000E+00 OUTFLOW=0.1173E+03 BASIN STORAGE=0.1826E-02 PERCENT ERROR=   0.0

        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
          RM344B  MANE         3.74    706.54    743.53      3.11      4.00    703.81    744.00        3.11

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1147E+03 EXCESS=0.0000E+00 OUTFLOW=0.1147E+03 BASIN STORAGE=0.1809E-02 PERCENT ERROR=   0.0

        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
          RM344B  MANE         3.78    672.79    745.59      3.03      4.00    663.51    744.00        3.03

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1117E+03 EXCESS=0.0000E+00 OUTFLOW=0.1118E+03 BASIN STORAGE=0.1857E-02 PERCENT ERROR=   0.0

        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
          RM344B  MANE         3.88    623.05    745.26      2.88      4.00    608.91    748.00        2.88

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1061E+03 EXCESS=0.0000E+00 OUTFLOW=0.1061E+03 BASIN STORAGE=0.1853E-02 PERCENT ERROR=   0.0

        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
          RM344B  MANE         3.93    595.58    745.87      2.80      4.00    585.86    748.00        2.80

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1034E+03 EXCESS=0.0000E+00 OUTFLOW=0.1034E+03 BASIN STORAGE=0.1682E-02 PERCENT ERROR=   0.0
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FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM344  MANE        2.39   888.24   763.39     3.32     4.00   887.52   764.00       3.32

TINUITY SUMMARY (AC-FT) - INFLOW=0.2204E+03 EXCESS=0.0000E+00 OUTFLOW=0.2204E+03 BASIN STORAGE=0.1230E-02 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM344  MANE        2.43   849.76   764.35     3.24     4.00   849.17   764.00       3.24

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2151E+03 EXCESS=0.0000E+00 OUTFLOW=0.2151E+03 BASIN STORAGE=0.1244E-02 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM344  MANE        2.47   802.10   764.33     3.15     4.00   800.94   764.00       3.15

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.2092E+03 EXCESS=0.0000E+00 OUTFLOW=0.2092E+03 BASIN STORAGE=0.1167E-02 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM344  MANE        2.55   715.41   767.82     2.98     4.00   715.04   768.00       2.98

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1980E+03 EXCESS=0.0000E+00 OUTFLOW=0.1980E+03 BASIN STORAGE=0.1253E-02 PERCENT ERROR=   0.0

FOR STORM = 5  STORM AREA (SQ MI) =     30.00
   RM344  MANE        2.60   670.47   768.06     2.90     4.00   670.35   768.00       2.90

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1925E+03 EXCESS=0.0000E+00 OUTFLOW=0.1925E+03 BASIN STORAGE=0.1155E-02 PERCENT ERROR=   0.0

FOR STORM = 1  STORM AREA (SQ MI) =      0.01
   RM345  MANE        4.00  5923.02   812.00     2.20     4.00  5923.02   812.00       2.20

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1635E+04 EXCESS=0.0000E+00 OUTFLOW=0.1635E+04 BASIN STORAGE=0.9224E-01 PERCENT ERROR=   0.0

FOR STORM = 2  STORM AREA (SQ MI) =      3.00
   RM345  MANE        4.00  5618.03   816.00     2.14     4.00  5618.03   816.00       2.14

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1587E+04 EXCESS=0.0000E+00 OUTFLOW=0.1588E+04 BASIN STORAGE=0.9224E-01 PERCENT ERROR=   0.0

FOR STORM = 3  STORM AREA (SQ MI) =     10.00
   RM345  MANE        4.00  5346.36   816.00     2.07     4.00  5346.36   816.00       2.07

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1539E+04 EXCESS=0.0000E+00 OUTFLOW=0.1539E+04 BASIN STORAGE=0.9227E-01 PERCENT ERROR=   0.0

FOR STORM = 4  STORM AREA (SQ MI) =     20.00
   RM345  MANE        4.00  4745.40   820.00     1.95     4.00  4745.40   820.00       1.95
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CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1444E+04 EXCESS=0.0000E+00 OUTFLOW=0.1445E+04 BASIN STORAGE=0.9229E-01 PERCENT ERROR=   0.0


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM345  MANE         4.00   4462.94    824.00      1.88      4.00   4462.94    824.00        1.88


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.1397E+04 EXCESS=0.0000E+00 OUTFLOW=0.1398E+04 BASIN STORAGE=0.9232E-01 PERCENT ERROR=   0.0


        FOR STORM = 1  STORM AREA (SQ MI) =       0.01
           RM347  MANE         4.00   3513.90    736.00    150.30      4.00   3513.90    736.00      150.30


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9669E+04 EXCESS=0.0000E+00 OUTFLOW=0.9669E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 2  STORM AREA (SQ MI) =       3.00
           RM347  MANE         4.00   3468.27    736.00    150.24      4.00   3468.27    736.00      150.24


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9665E+04 EXCESS=0.0000E+00 OUTFLOW=0.9665E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 3  STORM AREA (SQ MI) =      10.00
           RM347  MANE         4.00   3422.04    736.00    150.19      4.00   3422.04    736.00      150.19


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9661E+04 EXCESS=0.0000E+00 OUTFLOW=0.9661E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 4  STORM AREA (SQ MI) =      20.00
           RM347  MANE         4.00   3329.61    736.00    150.07      4.00   3329.61    736.00      150.08


CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9654E+04 EXCESS=0.0000E+00 OUTFLOW=0.9654E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0


        FOR STORM = 5  STORM AREA (SQ MI) =      30.00
           RM347  MANE         4.00   3283.39    736.00    150.02      4.00   3283.39    736.00      150.02

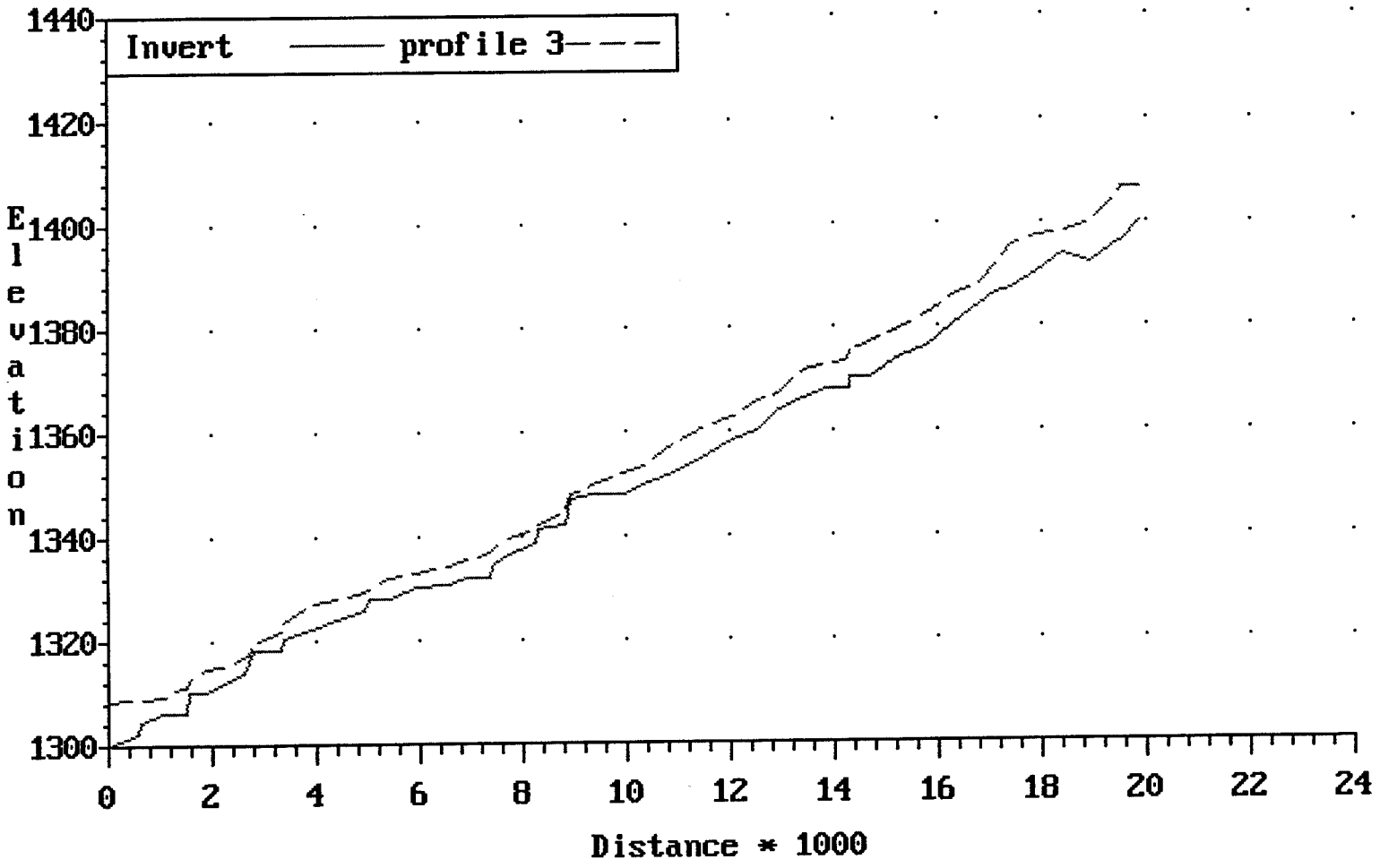

CONTINUITY SUMMARY (AC-FT) - INFLOW=0.9651E+04 EXCESS=0.0000E+00 OUTFLOW=0.9651E+04 BASIN STORAGE=0.0000E+00 PERCENT ERROR=   0.0

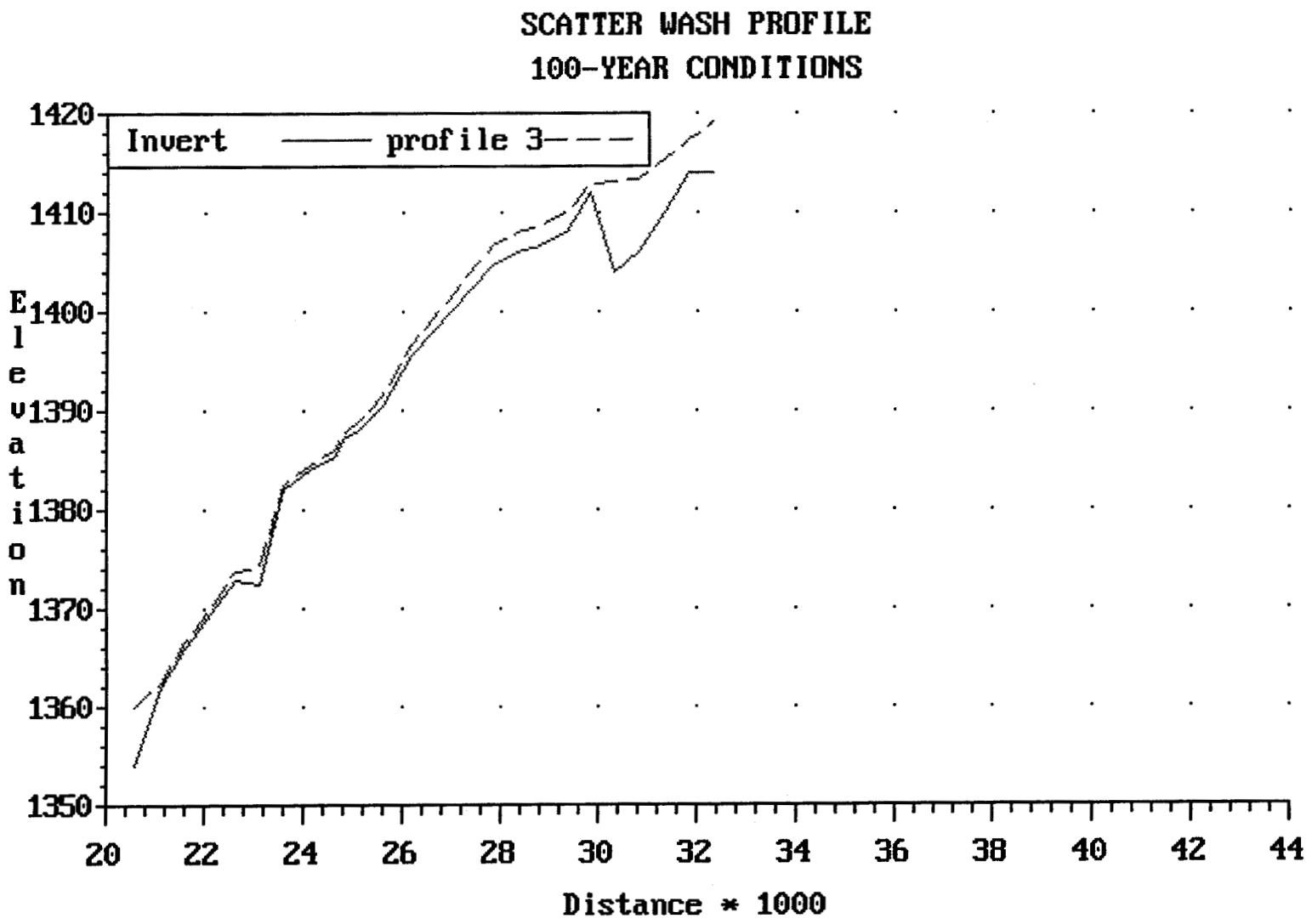

*** NORMAL END OF HEC-1 ***
```

APPENDIX K

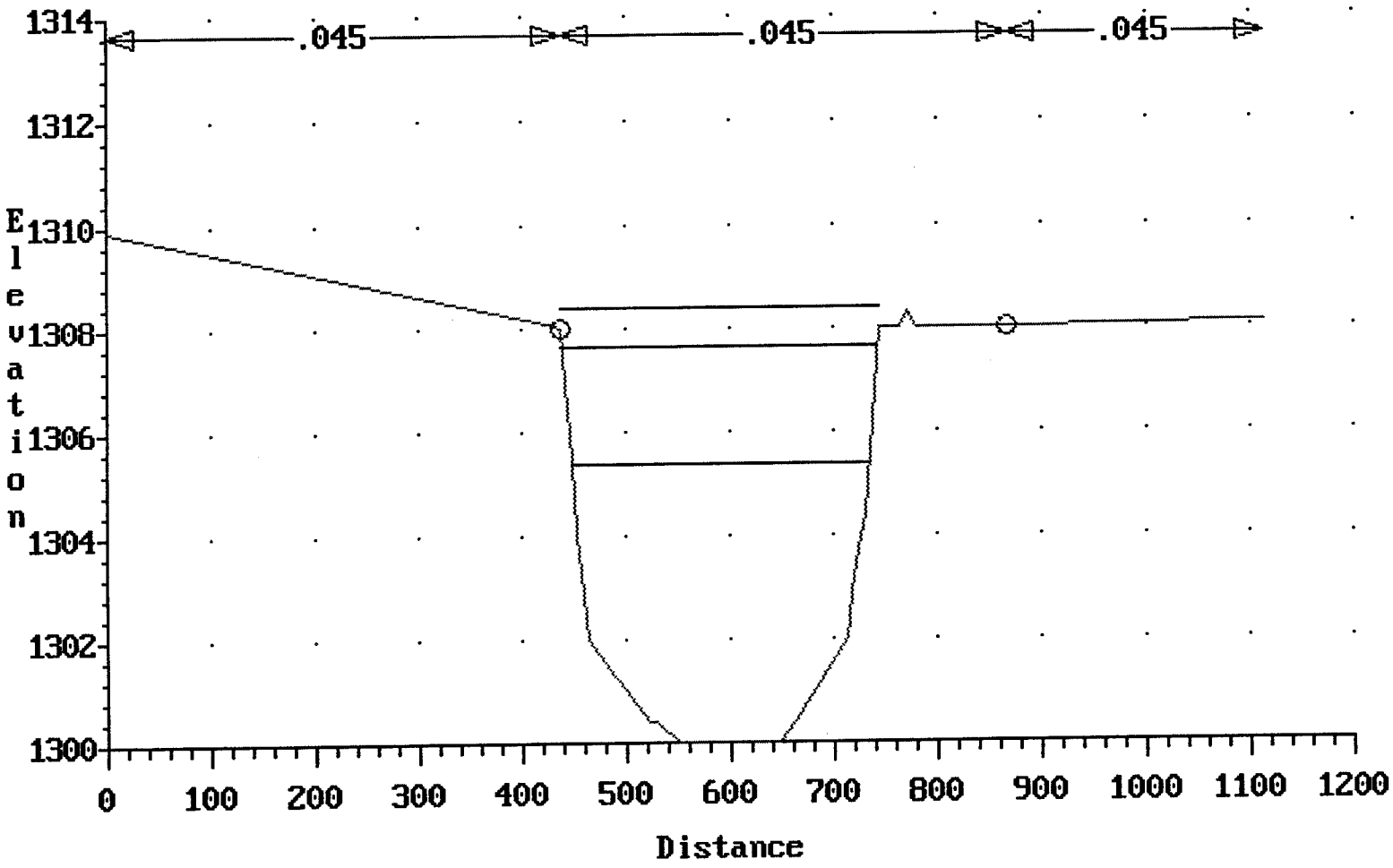
HEC-2 Cross-Section Plots And Profiles

SCATTER WASH PROFILE
100-YEAR CONDITIONS

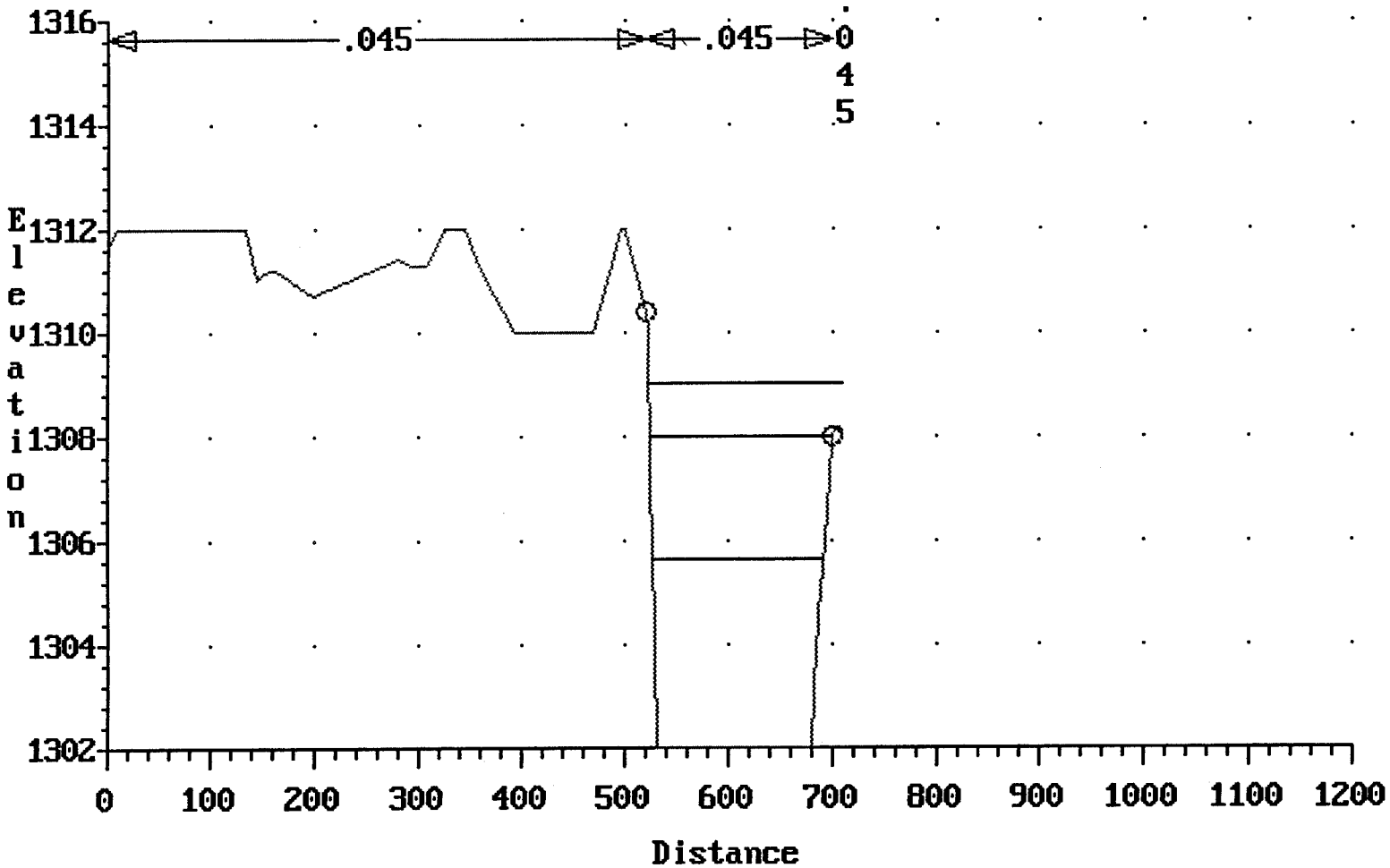



SCATTER WASH PROFILE
100-YEAR CONDITIONS
Invert
profile 3
Elevation
1420
1410
1400
1390
1380
1370
1360
1350
20
22
24
26
28
30
32
34
36
38
40
42
44
Distance * 1000

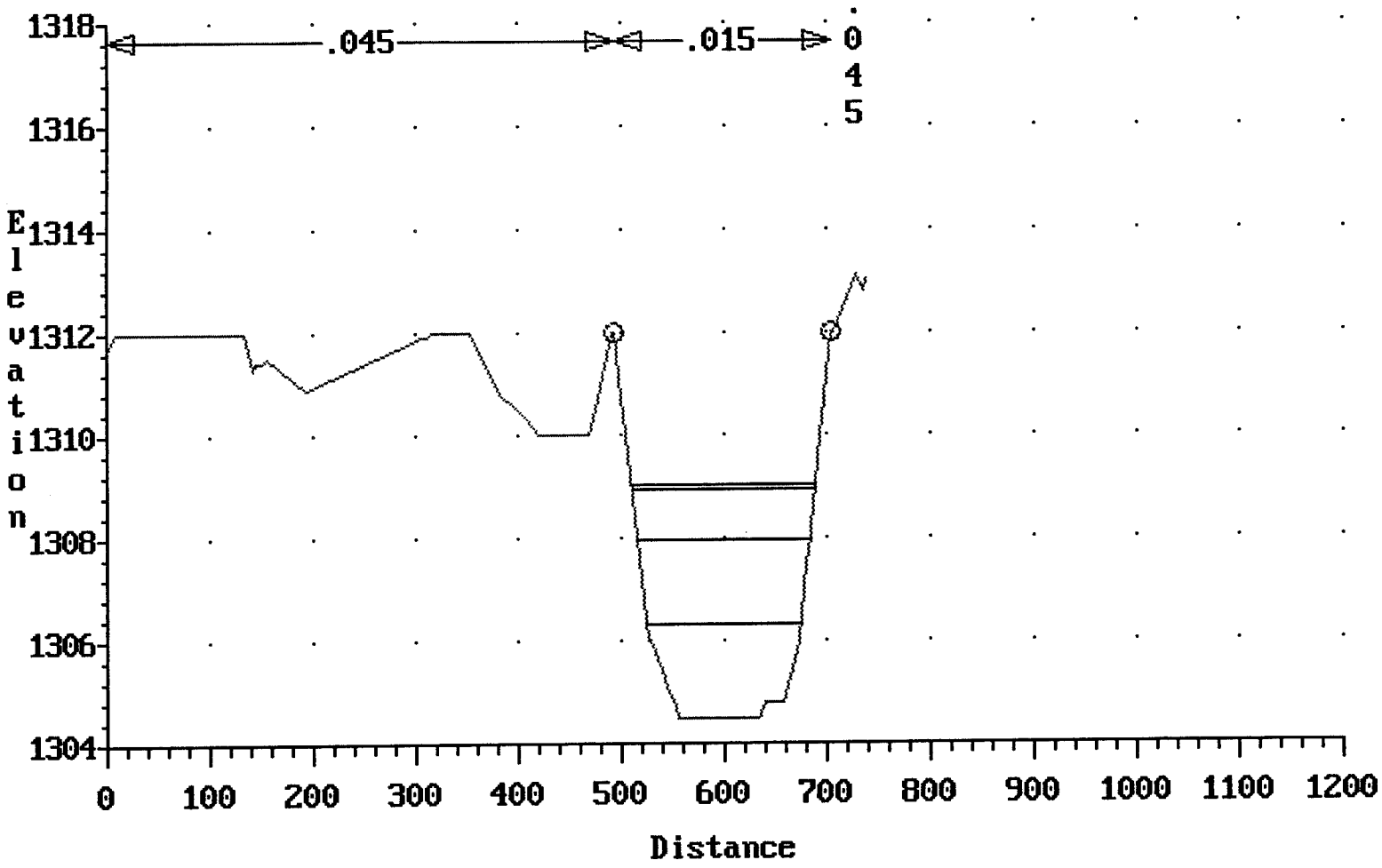
SCATTER WASH
CROSS-SECTIONS
Cross-section 10.000



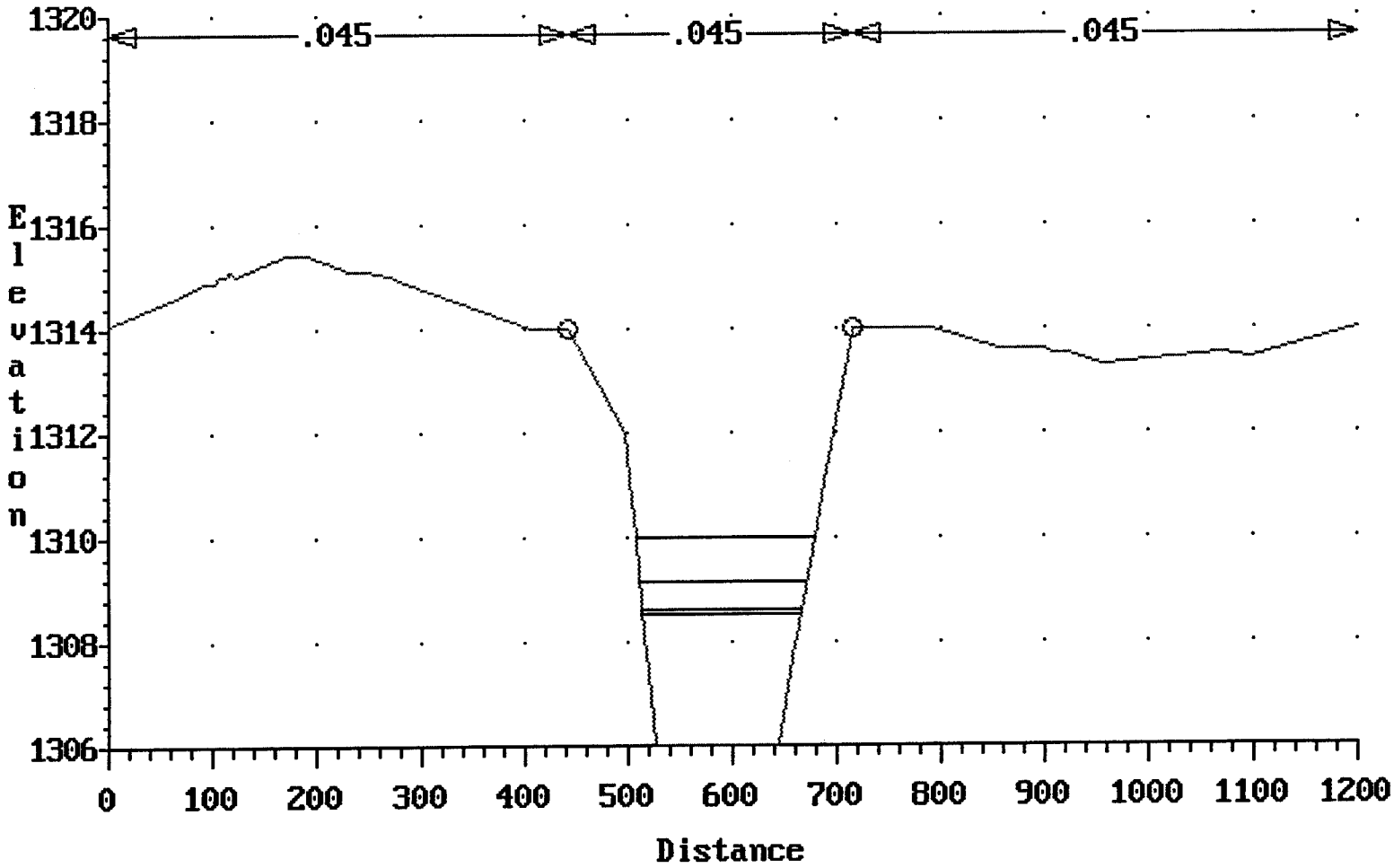
SCATTER WASH
CROSS-SECTIONS
Cross-section 15.600



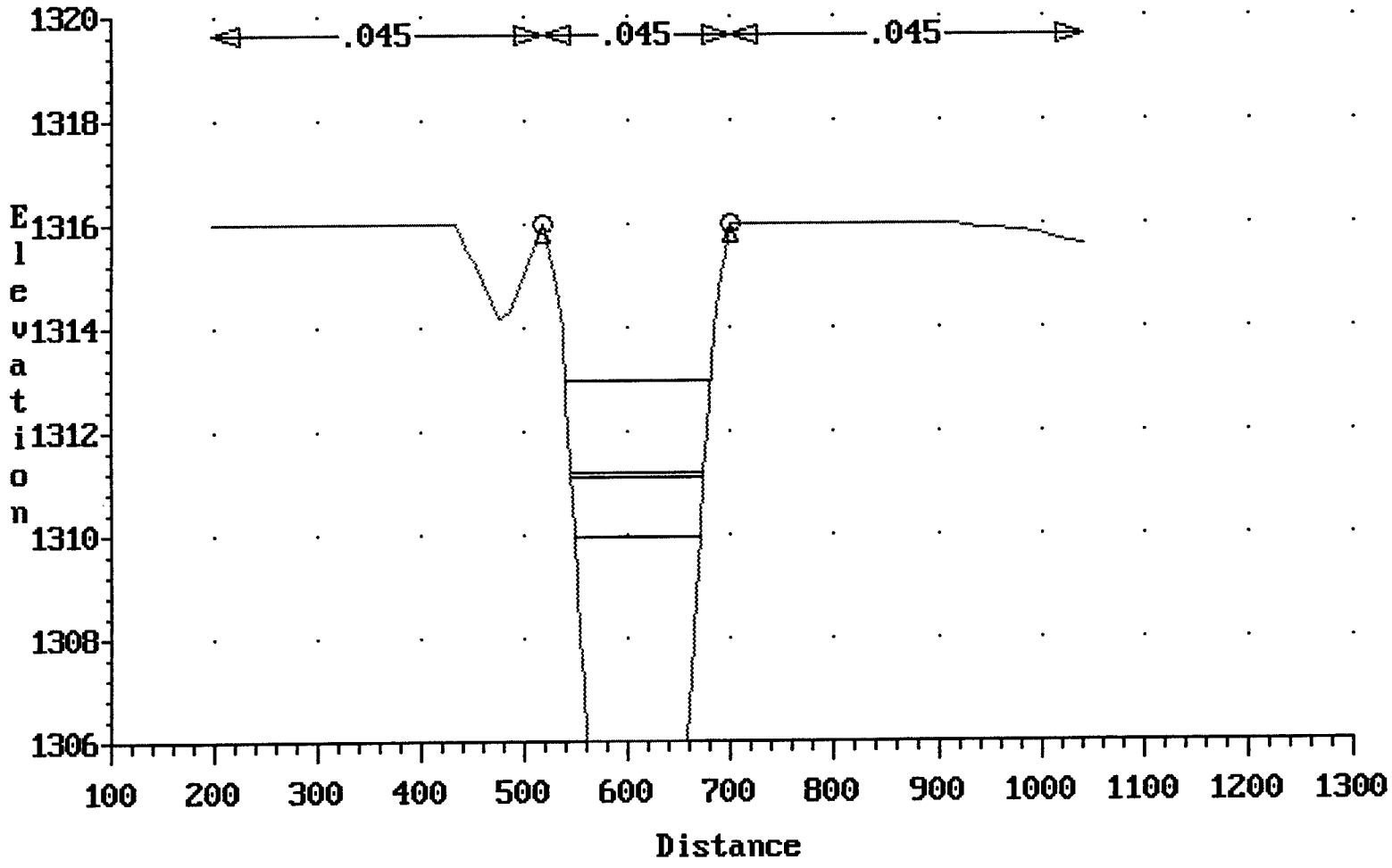
SCATTER WASH
CROSS-SECTIONS
Cross-section 16.000



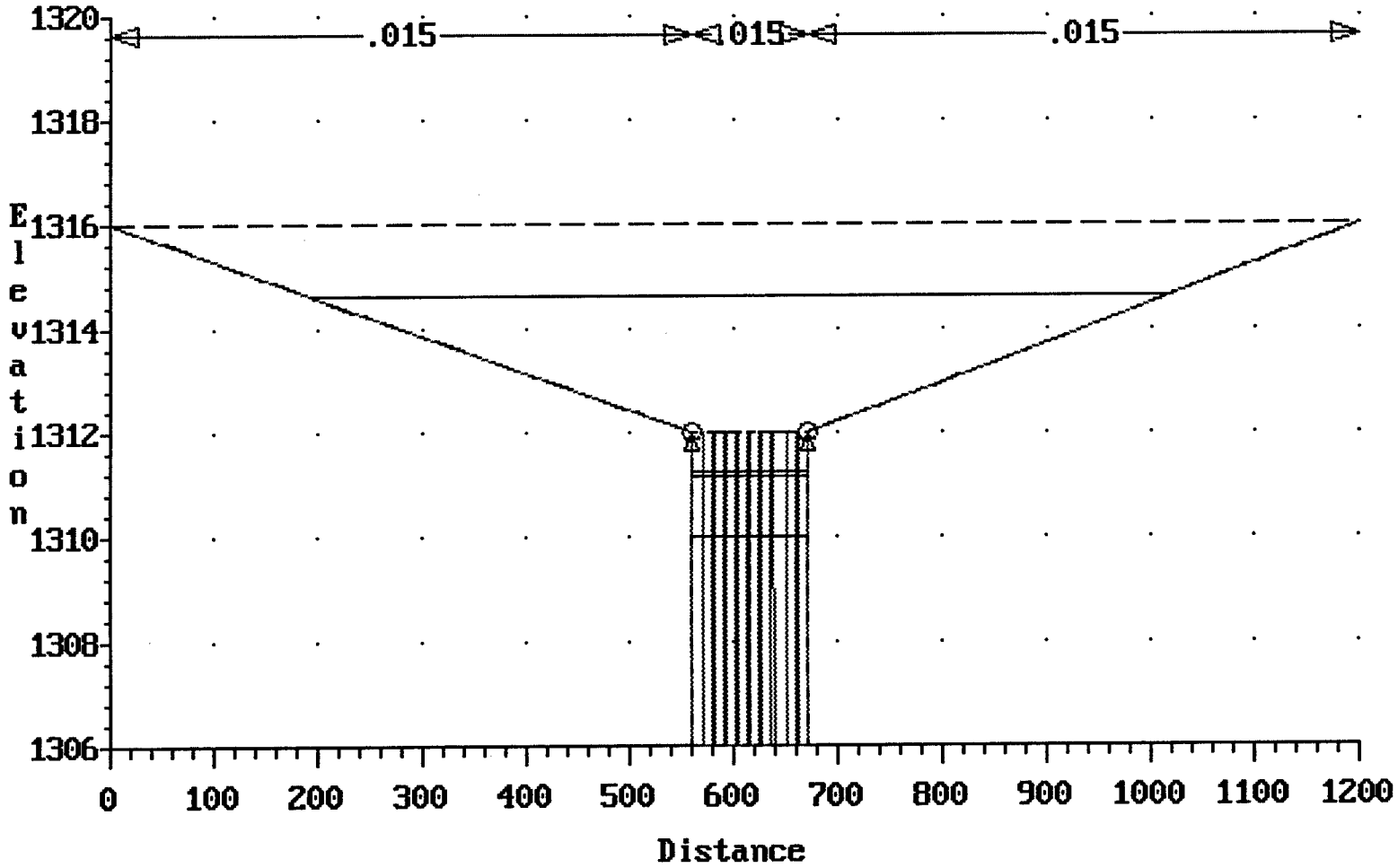
SCATTER WASH
CROSS-SECTIONS
Cross-section 20.500



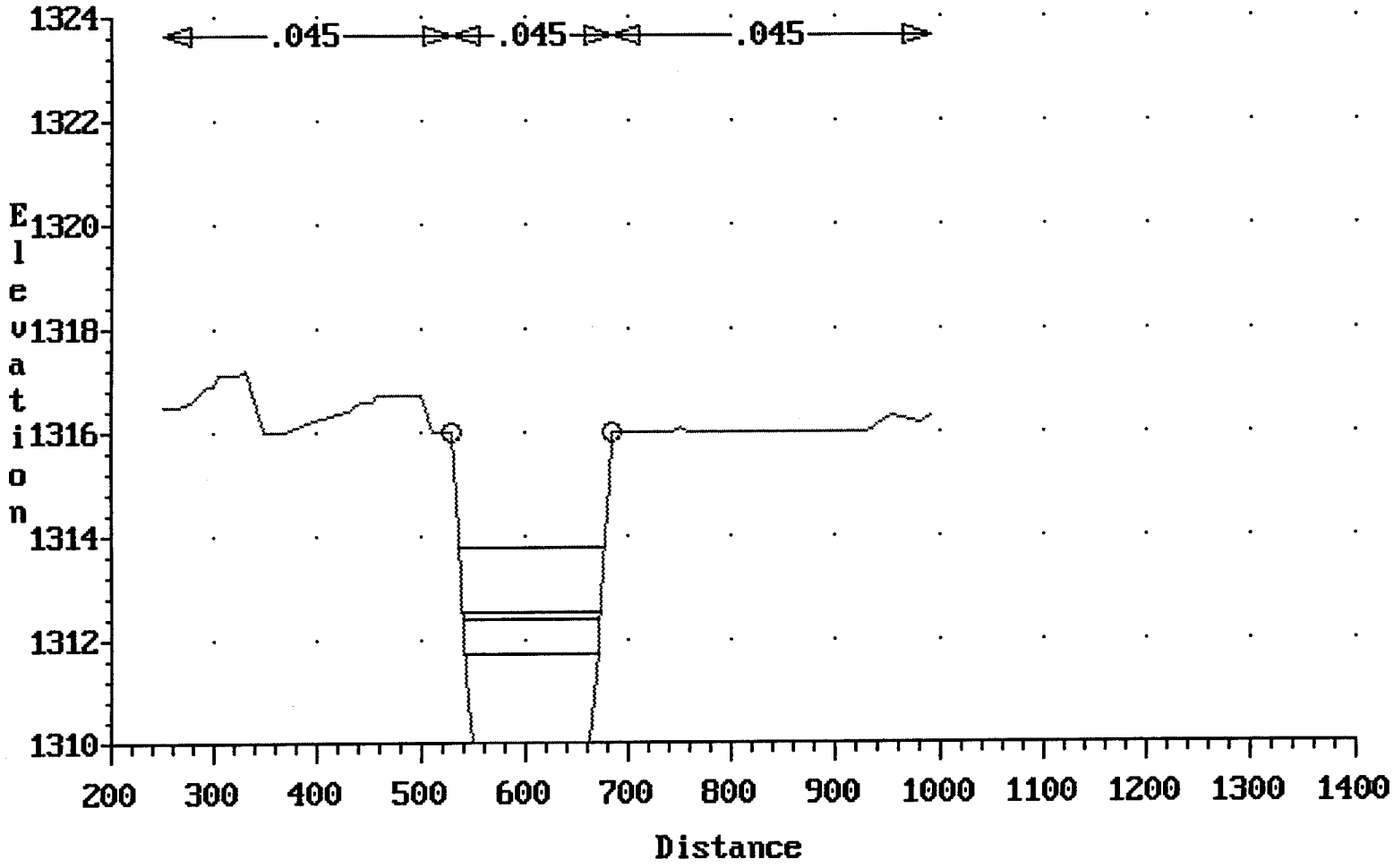
SCATTER WASH
CROSS-SECTIONS
Cross-section 24.200



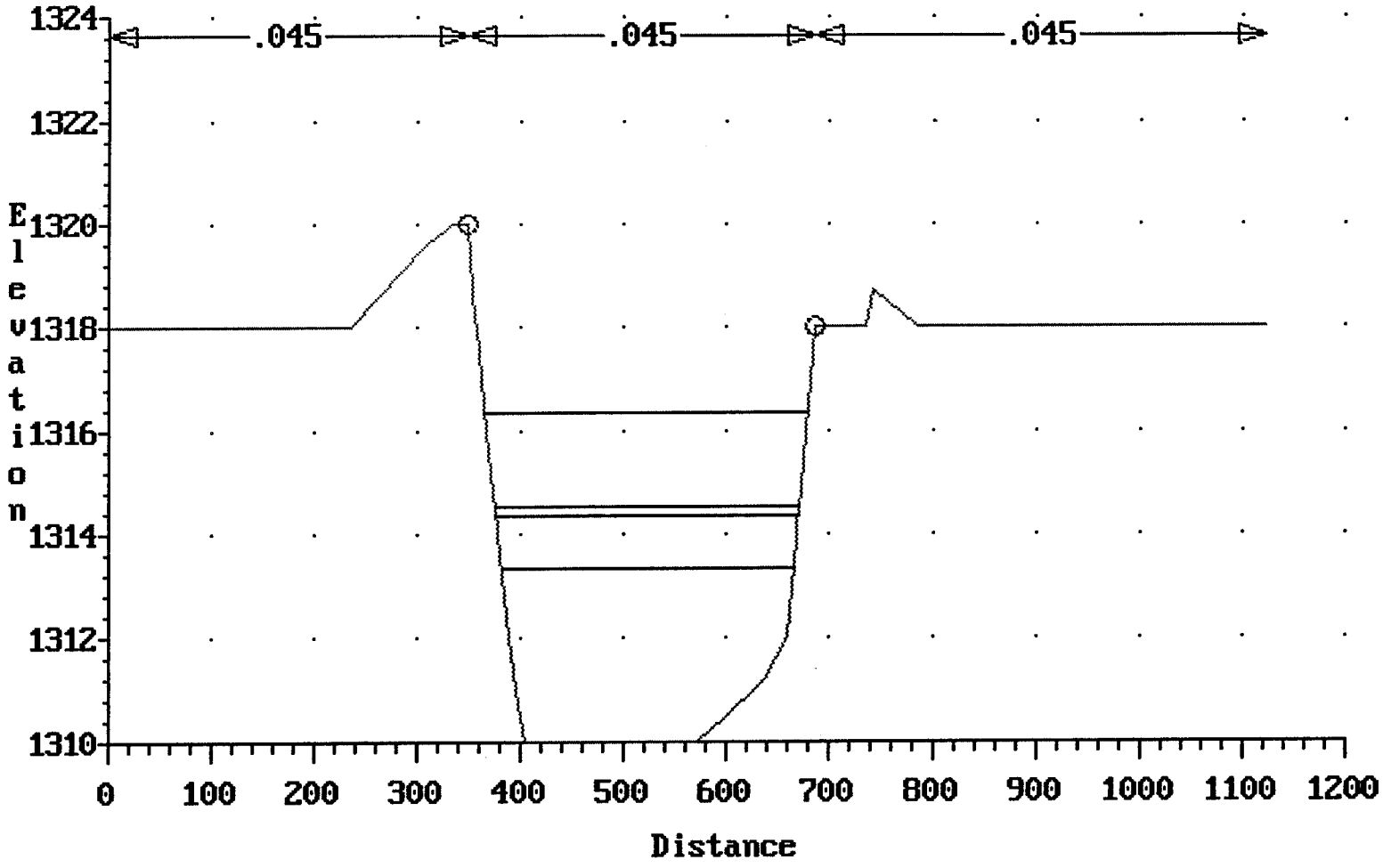
SCATTER WASH
CROSS-SECTIONS
Cross-section 25.000



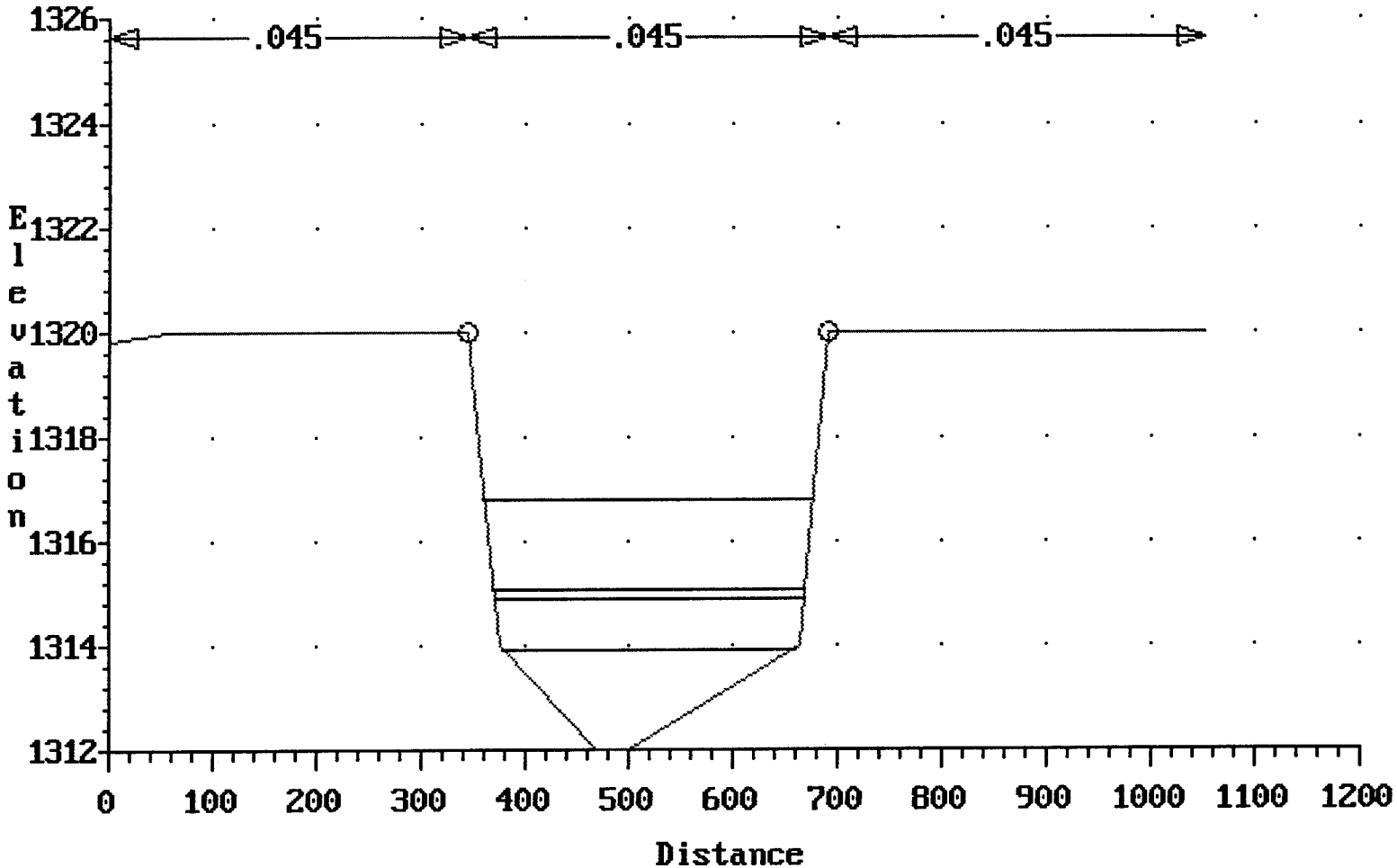
SCATTER WASH
CROSS-SECTIONS
Cross-section 25.300



SCATTER WASH
CROSS-SECTIONS
Cross-section 28.700



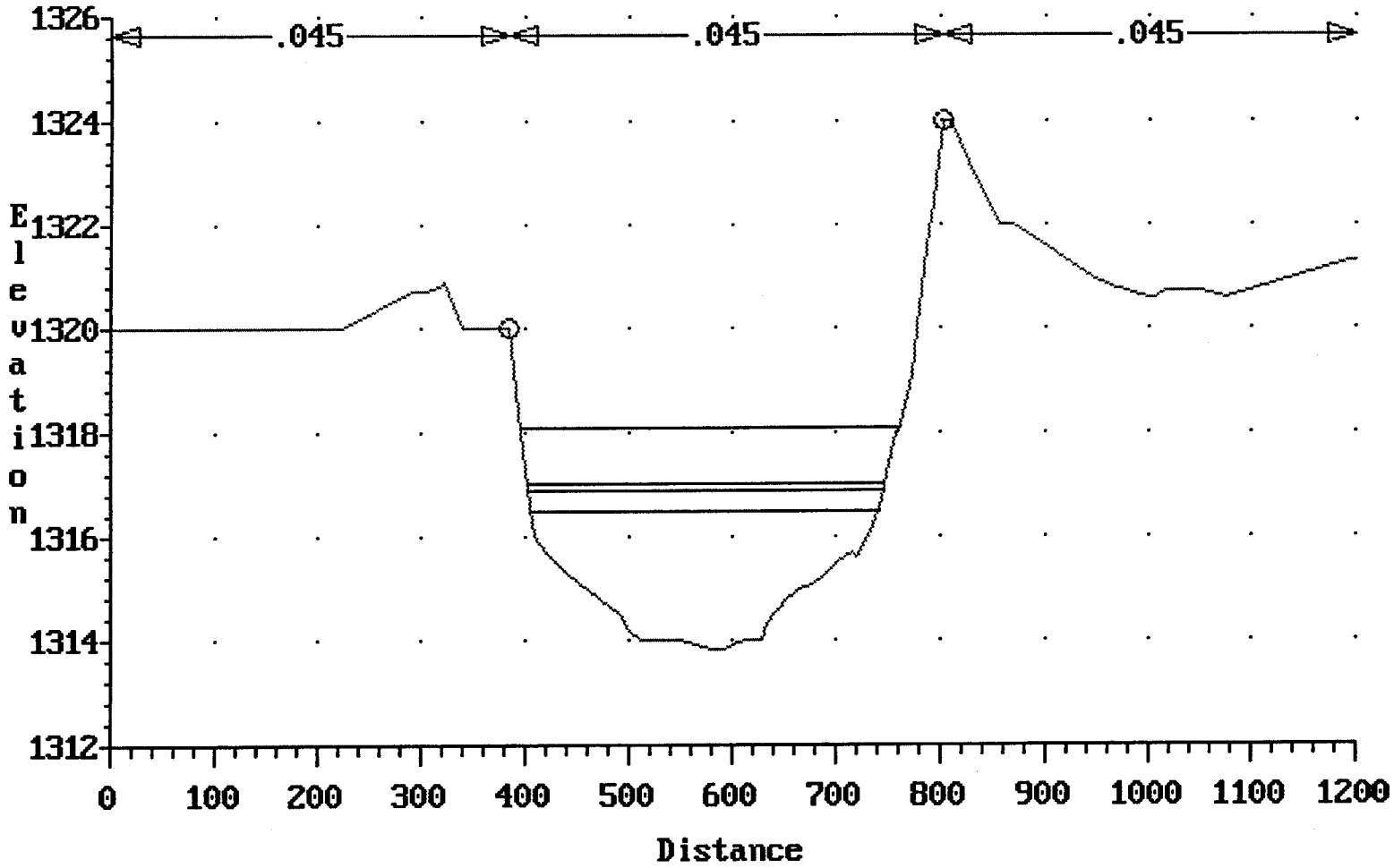
SCATTER WASH
CROSS-SECTIONS
Cross-section 32.500



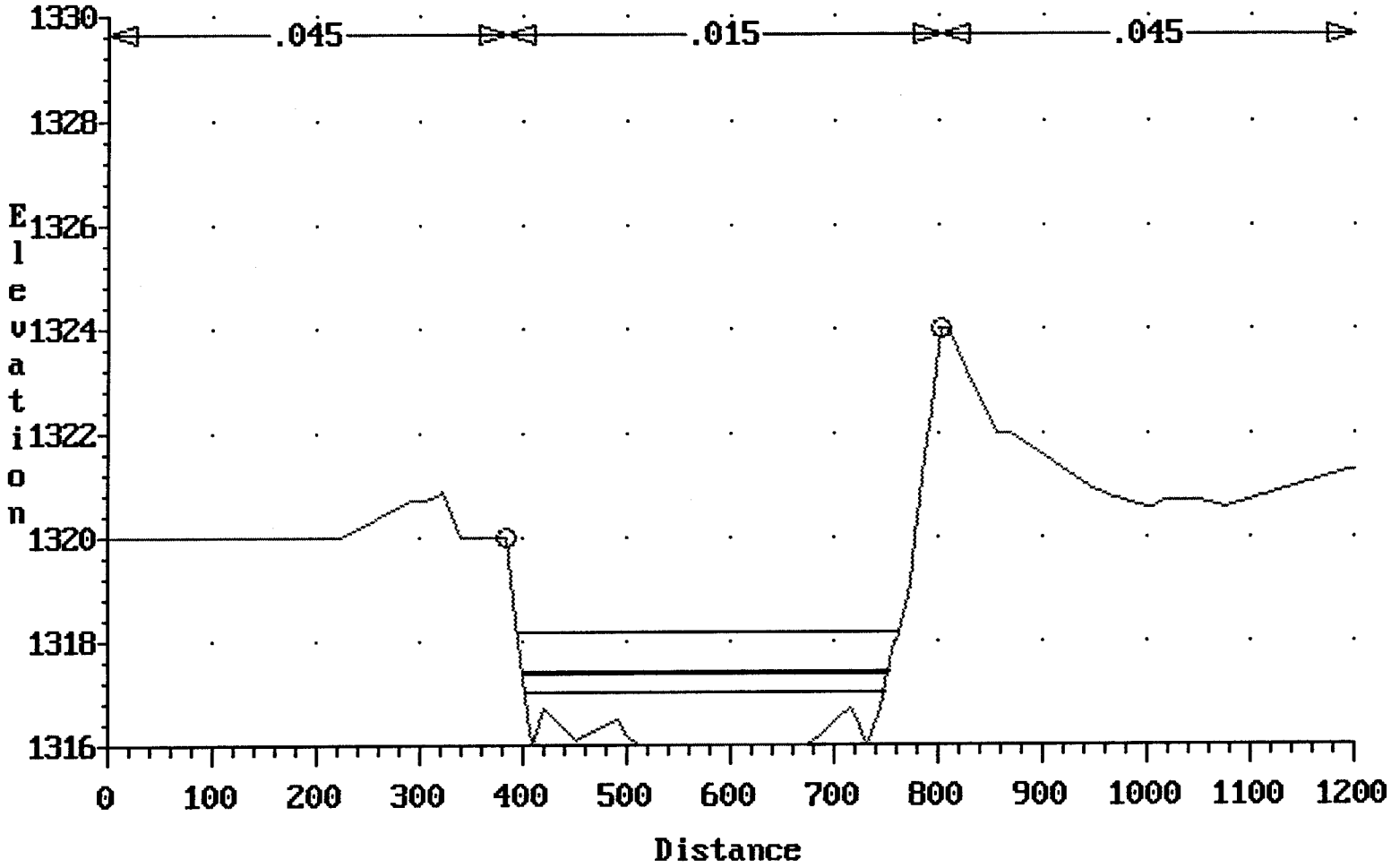
SCATTER WASH

CROSS-SECTIONS

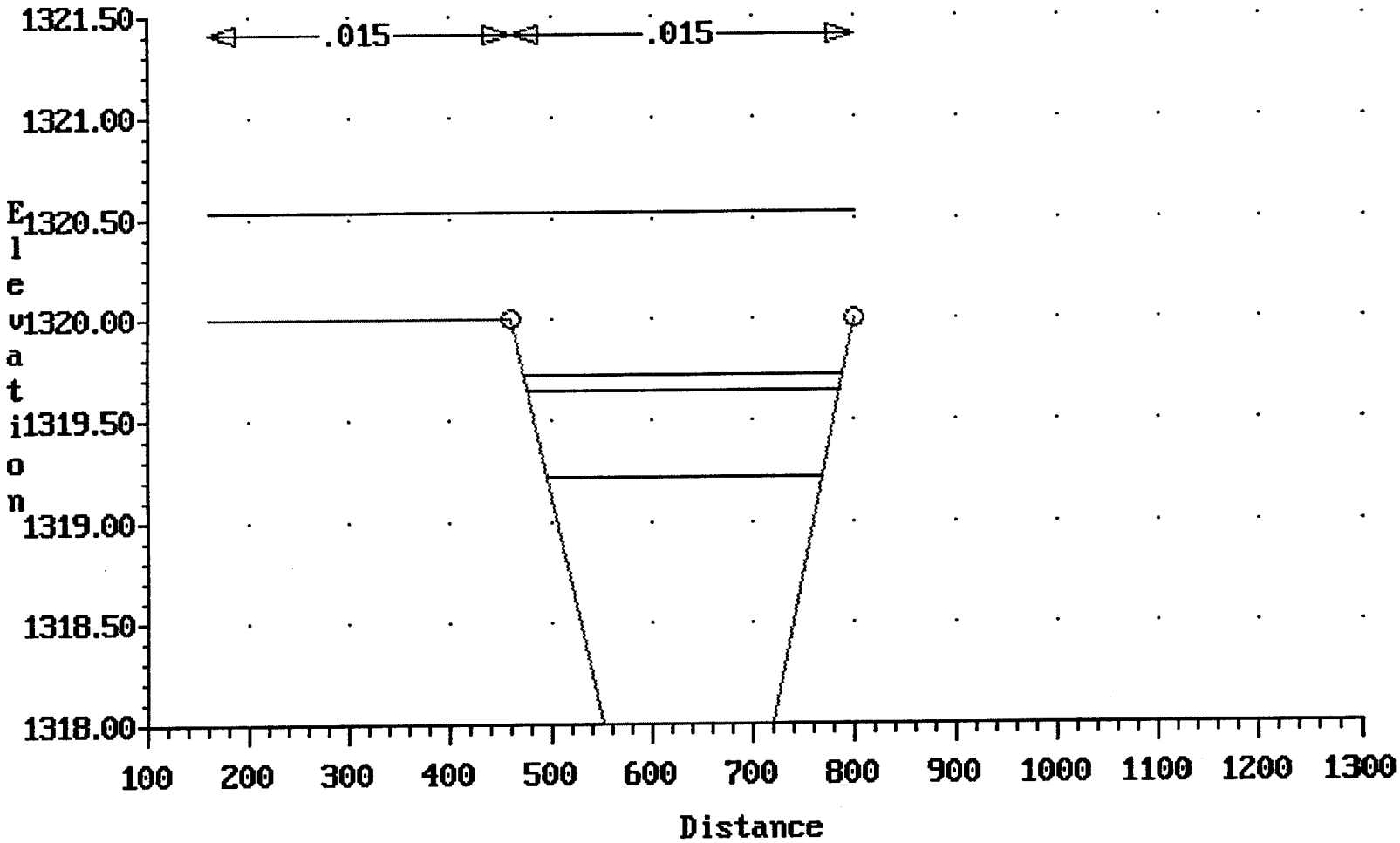
Cross-section 36.200



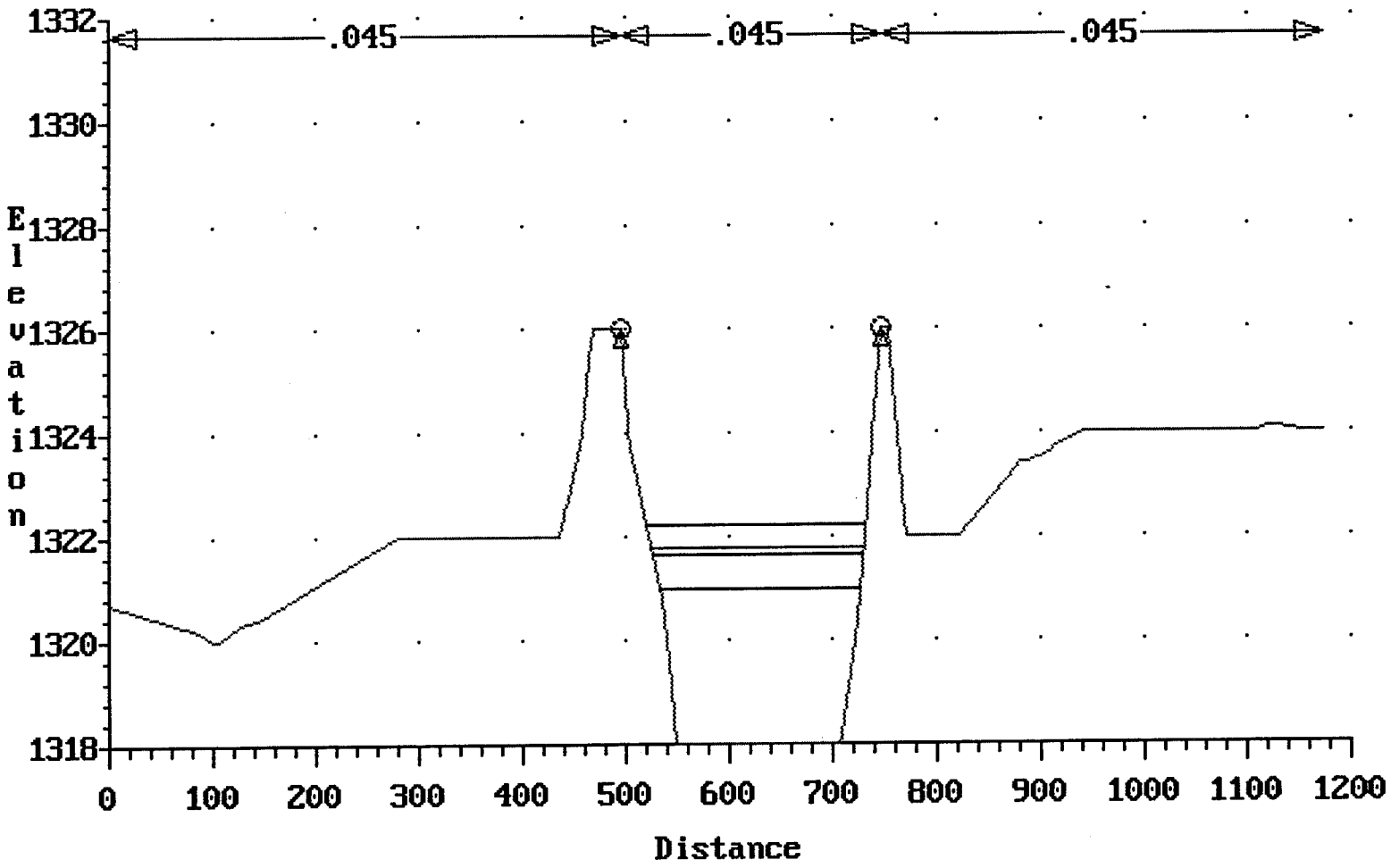
SCATTER WASH
CROSS-SECTIONS
Cross-section 36.900



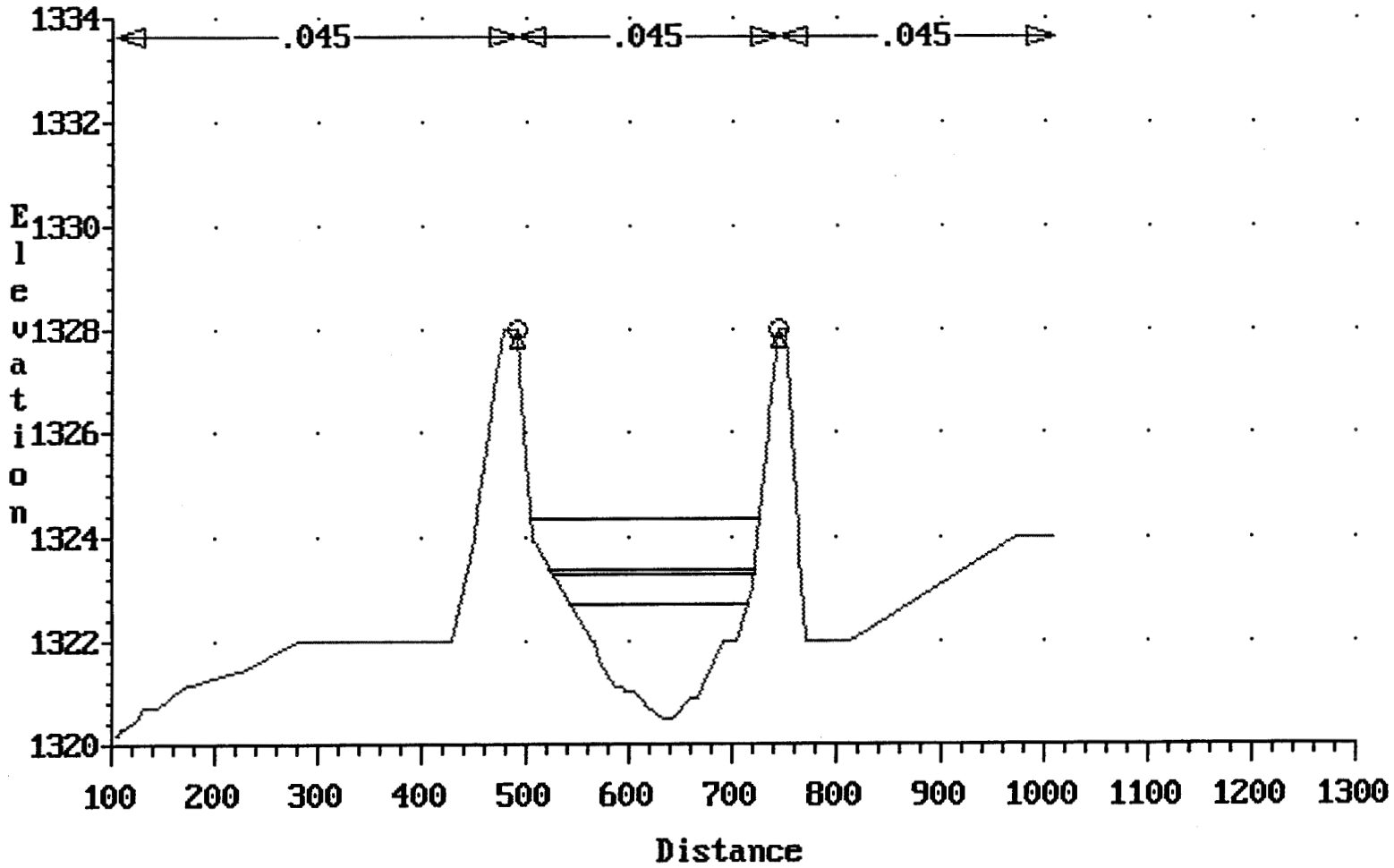
SCATTER WASH
CROSS-SECTIONS
Cross-section 38.100



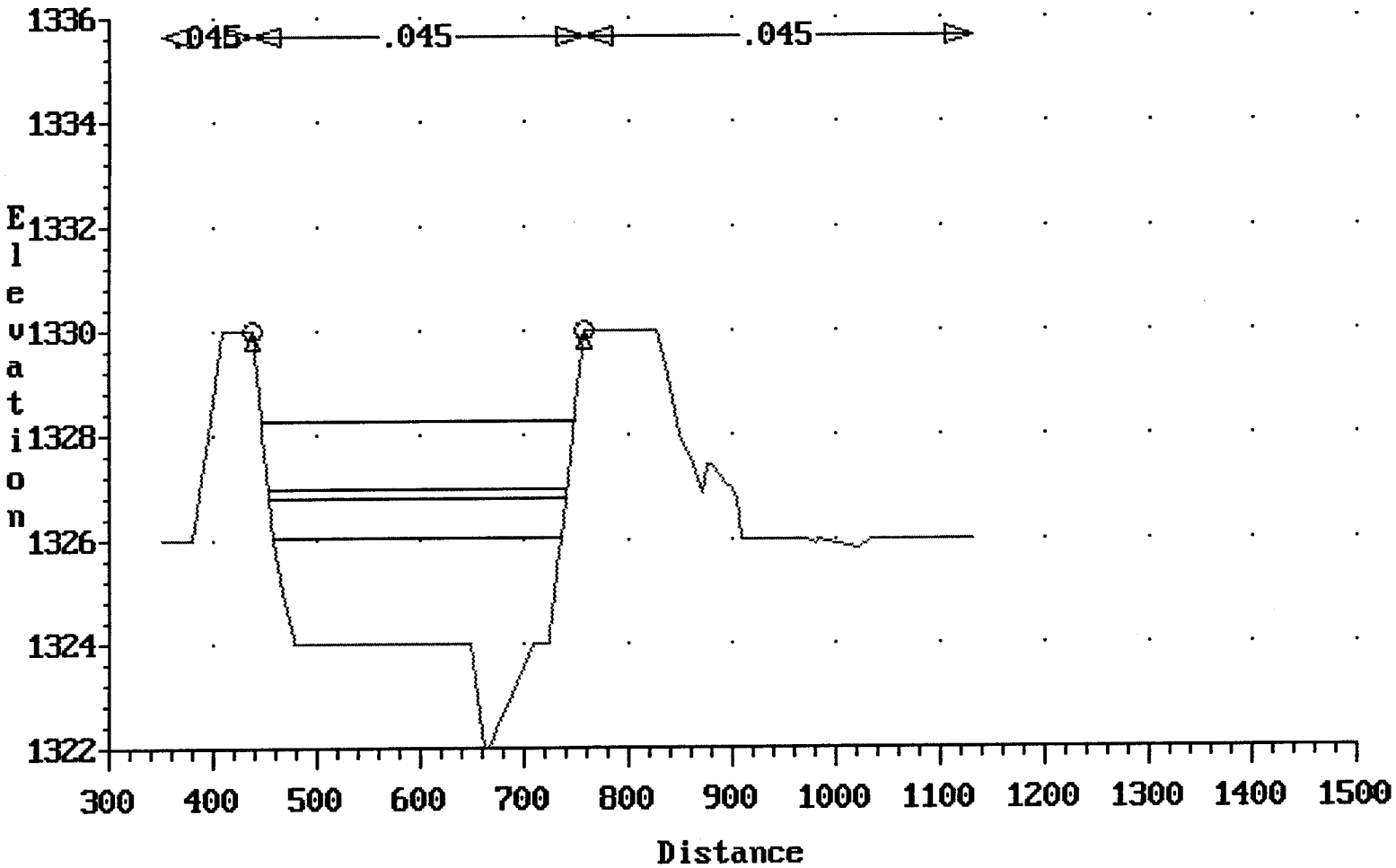
SCATTER WASH
CROSS-SECTIONS
Cross-section 43.300



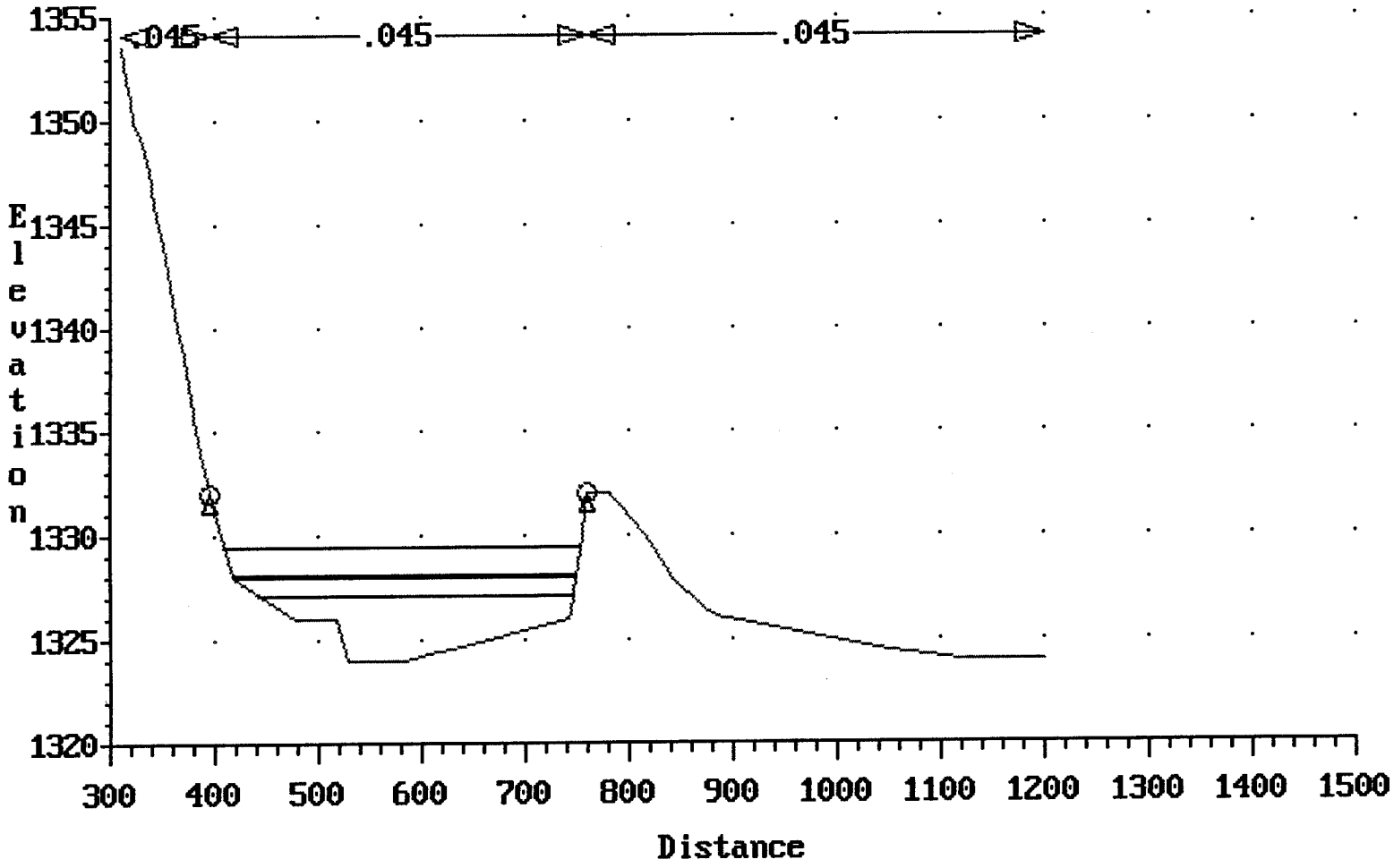
SCATTER WASH
CROSS-SECTIONS
Cross-section 43.800



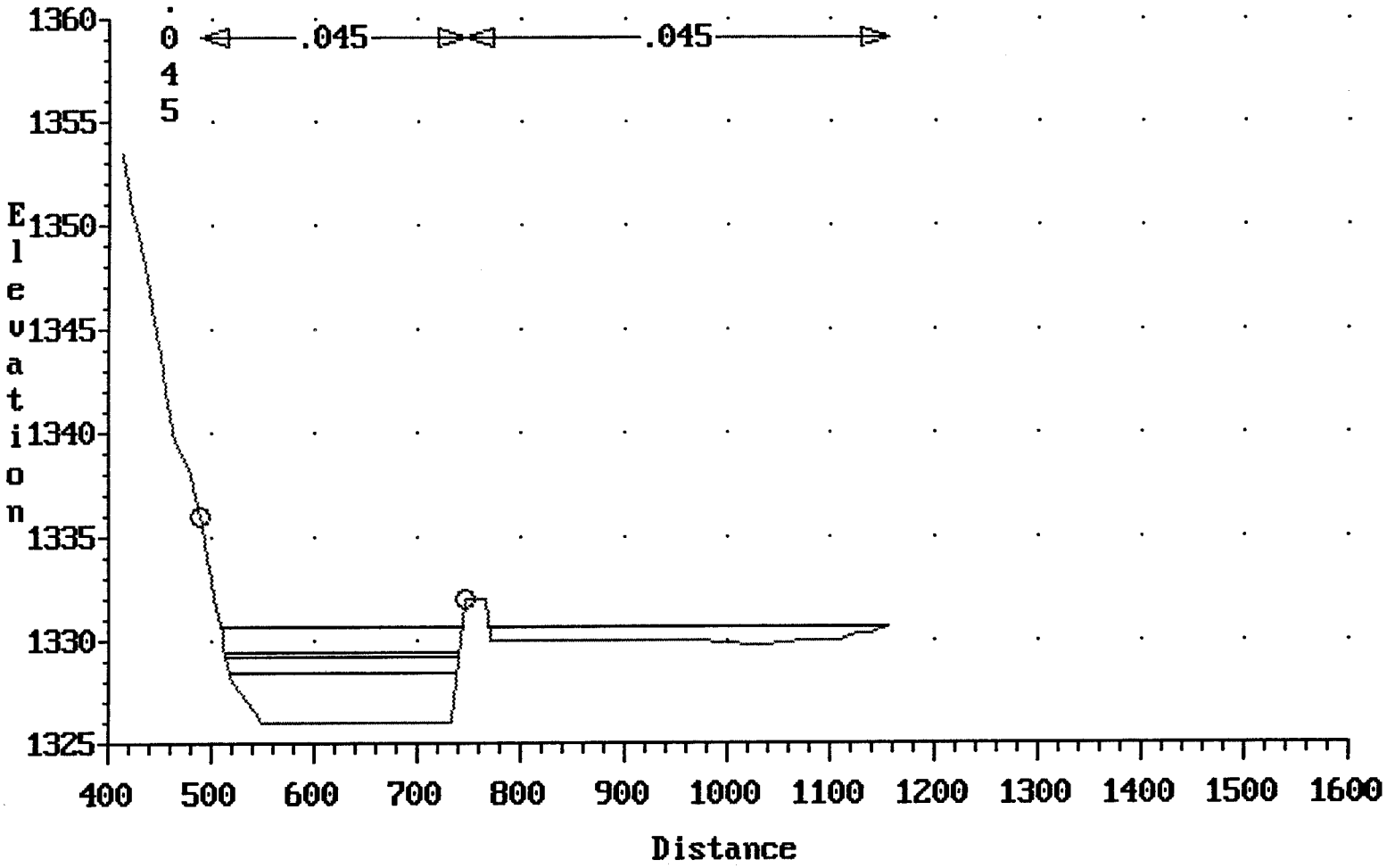
SCATTER WASH
CROSS-SECTIONS
Cross-section 49.000



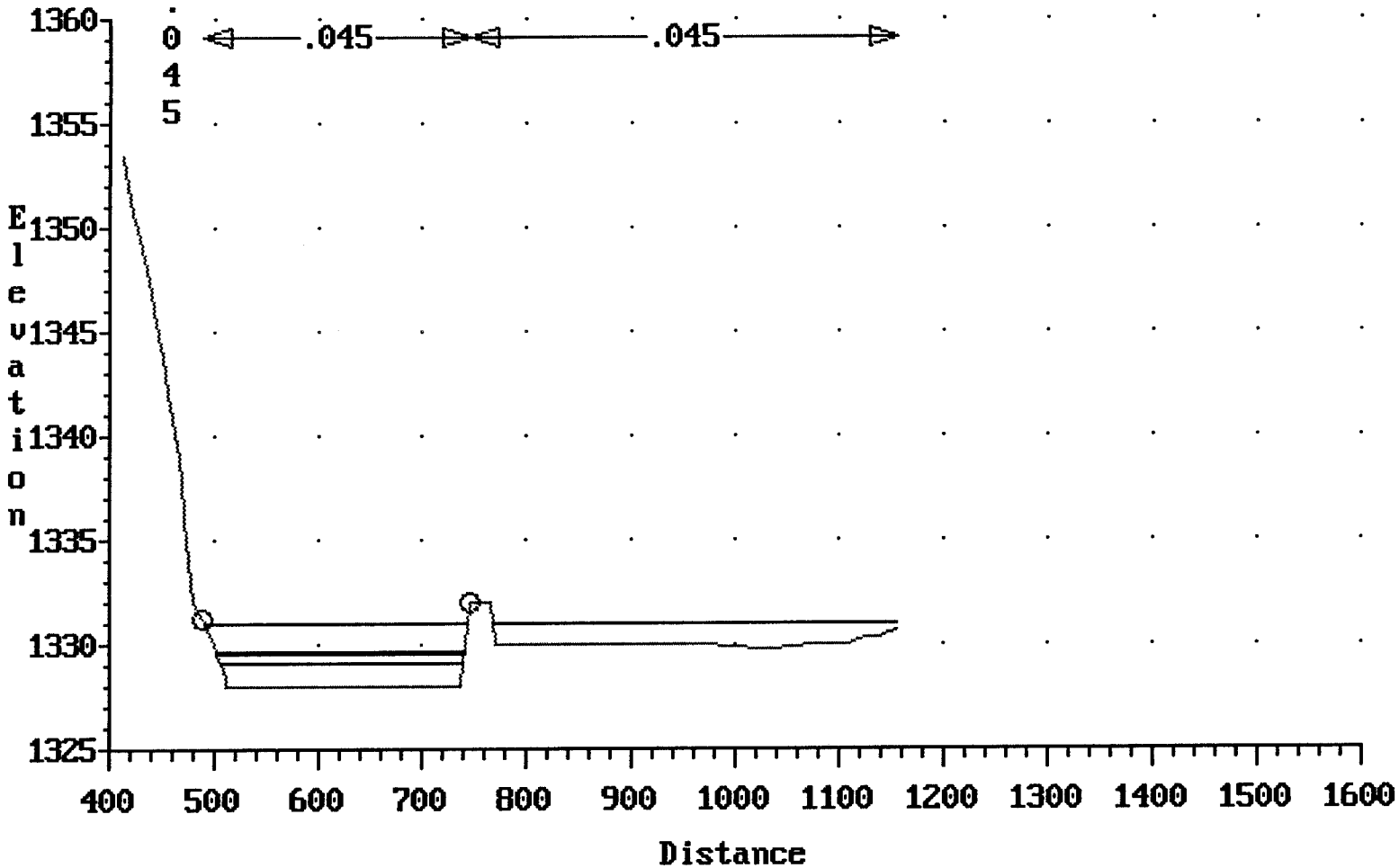
SCATTER WASH
CROSS-SECTIONS
Cross-section 54.000



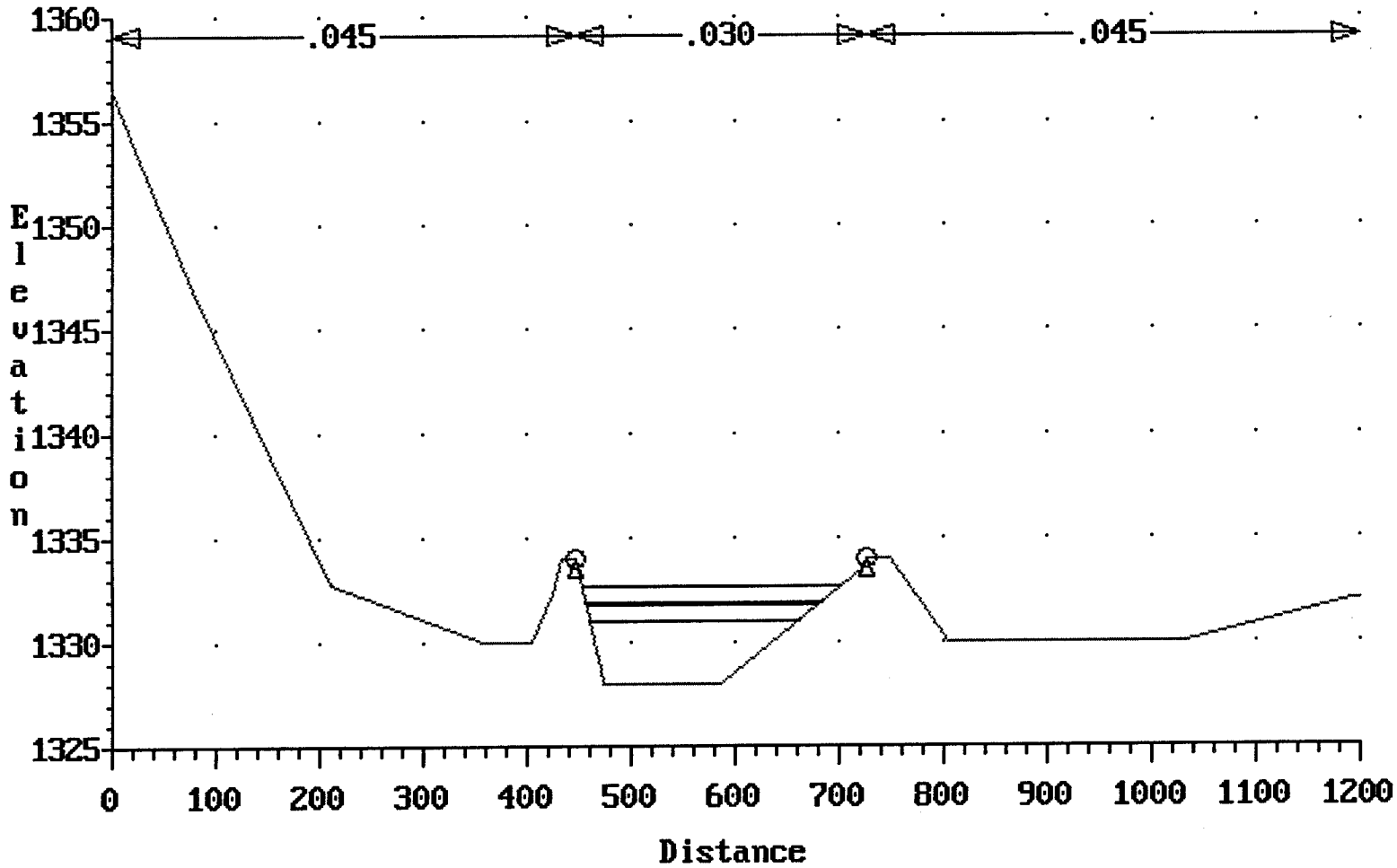
SCATTER WASH
CROSS-SECTIONS
Cross-section 59.400



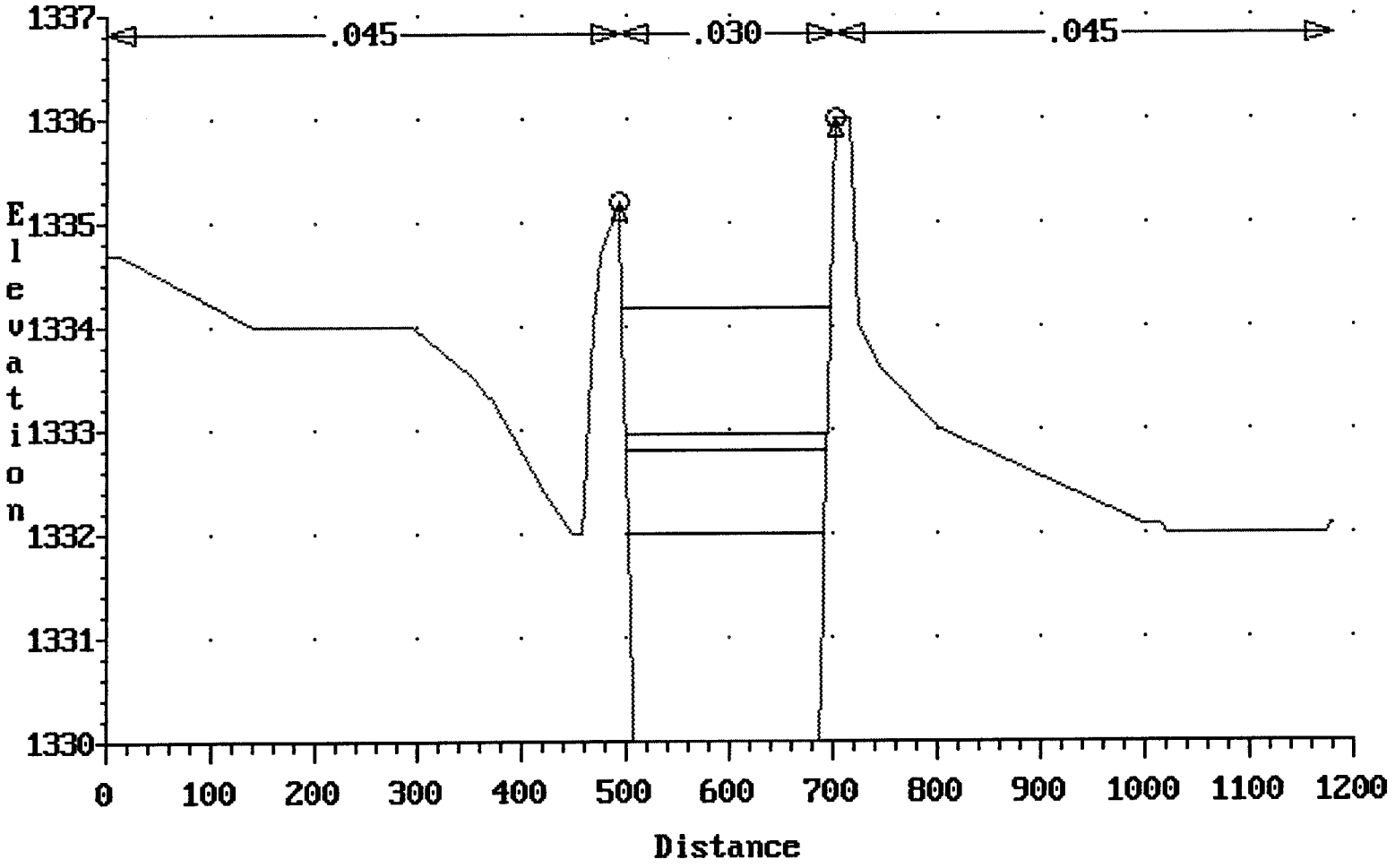
SCATTER WASH
CROSS-SECTIONS
Cross-section 60.000



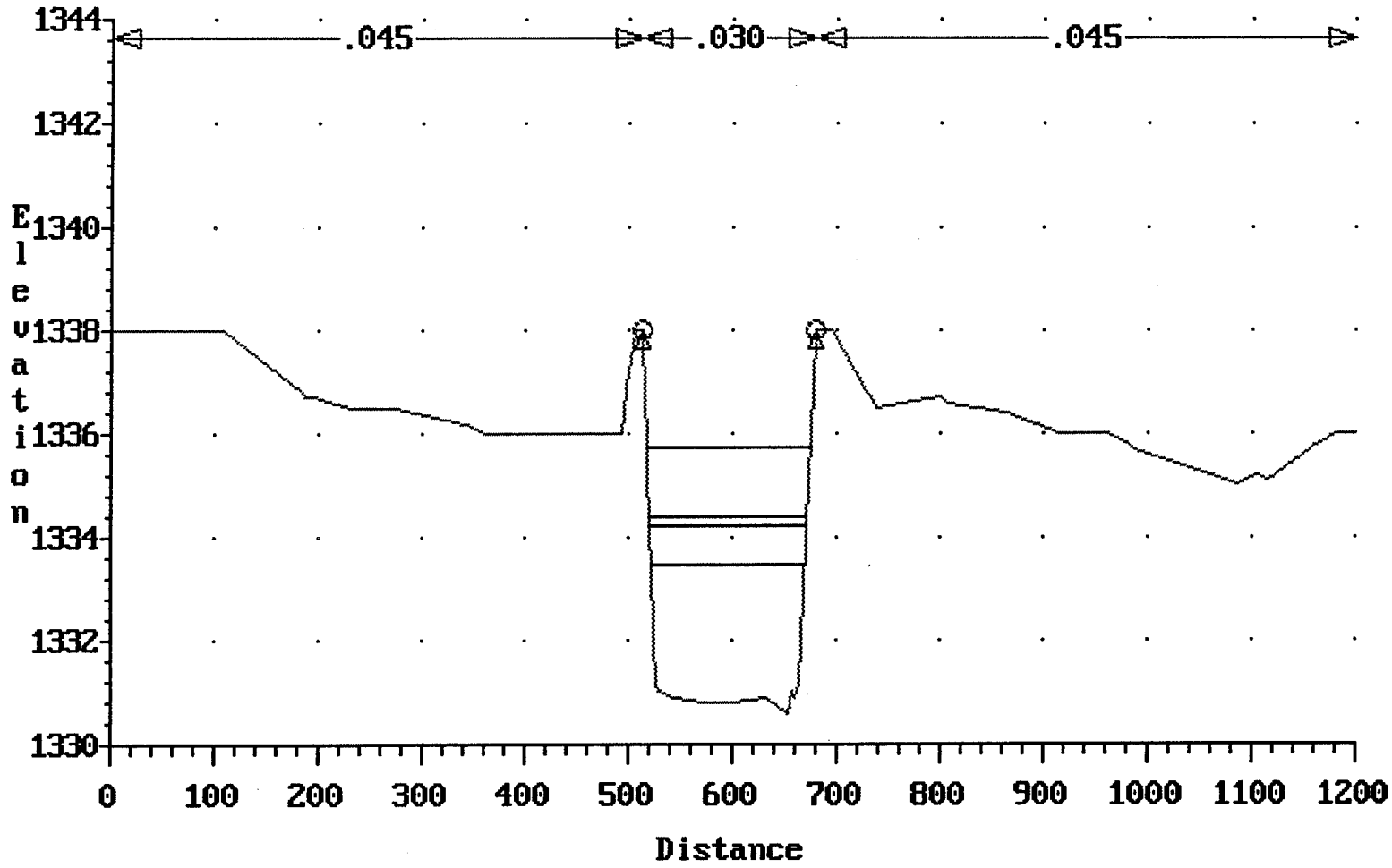
SCATTER WASH
CROSS-SECTIONS
Cross-section 64.000



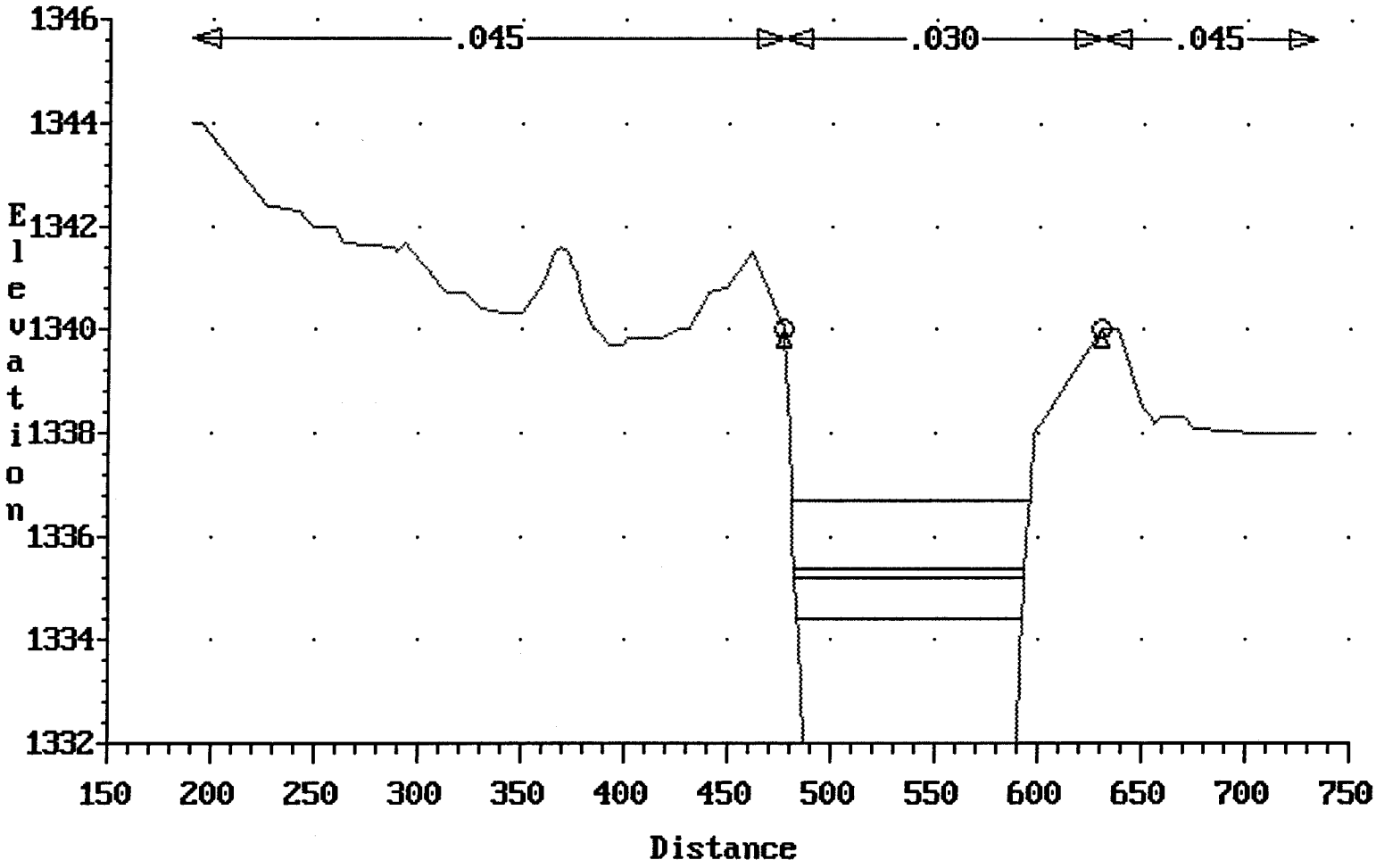
SCATTER WASH
CROSS-SECTIONS
Cross-section 69.500



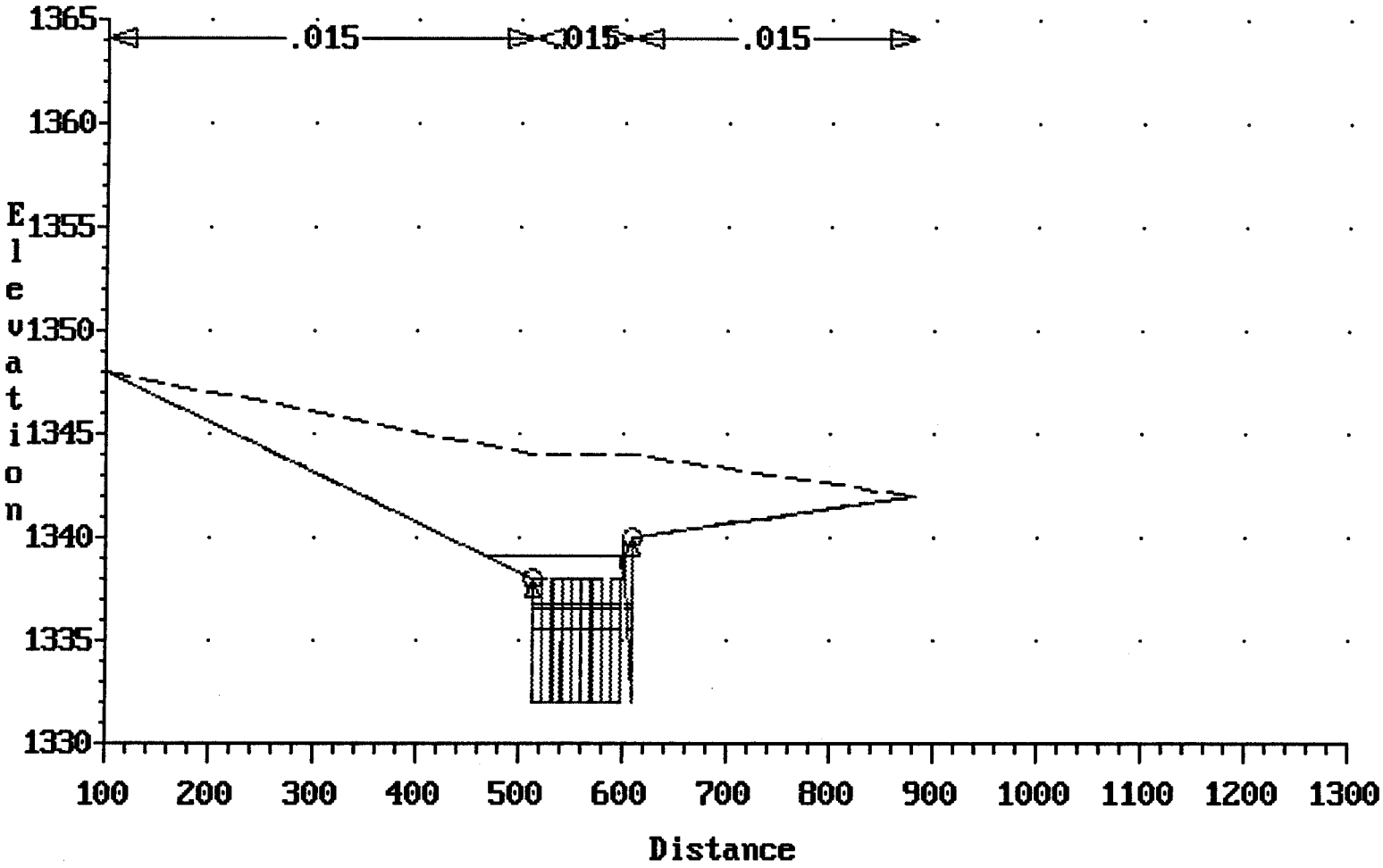
SCATTER WASH
CROSS-SECTIONS
Cross-section 75.500



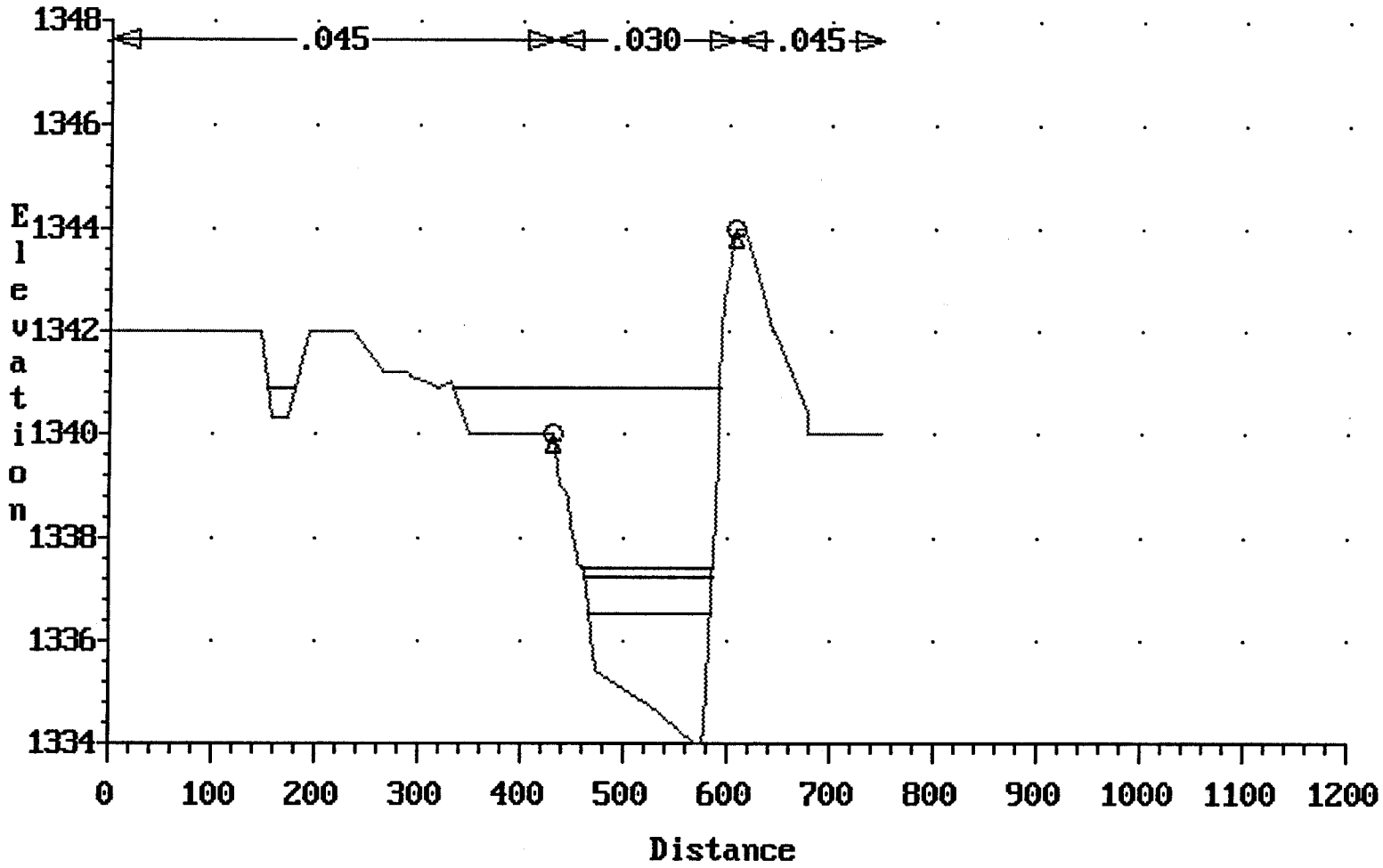
SCATTER WASH
CROSS-SECTIONS
Cross-section 79.300



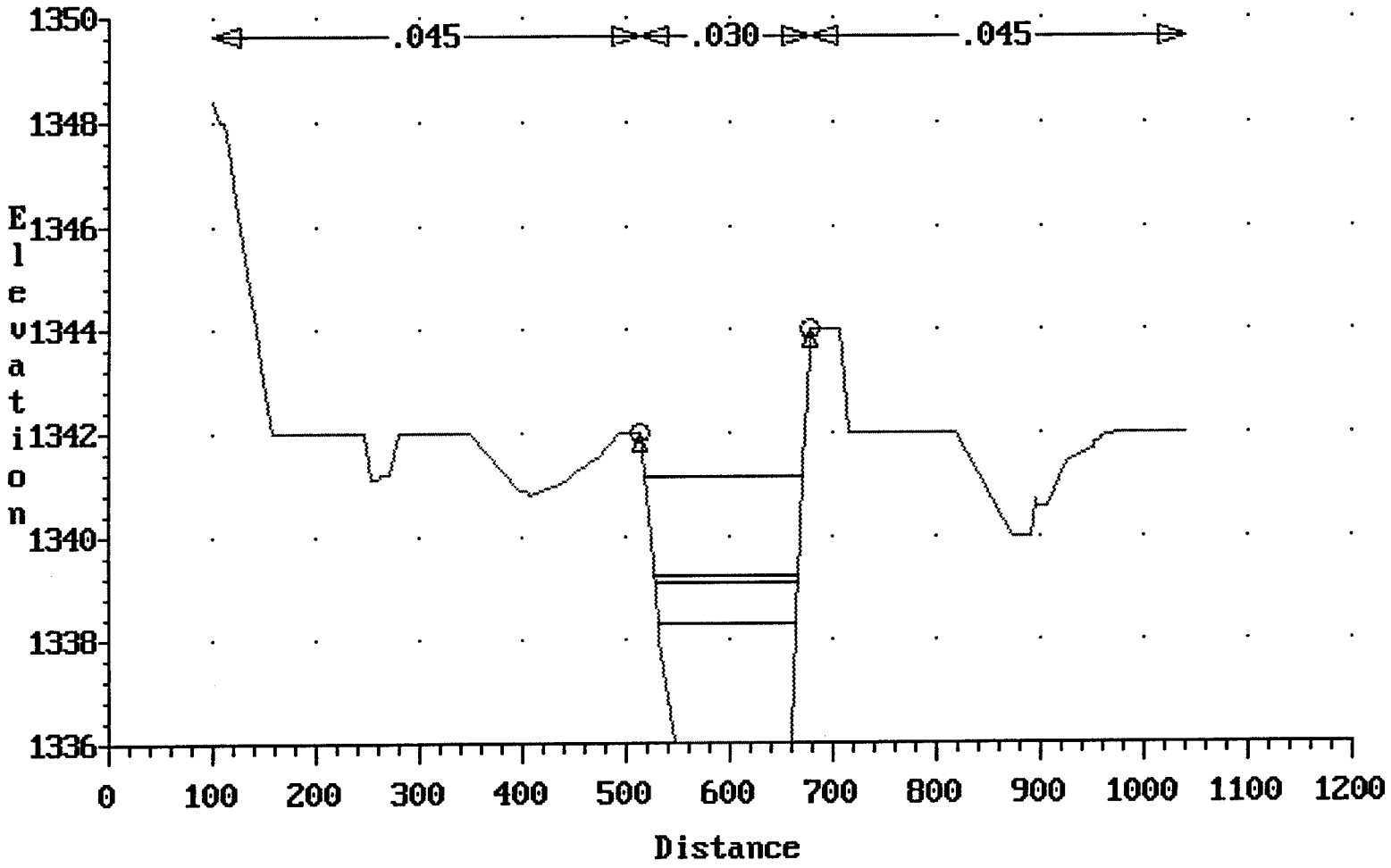
SCATTER WASH
CROSS-SECTIONS
Cross-section 83.700



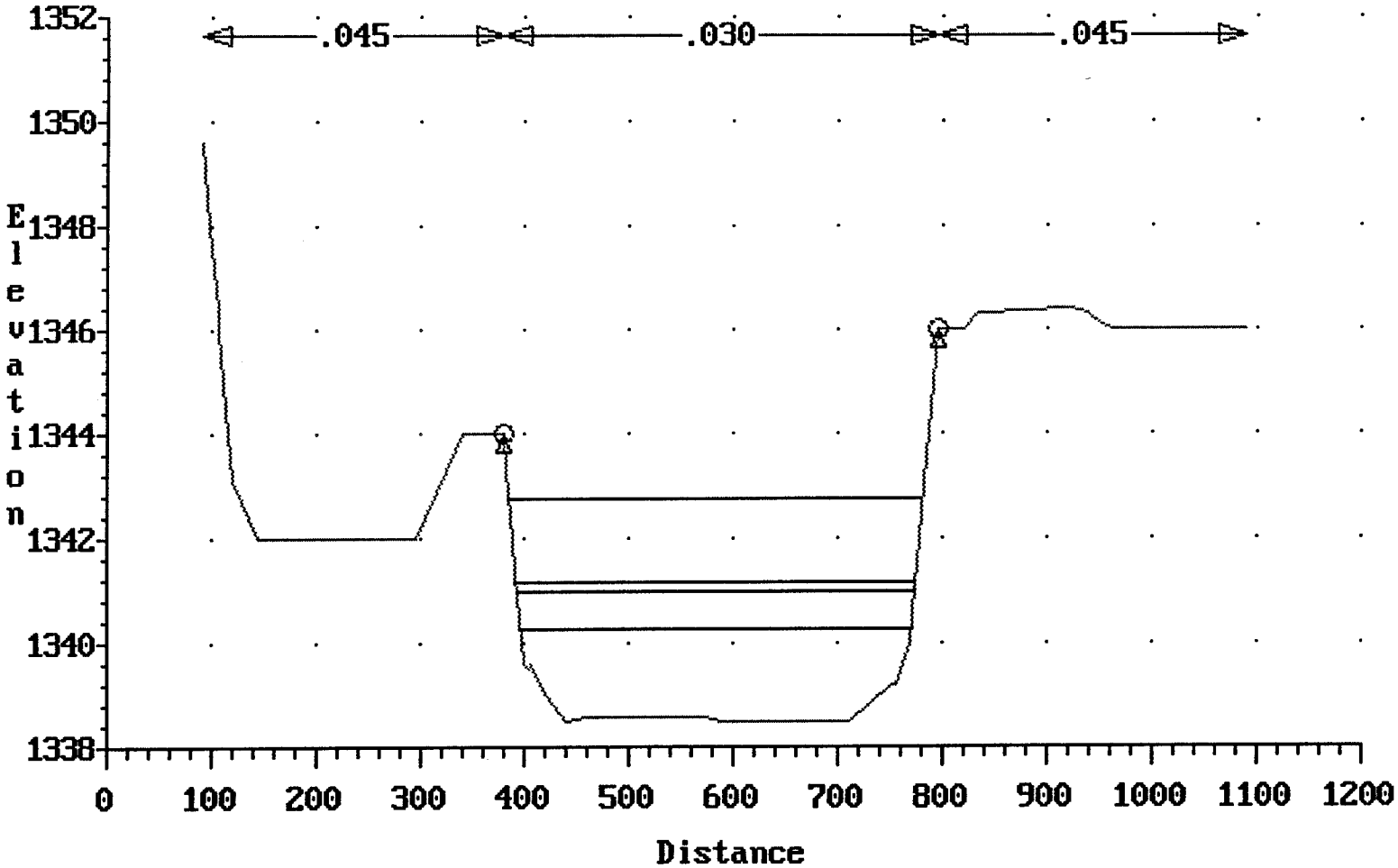
SCATTER WASH
CROSS-SECTIONS
Cross-section 84.200



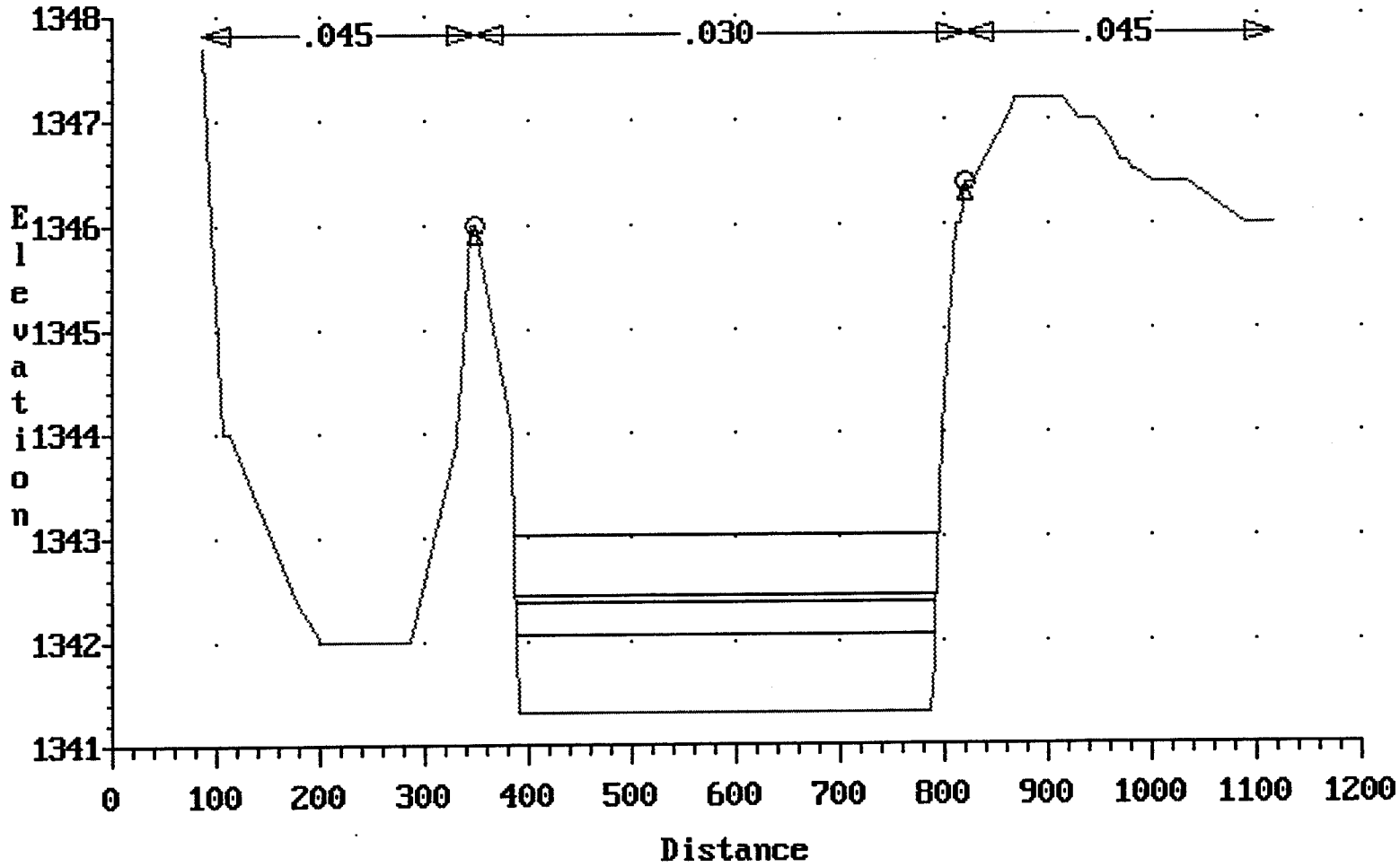
SCATTER WASH
CROSS-SECTIONS
Cross-section 86.200



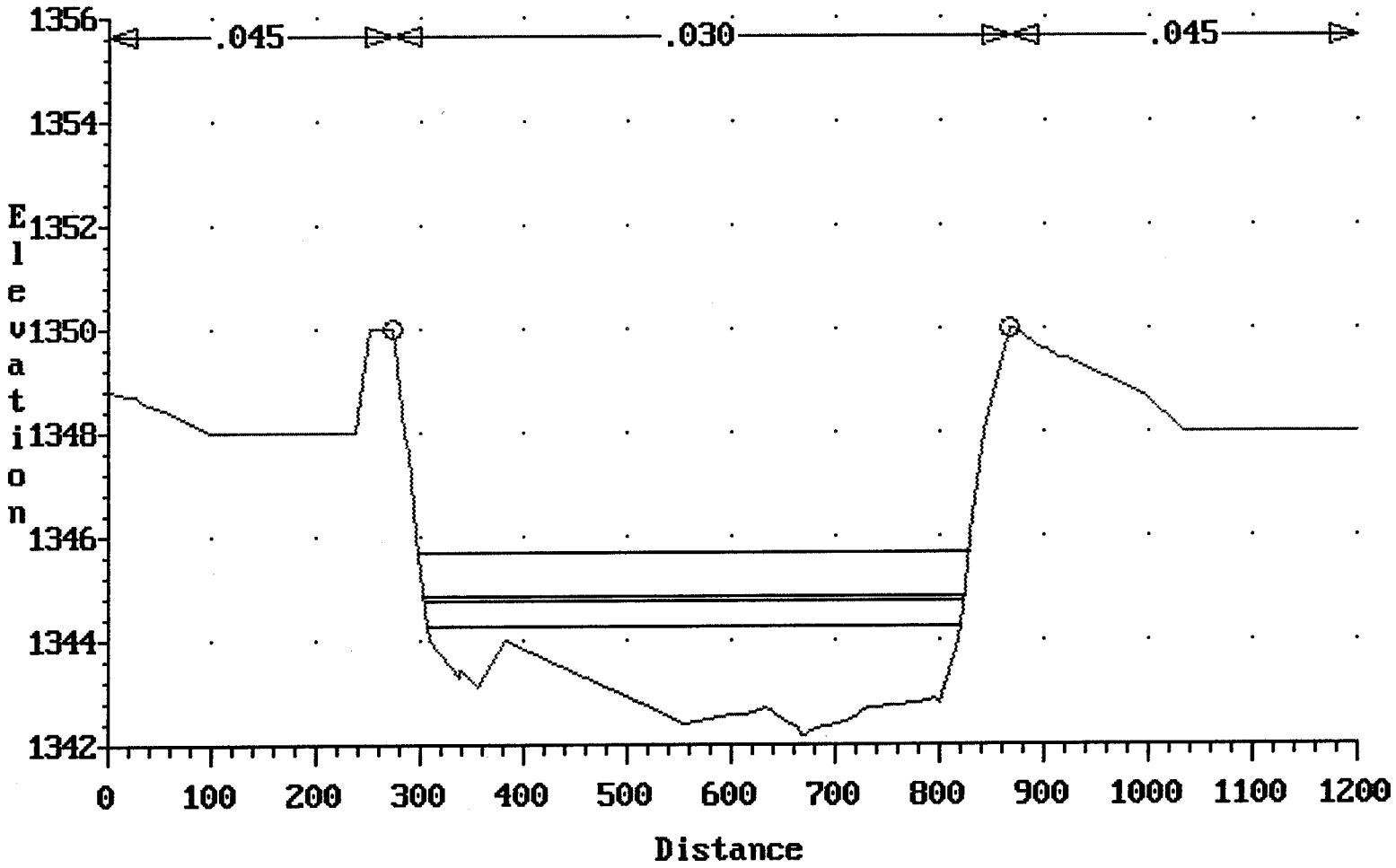
SCATTER WASH
CROSS-SECTIONS
Cross-section 92.700



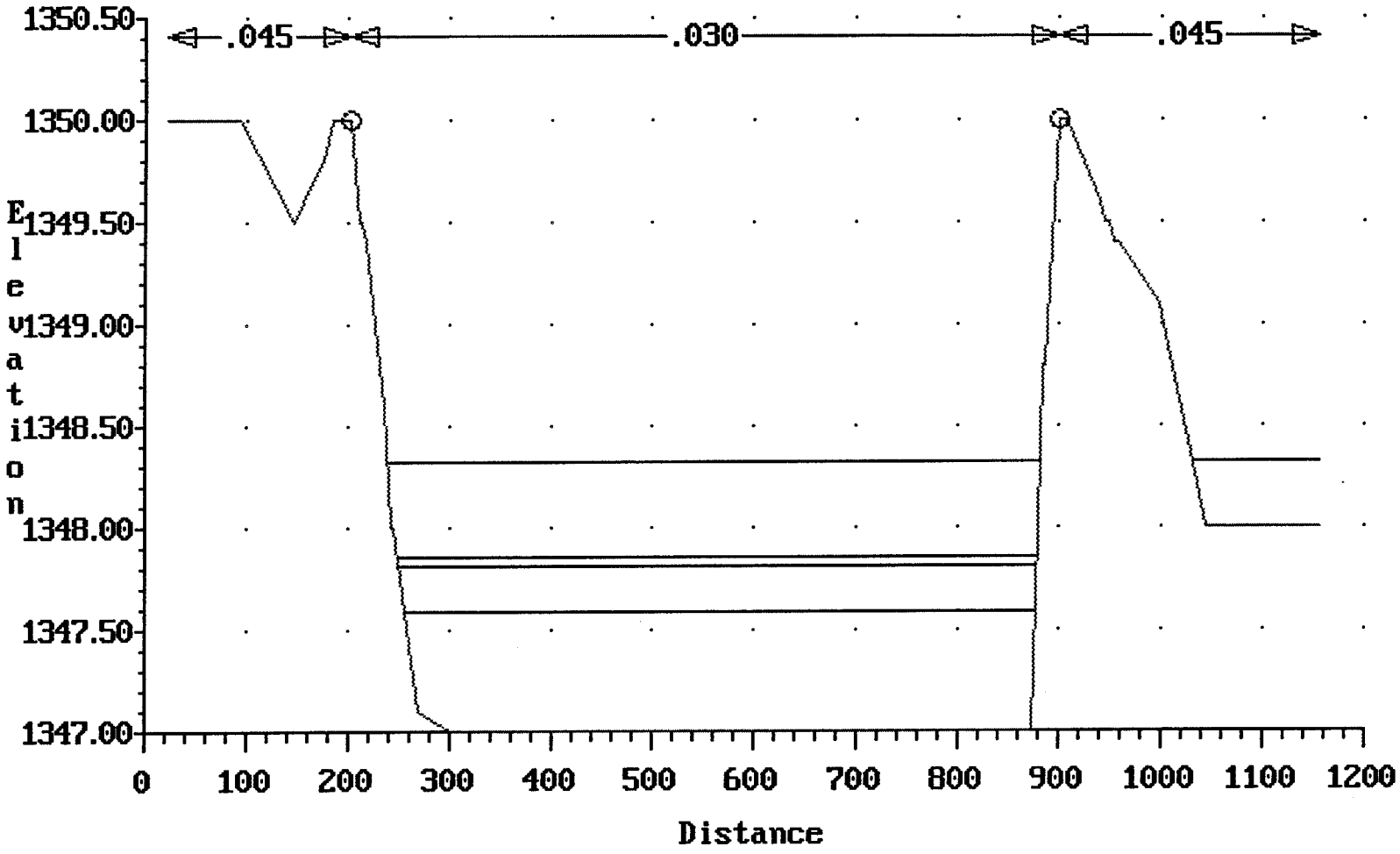
SCATTER WASH
CROSS-SECTIONS
Cross-section 93.200



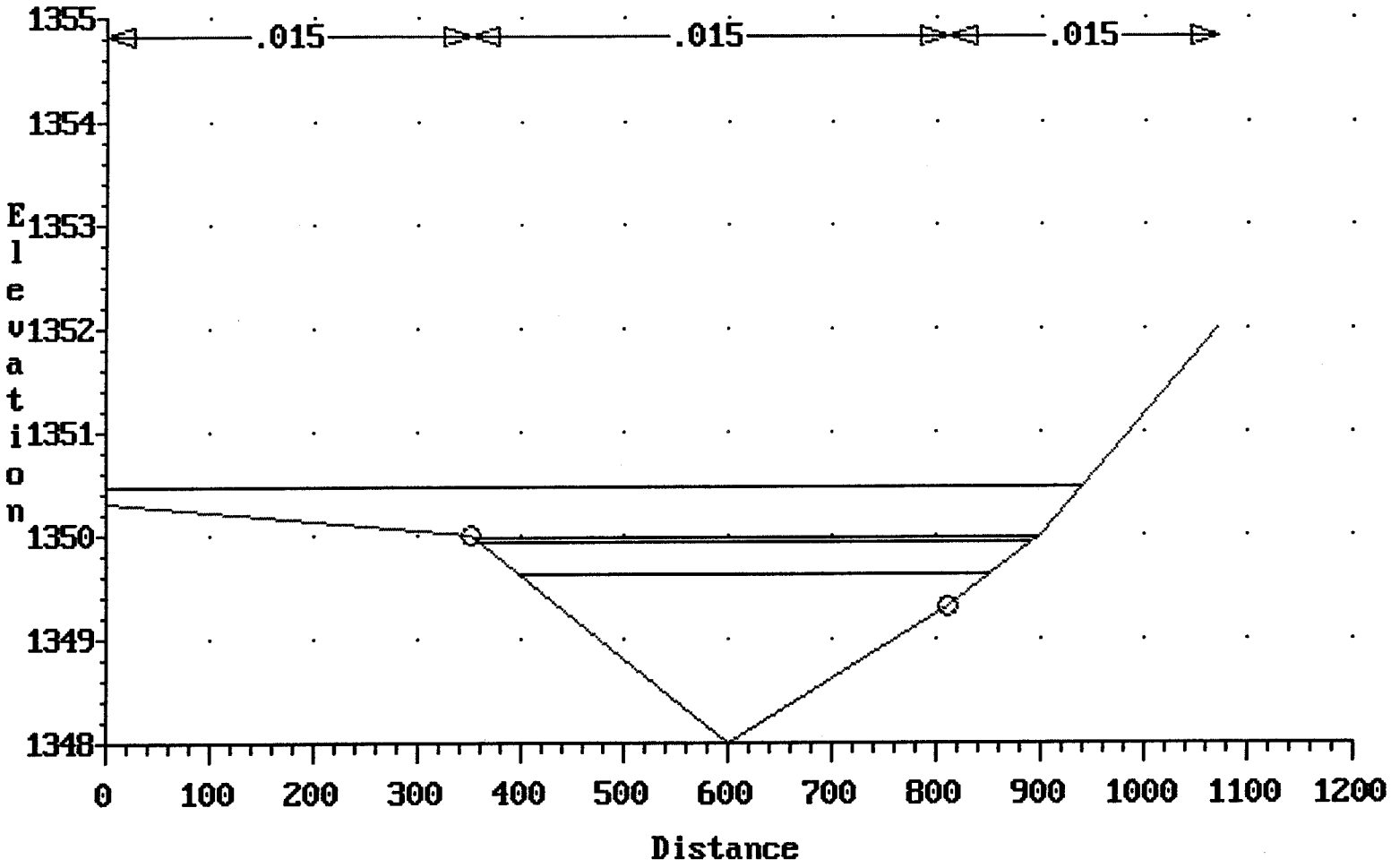
SCATTER WASH
CROSS-SECTIONS
Cross-section 98.300



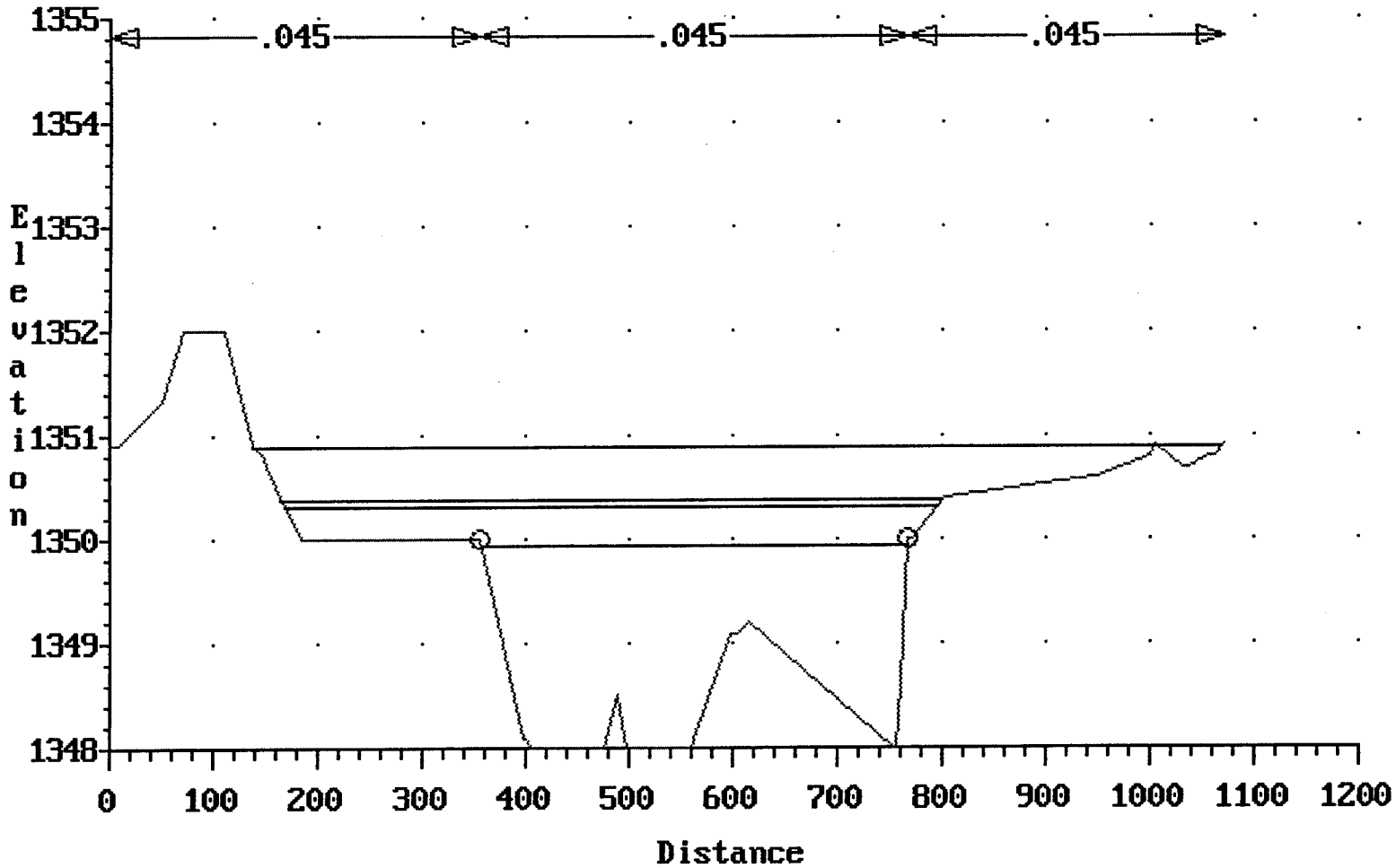
SCATTER WASH
CROSS-SECTIONS
Cross-section 99.400



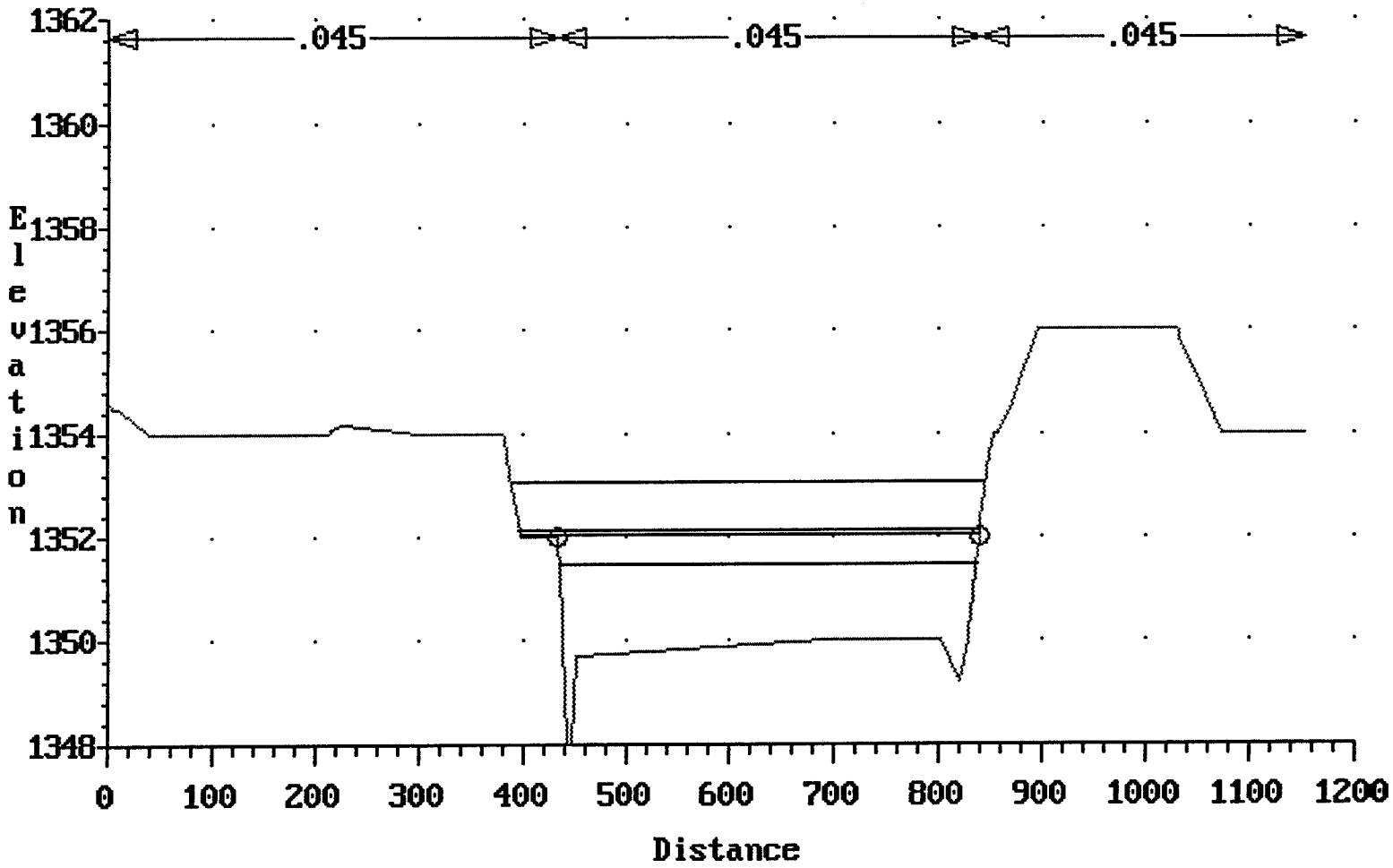
SCATTER WASH
CROSS-SECTIONS
Cross-section 103.900



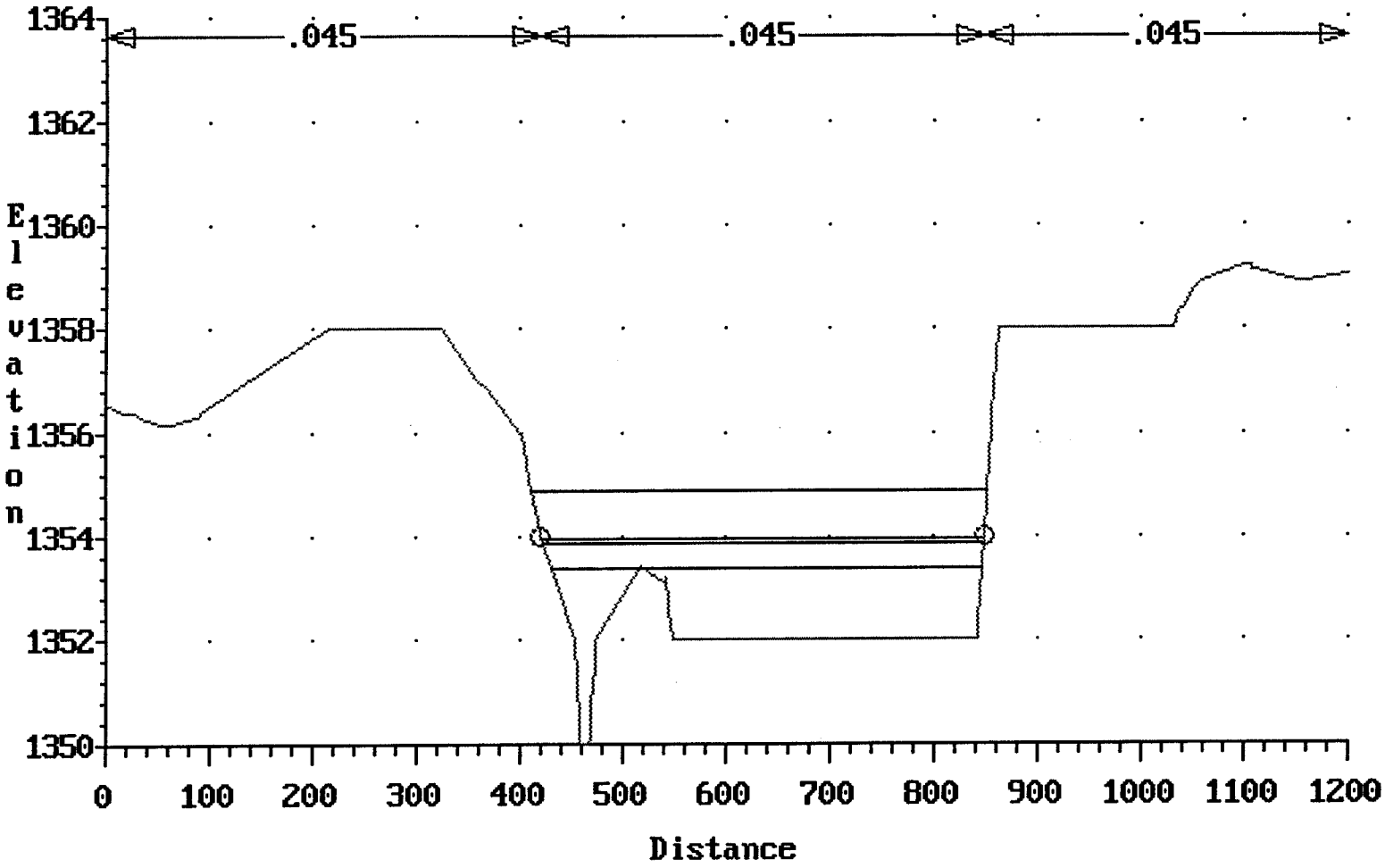
SCATTER WASH
CROSS-SECTIONS
Cross-section 104.400



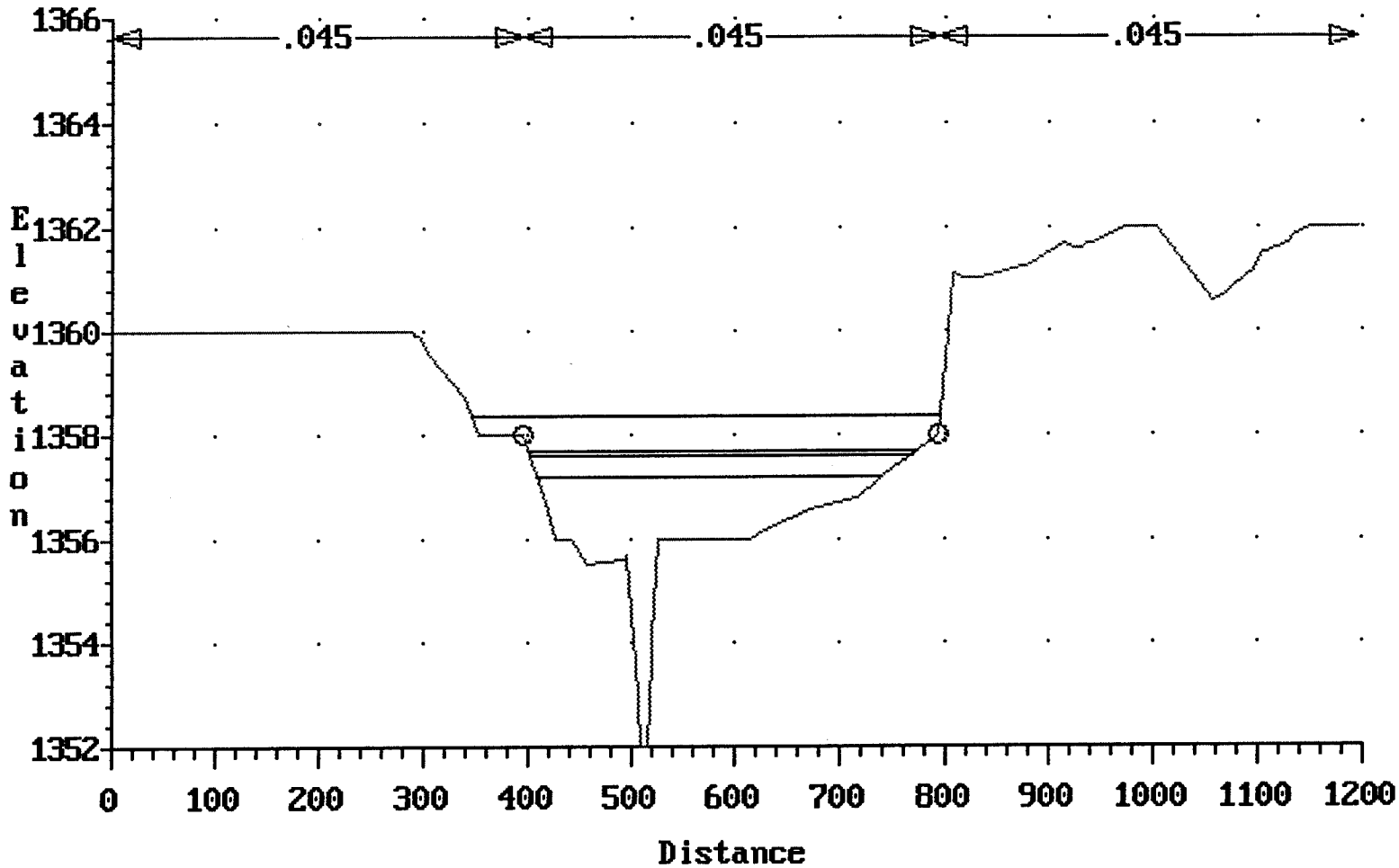
SCATTER WASH
CROSS-SECTIONS
Cross-section 109.400



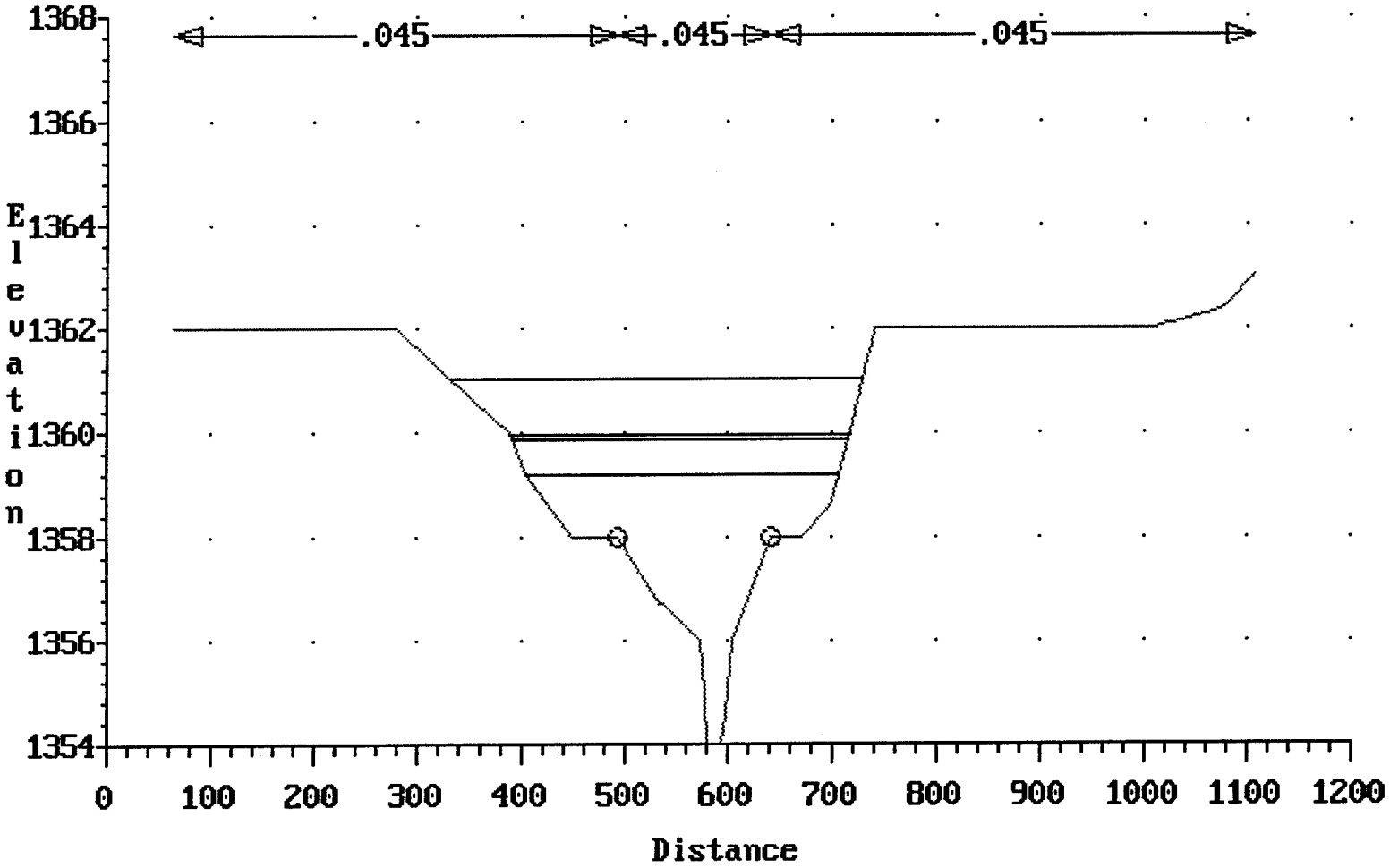
SCATTER WASH
CROSS-SECTIONS
Cross-section 114.400



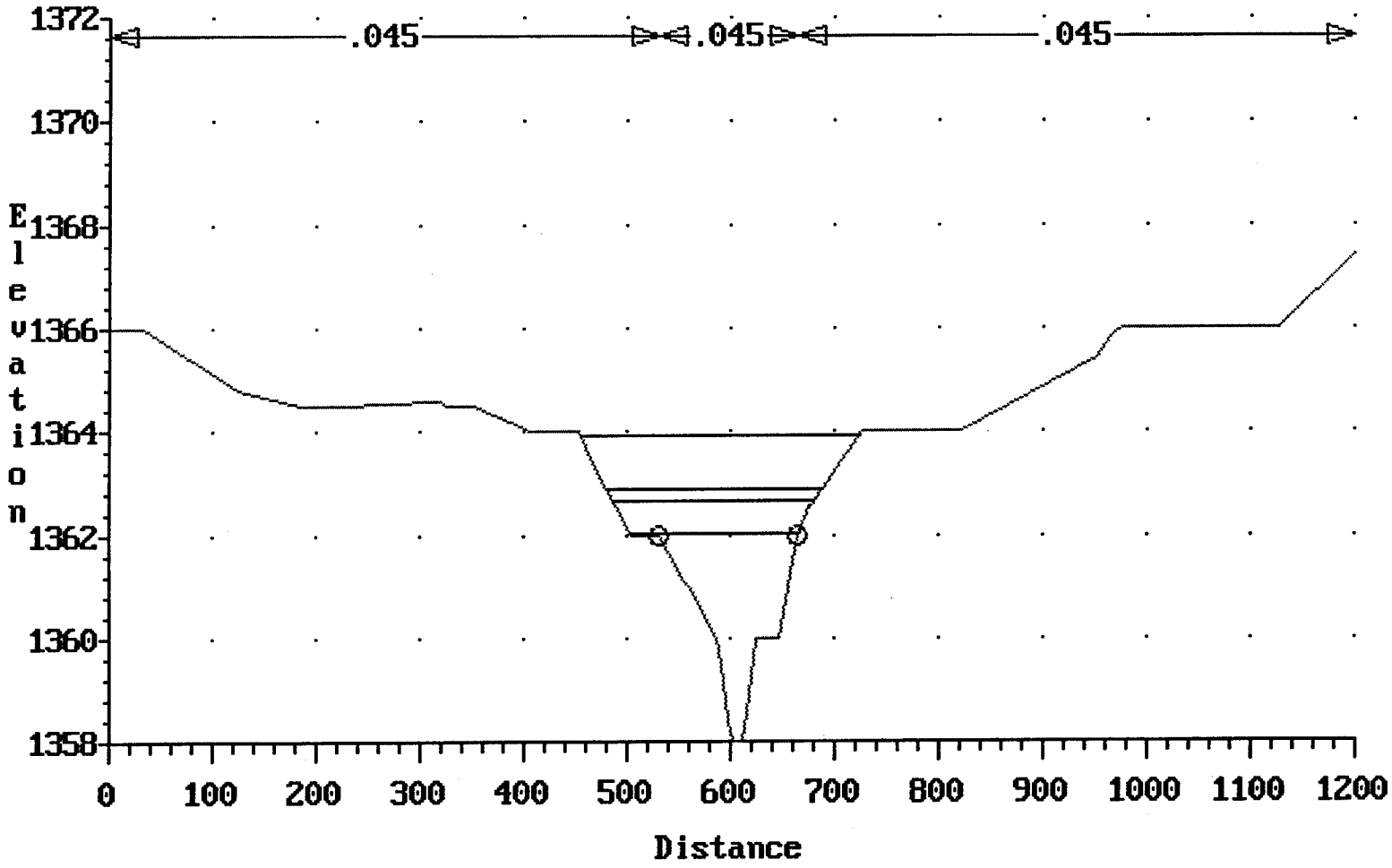
SCATTER WASH
CROSS-SECTIONS
Cross-section 119.400



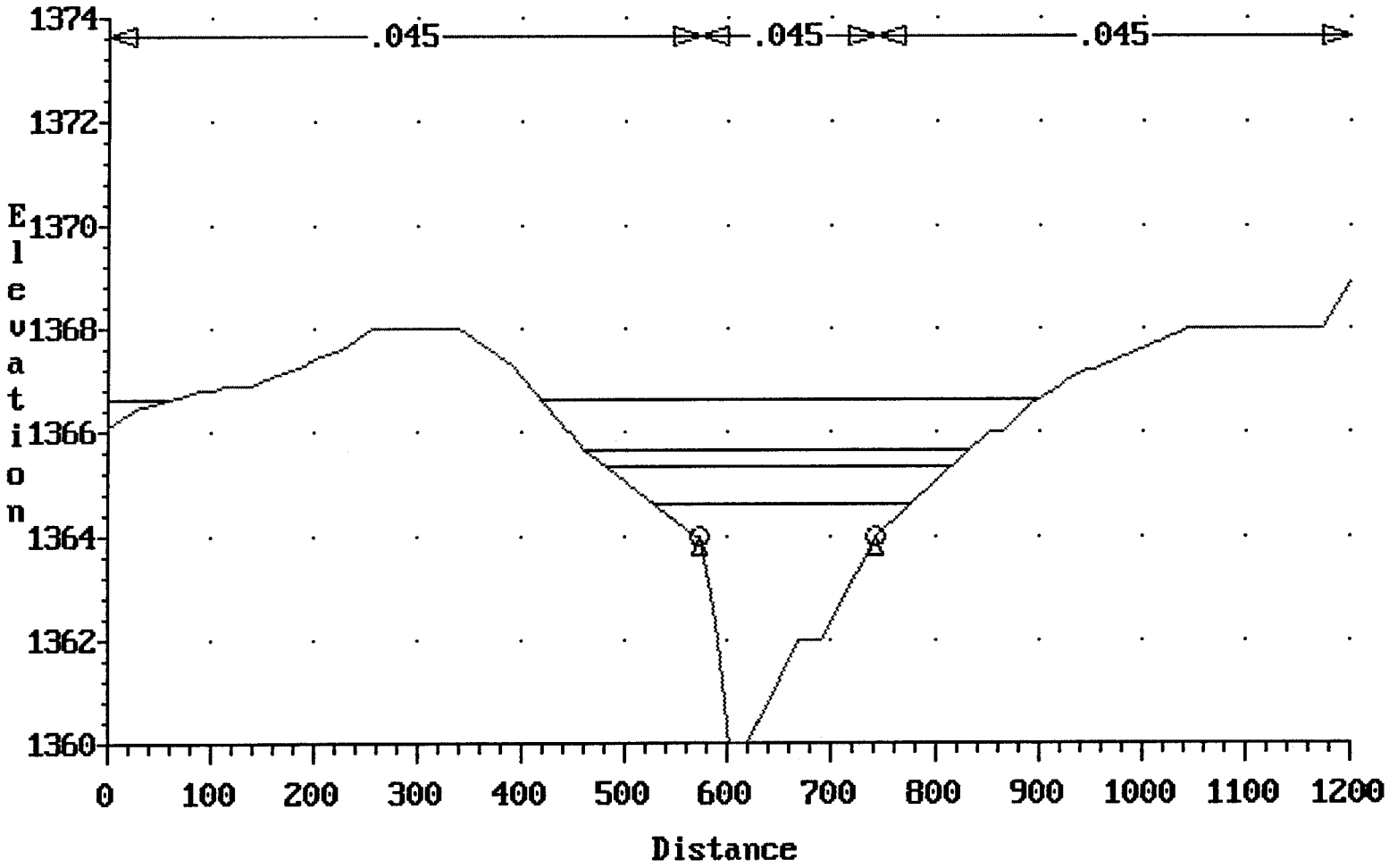
SCATTER WASH
CROSS-SECTIONS
Cross-section 123.700



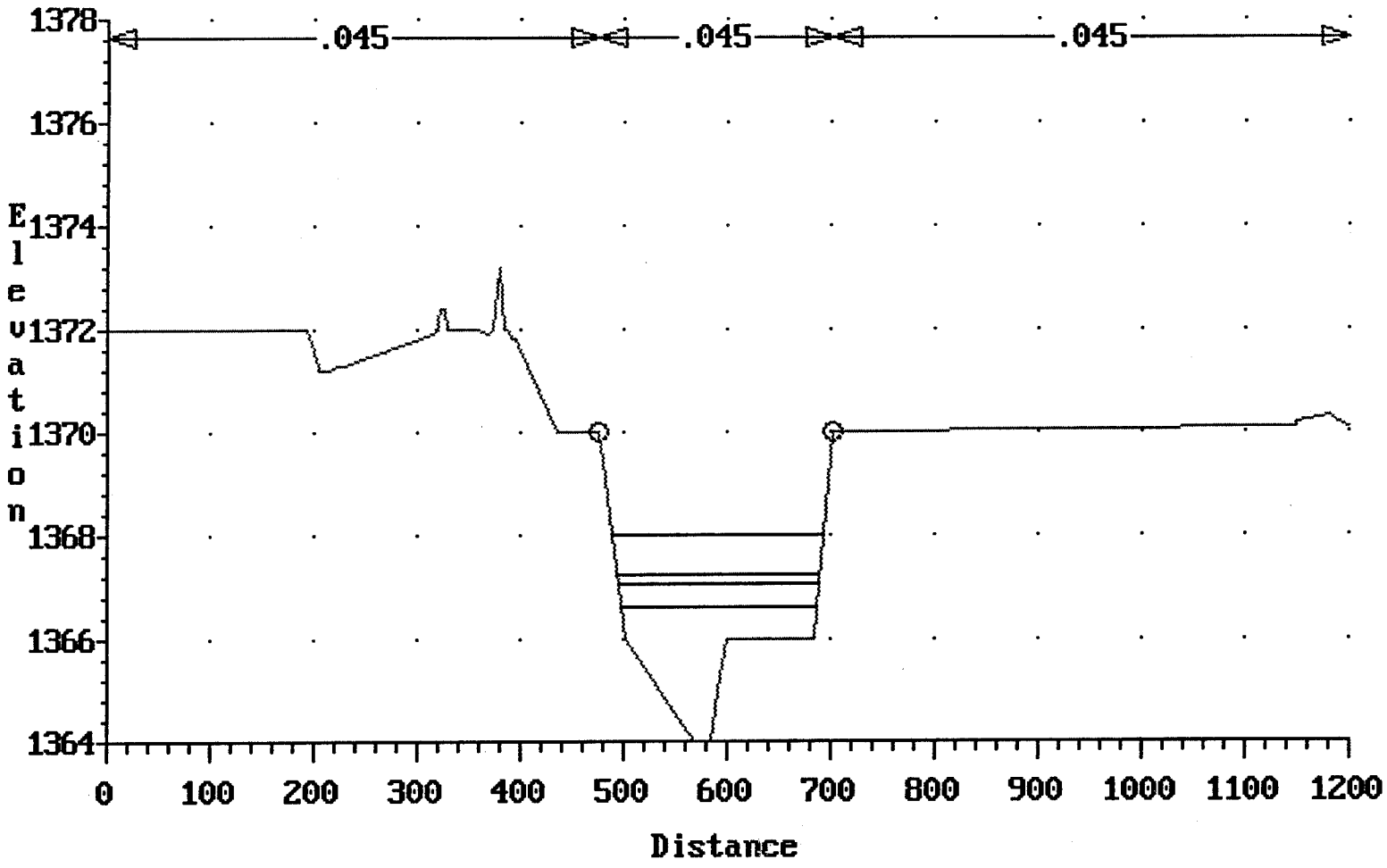
SCATTER WASH
CROSS-SECTIONS
Cross-section 130.400



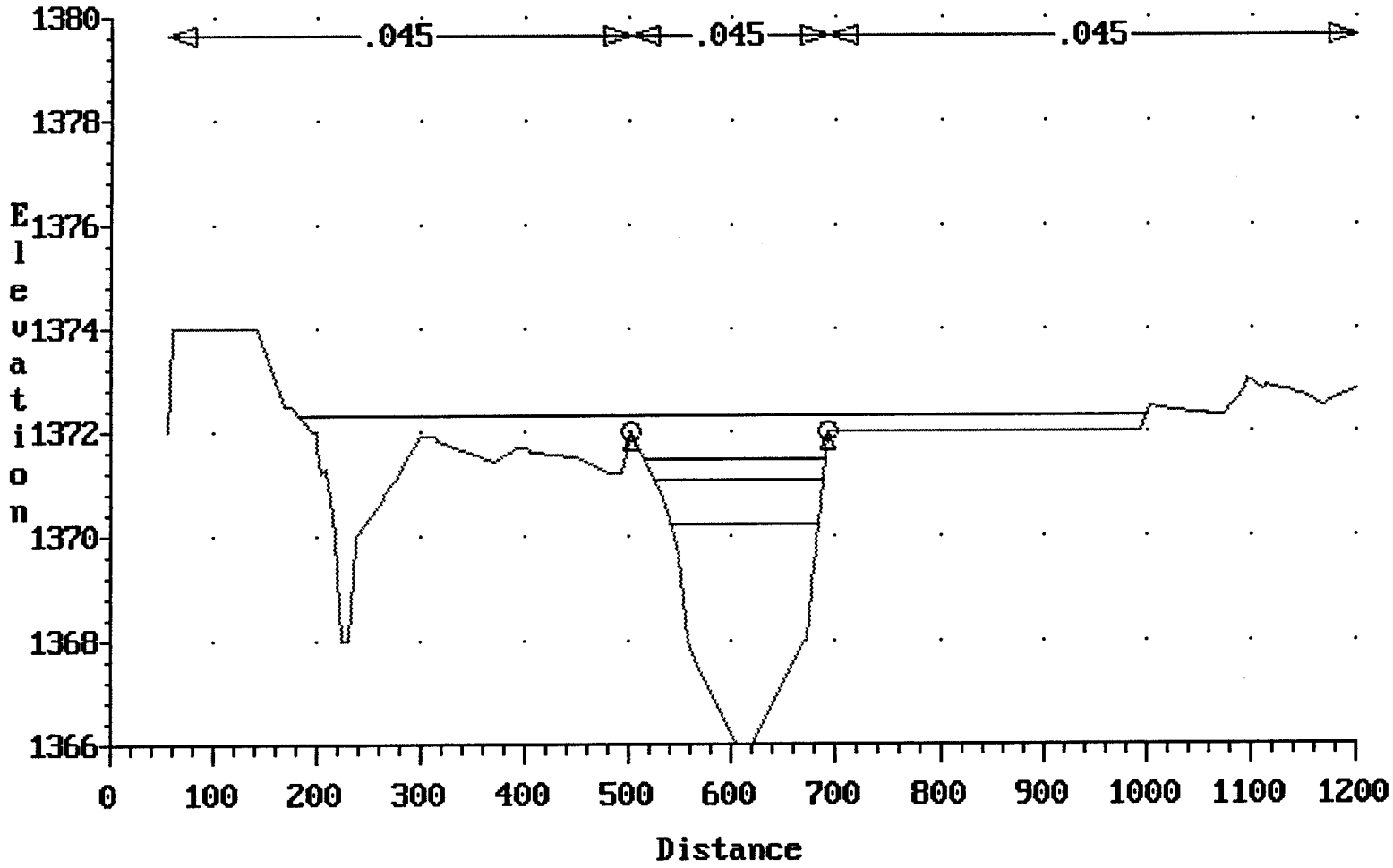
SCATTER WASH
CROSS-SECTIONS
Cross-section 135.400



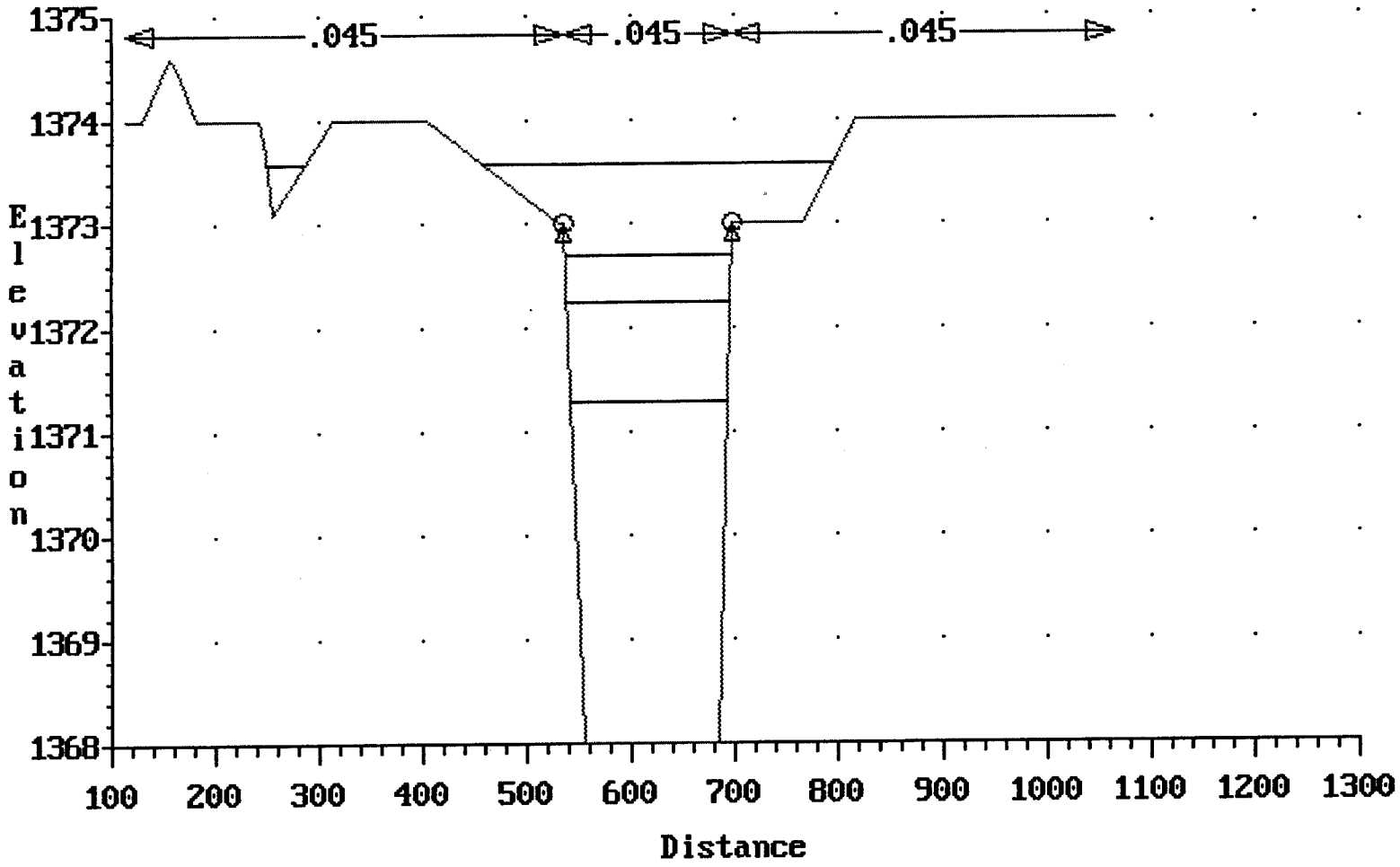
SCATTER WASH
CROSS-SECTIONS
Cross-section 139.100



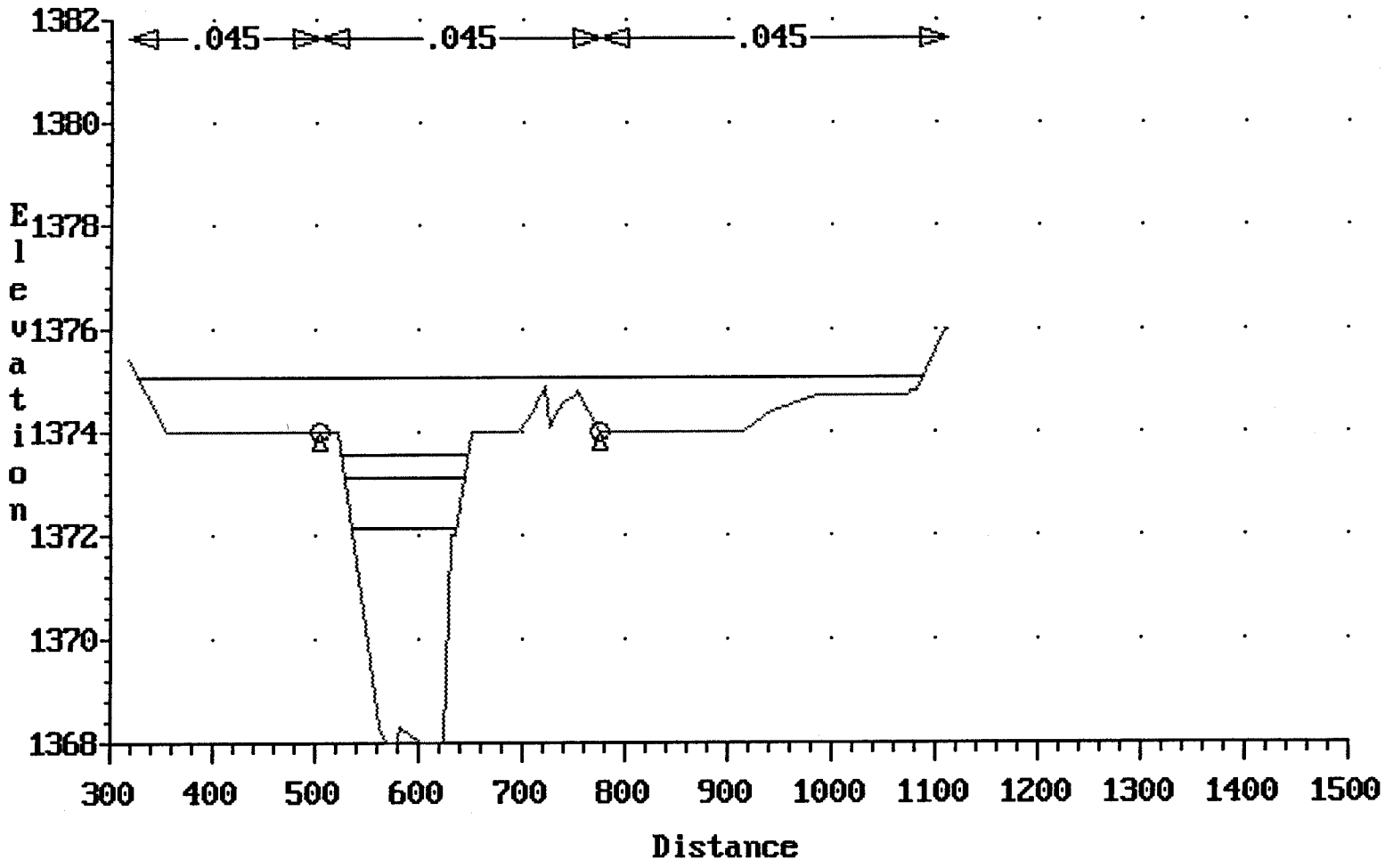
SCATTER WASH
CROSS-SECTIONS
Cross-section 144.100



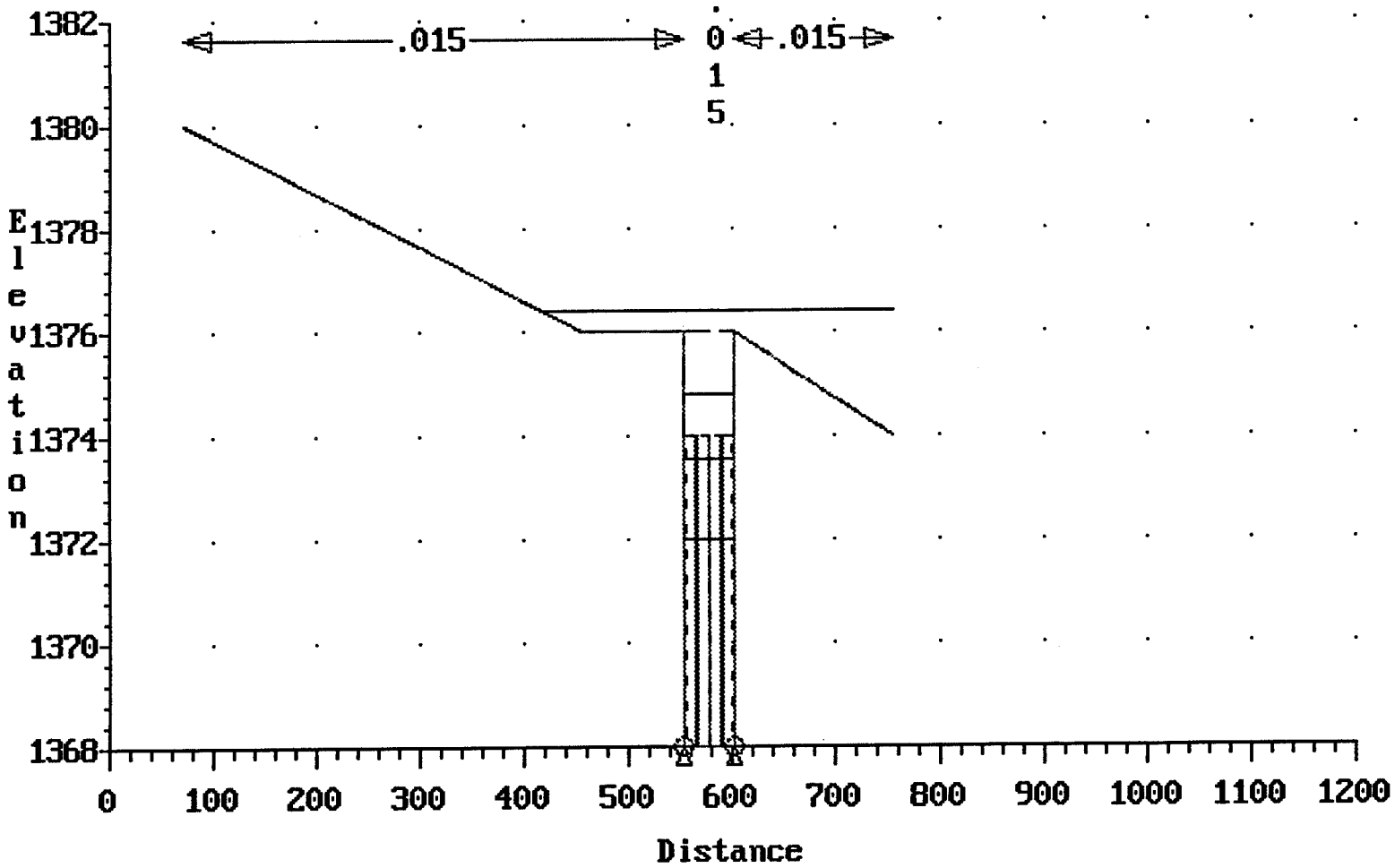
SCATTER WASH
CROSS-SECTIONS
Cross-section 148.600



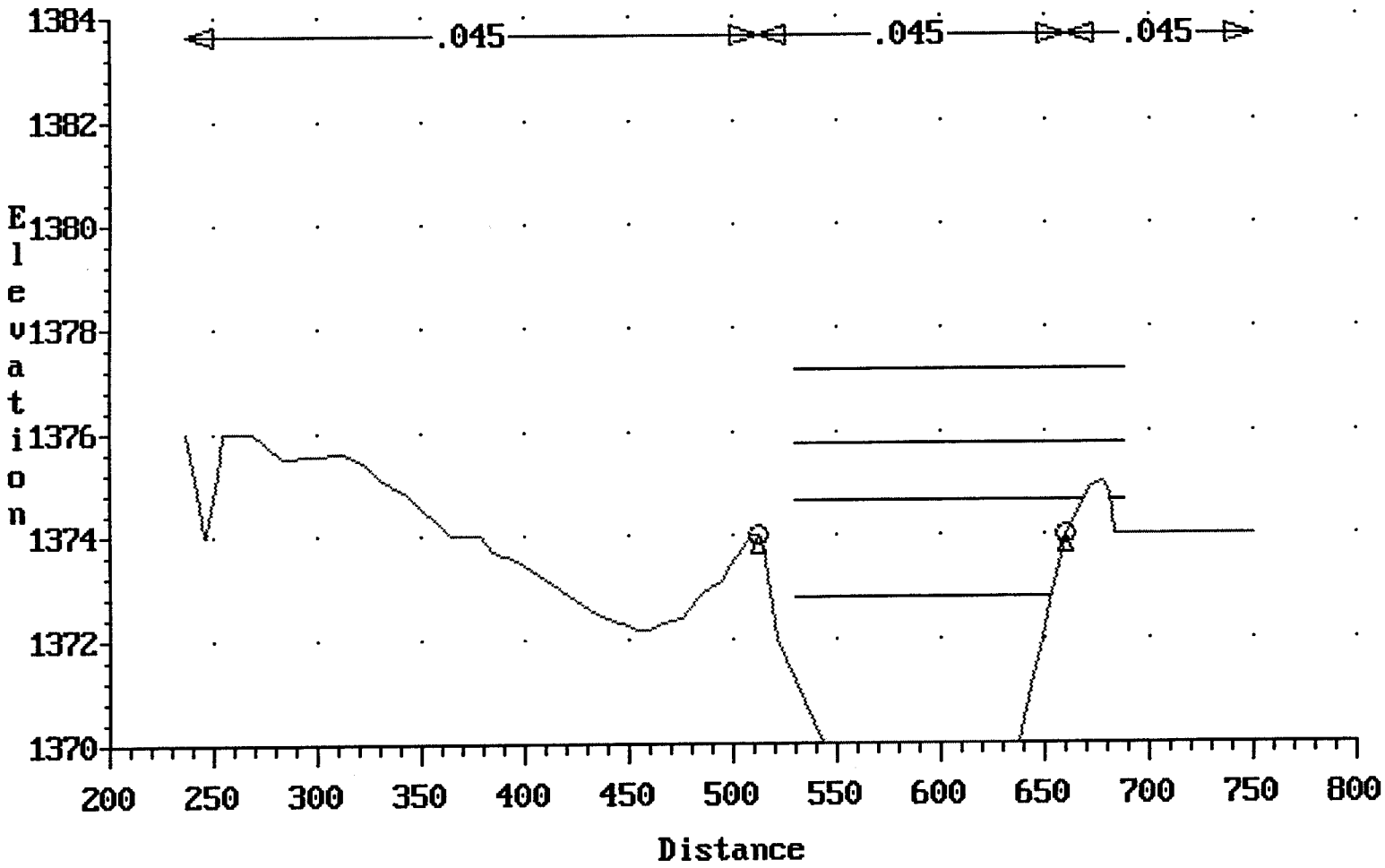
SCATTER WASH
CROSS-SECTIONS
Cross-section 152.100



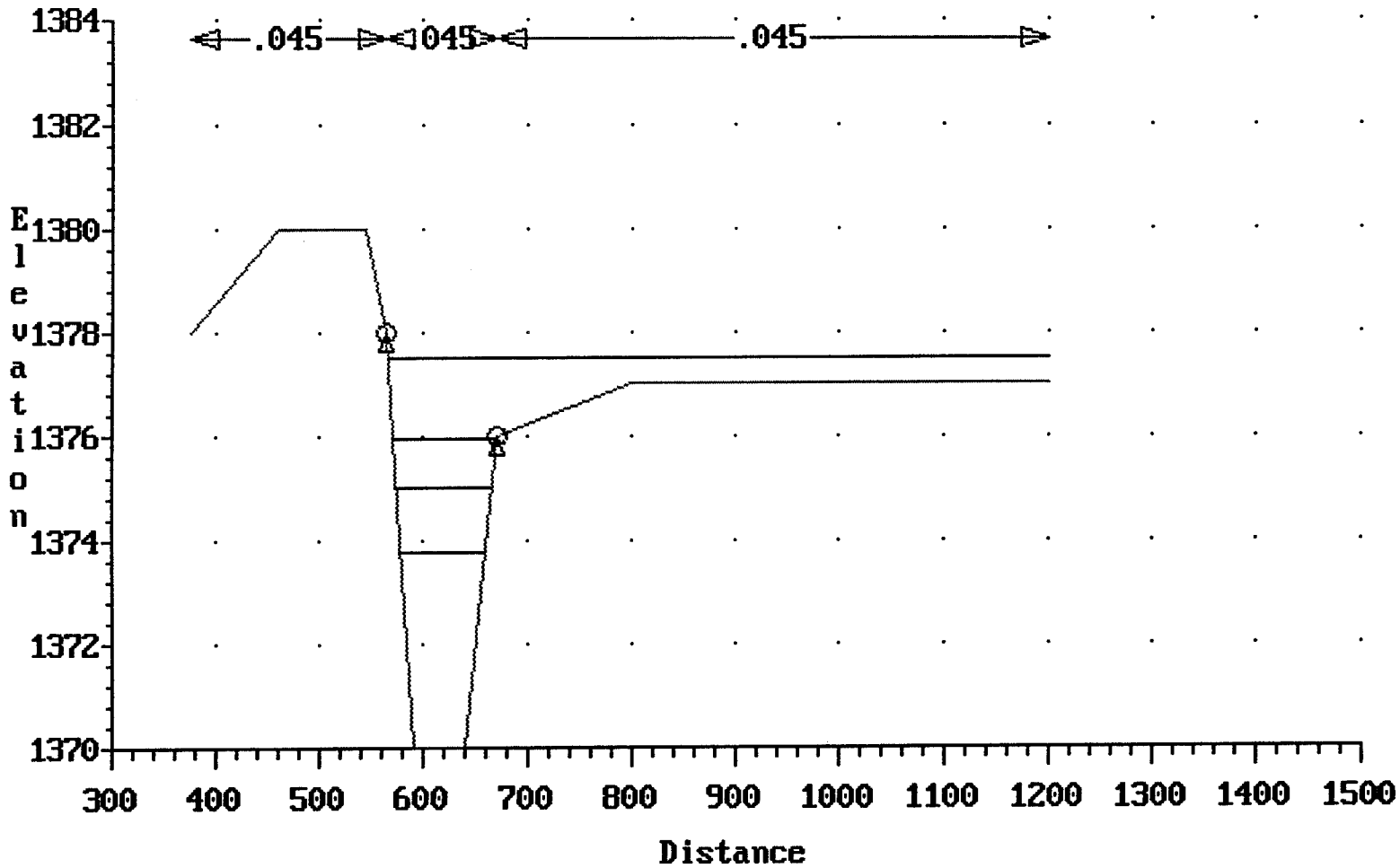
SCATTER WASH
CROSS-SECTIONS
Cross-section 152.800



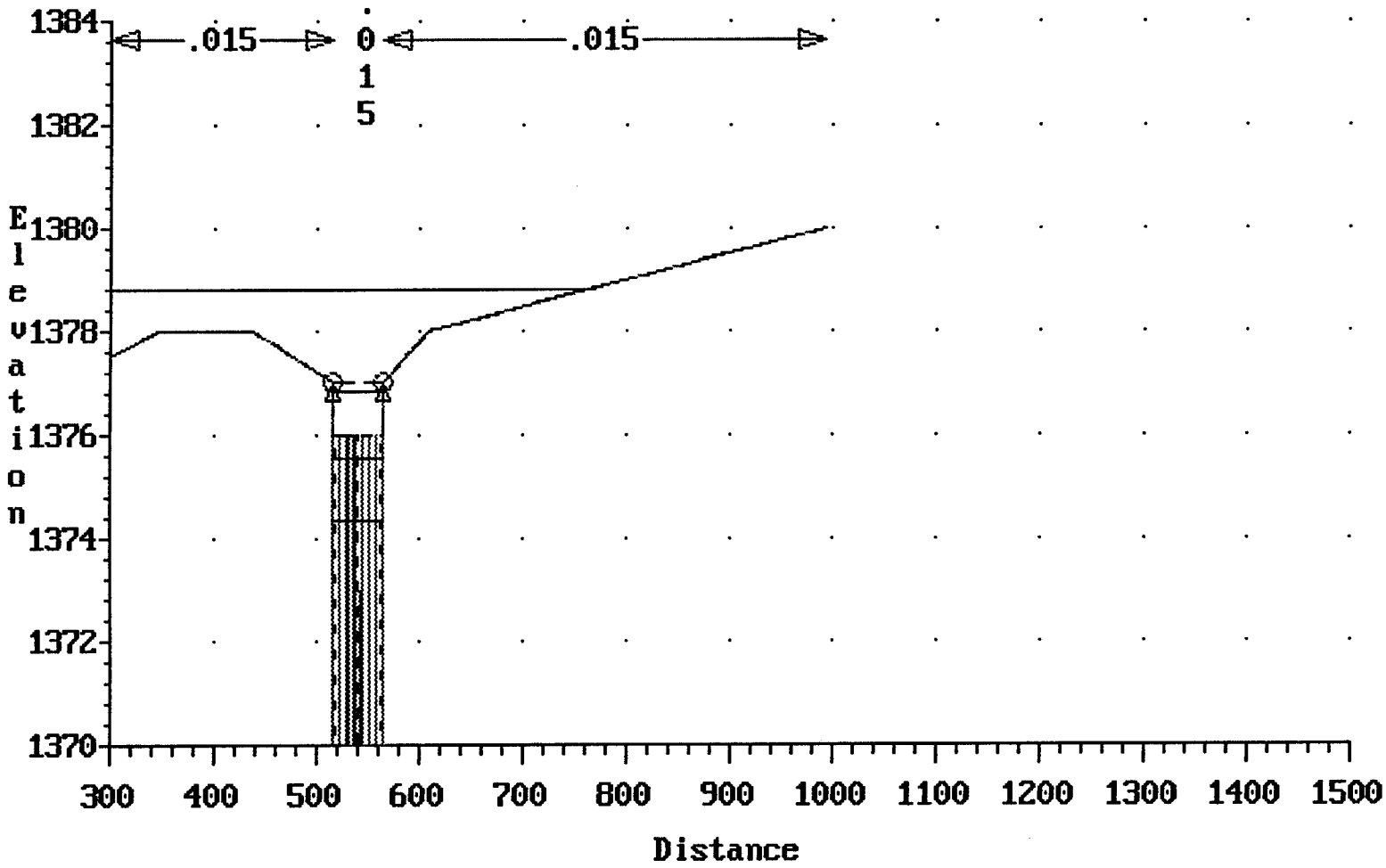
SCATTER WASH
CROSS-SECTIONS
Cross-section 153.100



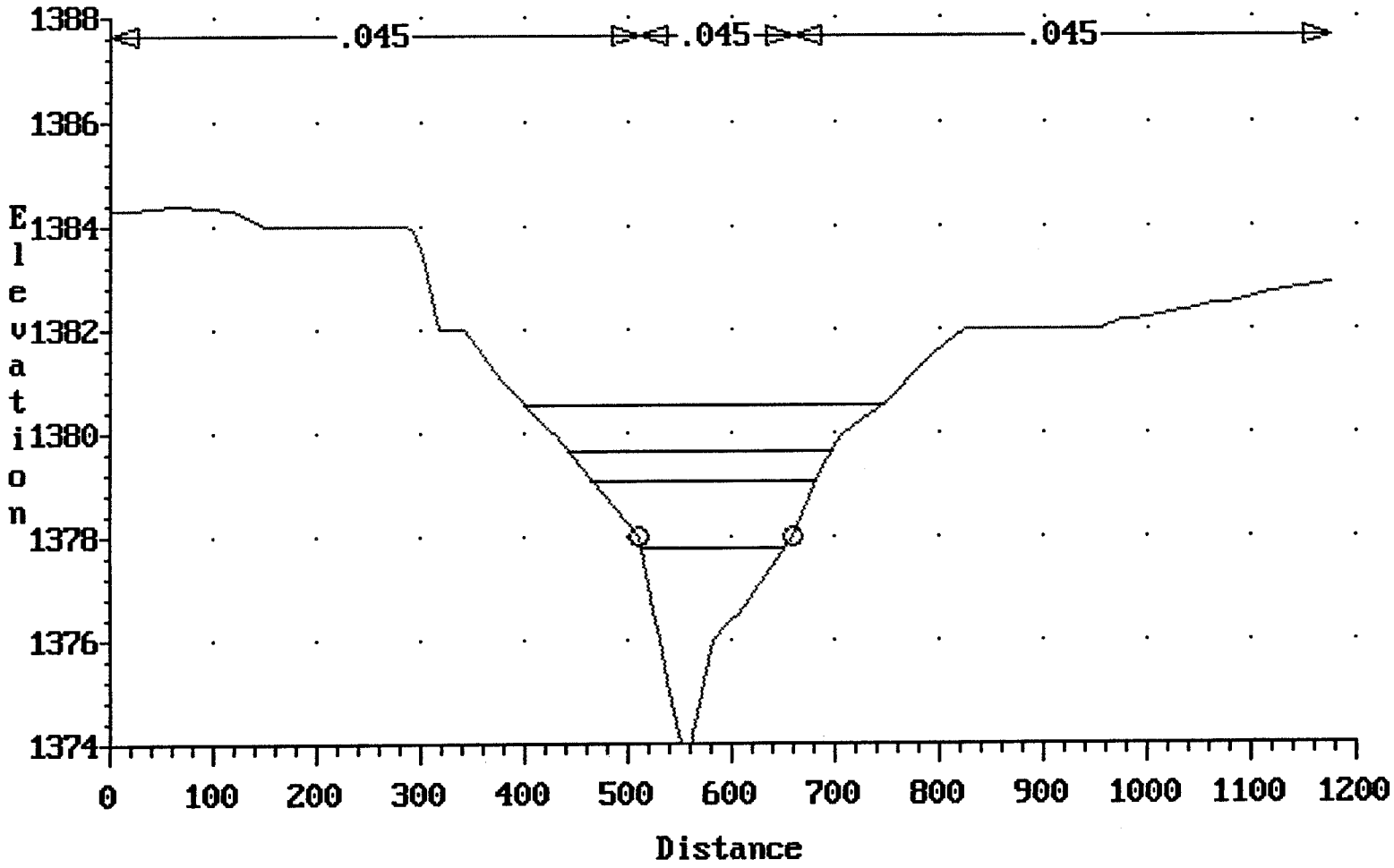
SCATTER WASH
CROSS-SECTIONS
Cross-section 154.900



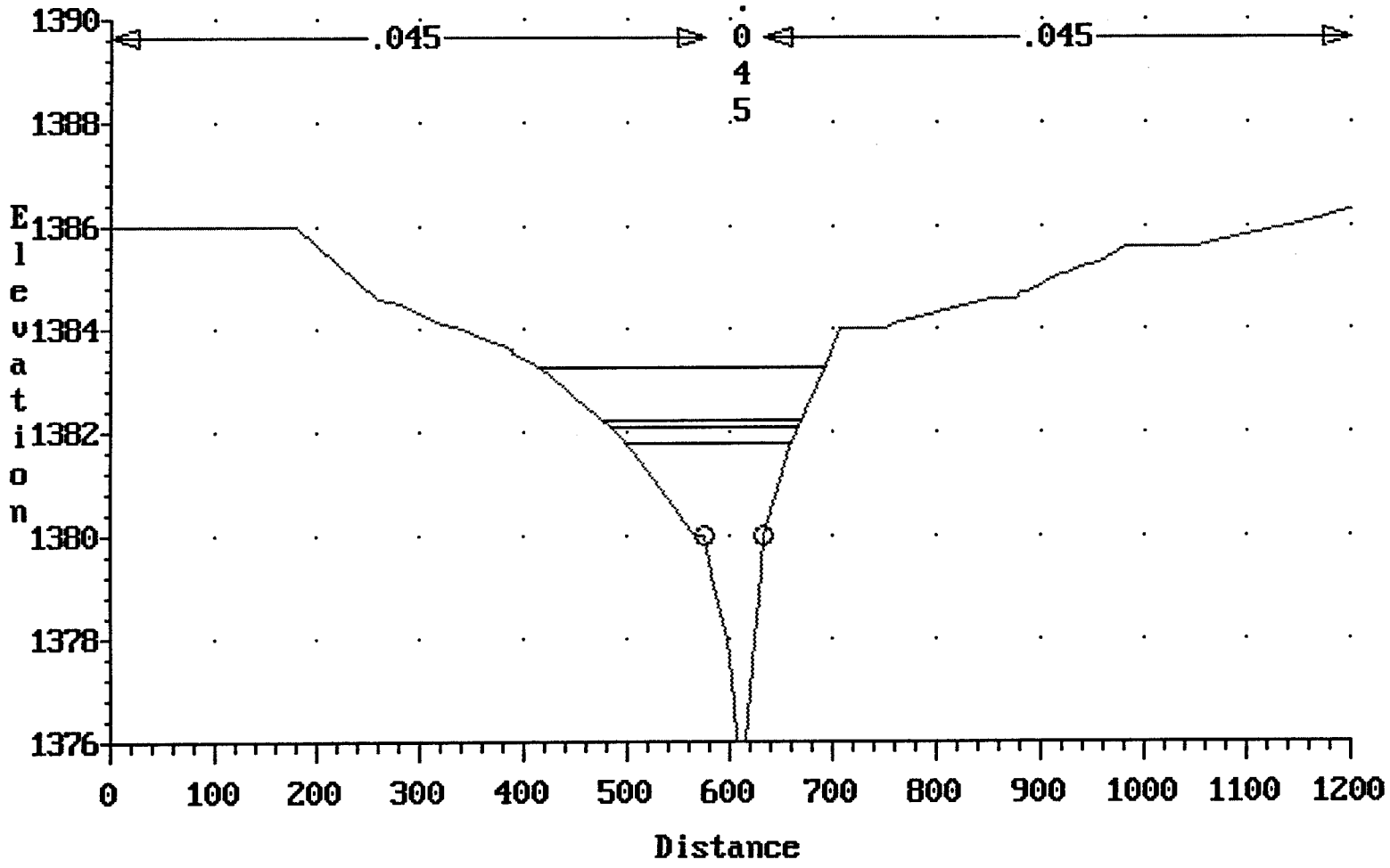
SCATTER WASH
CROSS-SECTIONS
Cross-section 156.800



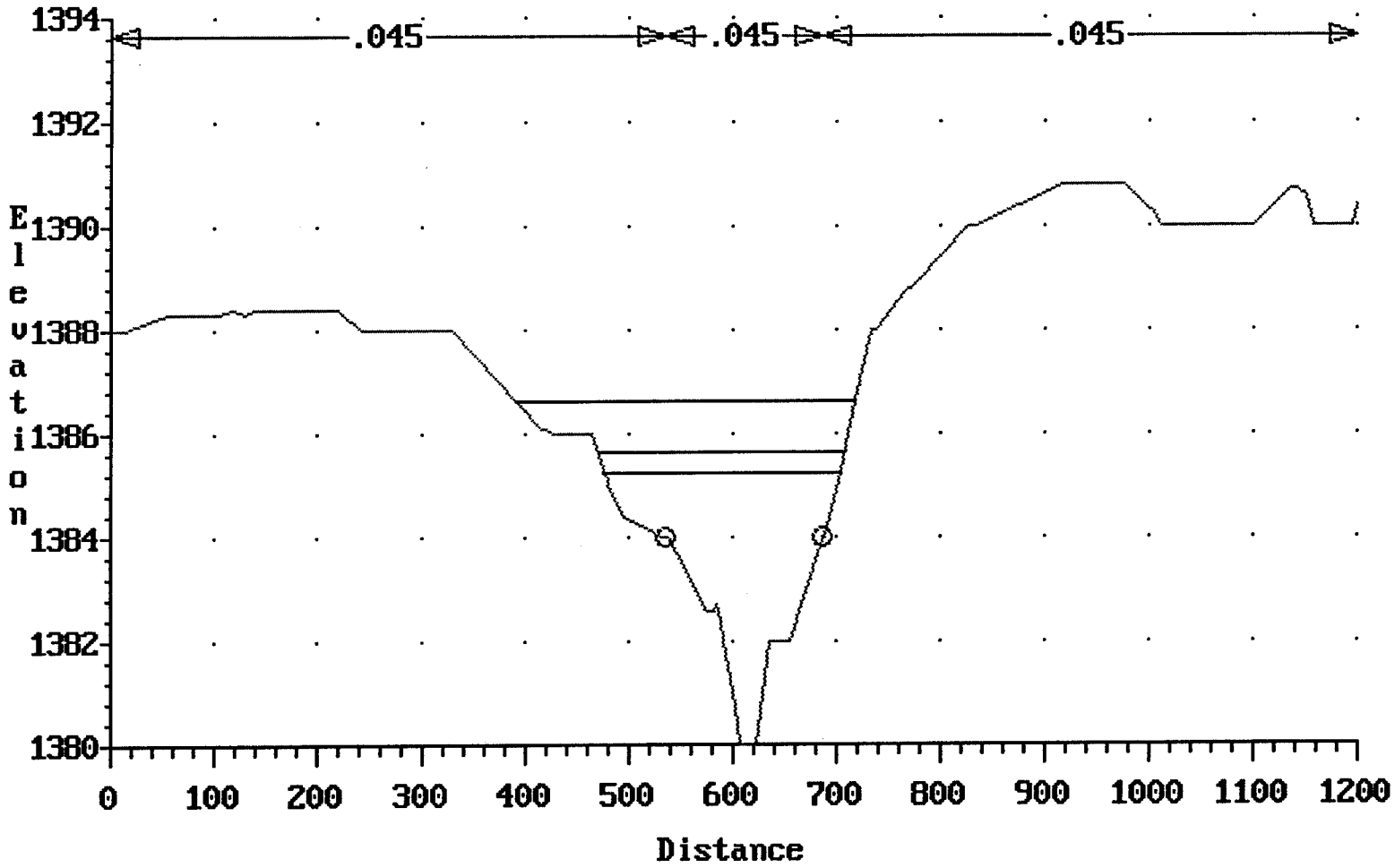
SCATTER WASH
CROSS-SECTIONS
Cross-section 162.700



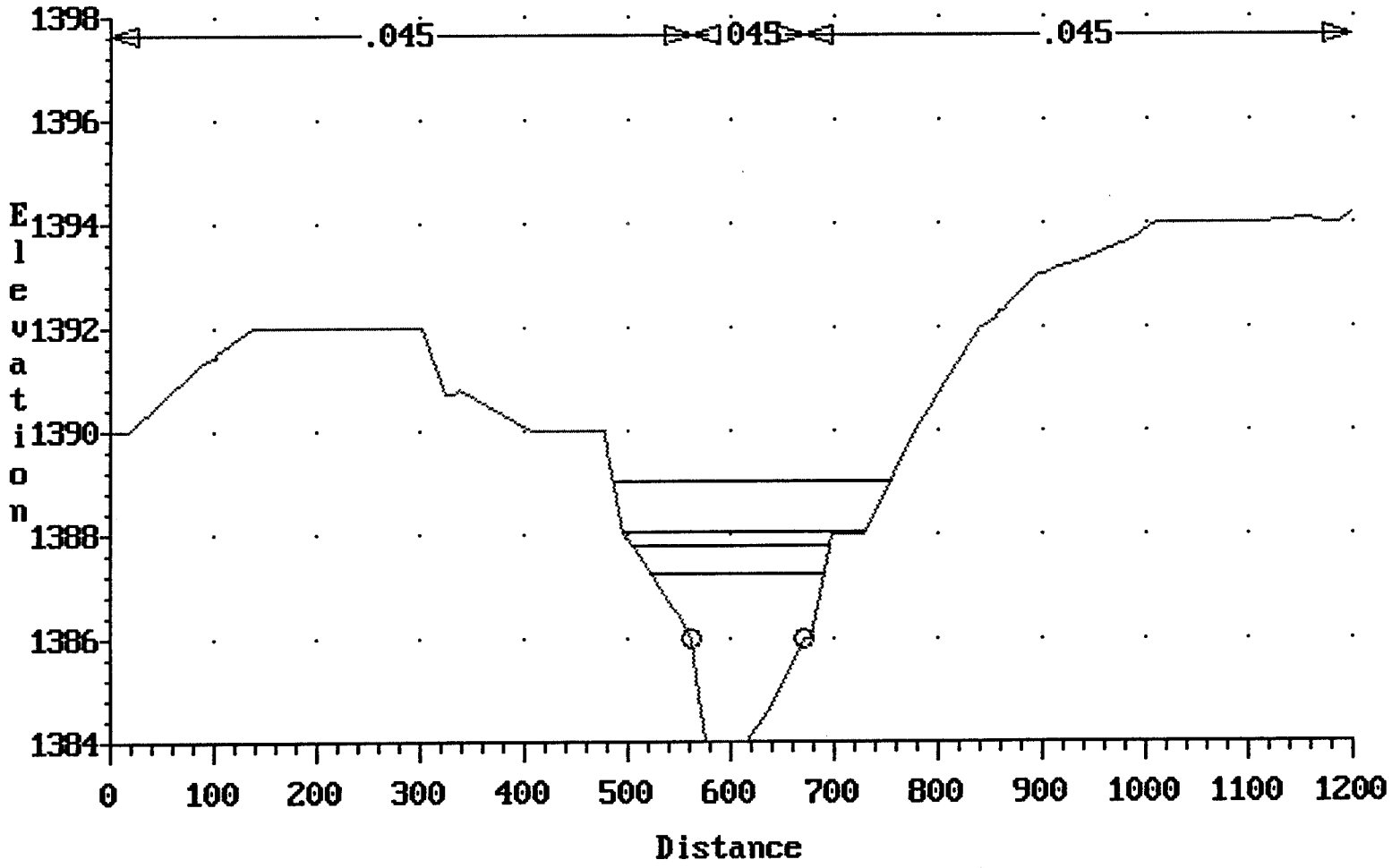
SCATTER WASH
CROSS-SECTIONS
Cross-section 167.700



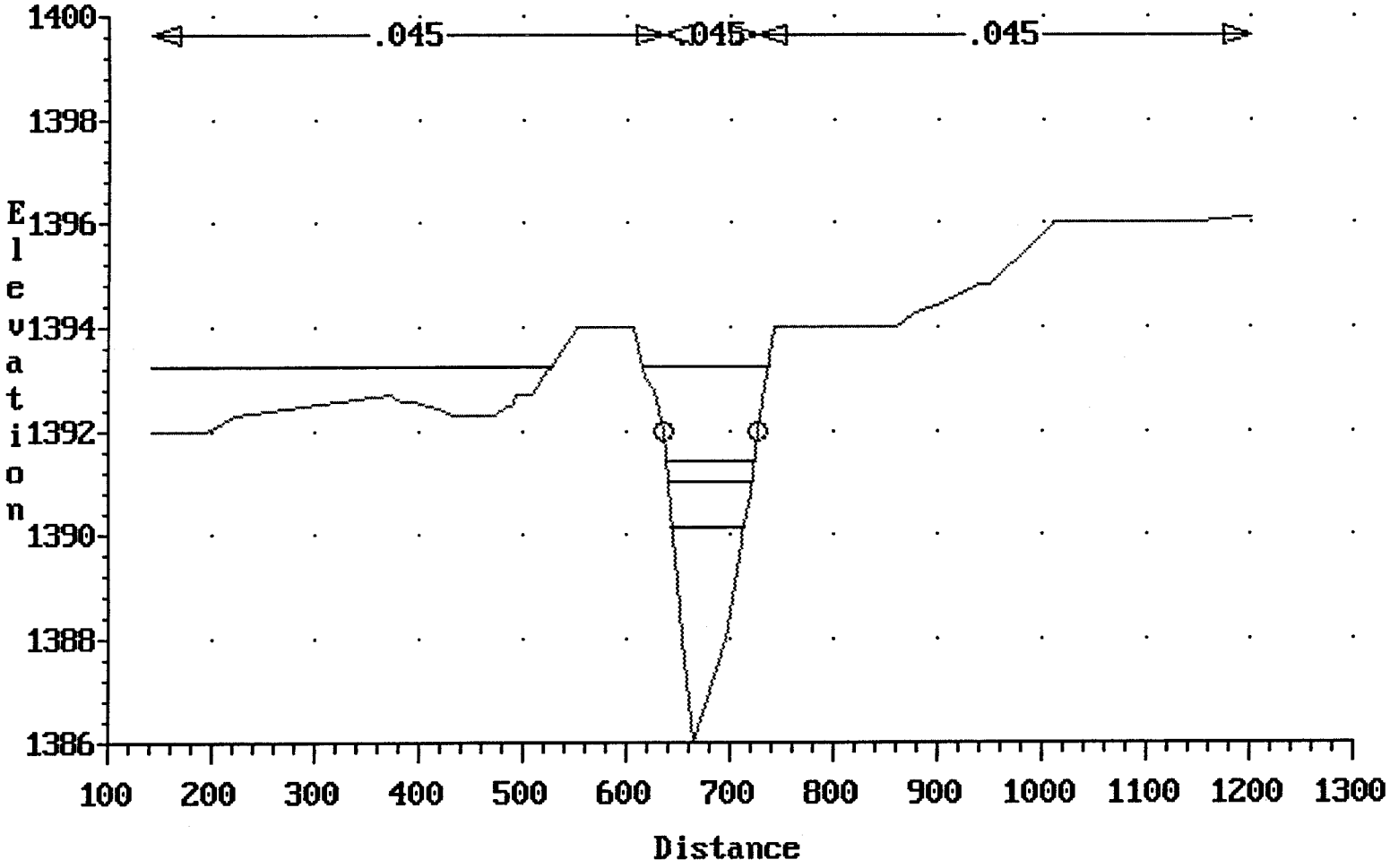
SCATTER WASH
CROSS-SECTIONS
Cross-section 172.700



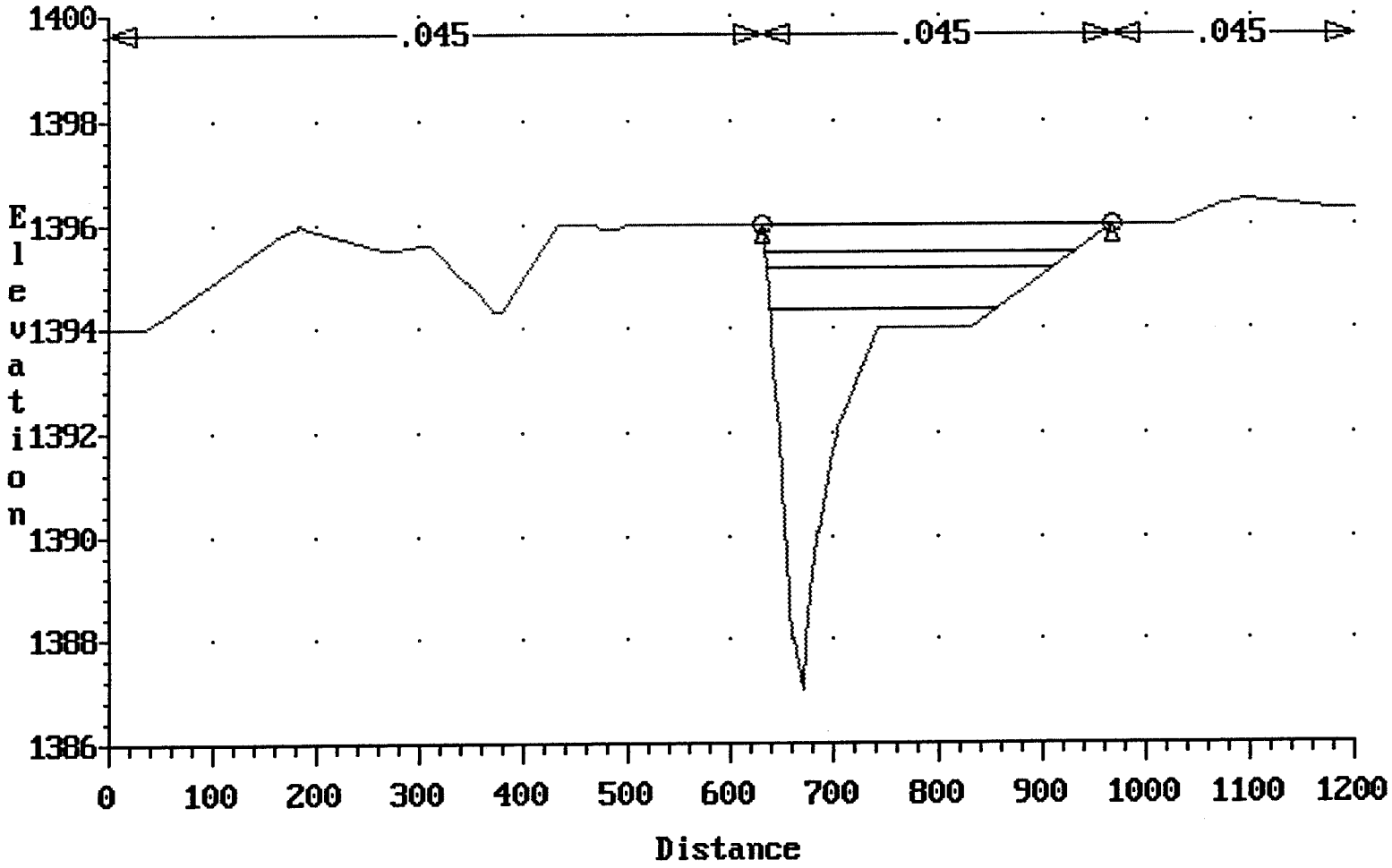
SCATTER WASH
CROSS-SECTIONS
Cross-section 177.700



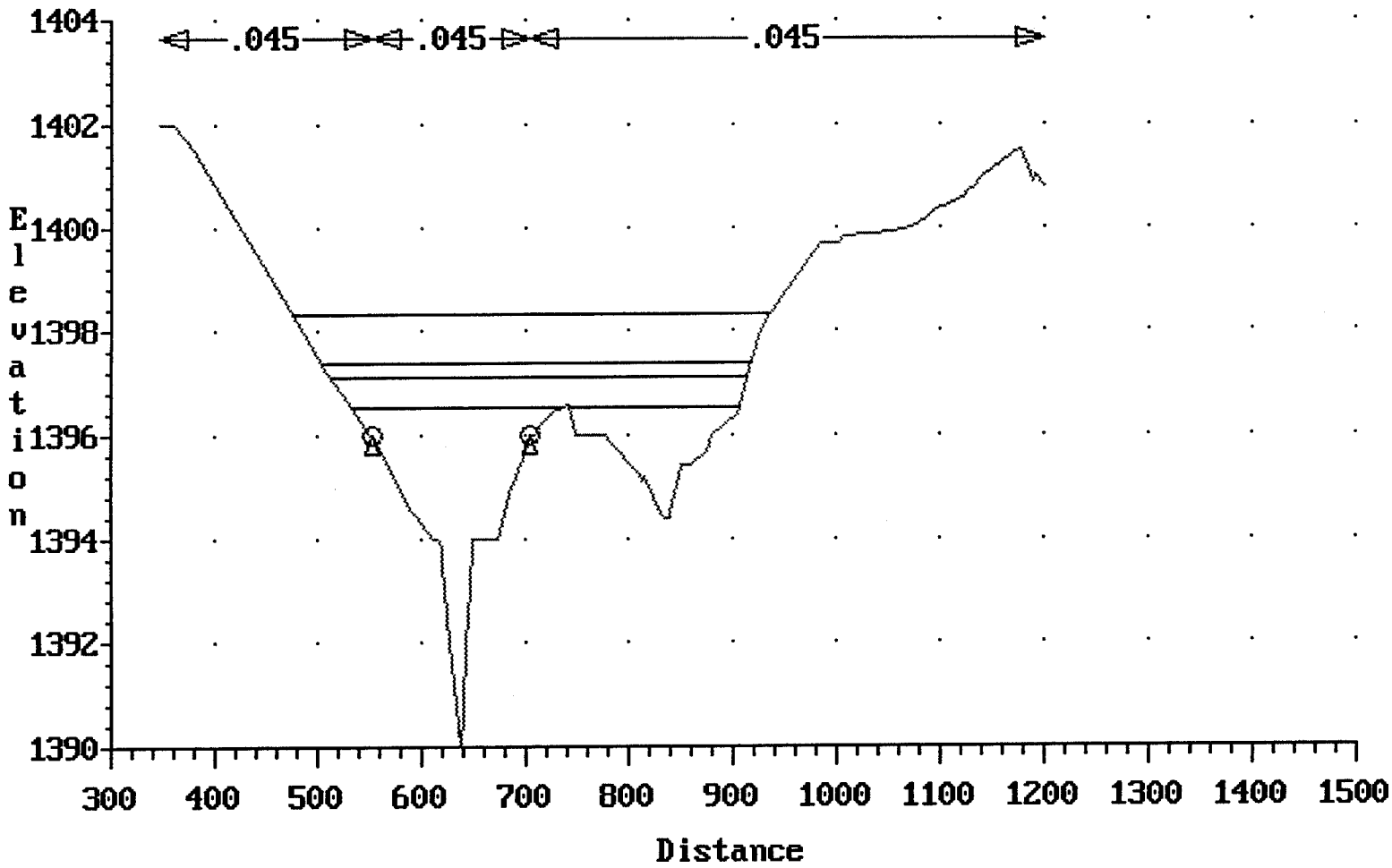
SCATTER WASH
CROSS-SECTIONS
Cross-section 181.200



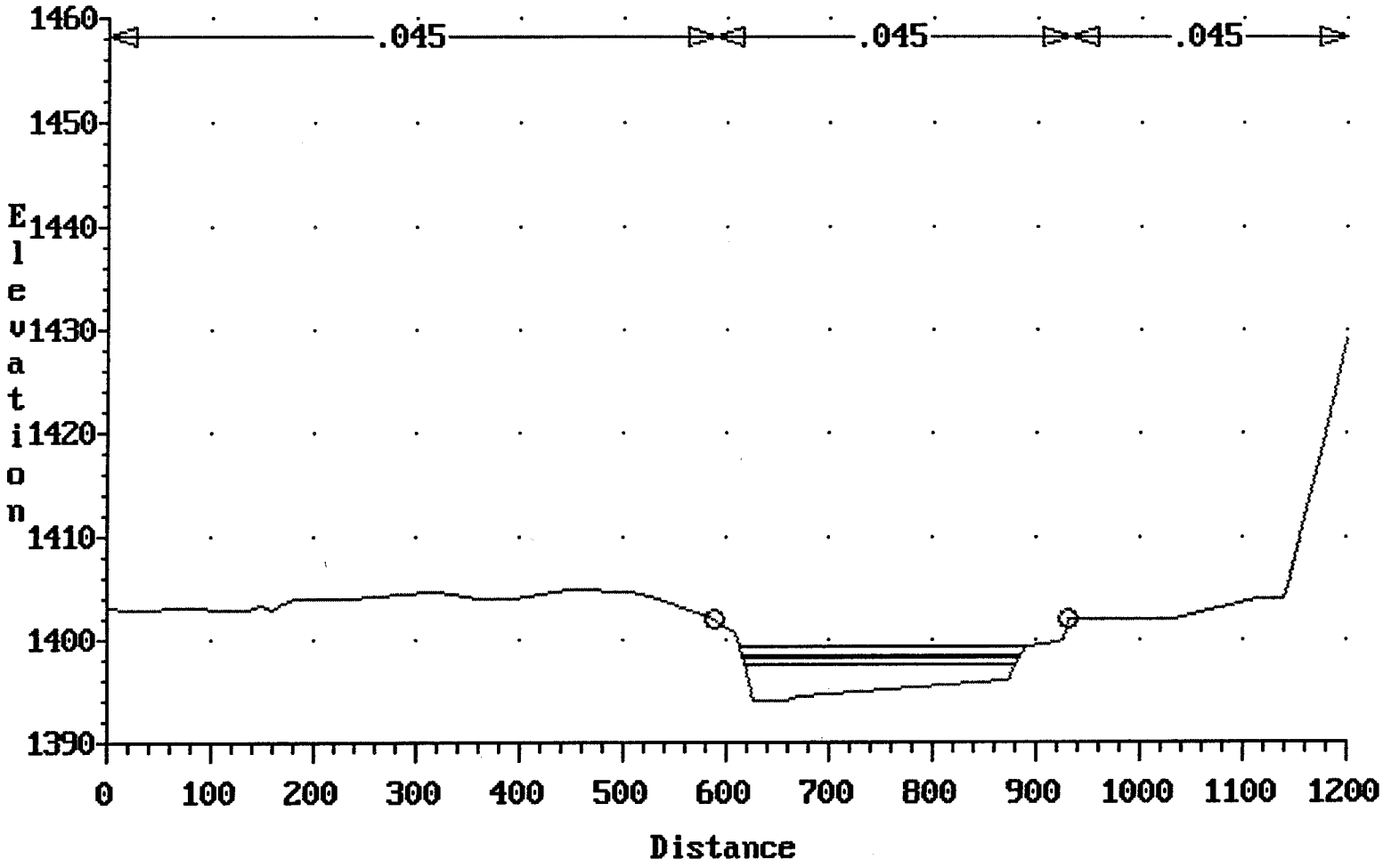
SCATTER WASH
CROSS-SECTIONS
Cross-section 184.000



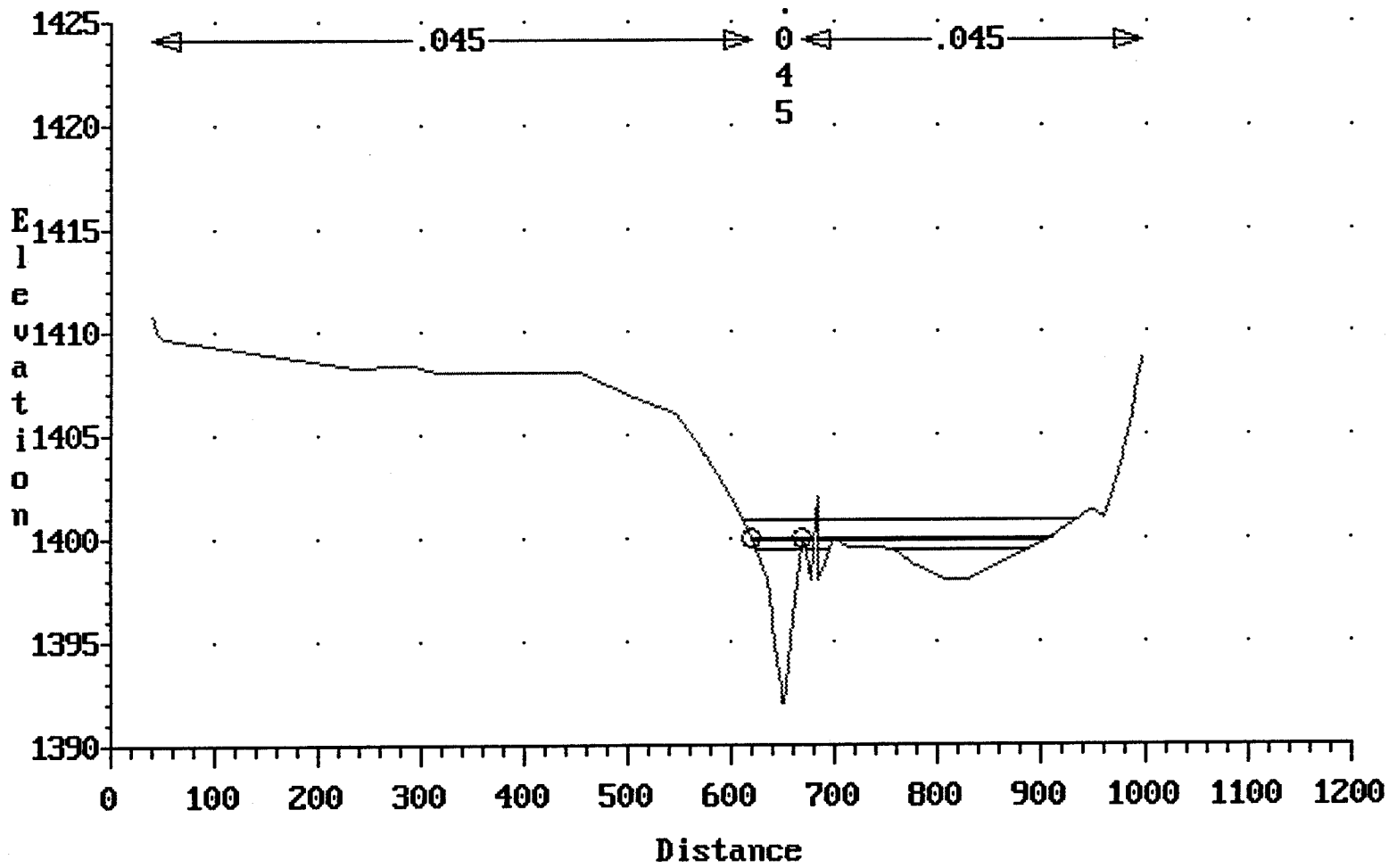
SCATTER WASH
CROSS-SECTIONS
Cross-section 189.000



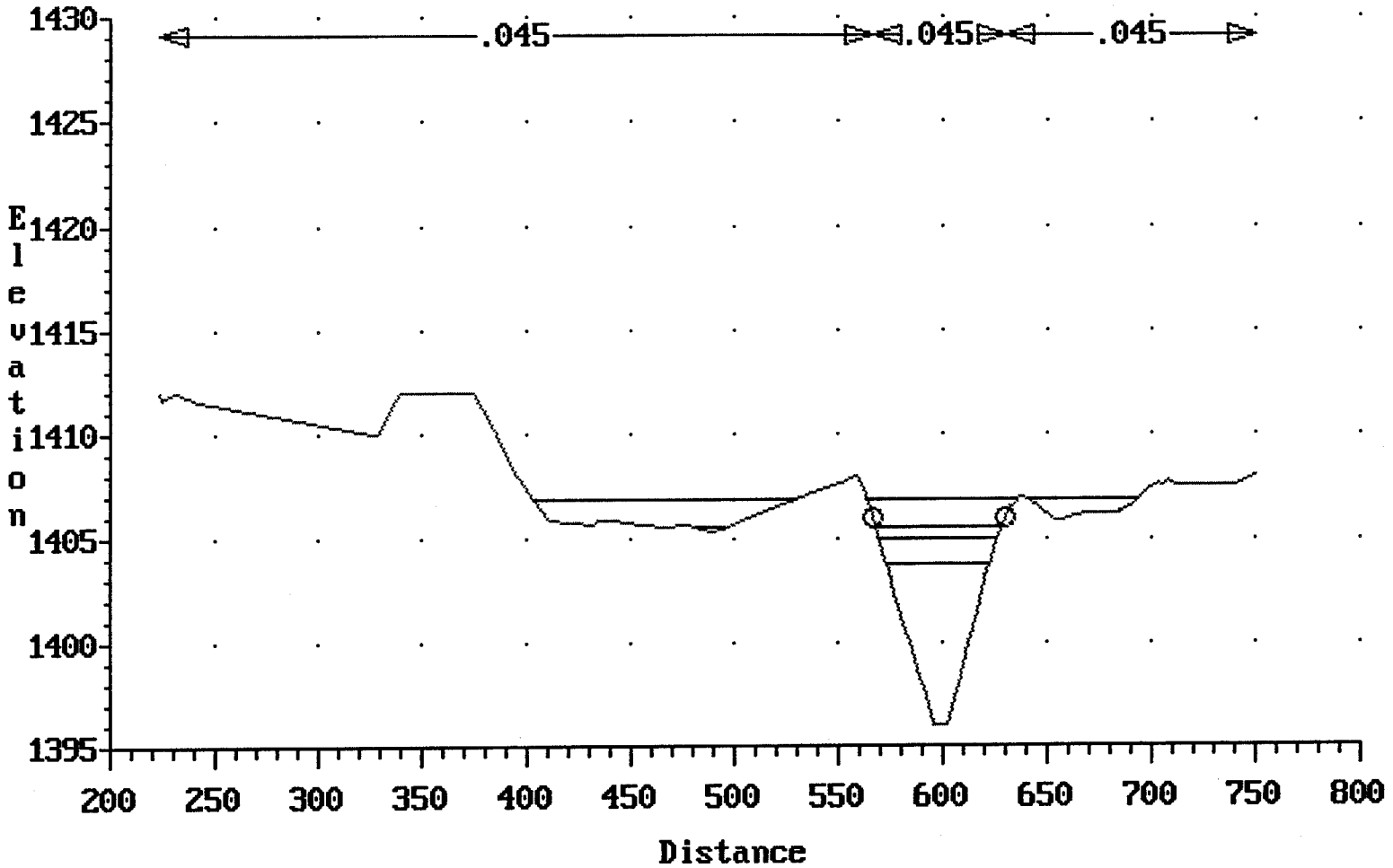
SCATTER WASH
CROSS-SECTIONS
Cross-section 194.000



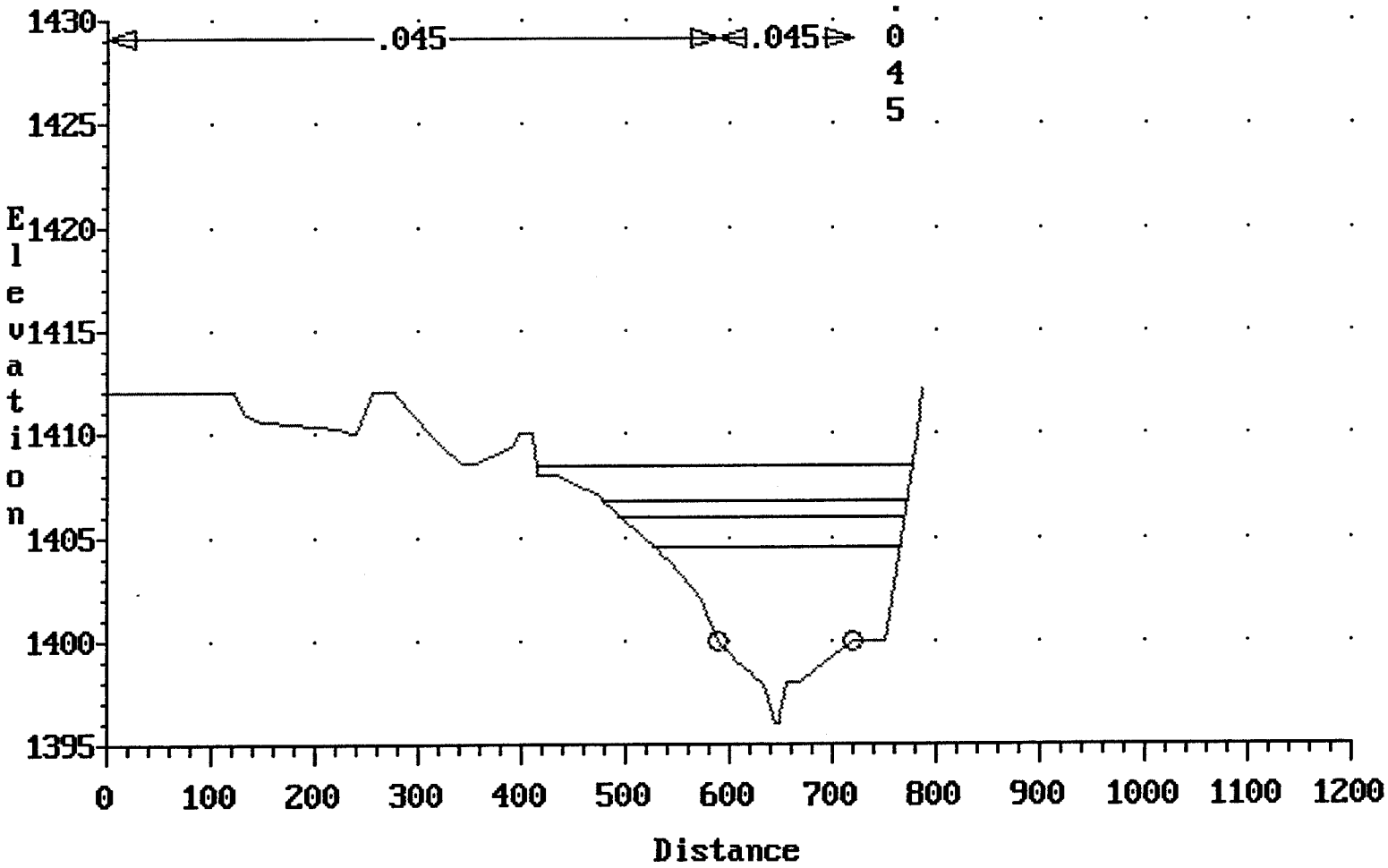
SCATTER WASH
CROSS-SECTIONS
Cross-section 199.000



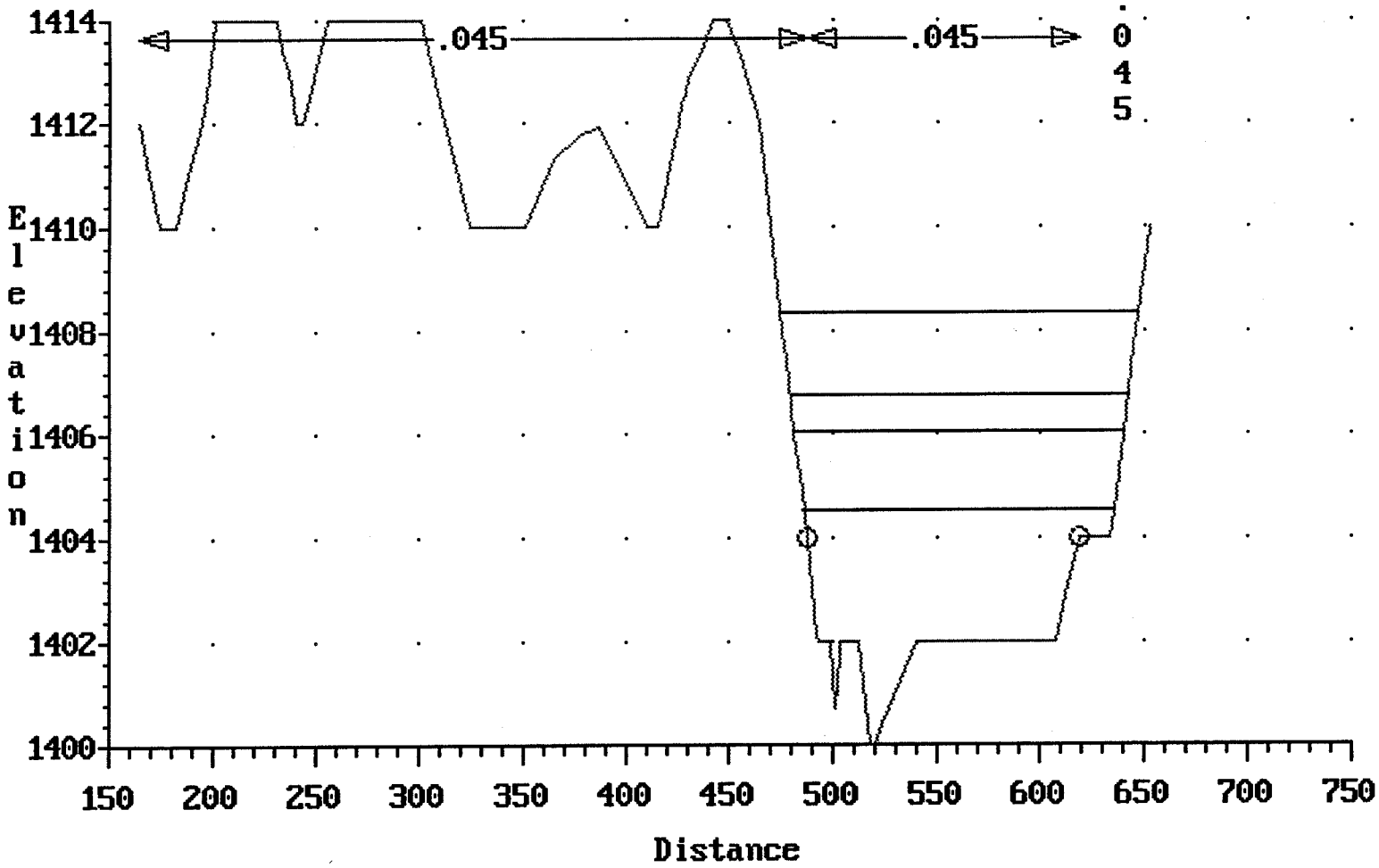
SCATTER WASH
CROSS-SECTIONS
Cross-section 204.500



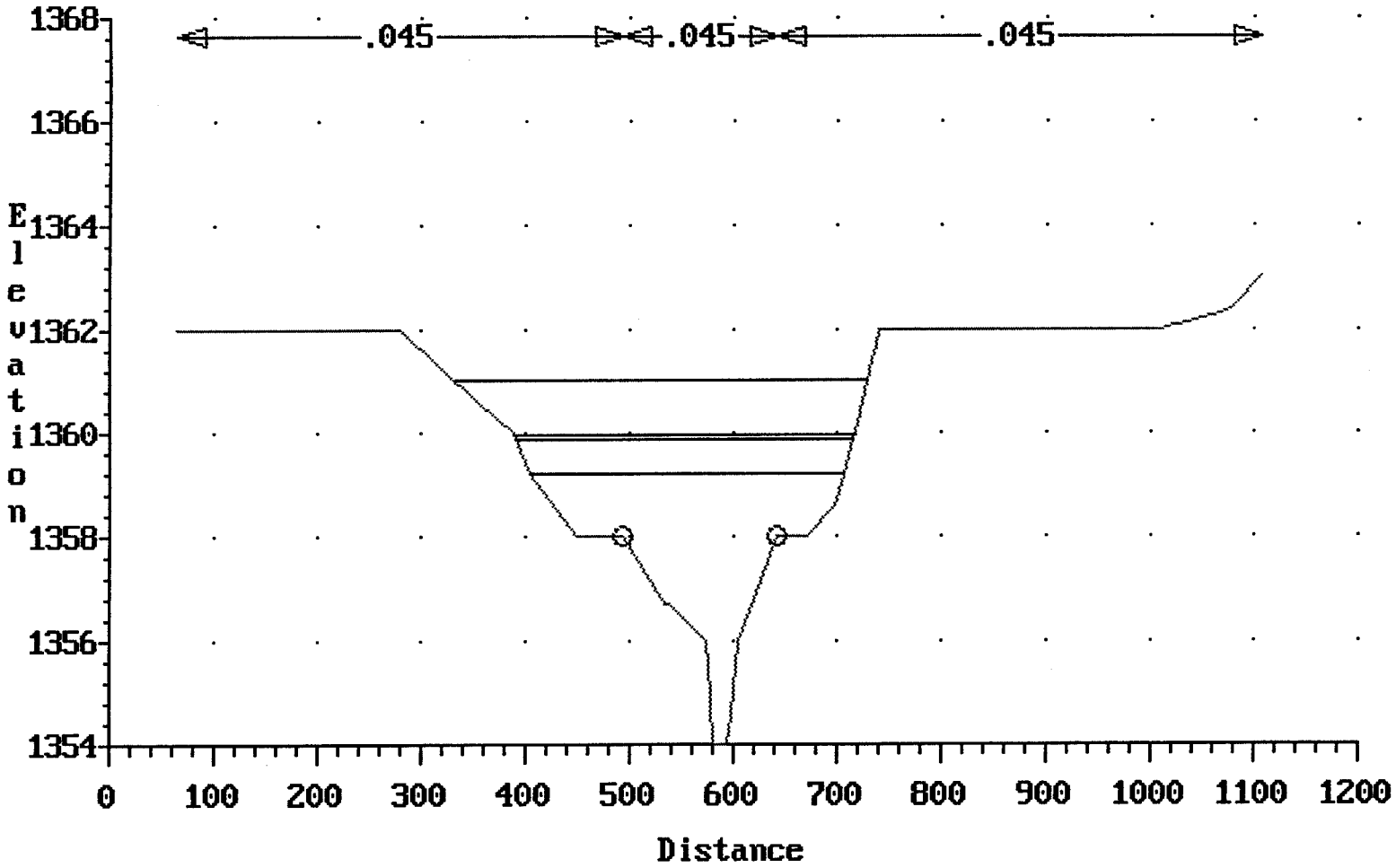
SCATTER WASH
CROSS-SECTIONS
Cross-section 205.100



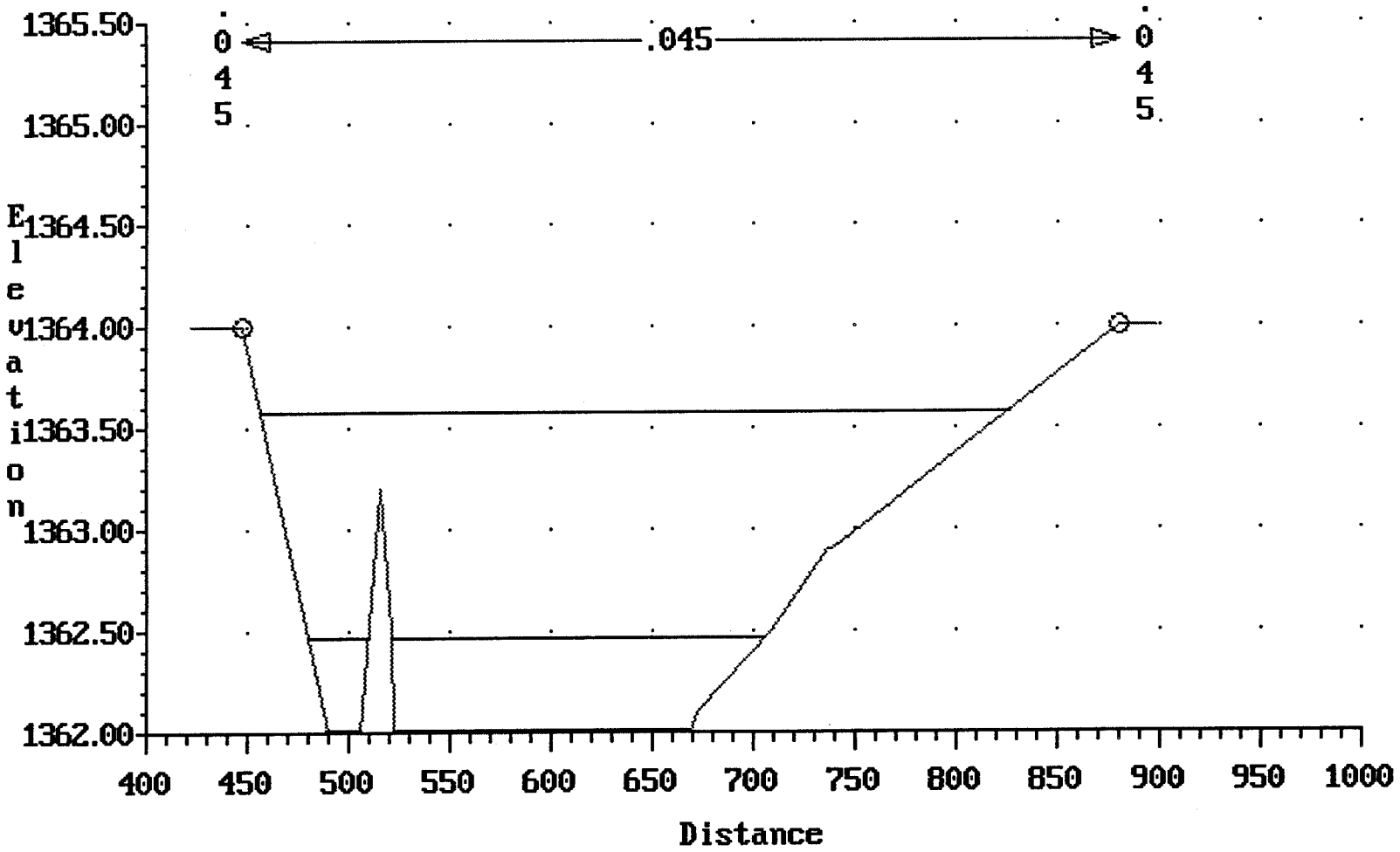
SCATTER WASH
CROSS-SECTIONS
Cross-section 208.000



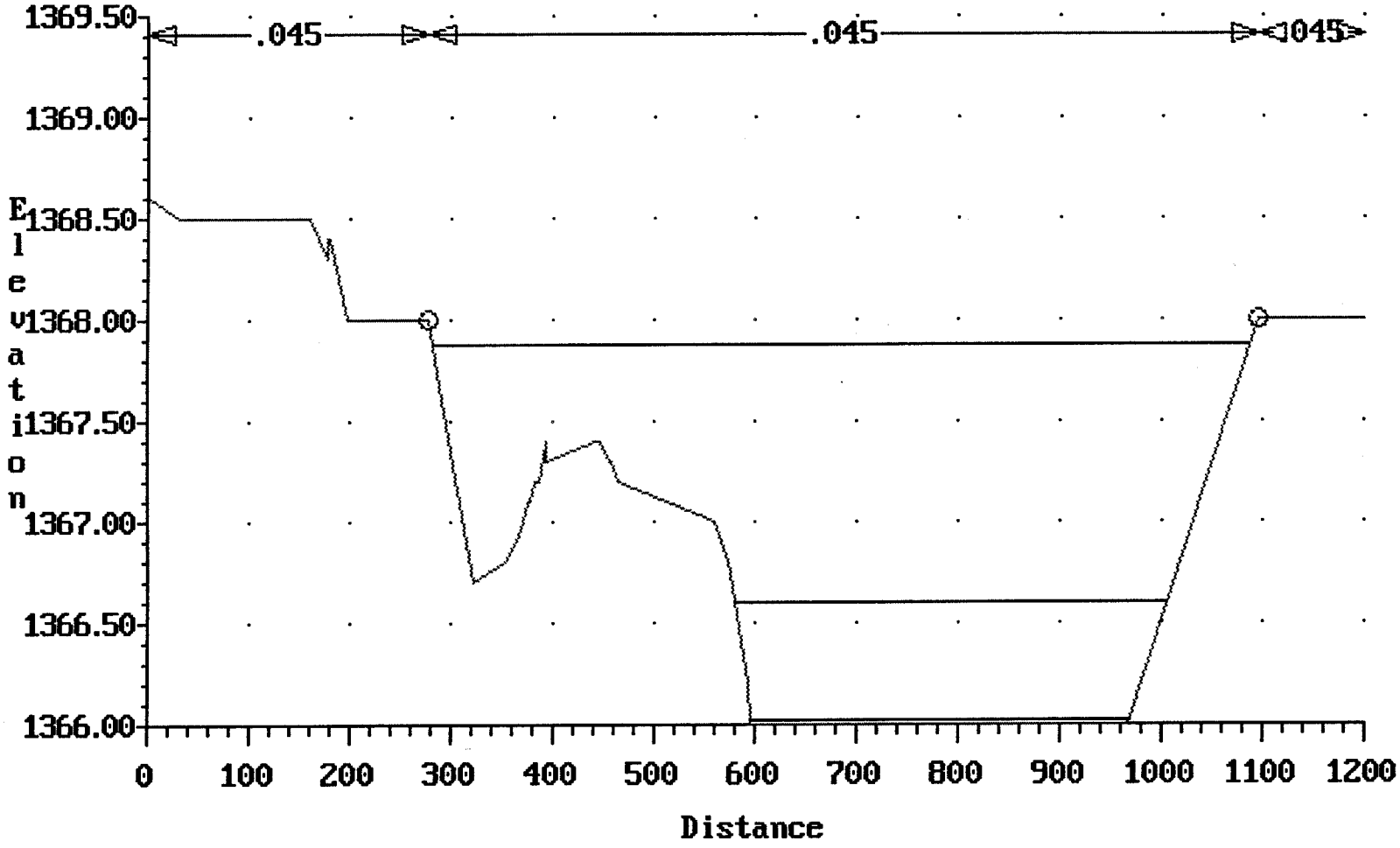
SCATTER WASH
CROSS-SECTIONS
Cross-section -123.700



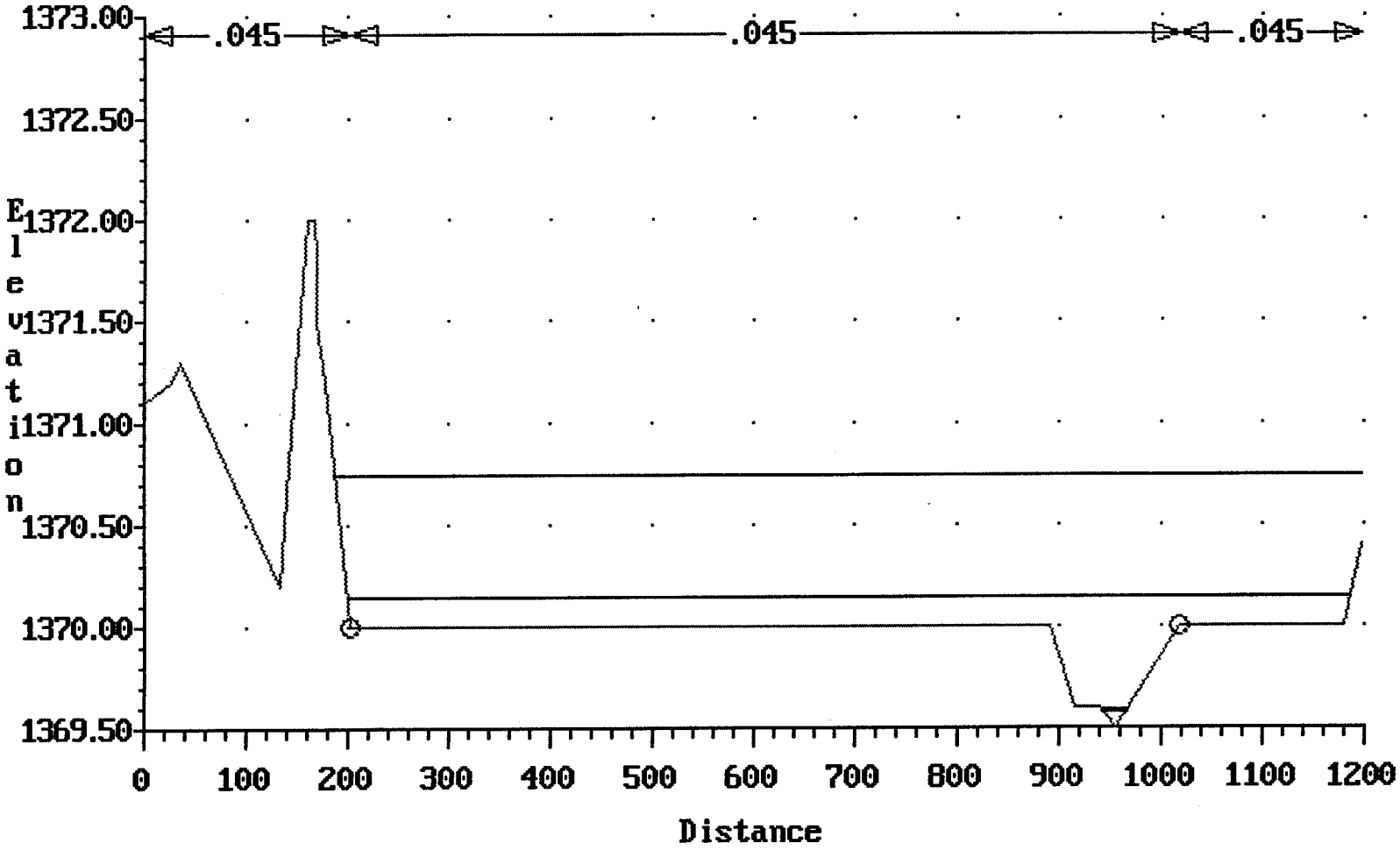
SCATTER WASH
CROSS-SECTIONS
Cross-section 305.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 310.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 315.000



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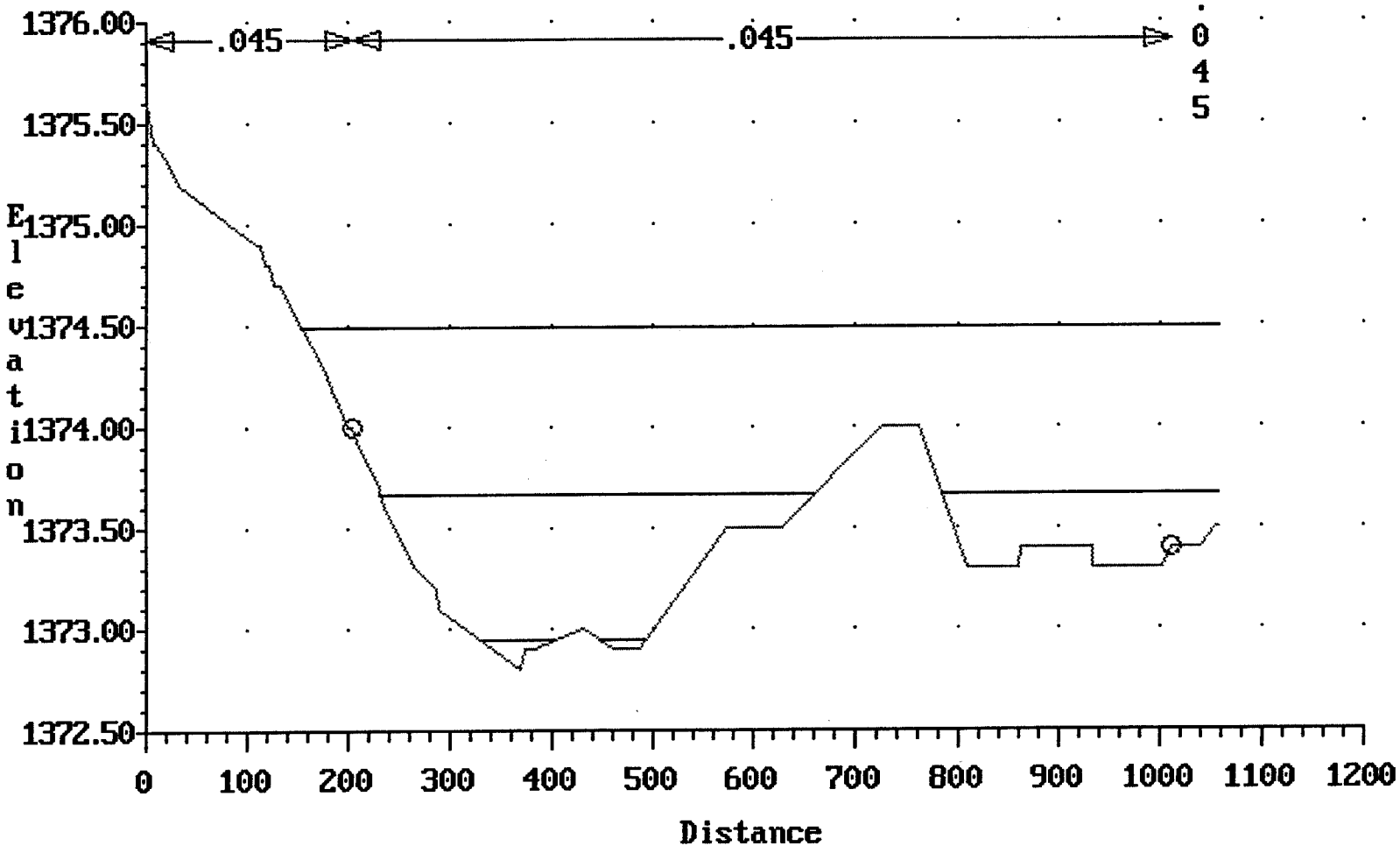
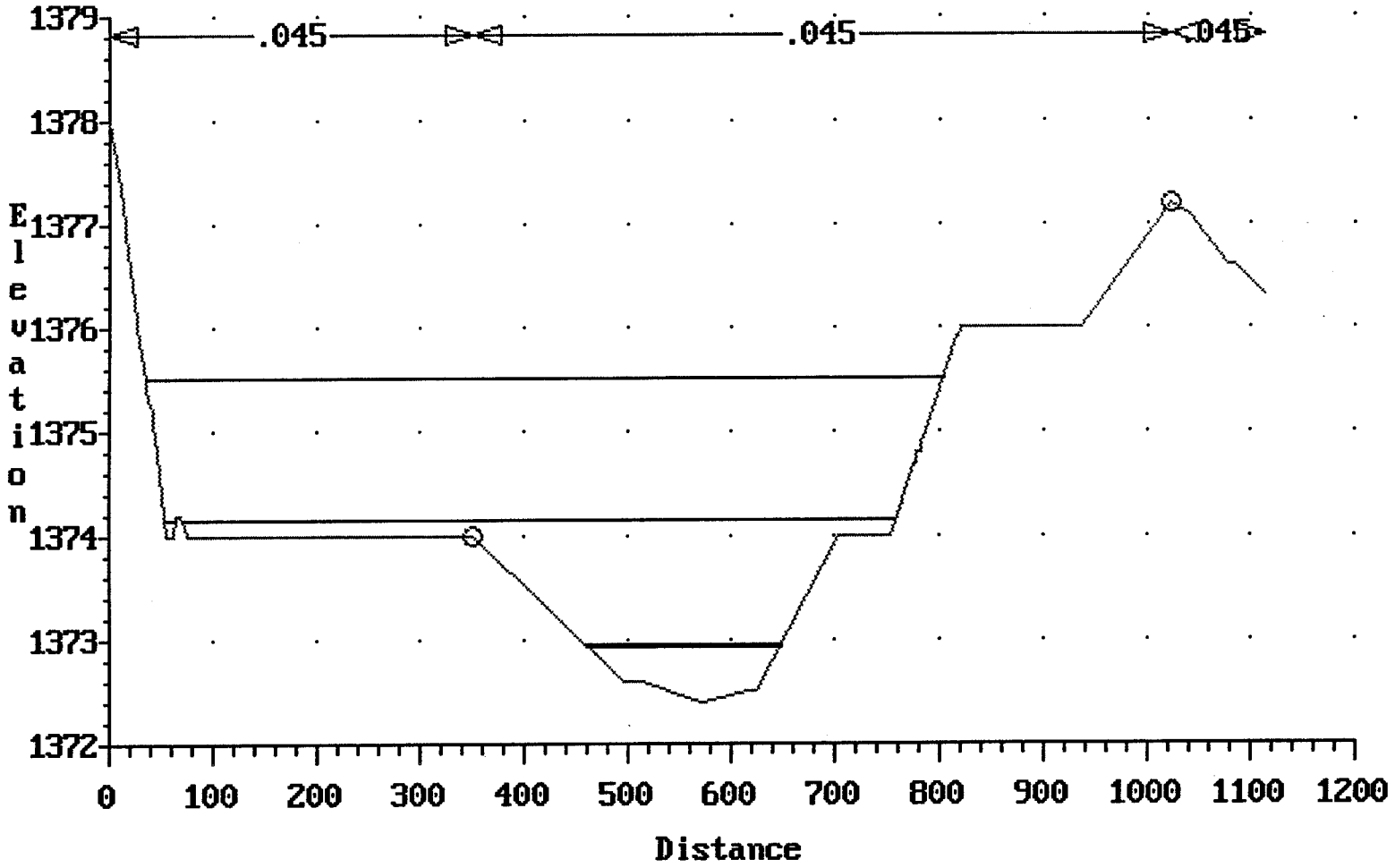
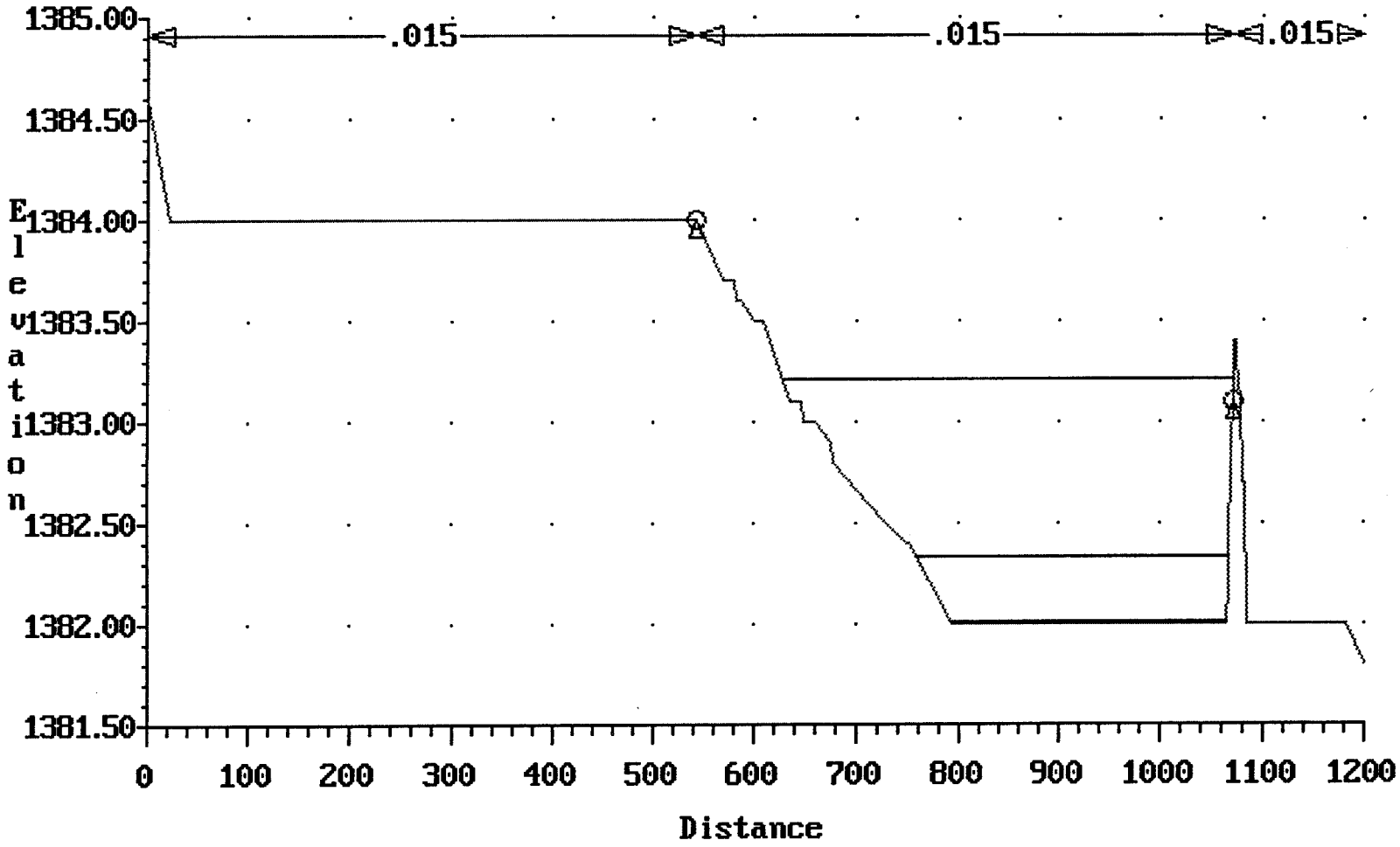
CROSS-SECTIONS
Cross-section 320.000



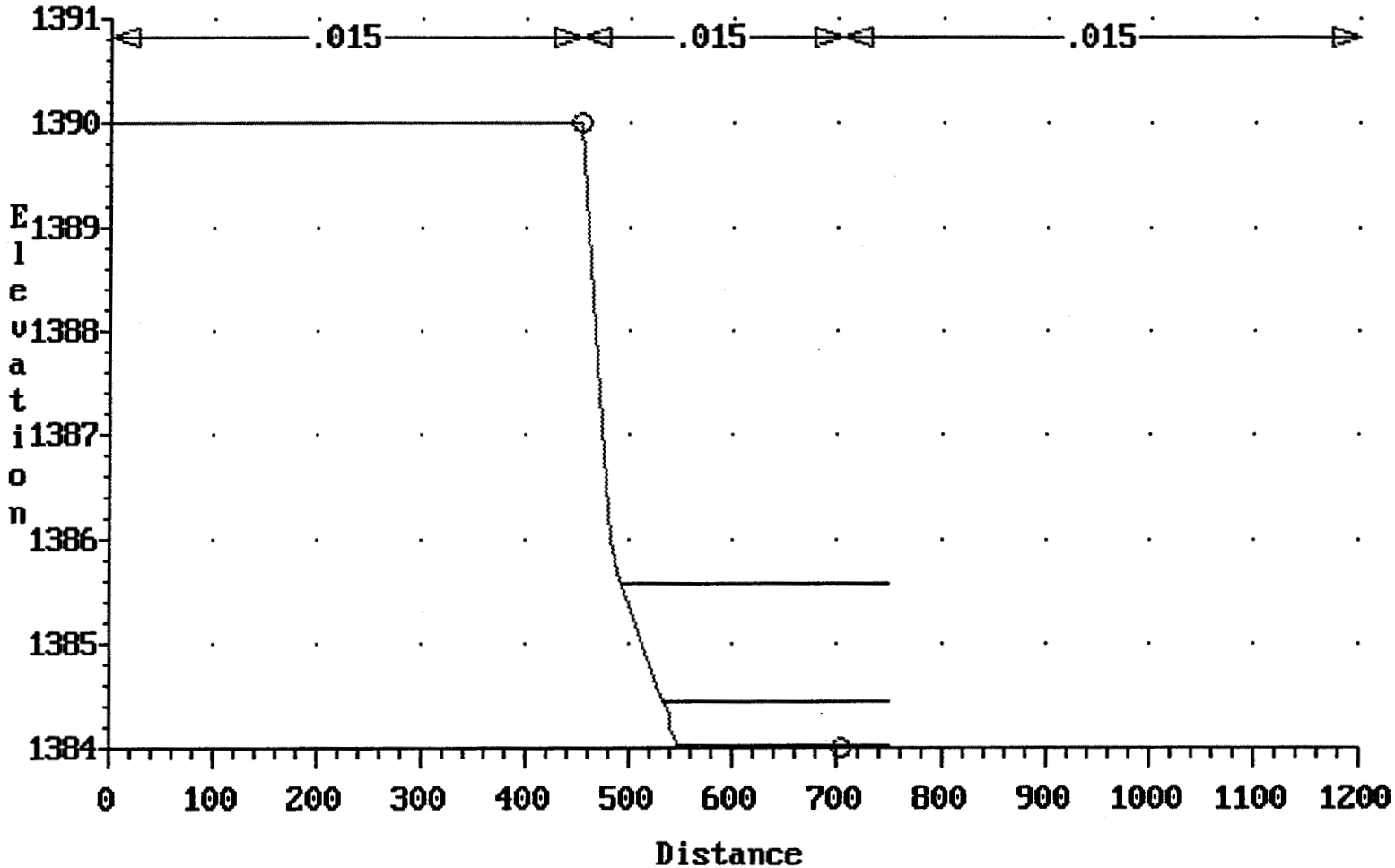
SCATTER WASH
CROSS-SECTIONS
Cross-section 325.000



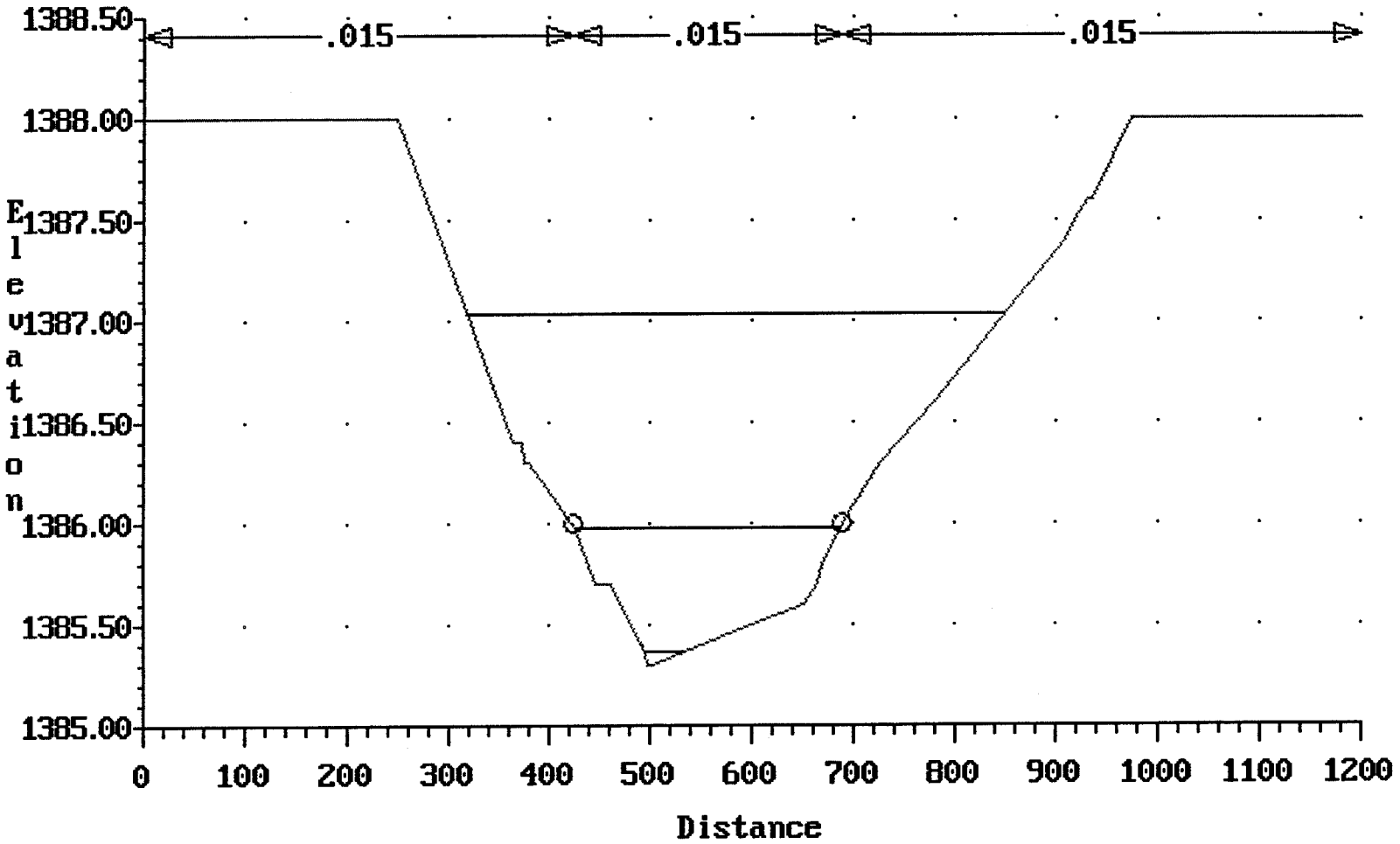
SCATTER WASH
CROSS-SECTIONS
Cross-section 330.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 335.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 340.000



SCATTER WASH
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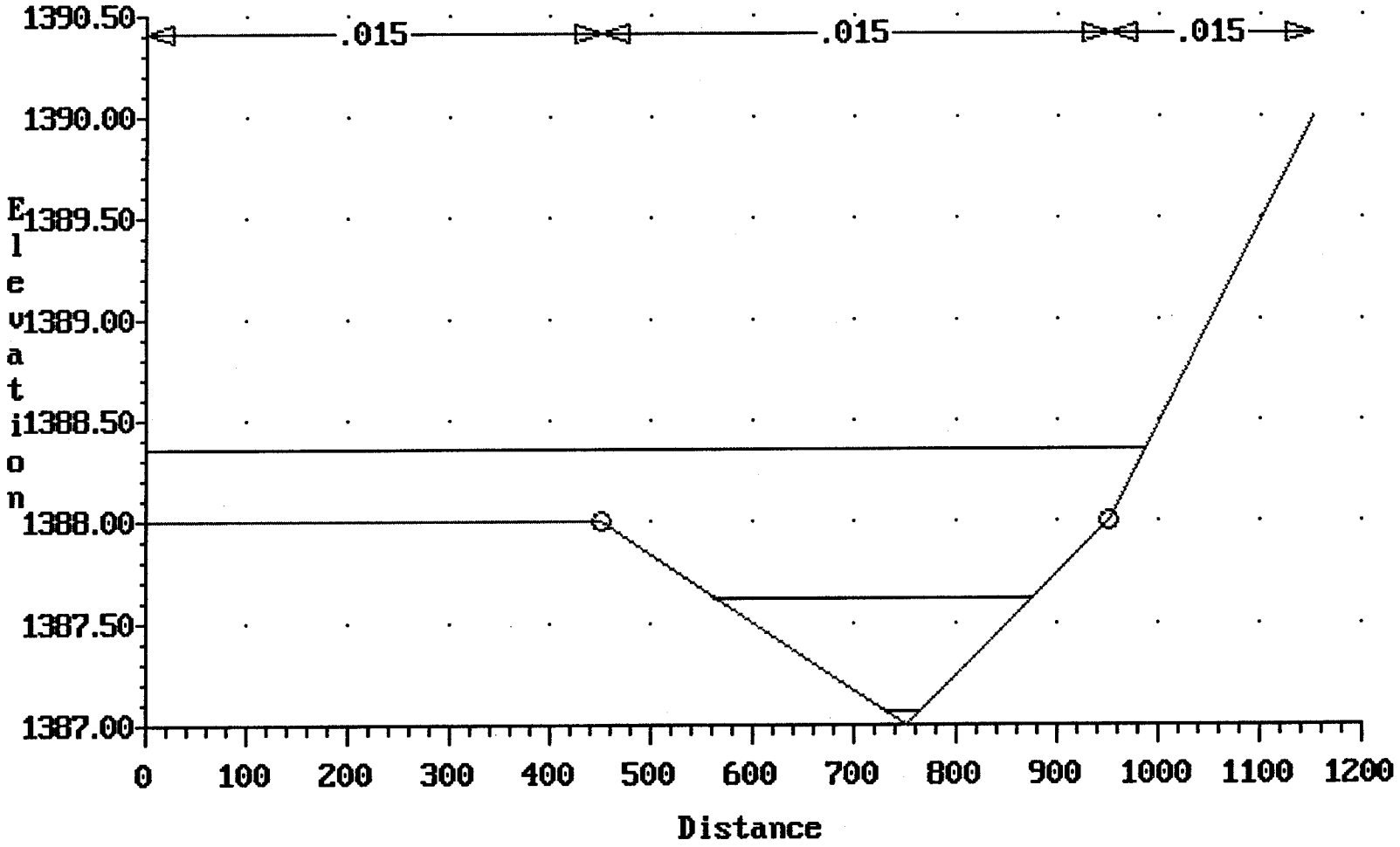
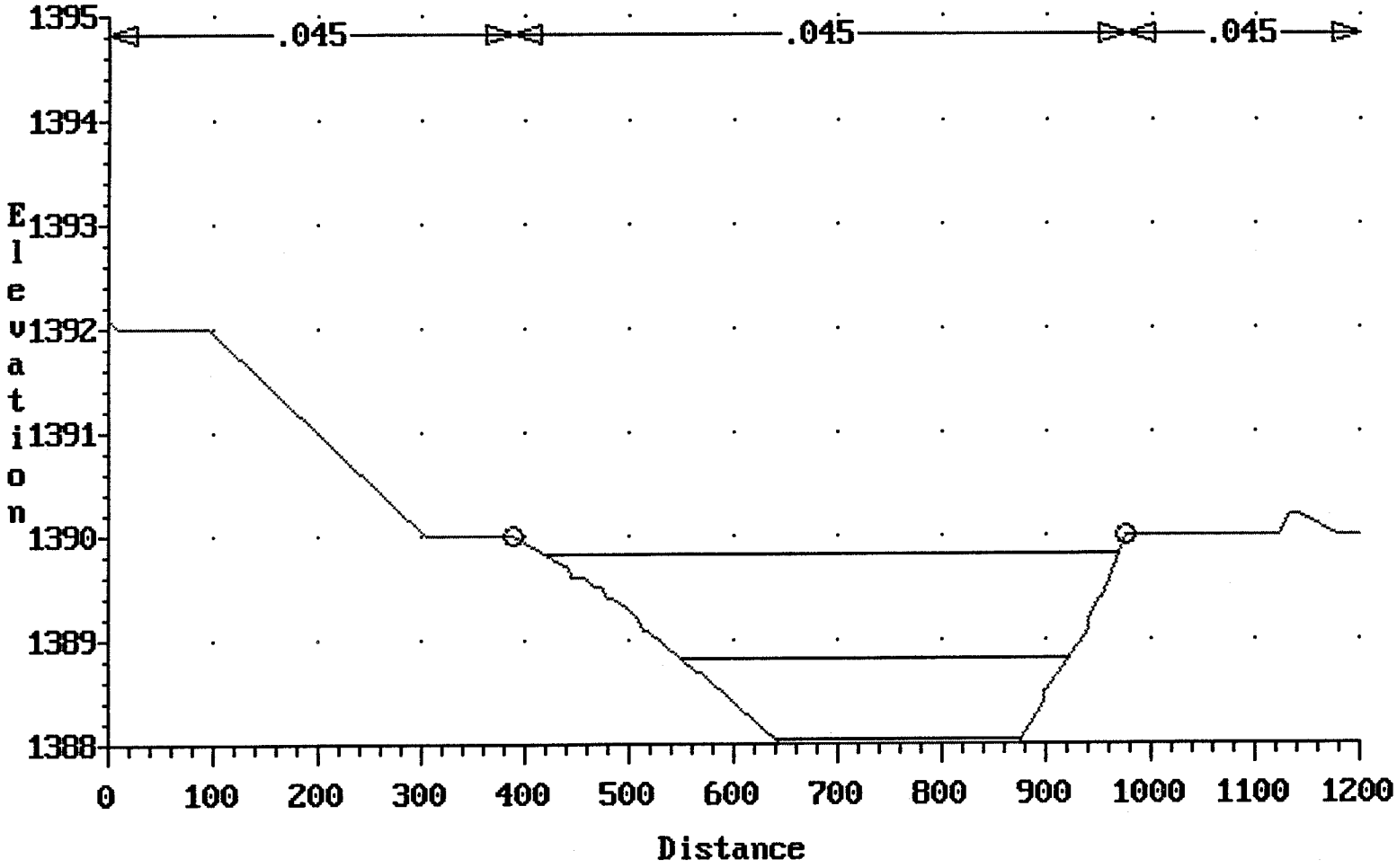
Cross-section 342.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 345.000



SCATTER WASH
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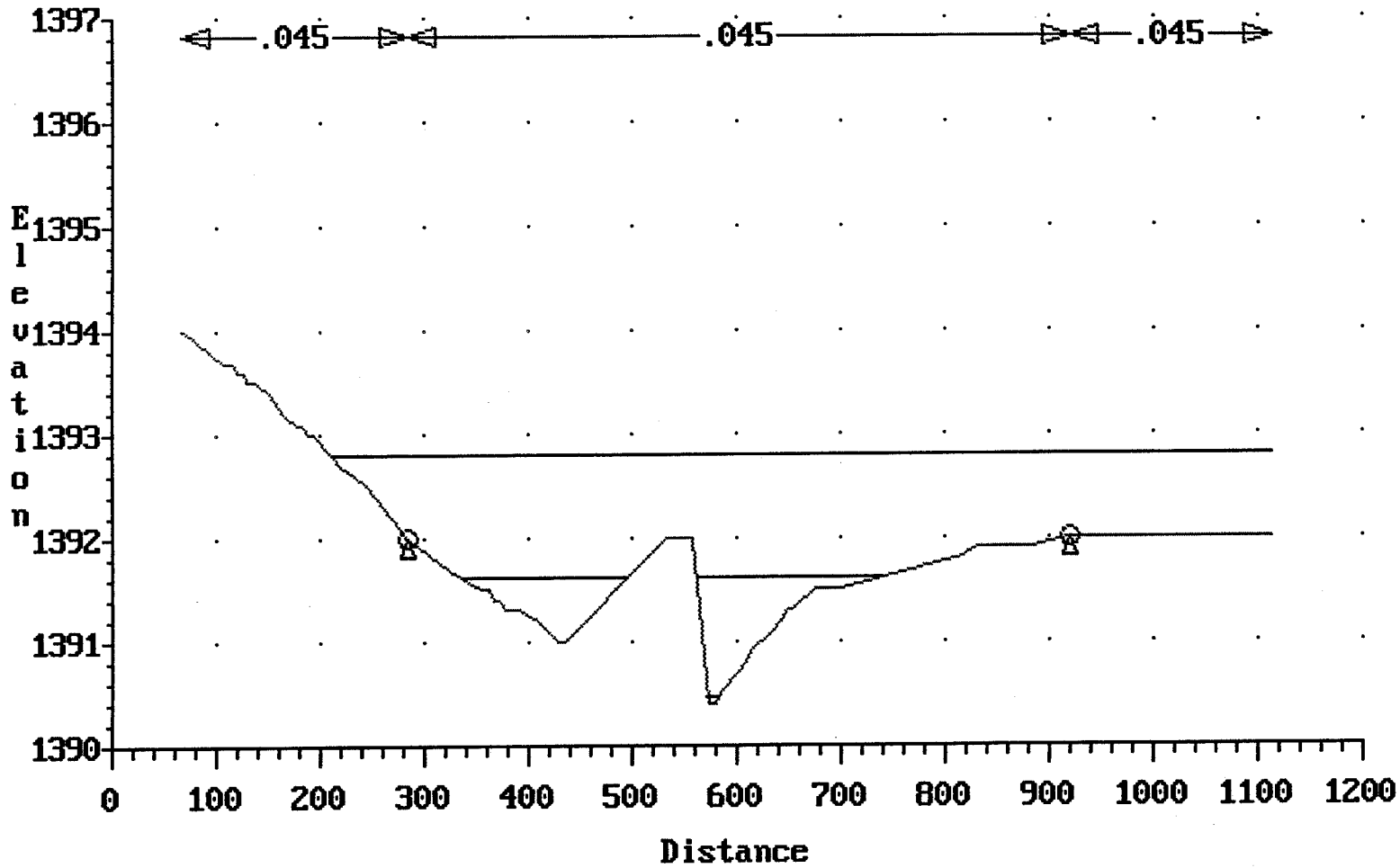
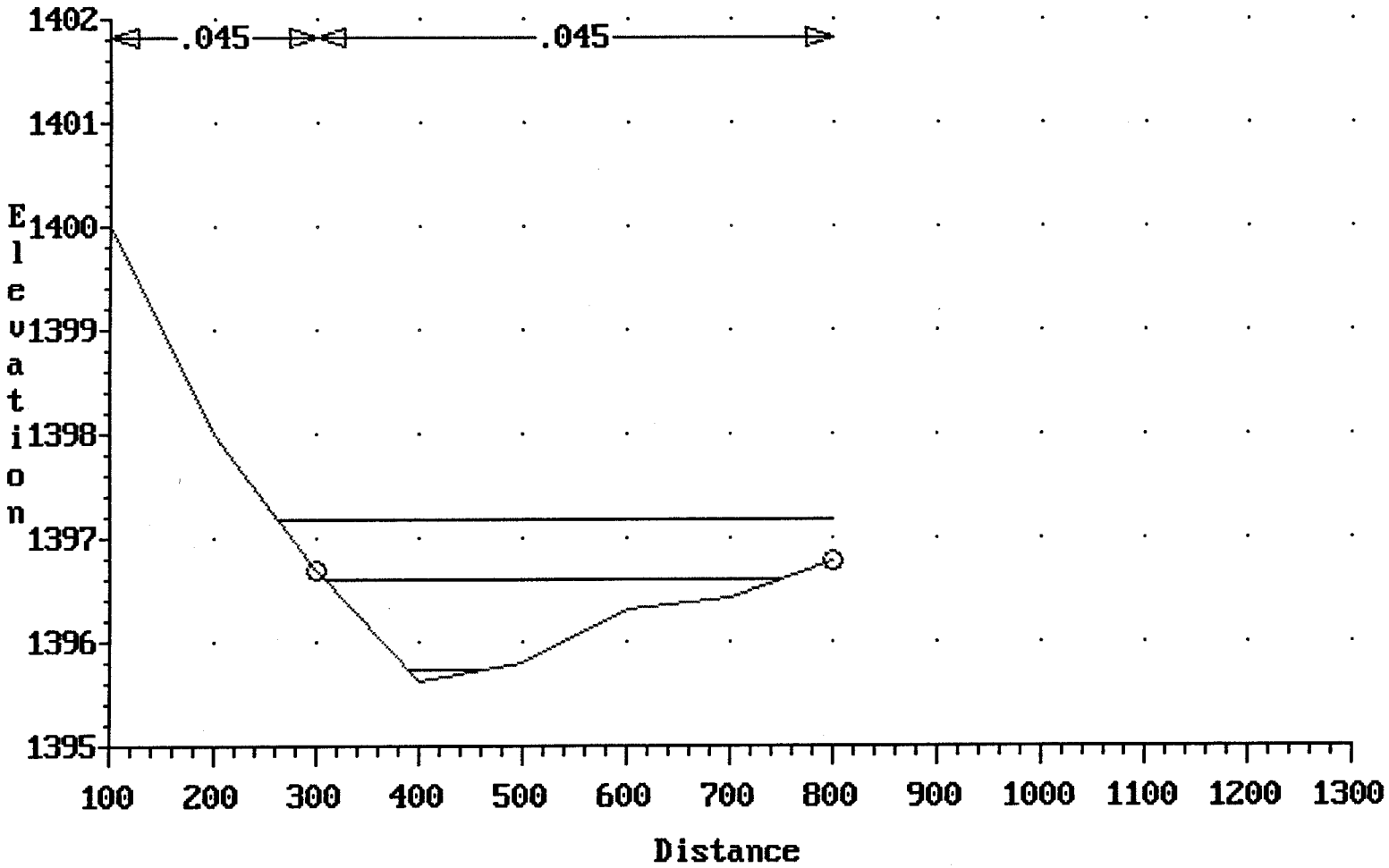
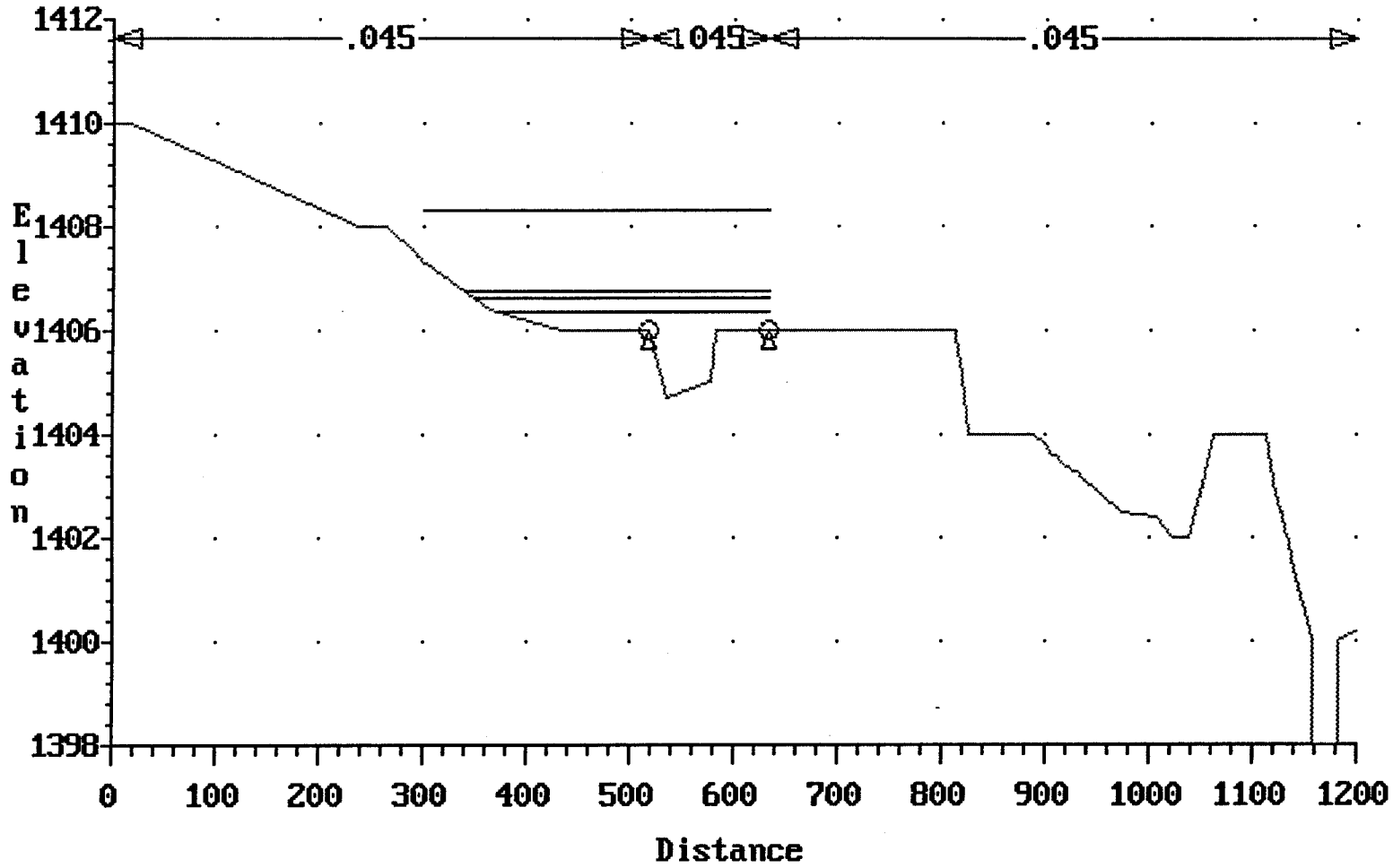
Cross-section 350.000



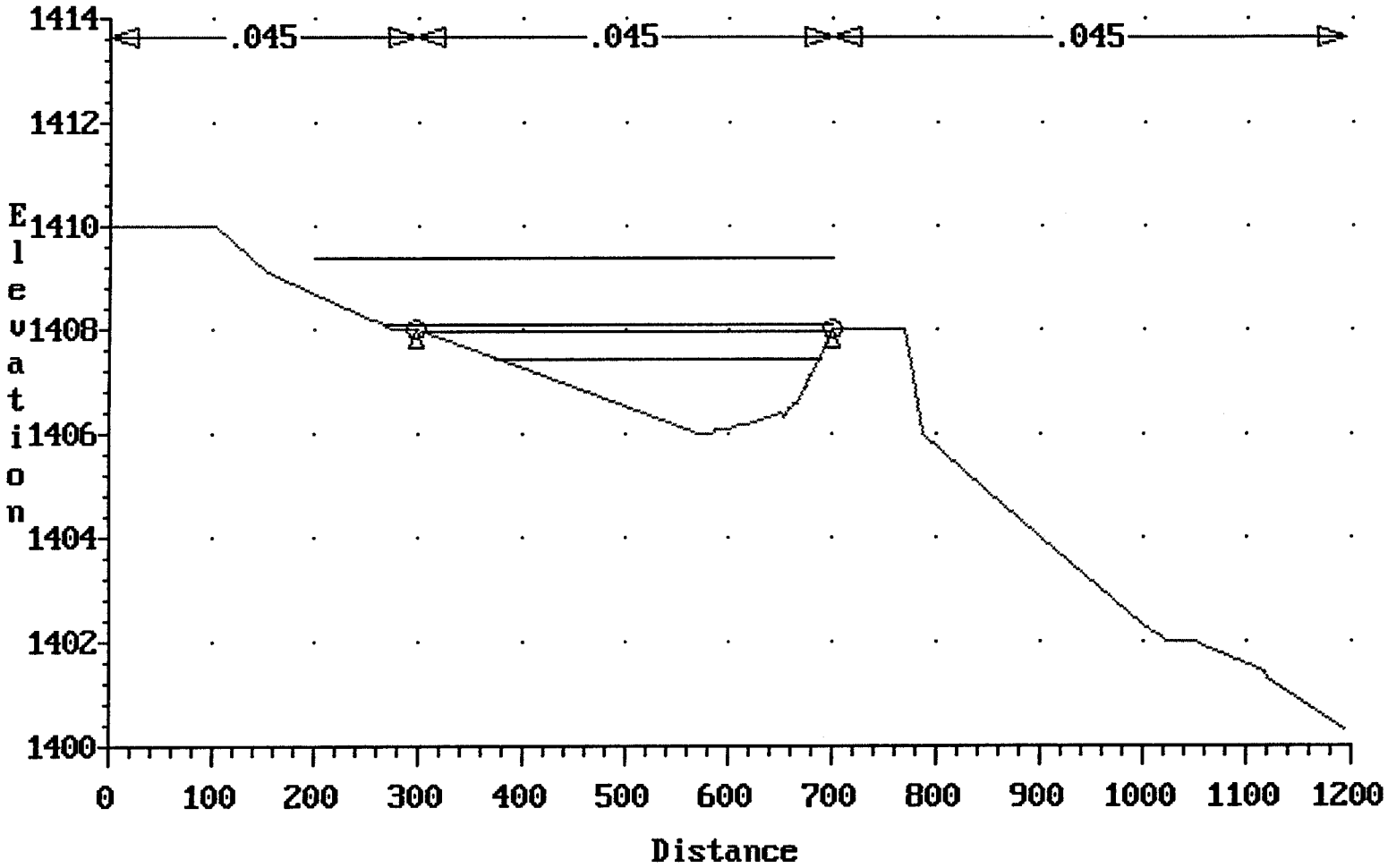
SCATTER WASH
CROSS-SECTIONS
Cross-section 355.400



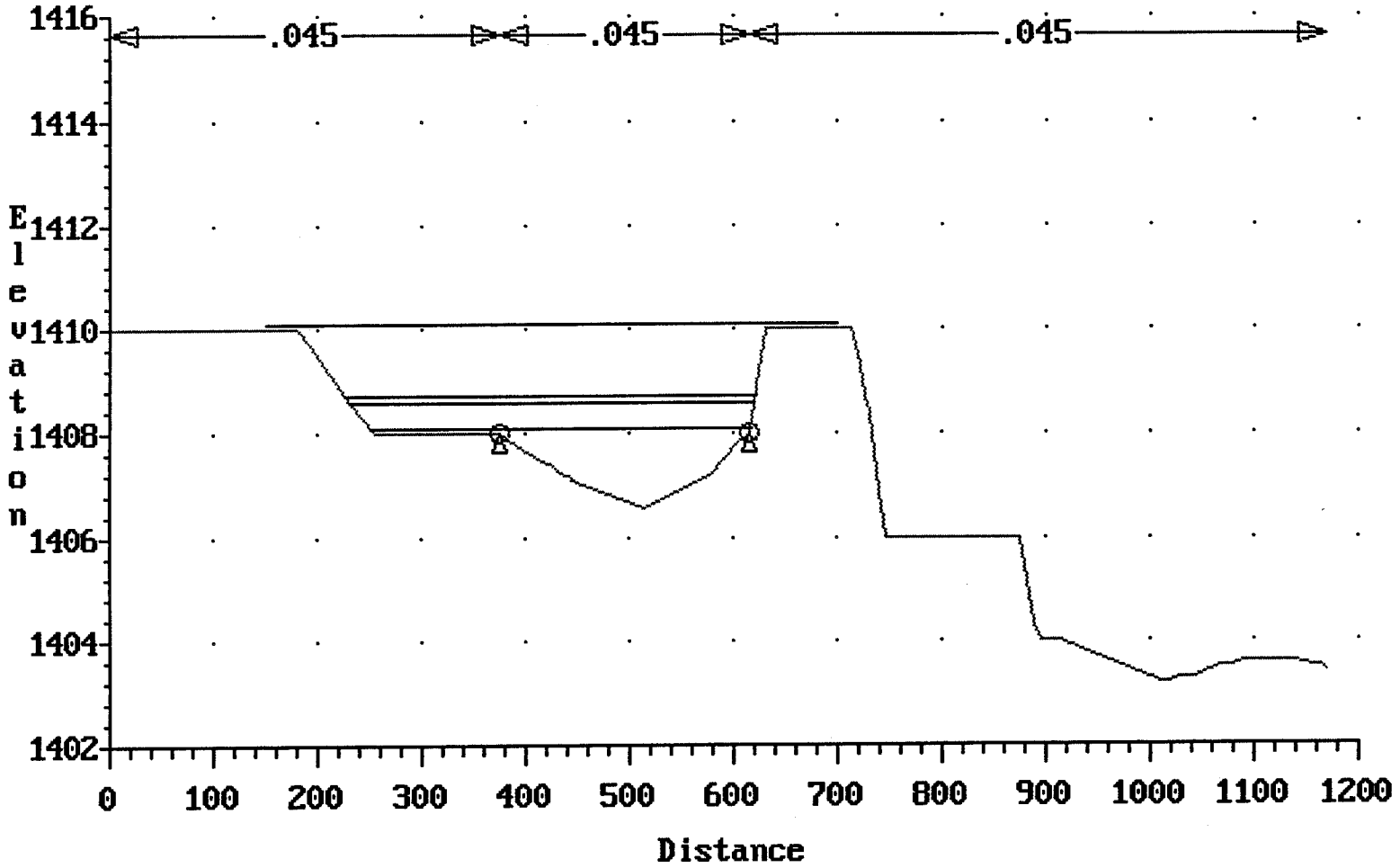
SCATTER WASH
CROSS-SECTIONS
Cross-section 372.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 377.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 382.000



SCATTER WASH
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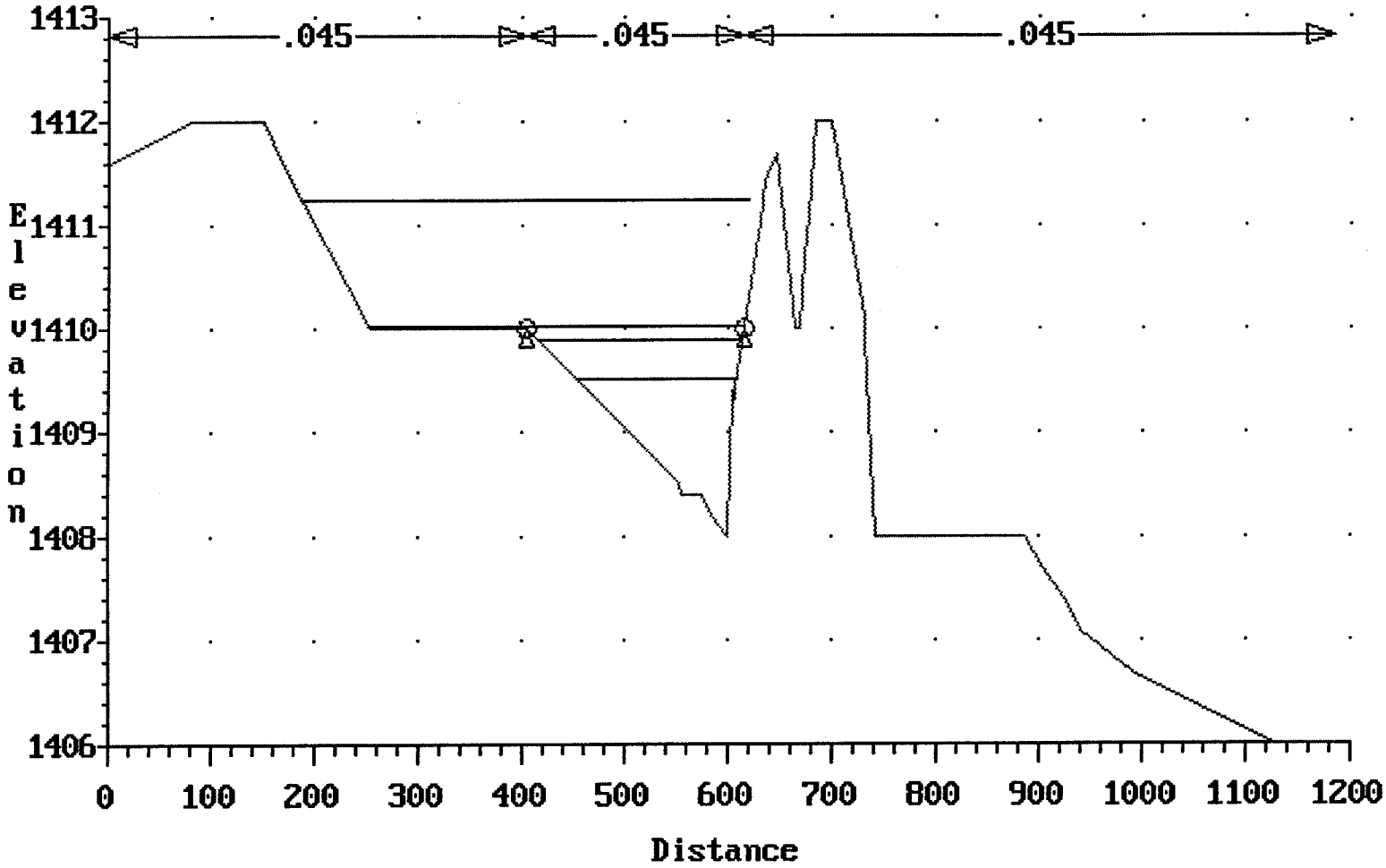
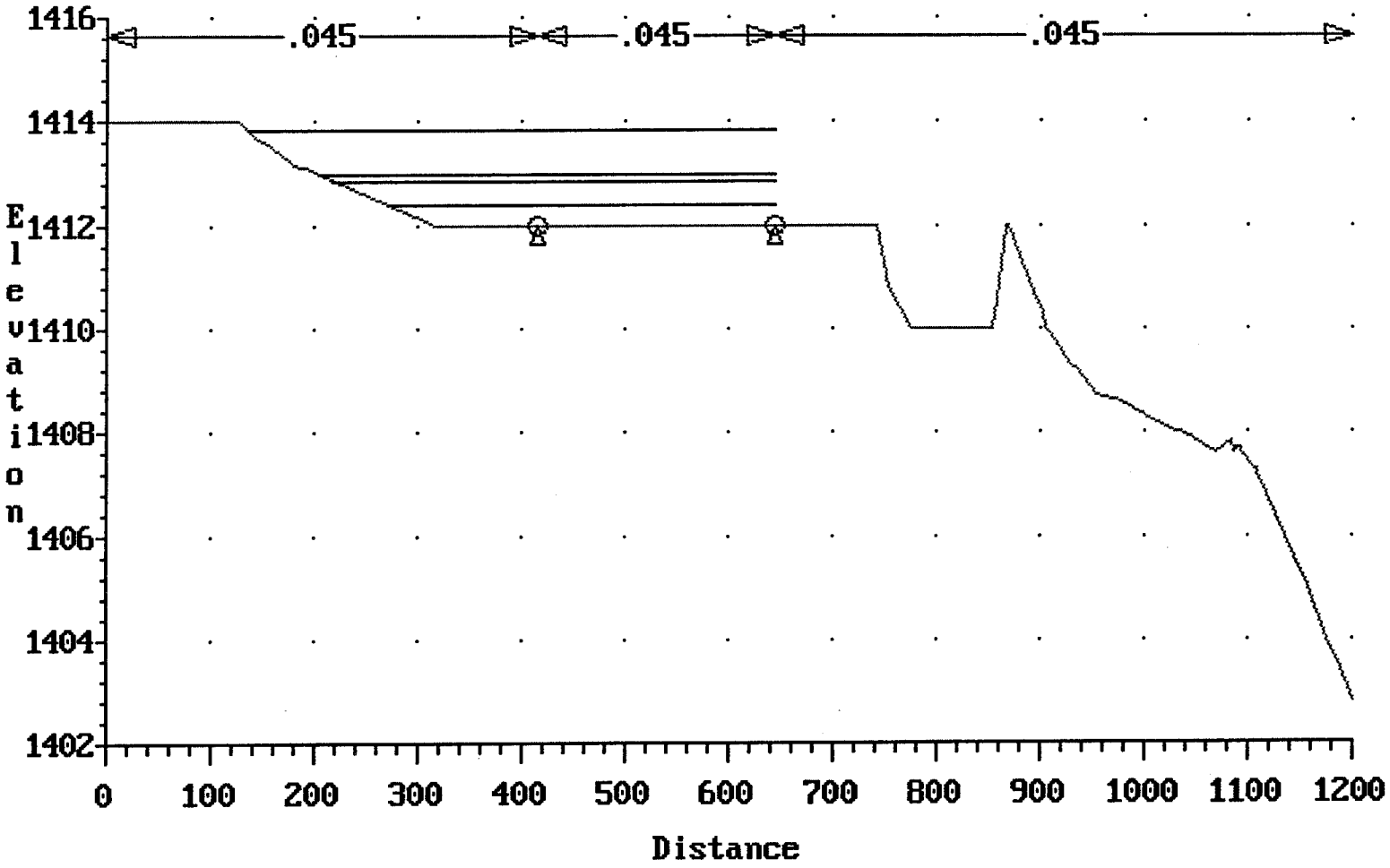


SCATTER WASH
CROSS-SECTIONS
Cross-section 392.000



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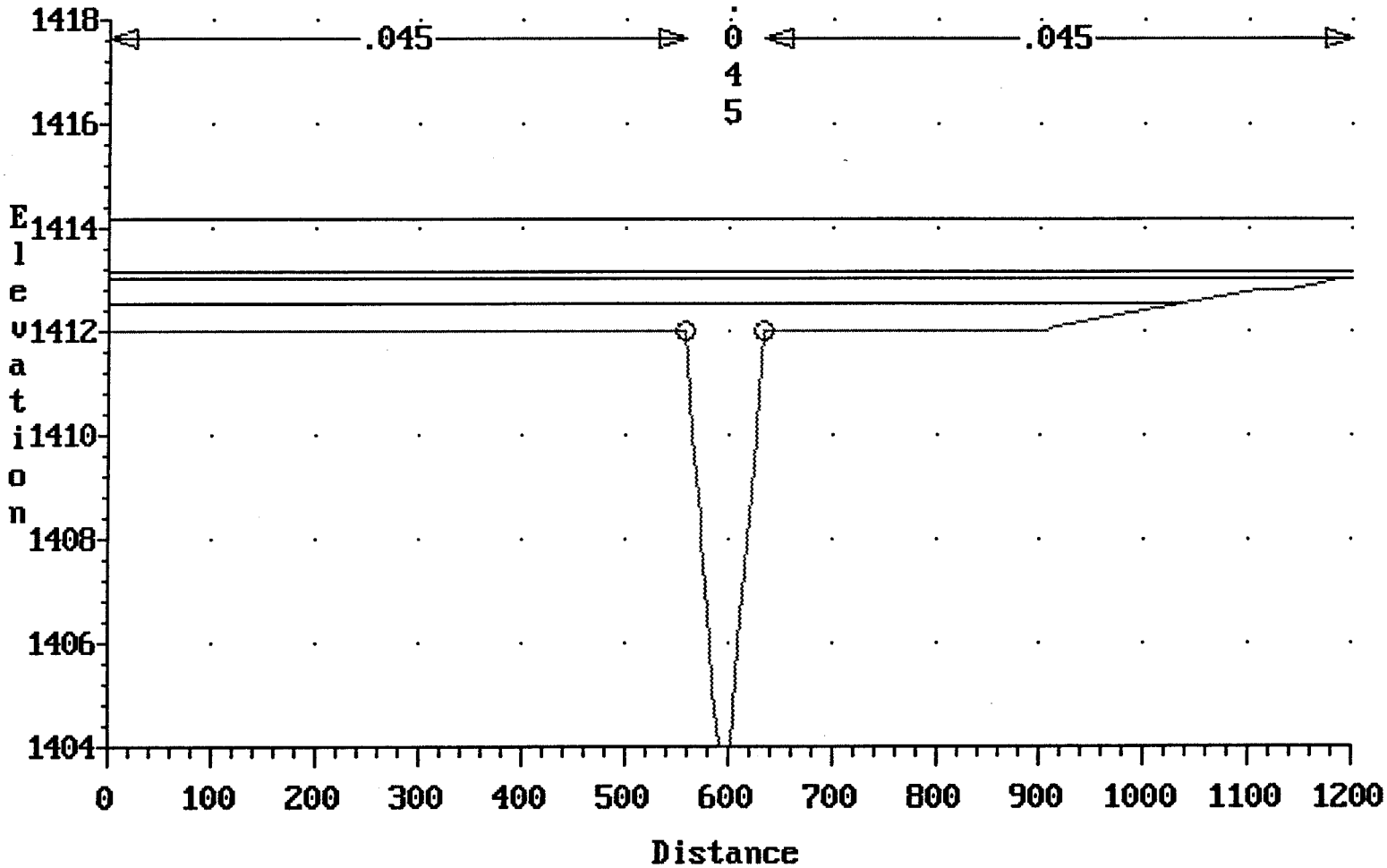
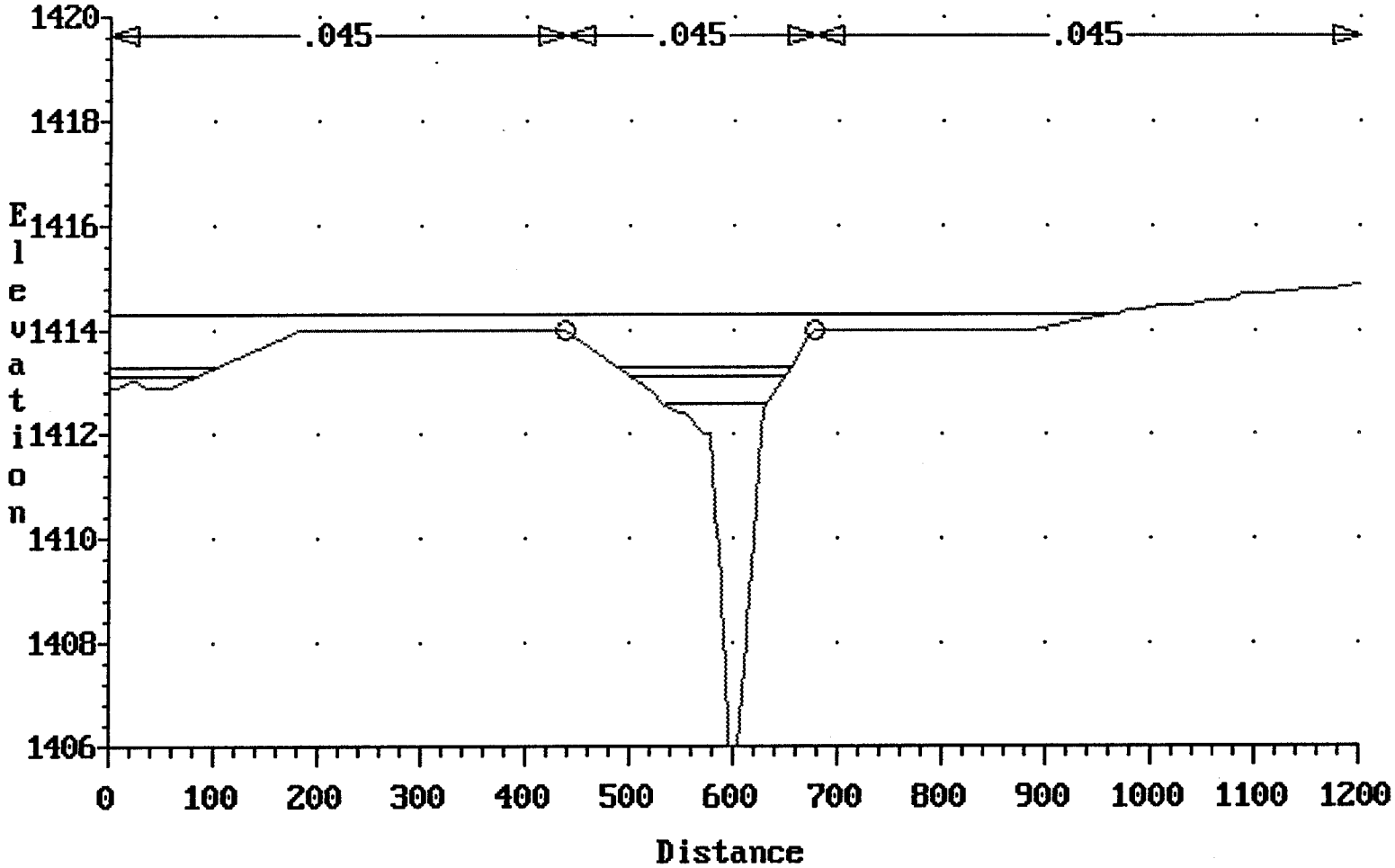
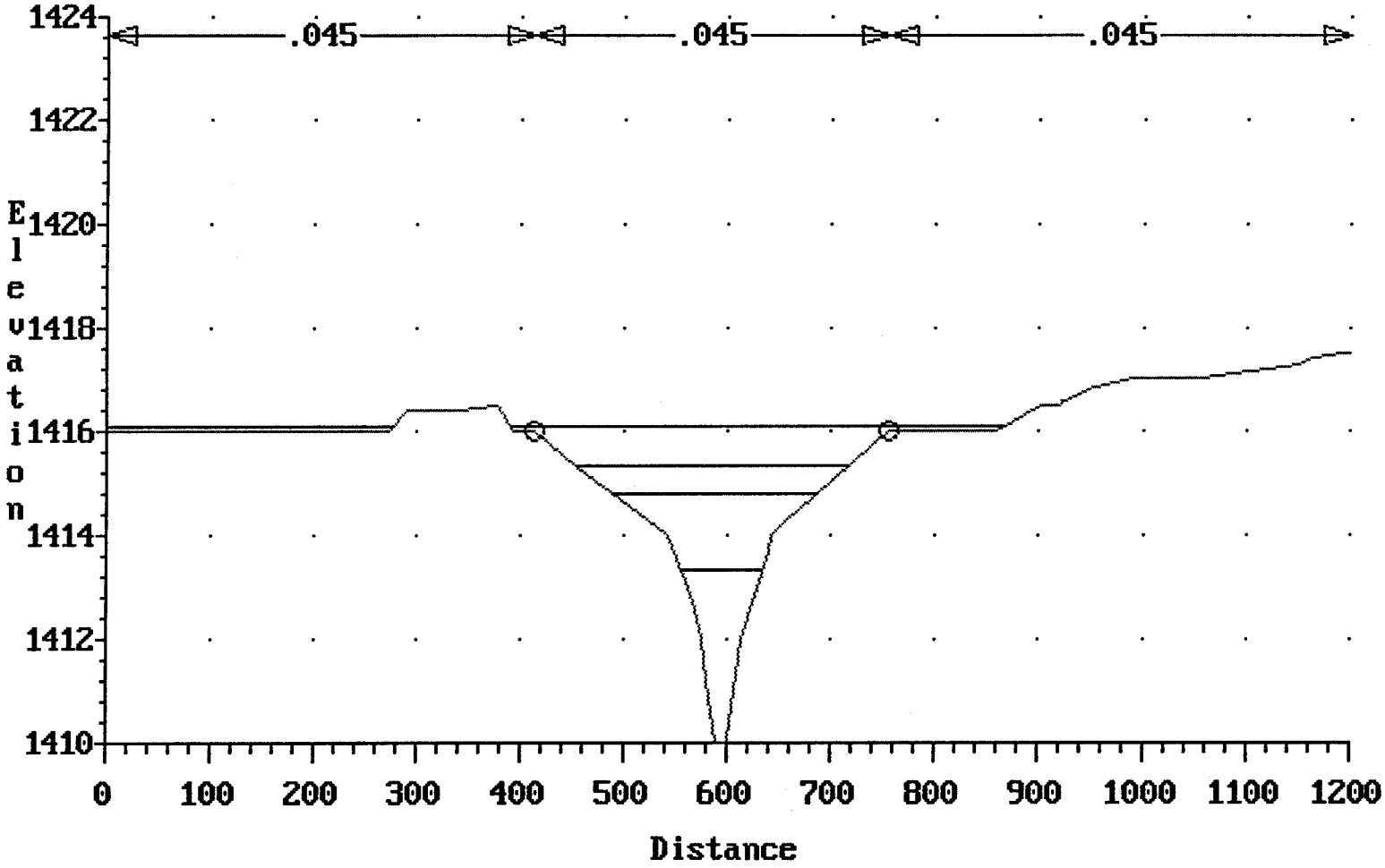
CROSS-SECTIONS
Cross-section 397.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 402.000



SCATTER WASH
CROSS-SECTIONS
Cross-section 407.000



SCATTER WASH
CROSS-SECTIONS
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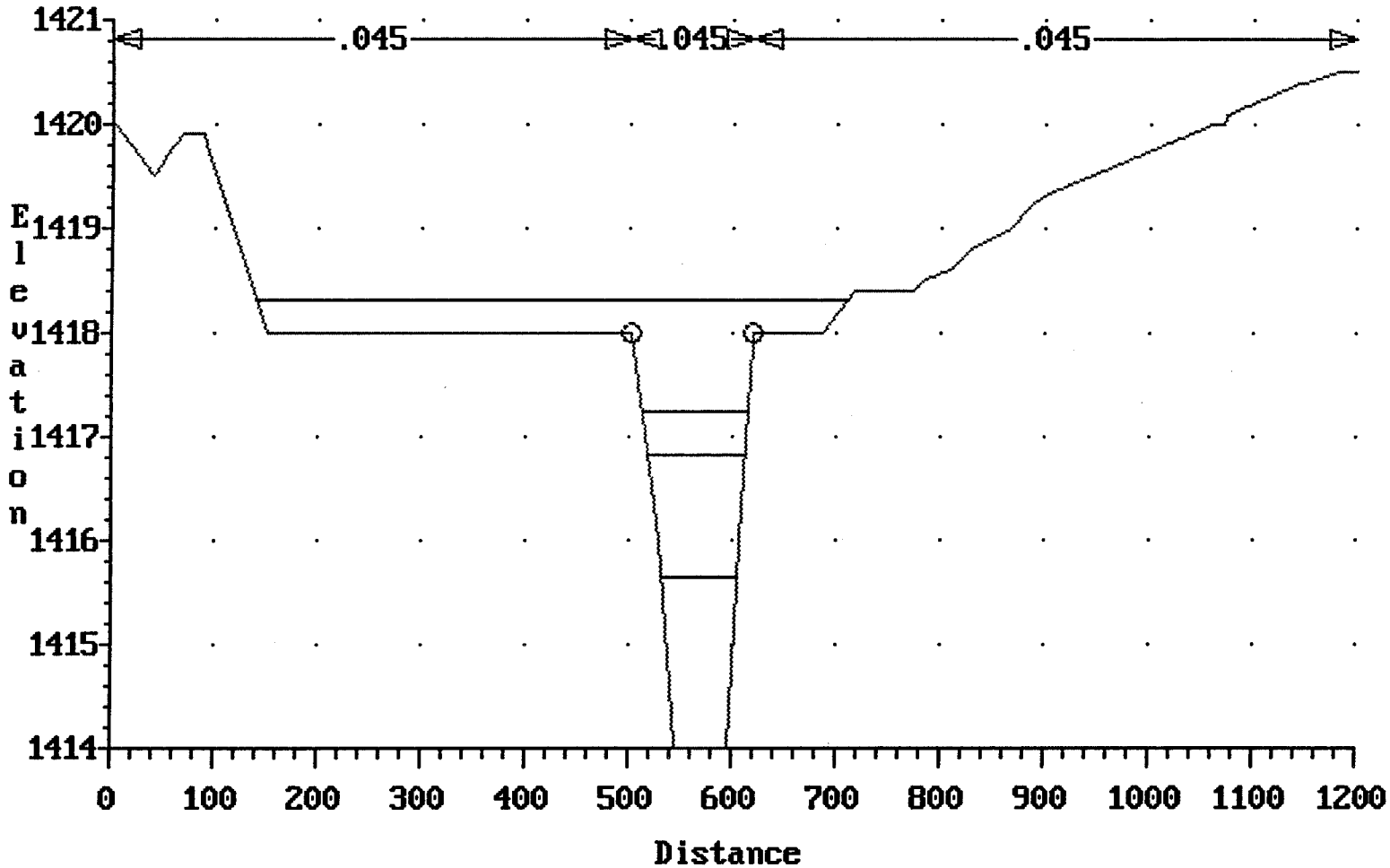
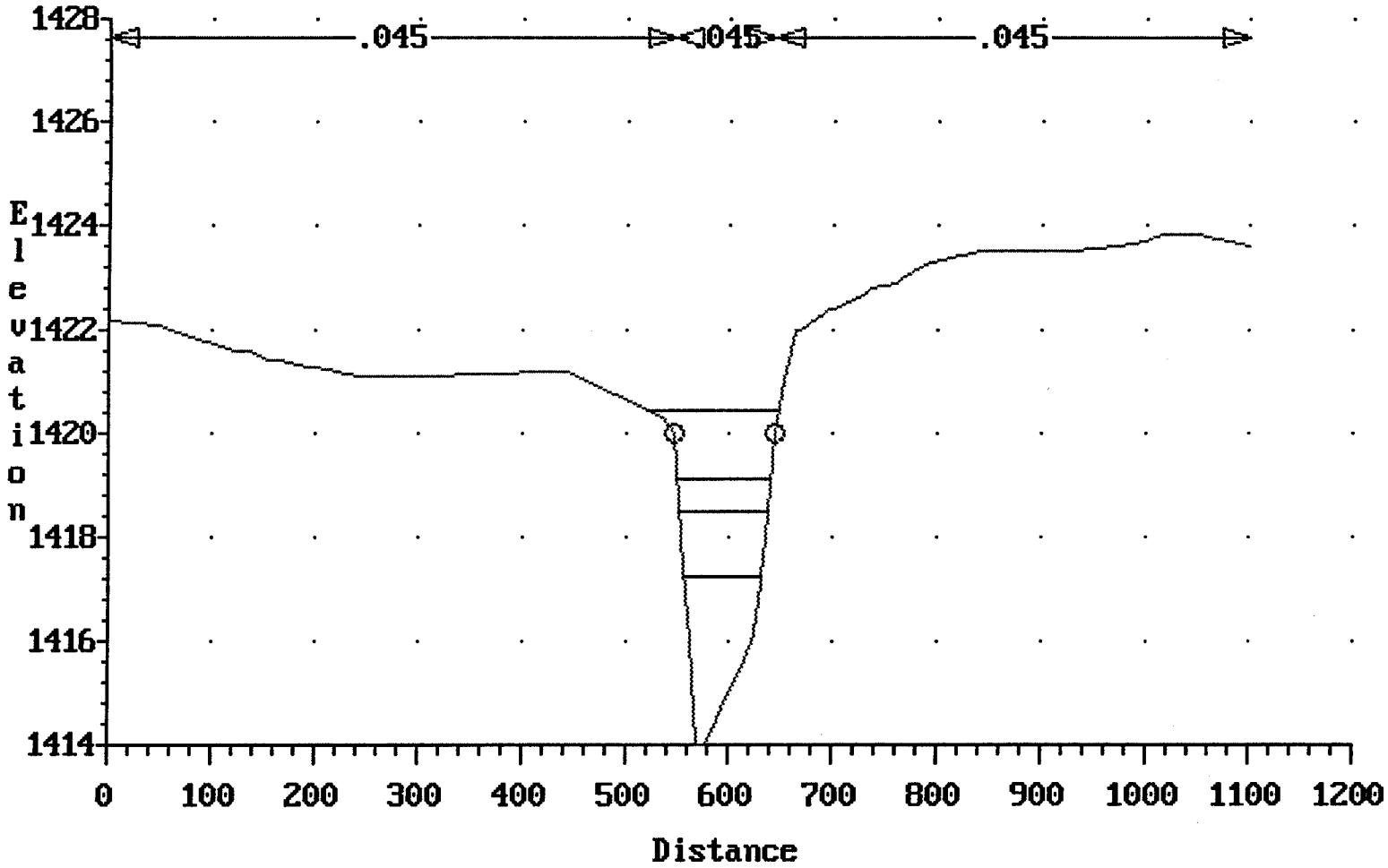


SCATTER WASH
CROSS-SECTIONS
Cross-section 417.000



APPENDIX L

HEC-2 Floodplain Input And Output Data

```
*****************************************
*  HEC-2 WATER SURFACE PROFILES         *
*                                       *
*  Version   4.6.2;  May 1991           *
*                                       *
*  RUN DATE    09OCT95    TIME   09:15:11 *
*****************************************
```

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

```
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
```

THIS RUN EXECUTED 09OCT95 09:15:11

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

SPLIT FLOW BEING PERFORMED

SF

10 YEAR FLOODPLAIN

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		2							1305.39	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1		-1				-1			15

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	43	16	17	18	1	2	26	4	8
201									

J5 LPRNT NUMSEC ********REQUESTED SECTION NUMBERS********

-10	-10	

NC	.045	.045	.045	.1	.3					
QT	4	2040	5100	8450	8450					
ET		9.1	9.1	9.1	9.1				437.2	743.4
	SKUNK CREEK									
	Beginning Point For Scatter Wash									
X1	10.00	60	437.2	867.3						
	1309.9	0.0	1308.2	405.5	1308.1	423.5	1308.1	425.6	1308.1	427.0
GR	1308.0	437.2	1306.4	444.0	1306.0	445.6	1304.8	450.8	1304.0	454.4
GR	1303.3	457.8	1302.0	463.6	1301.4	485.5	1301.3	489.9	1301.2	493.8
GR	1300.6	515.4	1300.4	522.8	1300.4	528.0	1300.0	551.3	1300.0	552.8
GR	1300.0	555.6	1300.0	556.3	1300.0	557.3	1300.0	579.3	1300.0	580.3
GR	1300.0	589.3	1300.0	589.5	1300.0	590.7	1300.0	592.4	1300.0	600.0
GR	1300.0	605.6	1300.0	609.9	1300.0	640.1	1300.0	644.0	1300.0	646.7
GR	1300.0	647.5	1300.4	661.9	1302.0	712.8	1302.9	717.1	1304.0	726.8
GR	1304.2	727.8	1304.4	730.4	1308.0	743.4	1308.0	763.4	1308.3	770.3
GR	1308.0	780.6	1308.0	811.7	1308.0	834.0	1308.0	867.3	1308.1	1100.1
GR	1308.1	1108.5	1308.1	1108.8	1308.1	1109.0	1308.1	1109.4	1308.1	1110.0
GR	1308.1	1110.7	1308.1	1111.1	1308.1	1111.2	1308.1	1113.4	1308.1	1113.4
QT	4	1540	2545	2760	5148					
	Scatter Wash Above Confluence With Skunk Creek									
X1	15.60	83	520.4	700.6	530.0	600.0	560.0			
GR	1311.7	0.0	1312.0	8.2	1312.0	9.4	1312.0	9.6	1312.0	18.5
GR	1312.0	21.0	1312.0	21.5	1312.0	27.7	1312.0	31.3	1312.0	31.7
GR	1312.0	52.3	1312.0	52.6	1312.0	62.4	1312.0	94.1	1312.0	102.1
GR	1312.0	107.0	1312.0	124.4	1312.0	129.0	1312.0	131.0	1312.0	133.2
GR	1311.0	145.3	1311.1	148.8	1311.2	156.2	1311.2	163.1	1310.7	196.8
GR	1311.4	279.9	1311.3	292.9	1311.3	306.8	1312.0	324.7	1312.0	325.2
GR	1312.0	333.2	1312.0	333.4	1312.0	335.0	1312.0	335.6	1312.0	336.3
GR	1312.0	344.4	1311.3	357.7	1311.2	359.9	1311.1	362.9	1310.0	393.5
GR	1310.0	409.8	1310.0	412.6	1310.0	461.2	1310.0	465.3	1310.0	466.4
	1310.0	466.8	1310.0	468.2	1310.2	470.6	1310.5	474.7	1312.0	494.7
	1312.0	499.1	1312.0	499.3	1312.0	499.5	1311.9	500.3	1310.4	520.4

	1310.0	522.4	1309.3	522.8	1308.0	523.8	1307.0	524.9	1306.0	526.0
GR	1304.1	528.3	1304.0	528.4	1303.9	528.6	1302.0	531.7	1302.0	536.6
GR	1302.0	544.4	1302.0	545.4	1302.0	573.6	1302.0	577.3	1302.0	600.0
GR	1302.0	672.4	1302.0	679.6	1303.1	682.0	1304.0	685.5	1304.3	686.4
GR	1304.6	687.7	1306.0	692.5	1307.2	697.6	1308.0	700.6	1308.2	702.4
GR	1308.2	706.7	1308.1	709.1	1308.0	709.9				
NC	0.045	0.045	0.015	0.6	0.8					
X1	16.00	80	493.7	704.9	40.0	40.0	40.0			
GR	1311.7	0.0	1312.0	9.1	1312.0	9.8	1312.0	9.9	1312.0	18.6
GR	1312.0	20.8	1312.0	21.4	1312.0	26.9	1312.0	31.1	1312.0	31.7
GR	1312.0	51.1	1312.0	51.7	1312.0	71.1	1312.0	101.8	1312.0	108.9
GR	1312.0	113.1	1312.0	127.2	1312.0	130.8	1312.0	132.3	1312.0	134.0
GR	1311.3	142.8	1311.4	145.3	1311.4	150.4	1311.5	155.1	1310.9	194.2
GR	1311.9	306.6	1311.9	309.3	1311.9	312.1	1312.0	315.3	1312.0	315.3
GR	1312.0	317.9	1312.0	322.8	1312.0	323.3	1312.0	324.5	1312.0	325.4
GR	1312.0	332.6	1312.0	352.7	1310.8	382.7	1310.6	394.7	1310.3	407.9
GR	1310.0	418.9	1310.0	420.1	1310.0	420.7	1310.0	469.1	1310.3	472.3
GR	1310.7	477.2	1312.0	491.2	1312.0	492.7	1312.0	493.7	1311.1	498.4
GR	1310.0	504.4	1308.4	513.9	1308.0	516.2	1307.2	520.6	1306.0	527.2
GR	1306.0	527.9	1305.4	539.1	1305.1	545.0	1304.7	553.1	1304.5	555.8
GR	1304.5	585.7	1304.5	600.0	1304.5	633.3	1304.6	635.5	1304.8	641.1
GR	1304.8	656.9	1305.3	663.7	1306.0	672.9	1307.5	681.0	1308.0	683.8
GR	1308.3	685.5	1308.6	687.0	1310.0	694.4	1310.3	696.4	1311.2	700.8
GR	1312.0	704.9	1312.0	706.0	1313.1	729.6	1312.8	735.7	1313.0	737.7
	0.045	0.045	0.045	0.1	0.3					
X1	20.50	73	441.7	715.5	450.0	450.0	450.0			
GR	1314.1	0.0	1314.6	59.0	1314.6	59.8	1314.6	62.1	1314.9	91.4
GR	1314.9	92.4	1314.9	100.0	1314.9	102.5	1315.0	107.1	1315.0	109.3
GR	1315.0	111.5	1315.0	113.2	1315.0	114.4	1315.1	115.2	1315.1	117.6
GR	1315.0	121.4	1315.4	170.2	1315.4	179.8	1315.4	190.7	1315.2	220.0
GR	1315.1	232.1	1315.1	247.1	1315.0	269.5	1314.9	284.8	1314.0	405.6
GR	1314.0	425.4	1314.0	428.5	1314.0	433.8	1314.0	434.4	1314.0	441.7
GR	1313.7	450.3	1312.0	498.8	1310.7	504.5	1310.0	507.9	1308.1	516.2
GR	1308.0	516.6	1307.8	517.6	1307.4	519.5	1306.0	526.1	1306.0	600.0
GR	1306.0	626.6	1306.0	643.4	1307.7	657.8	1308.0	660.9	1308.1	661.6
GR	1310.0	679.1	1311.3	691.1	1312.0	697.2	1313.2	708.0	1314.0	715.5
GR	1314.0	732.7	1314.0	733.9	1314.0	775.0	1314.0	788.8	1314.0	790.6
GR	1313.6	855.4	1313.6	863.5	1313.6	876.0	1313.6	881.1	1313.6	888.2
GR	1313.6	894.3	1313.6	895.9	1313.6	898.9	1313.5	907.0	1313.5	910.3
GR	1313.5	921.4	1313.3	955.3	1313.3	956.2	1313.5	1071.1	1313.4	1096.4
GR	1313.4	1097.7	1313.4	1098.6	1314.0	1200.0				
X1	24.20	95	516.8	699.7	370.0	370.0	370.0			
X3	10									
GR	1316.0	198.8	1316.0	199.6	1316.0	200.8	1316.0	205.3	1316.0	205.8
GR	1316.0	208.9	1316.0	212.9	1316.0	216.9	1316.0	218.9	1316.0	221.1
GR	1316.0	314.6	1316.0	337.8	1316.0	340.3	1316.0	344.2	1316.0	347.3
GR	1316.0	353.8	1316.0	354.5	1316.0	375.6	1316.0	375.8	1316.0	375.8
GR	1316.0	378.5	1316.0	385.6	1316.0	385.8	1316.0	393.4	1316.0	393.5
	1316.0	395.1	1316.0	410.2	1316.0	416.6	1316.0	418.2	1316.0	422.2
	1316.0	433.6	1316.0	433.9	1316.0	434.0	1315.7	440.4	1315.5	442.9
GR	1315.3	450.3	1315.2	454.1	1314.2	475.2	1314.2	477.5	1314.3	485.6

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   1316.0     516.8    1315.0     529.3    1314.0     537.9    1312.6     540.9    1312.0     542.9
GR 1311.3     545.3    1310.0     548.6    1309.0     551.2    1308.0     554.4    1307.1     557.4
GR 1306.0     560.6    1306.0     562.2    1306.0     563.2    1306.0     563.8    1306.0     566.6
GR 1306.0     591.7    1306.0     600.0    1306.0     600.6    1306.0     605.9    1306.0     608.2
GR 1306.0     642.8    1306.0     644.9    1306.0     652.9    1306.0     654.0    1306.0     657.7
GR 1307.3     661.5    1308.0     663.4    1308.2     663.8    1310.0     670.2    1311.2     673.8
GR 1312.0     676.9    1313.3     681.5    1314.0     683.5    1315.0     692.0    1315.4     696.1
GR 1316.0     699.7    1316.0     721.4    1316.0     772.6    1316.0     781.2    1316.0     785.2
GR 1316.0     795.5    1316.0     803.0    1316.0     804.4    1316.0     818.6    1316.0     823.0
GR 1316.0     869.2    1316.0     910.6    1315.9     939.2    1315.9     939.5    1315.9     944.6
GR 1315.9     953.4    1315.8     995.9    1315.7    1015.1    1315.6    1038.3    1315.6    1039.1

NC   0.015     0.015     0.015       0.3      0.5
SB    1.25      1.56      2.63               110               600               1306.0    1306.0
        45th Avenue Box Culvert
        10 - 6'x10'Concrete Box Culvert
X1   25.00        42     559.9     672.1       80        80        80
X2                         1    1312.0    1316.0
X3      10
BT     -42       0.0    1316.0    1316.0     559.9    1316.0    1312.0     560.0    1316.0    1312.0
BT              570.0    1316.0    1312.0     570.1    1316.0    1312.0     570.9    1316.0    1312.0
BT              571.0    1316.0    1312.0     581.0    1316.0    1312.0     581.1    1316.0    1312.0
BT              581.9    1316.0    1312.0     582.0    1316.0    1312.0     592.0    1316.0    1312.0
BT              592.1    1316.0    1312.0     592.9    1316.0    1312.0     593.0    1316.0    1312.0
BT              603.0    1316.0    1312.0     603.1    1316.0    1312.0     603.9    1316.0    1312.0
BT              604.0    1316.0    1312.0     614.0    1316.0    1312.0     614.1    1316.0    1312.0
                614.9    1316.0    1312.0     615.0    1316.0    1312.0     625.0    1316.0    1312.0
BT              625.1    1316.0    1312.0     625.9    1316.0    1312.0     626.0    1316.0    1312.0
BT              636.0    1316.0    1312.0     636.1    1316.0    1312.0     636.9    1316.0    1312.0
BT              640.0    1316.0    1312.0     650.0    1316.0    1312.0     650.1    1316.0    1312.0
BT              650.9    1316.0    1312.0     651.0    1316.0    1312.0     661.0    1316.0    1312.0
BT              661.1    1316.0    1312.0     661.9    1316.0    1312.0     662.0    1316.0    1312.0
BT              672.0    1316.0    1312.0     672.1    1316.0    1312.0    1200.0    1316.0    1316.0
GR   1316.0       0     1312.0     559.9    1306.0     560.0    1306.0     570.0    1312.0     570.1
GR   1312.0     570.9    1306.0     571.0    1306.0     581.0    1312.0     581.1    1312.0     581.9
GR   1306.0     582.0    1306.0     592.0    1312.0     592.1    1312.0     592.9    1306.0     593.0
GR   1306.0     603.0    1312.0     603.1    1312.0     603.9    1306.0     604.0    1306.0     614.0
GR   1312.0     614.1    1312.0     614.9    1306.0     615.0    1306.0     625.0    1312.0     625.1
GR   1312.0     625.9    1306.0     626.0    1306.0     636.0    1312.0     636.1    1312.0     636.9
GR   1306.0     640.0    1306.0     650.0    1312.0     650.1    1312.0     650.9    1306.0     651.0
GR   1306.0     661.0    1312.0     661.1    1312.0     661.9    1306.0     662.0    1306.0     672.0
GR   1312.0     672.1    1316.0    1200.0

NC   0.045     0.045     0.045       0.1      0.3
X1   25.30        95     527.9     684.6     30.0      30.0      30.0
GR   1316.5     251.0    1316.5     252.1    1316.5     263.1    1316.5     264.3    1316.6     277.4
GR   1316.7     285.4    1316.9     292.9    1316.9     300.6    1317.1     304.4    1317.1     308.9
GR   1317.1     324.5    1317.1     325.5    1317.2     330.5    1317.2     331.6    1316.2     346.2
GR   1316.0     348.0    1316.0     349.5    1316.0     351.8    1316.0     356.9    1316.0     363.2
GR   1316.0     371.3    1316.1     379.6    1316.1     380.0    1316.2     391.6    1316.3     412.7
GR   1316.3     413.1    1316.3     413.5    1316.4     428.7    1316.4     429.2    1316.4     431.7
     1316.5     435.7    1316.6     443.9    1316.6     451.8    1316.6     454.1    1316.7     458.2
GR   1316.7     480.1    1316.7     482.4    1316.7     490.7    1316.7     496.0    1316.7     500.0
GR   1316.0     512.1    1316.0     517.6    1316.0     519.6    1316.0     521.6    1316.0     527.9
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[illegible]	1314.7	533.1	1314.0	535.9	1313.0	538.7	1312.0	541.0	1310.8	545.5
GR	1310.0	548.3	1310.0	556.5	1310.0	558.3	1310.0	561.4	1310.0	566.7
GR	1310.0	600.0	1310.0	616.7	1310.0	628.6	1310.0	639.3	1310.0	659.3
GR	1310.0	659.4	1310.0	660.5	1310.0	662.8	1311.8	670.3	1312.0	670.7
GR	1312.2	671.1	1314.0	677.3	1315.0	681.3	1316.0	684.6	1316.0	693.1
GR	1316.0	710.9	1316.0	723.7	1316.0	728.6	1316.0	744.8	1316.1	751.7
GR	1316.0	758.9	1316.0	766.0	1316.0	766.5	1316.0	767.2	1316.0	811.5
GR	1316.0	813.1	1316.0	815.3	1316.0	847.9	1316.0	864.4	1316.0	869.2
GR	1316.0	876.0	1316.0	879.1	1316.0	912.2	1316.0	919.9	1316.0	929.4
GR	1316.0	931.8	1316.3	952.4	1316.2	981.6	1316.2	982.7	1316.3	991.8
X1	28.70	87	347.9	685.7	390.0	340.0	340.0			
GR	1318.0	0.0	1318.0	151.3	1318.0	176.4	1318.0	184.7	1318.0	208.3
GR	1318.0	228.2	1318.0	233.5	1318.0	233.6	1318.0	233.6	1318.0	236.1
GR	1319.1	287.3	1319.5	305.4	1319.8	322.1	1319.8	324.7	1320.0	334.0
GR	1320.0	334.7	1320.0	340.5	1320.0	342.8	1320.0	345.3	1320.0	347.9
GR	1318.1	356.5	1318.0	357.0	1317.5	359.6	1316.0	366.9	1315.2	370.8
GR	1314.1	377.3	1314.0	377.8	1314.0	378.0	1312.4	387.0	1312.0	389.9
GR	1310.7	398.6	1310.0	403.5	1310.0	408.1	1310.0	417.1	1310.0	417.4
GR	1310.0	417.5	1310.0	417.7	1310.0	419.0	1310.0	419.4	1310.0	440.5
GR	1310.0	462.2	1310.0	490.7	1310.0	498.8	1310.0	504.2	1310.0	508.0
GR	1310.0	513.9	1310.0	548.3	1310.0	566.1	1310.0	572.0	1310.5	600.0
GR	1311.1	632.6	1311.2	638.0	1312.0	660.1	1313.9	668.2	1314.0	668.8
GR	1314.2	669.8	1314.9	672.9	1316.0	677.6	1316.5	679.4	1318.0	685.7
GR	1318.0	735.9	1318.7	741.2	1318.0	785.5	1318.0	787.8	1318.0	788.0
GR	1318.0	788.1	1318.0	794.7	1318.0	805.5	1318.0	819.1	1318.0	835.4
[illegible]	1318.0	1064.8	1318.0	1064.9	1318.0	1067.1	1318.0	1069.2	1318.0	1072.7
GR	1318.0	1080.1	1318.0	1081.8	1318.0	1085.2	1318.0	1086.9	1318.0	1087.1
GR	1318.0	1091.0	1318.0	1106.7	1318.0	1112.3	1318.0	1114.7	1318.0	1115.7
GR	1318.0	1117.6	1318.0	1121.9						
X1	32.50	10	345.0	690.0	380	380	380			
GR	1319.8	0.0	1320.0	56.7	1320.0	345.0	1314.0	375.0	1312.0	470.0
GR	1312.0	500.0	1314.0	665.0	1320.0	690.0	1320.0	780.0	1320.0	1050.0
X1	36.20	97	384.9	803.2	430.0	330.0	370.0			
GR	1320.0	0.0	1320.0	127.2	1320.0	127.9	1320.0	129.4	1320.0	157.1
GR	1320.0	162.1	1320.0	185.2	1320.0	208.2	1320.0	218.8	1320.0	224.6
GR	1320.7	290.6	1320.7	305.3	1320.8	318.0	1320.9	323.3	1320.0	340.0
GR	1320.0	384.9	1319.2	389.4	1318.0	396.3	1316.6	405.0	1316.0	408.7
GR	1315.7	419.3	1315.3	440.6	1315.1	451.6	1314.5	490.6	1314.2	500.5
GR	1314.0	512.1	1314.0	518.7	1314.0	520.8	1314.0	533.9	1314.0	533.9
GR	1314.0	534.0	1314.0	534.0	1314.0	534.4	1314.0	543.6	1314.0	545.9
GR	1314.0	547.8	1313.8	579.0	1313.8	586.9	1313.8	589.9	1313.8	592.1
GR	1313.8	593.8	1313.9	600.0	1314.0	614.2	1314.0	620.4	1314.0	624.7
GR	1314.0	625.5	1314.0	627.1	1314.0	629.3	1314.3	633.3	1314.8	653.5
GR	1315.0	669.1	1315.0	672.8	1315.2	686.3	1315.5	702.7	1315.7	714.8
GR	1315.6	719.8	1315.6	720.0	1316.0	731.9	1316.6	743.3	1316.7	744.1
GR	1317.2	749.8	1318.0	757.9	1318.0	758.7	1318.0	759.7	1318.9	771.0
GR	1319.1	773.3	1320.0	778.2	1321.9	789.1	1322.0	789.7	1322.1	790.2
GR	1324.0	803.2	1324.0	803.2	1324.0	803.2	1324.0	808.2	1323.2	827.6
[illegible]	1322.0	856.0	1322.0	856.7	1322.0	858.6	1322.0	860.2	1322.0	866.0
GR	1322.0	867.6	1322.0	868.1	1320.9	952.0	1320.9	954.1	1320.9	955.1
GR	1320.8	962.0	1320.6	999.6	1320.6	1004.3	1320.6	1007.1	1320.7	1014.5

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   1320.7    1023.5    1320.7    1050.6    1320.7    1051.8    1320.6    1075.0    1321.3    1192.8
GR 1321.3    1197.0    1321.3    1200.0

NC   0.045    0.045    0.015     0.6       0.8
X1   36.90     97      384.9     803.2     70.0      70.0      70.0
GR 1320.0      0.0    1320.0     127.2    1320.0     127.9    1320.0     129.4    1320.0     157.1
GR 1320.0    162.1    1320.0     185.2    1320.0     208.2    1320.0     218.8    1320.0     224.6
GR 1320.7    290.6    1320.7     305.3    1320.8     318.0    1320.9     323.3    1320.0     340.0
GR 1320.0    384.9    1319.2     389.4    1318.0     396.3    1316.6     405.0    1316.0     408.7
GR 1316.7    419.3    1316.3     440.6    1316.1     451.6    1316.5     490.6    1316.2     500.5
GR 1316.0    512.1    1316.0     518.7    1316.0     520.8    1316.0     533.9    1316.0     533.9
GR 1316.0    534.0    1316.0     534.0    1316.0     534.4    1316.0     543.6    1316.0     545.9
GR 1316.0    547.8    1316.0     579.0    1316.0     586.9    1316.0     589.9    1316.0     592.1
GR 1316.0    593.8    1316.0     600.0    1316.0     614.2    1316.0     620.4    1316.0     624.7
GR 1316.0    625.5    1316.0     627.1    1316.0     629.3    1316.0     633.3    1316.0     653.5
GR 1316.0    669.1    1316.0     672.8    1316.2     686.3    1316.5     702.7    1316.7     714.8
GR 1316.6    719.8    1316.6     720.0    1316.0     731.9    1316.6     743.3    1316.7     744.1
GR 1317.2    749.8    1318.0     757.9    1318.0     758.7    1318.0     759.7    1318.9     771.0
GR 1319.1    773.3    1320.0     778.2    1321.9     789.1    1322.0     789.7    1322.1     790.2
GR 1324.0    803.2    1324.0     803.2    1324.0     803.2    1324.0     808.2    1323.2     827.6
GR 1322.0    856.0    1322.0     856.7    1322.0     858.6    1322.0     860.2    1322.0     866.0
GR 1322.0    867.6    1322.0     868.1    1320.9     952.0    1320.9     954.1    1320.9     955.1
GR 1320.8    962.0    1320.6     999.6    1320.6    1004.3    1320.6    1007.1    1320.7    1014.5
GR 1320.7    1023.5   1320.7     1050.6   1320.7    1051.8    1320.6    1075.0    1321.3    1192.8
GR 1321.3    1197.0   1321.3     1200.0

   0.015     0.015    0.015      0.1      0.3
        43rd Avenue Dip Roadway Crossing
X1   38.10      5      460.0     800.0     60        180       120
GR 1320.0    160.0    1320.0     460.0    1318.0     550.0    1318.0     720.0    1320.0     800.0

NC   0.045    0.045    0.045      0.1      0.3
X1   43.30     95      494.8     746.8     520.0     520.0     520.0
X3   10
GR 1320.7      0.0    1320.2      85.7    1320.0      99.5    1320.0     101.7    1320.0     106.6
GR 1320.3    127.3    1320.4     144.1    1320.4     145.1    1322.0     279.9    1322.0     287.0
GR 1322.0    293.2    1322.0     293.2    1322.0     303.5    1322.0     310.6    1322.0     424.4
GR 1322.0    426.1    1322.0     435.1    1322.4     439.4    1322.5     440.3    1322.7     443.7
GR 1324.0    457.3    1325.4     464.7    1326.0     467.9    1326.0     475.9    1326.0     494.8
GR 1324.2    502.2    1324.0     503.0    1323.5     507.6    1323.1     510.9    1322.0     522.1
GR 1322.0    522.1    1321.8     524.2    1320.8     536.2    1320.0     540.1    1319.1     544.0
GR 1318.5    547.0    1318.0     549.9    1318.0     560.2    1318.0     565.9    1318.0     571.5
GR 1318.0    574.0    1318.0     579.9    1318.0     585.0    1318.0     598.0    1318.0     600.0
GR 1318.0    654.1    1318.0     660.4    1318.0     663.5    1318.0     681.3    1318.0     691.5
GR 1318.0    696.9    1318.0     707.7    1318.2     708.4    1320.0     722.2    1320.9     725.6
GR 1322.0    730.2    1323.8     737.8    1324.0     738.6    1324.9     742.4    1326.0     746.8
GR 1326.0    752.5    1326.0     753.1    1324.4     760.1    1324.0     762.1    1322.3     769.5
GR 1322.0    771.1    1322.0     819.9    1322.0     821.5    1322.0     821.6    1322.0     821.7
GR 1323.3    875.6    1323.4     880.0    1323.4     885.7    1323.6     908.4    1323.7     910.7
GR 1324.0    941.3    1324.0     981.7    1324.0     994.8    1324.0     995.5    1324.0    1011.3
GR 1324.0    1023.0   1324.0     1024.7   1324.0    1032.7    1324.0    1082.9    1324.0    1083.4
   1324.0    1085.9   1324.0     1088.8   1324.0    1105.4    1324.0    1109.6    1324.1    1120.4
GR 1324.1    1121.2   1324.1     1122.2   1324.1    1125.8    1324.0    1156.4    1324.0    1172.6
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[illegible]	0.045	0.045	0.045	0.6	0.8					
X1	43.80	95	491.1	744.5	50.0	50.0	50.0			
X3	10									
GR	1320.2	103.8	1320.2	104.4	1320.2	105.8	1320.2	107.6	1320.3	109.8
GR	1320.3	110.5	1320.3	112.6	1320.3	114.3	1320.4	117.4	1320.4	119.0
GR	1320.5	123.9	1320.6	126.4	1320.7	132.2	1320.7	139.4	1320.7	145.2
GR	1321.1	168.2	1321.4	222.9	1321.4	226.0	1322.0	279.1	1322.0	289.3
GR	1322.0	298.2	1322.0	301.9	1322.0	312.0	1322.0	353.8	1322.0	366.0
GR	1322.0	428.8	1323.0	439.8	1323.6	446.8	1324.0	451.1	1324.5	454.1
GR	1326.0	463.8	1326.8	468.8	1328.0	478.3	1328.0	490.6	1328.0	491.1
GR	1327.1	494.4	1326.1	498.5	1326.0	498.7	1325.5	500.7	1324.0	506.3
GR	1323.9	507.6	1323.9	507.8	1323.2	528.8	1322.0	563.7	1322.0	564.1
GR	1322.0	566.1	1322.0	567.3	1321.6	571.2	1321.1	587.1	1321.1	593.5
GR	1321.0	595.7	1321.0	600.0	1321.0	604.8	1320.9	611.6	1320.7	617.5
GR	1320.5	632.4	1320.5	642.8	1320.9	659.5	1320.9	665.9	1321.1	671.9
GR	1322.0	690.3	1322.0	691.9	1322.0	693.8	1322.0	696.1	1322.0	704.2
GR	1323.0	719.6	1323.0	720.5	1324.0	724.6	1325.6	732.7	1326.0	734.5
GR	1326.3	736.0	1328.0	744.5	1328.0	748.6	1328.0	750.5	1326.1	757.1
GR	1326.0	757.5	1324.1	763.8	1324.0	764.2	1323.7	765.3	1322.0	770.4
GR	1322.0	784.1	1322.0	812.3	1322.0	812.6	1322.0	813.2	1322.0	813.9
GR	1323.3	915.4	1324.0	972.4	1324.0	991.0	1324.0	994.9	1324.0	997.7
GR	1324.0	1002.8	1324.0	1003.3	1324.0	1006.0	1324.0	1007.4	1324.0	1009.9
NC	0.045	0.045	0.045	0.1	0.3					
X1	49.00	95	436.9	757.4	650.0	480.0	520.0			
[illegible]	10									
GR	1326.0	350.8	1326.0	351.1	1326.0	355.4	1326.0	371.1	1326.0	372.7
GR	1326.0	381.1	1326.9	387.2	1328.0	394.6	1330.0	408.3	1330.0	408.5
GR	1330.0	408.9	1330.0	436.9	1328.3	445.7	1328.0	447.1	1327.3	451.0
GR	1326.0	457.8	1325.0	466.4	1324.1	477.1	1324.0	477.8	1324.0	505.2
GR	1324.0	537.1	1324.0	552.7	1324.0	558.6	1324.0	580.3	1324.0	580.5
GR	1324.0	589.9	1324.0	600.0	1324.0	631.0	1324.0	649.9	1323.3	654.2
GR	1322.0	662.3	1322.0	663.7	1322.0	666.4	1322.6	677.7	1322.8	684.8
GR	1324.0	709.1	1324.0	716.3	1324.0	717.0	1324.0	717.8	1324.0	724.0
GR	1324.2	725.1	1324.6	727.2	1325.8	733.6	1326.0	734.7	1326.4	737.1
GR	1328.0	746.3	1328.6	749.7	1330.0	757.4	1330.0	763.0	1330.0	765.5
GR	1330.0	773.1	1330.0	781.0	1330.0	785.8	1330.0	826.0	1330.0	826.1
GR	1330.0	826.3	1329.1	838.0	1328.0	849.7	1327.6	858.8	1327.4	863.3
GR	1327.3	864.0	1326.9	871.6	1327.4	876.5	1327.4	877.4	1327.4	880.9
GR	1327.0	894.7	1327.0	898.4	1326.8	904.1	1326.0	909.8	1326.0	910.8
GR	1326.0	911.3	1326.0	911.7	1326.0	947.1	1326.0	947.6	1326.0	947.7
GR	1326.0	947.8	1326.0	948.0	1326.0	952.1	1326.0	955.5	1326.0	955.9
GR	1326.0	962.8	1326.0	967.7	1326.0	971.8	1326.0	973.1	1325.9	979.7
GR	1325.9	980.3	1326.0	982.7	1325.8	1021.6	1326.0	1034.4	1326.0	1064.1
GR	1326.0	1064.8	1326.0	1100.3	1326.0	1106.7	1326.0	1127.4	1326.0	1131.0
X1	54.00	81	396.1	760.8	500.0	530.0	500.0			
X3	10									
GR	1353.6	311.2	1352.0	315.4	1351.0	319.1	1350.0	321.7	1350.0	322.1
GR	1349.2	329.0	1348.9	331.1	1348.9	332.1	1348.0	336.1	1347.7	337.1
[illegible]	1346.0	342.8	1344.9	346.8	1344.0	350.3	1342.7	355.3	1342.0	358.0
[illegible]	1341.4	360.3	1340.0	365.3	1339.2	368.2	1338.0	372.5	1336.6	377.7
GR	1336.0	380.0	1335.7	381.1	1334.0	387.5	1332.5	393.8	1332.0	396.1

	1331.5	398.5	1330.0	407.3	1328.4	416.1	1328.0	418.3	1327.6	430.2
GR	1326.0	478.2	1326.0	490.8	1326.0	498.6	1326.0	512.7	1326.0	517.5
GR	1325.5	520.7	1324.0	529.4	1324.0	535.2	1324.0	539.6	1324.0	560.1
GR	1324.0	583.6	1324.0	584.4	1324.0	584.7	1324.2	600.0	1324.4	618.4
GR	1324.6	630.1	1326.0	742.3	1326.0	743.3	1326.3	744.1	1328.0	748.9
GR	1329.9	754.7	1330.0	755.1	1330.1	755.4	1332.0	760.8	1332.0	773.5
GR	1332.0	780.7	1332.0	781.7	1331.9	782.6	1331.4	792.2	1331.3	793.9
GR	1330.9	800.9	1330.0	816.1	1328.4	835.3	1328.0	840.8	1326.6	870.1
GR	1326.5	874.4	1326.0	888.3	1326.0	890.3	1326.0	890.6	1326.0	896.0
GR	1324.4	1050.0	1324.4	1054.5	1324.3	1067.4	1324.3	1069.1	1324.3	1076.9
GR	1324.2	1079.6	1324.2	1089.8	1324.0	1120.7	1324.0	1121.7	1324.0	1123.9
GR	1324.0	1200.0								
X1	59.40	85	488.9	747.1	380.0	640.0	540.0			
GR	1353.4	414.0	1352.0	418.0	1350.7	423.0	1350.0	425.8	1349.0	430.6
GR	1348.0	435.1	1346.9	439.8	1346.0	443.0	1345.4	444.7	1344.1	449.7
GR	1344.1	449.9	1344.0	450.1	1343.9	450.6	1342.0	456.5	1340.9	460.0
GR	1340.0	462.9	1339.7	464.3	1338.0	479.1	1337.3	483.0	1336.4	487.1
GR	1336.3	487.7	1336.0	488.9	1335.6	490.8	1334.0	495.1	1333.0	499.4
GR	1332.0	502.3	1330.8	507.8	1330.4	510.0	1330.0	511.1	1329.7	512.2
GR	1328.0	520.4	1326.5	541.2	1326.0	548.0	1326.0	548.8	1326.0	549.4
GR	1326.0	550.5	1326.0	600.0	1326.0	600.7	1326.0	616.6	1326.0	618.9
GR	1326.0	626.2	1326.0	632.4	1326.0	637.5	1326.0	644.7	1326.0	645.6
GR	1326.0	669.9	1326.0	696.8	1326.0	697.9	1326.0	720.3	1326.0	732.8
GR	1327.3	735.5	1328.0	737.5	1329.2	740.4	1330.0	742.3	1330.0	742.4
GR	1331.0	744.8	1331.9	746.9	1332.0	747.1	1332.0	747.5	1332.0	765.6
	1330.1	771.3	1330.0	771.7	1330.0	877.4	1330.0	907.0	1330.0	918.0
GR	1330.0	953.8	1330.0	968.2	1329.8	1026.9	1329.8	1036.2	1329.8	1036.4
GR	1330.0	1075.9	1330.0	1086.4	1330.0	1093.8	1330.0	1099.0	1330.0	1101.4
GR	1330.0	1103.2	1330.0	1103.4	1330.0	1103.5	1330.0	1106.1	1330.0	1107.7
GR	1330.0	1108.5	1330.3	1127.1	1330.3	1129.3	1330.3	1136.7	1330.7	1155.6
NC	0.045	0.045	0.045	0.6	0.8					
X1	60.00	85	488.9	747.1	60.0	60.0	60.0			
GR	1353.4	414.0	1352.0	418.0	1350.7	423.0	1350.0	425.8	1349.0	430.6
GR	1348.0	435.1	1346.9	439.8	1346.0	443.0	1345.4	444.7	1344.1	449.7
GR	1344.1	449.9	1344.0	450.1	1343.9	450.6	1342.0	456.5	1340.9	460.0
GR	1340.0	462.9	1339.7	464.3	1338.0	467.8	1336.0	471.9	1334.0	476.0
GR	1332.0	480.0	1331.2	488.9	1331.0	490.8	1330.4	495.1	1330.0	499.4
GR	1329.6	502.3	1328.8	507.8	1328.3	510.0	1328.2	511.1	1328.0	512.2
GR	1328.0	520.4	1328.0	541.2	1328.0	548.0	1328.0	548.8	1328.0	549.4
GR	1328.0	550.5	1328.0	600.0	1328.0	600.7	1328.0	616.6	1328.0	618.9
GR	1328.0	626.2	1328.0	632.4	1328.0	637.5	1328.0	644.7	1328.0	645.6
GR	1328.0	669.9	1328.0	696.8	1328.0	697.9	1328.0	720.3	1328.0	732.8
GR	1328.0	735.5	1328.0	737.5	1329.2	740.4	1330.0	742.3	1330.0	742.4
GR	1331.0	744.8	1331.9	746.9	1332.0	747.1	1332.0	747.5	1332.0	765.6
GR	1330.1	771.3	1330.0	771.7	1330.0	877.4	1330.0	907.0	1330.0	918.0
GR	1330.0	953.8	1330.0	968.2	1329.8	1026.9	1329.8	1036.2	1329.8	1036.4
GR	1330.0	1075.9	1330.0	1086.4	1330.0	1093.8	1330.0	1099.0	1330.0	1101.4
GR	1330.0	1103.2	1330.0	1103.4	1330.0	1103.5	1330.0	1106.1	1330.0	1107.7
GR	1330.0	1108.5	1330.3	1127.1	1330.3	1129.3	1330.3	1136.7	1330.7	1155.6

N	0.045	0.045	0.030	0.1	0.3					
X1	64.00	58	447.3	726.0	400.0	400.0	400.0			
X3	10									
GR	1356.6	0.0	1353.7	21.9	1346.9	77.9	1332.8	210.6	1330.0	357.9
GR	1330.0	360.6	1330.0	360.9	1330.0	361.4	1330.0	361.8	1330.0	369.6
GR	1330.0	375.0	1330.0	376.0	1330.0	403.4	1330.0	403.9	1332.3	424.2
GR	1334.0	432.3	1334.0	447.3	1328.7	471.0	1328.0	472.7	1328.0	587.7
GR	1328.5	600.0	1333.6	724.8	1334.0	726.0	1334.0	735.8	1334.0	749.8
GR	1330.0	805.5	1330.0	806.0	1330.0	806.8	1330.0	807.5	1330.0	808.4
GR	1330.0	808.9	1330.0	810.3	1330.0	811.8	1330.0	836.5	1330.0	842.7
GR	1330.0	846.0	1330.0	847.8	1330.0	851.1	1330.0	855.9	1330.0	866.3
GR	1330.0	870.2	1330.0	875.8	1330.0	876.4	1330.0	895.9	1330.0	901.0
GR	1330.0	902.7	1330.0	927.7	1330.0	933.1	1330.0	939.9	1330.0	963.0
GR	1330.0	990.5	1330.0	993.9	1330.0	997.8	1330.0	1025.5	1330.0	1032.0
GR	1332.0	1192.4	1332.0	1196.5	1332.0	1200.0				
X1	69.50	90	492.9	702.8	490.0	580.0	550.0			
X3	10									
GR	1334.7	0.0	1334.7	1.4	1334.7	9.7	1334.7	13.1	1334.0	139.9
GR	1334.0	140.6	1334.0	143.3	1334.0	150.3	1334.0	154.3	1334.0	154.9
GR	1334.0	164.3	1334.0	173.9	1334.0	191.4	1334.0	193.3	1334.0	195.6
GR	1334.0	274.0	1334.0	275.6	1334.0	278.6	1334.0	280.2	1334.0	285.1
GR	1334.0	293.6	1334.0	294.5	1334.0	295.7	1333.5	354.3	1333.3	369.0
GR	1333.3	371.4	1332.4	421.6	1332.4	422.3	1332.0	447.8	1332.0	449.0
GR	1332.0	449.9	1332.0	455.8	1332.0	458.0	1332.3	459.8	1333.2	464.4
GR	1334.0	468.2	1334.7	474.9	1334.7	476.1	1335.2	492.3	1335.2	492.9
GR	1334.0	496.6	1333.4	498.2	1332.0	501.7	1330.4	506.1	1330.0	507.2
GR	1330.0	561.0	1330.0	579.6	1330.0	583.4	1330.0	685.8	1330.6	687.8
GR	1331.4	690.7	1332.0	691.9	1332.6	693.0	1334.0	697.3	1335.2	700.8
GR	1336.0	702.8	1336.0	706.0	1336.0	716.6	1335.1	720.8	1334.0	725.3
GR	1333.6	744.2	1333.0	801.6	1332.1	998.5	1332.1	1001.2	1332.1	1007.1
GR	1332.1	1009.3	1332.1	1013.0	1332.1	1014.0	1332.0	1019.1	1332.0	1021.7
GR	1332.0	1023.5	1332.0	1024.8	1332.0	1025.9	1332.0	1026.9	1332.0	1027.7
GR	1332.0	1029.9	1332.0	1030.9	1332.0	1031.5	1332.0	1031.8	1332.0	1046.3
GR	1332.0	1071.0	1332.0	1091.0	1332.0	1109.5	1332.0	1165.7	1332.0	1166.9
GR	1332.0	1168.6	1332.0	1170.8	1332.0	1174.2	1332.1	1177.1	1332.1	1179.6
X1	75.50	78	513.3	679.5	630.0	530.0	600.0			
X3	10									
GR	1338.0	0.0	1338.0	42.5	1338.0	44.7	1338.0	66.0	1338.0	70.8
GR	1338.0	71.0	1338.0	75.2	1338.0	80.9	1338.0	81.7	1338.0	82.4
GR	1338.0	99.1	1338.0	107.2	1338.0	108.6	1336.8	184.4	1336.7	187.2
GR	1336.7	196.0	1336.5	230.1	1336.5	267.7	1336.5	274.2	1336.2	342.9
GR	1336.0	361.7	1336.0	422.0	1336.0	451.6	1336.0	476.5	1336.0	493.6
GR	1336.9	498.7	1338.0	507.5	1338.0	512.2	1338.0	512.7	1338.0	512.8
GR	1338.0	513.3	1336.6	515.8	1336.0	517.0	1335.5	517.9	1334.0	521.1
GR	1333.5	521.9	1332.0	525.0	1331.1	526.9	1331.1	527.4	1331.0	528.9
GR	1330.9	544.5	1330.8	573.9	1330.8	600.0	1330.9	632.8	1330.6	653.8
GR	1331.0	657.1	1330.9	660.7	1331.0	663.1	1331.2	664.2	1332.0	665.9
GR	1333.9	670.2	1334.0	670.5	1334.2	670.9	1336.0	675.2	1337.9	679.4
GR	1338.0	679.5	1338.0	693.4	1338.0	694.9	1336.8	729.7	1336.7	733.5
GR	1336.5	737.7	1336.7	799.7	1336.6	806.9	1336.4	865.2	1336.0	916.1
GR	1336.0	929.9	1336.0	951.8	1336.0	963.0	1335.8	979.5	1335.7	986.6

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G   1335.0    1086.4    1335.2    1105.2    1335.1    1116.0    1335.8    1163.4    1335.8    1166.3
GR  1336.0    1180.8    1336.0    1199.7    1336.0    1200.0

X1    79.30       95     519.6     696.4     430.0     340.0     380.0      0.87
X3       10
GR  1344.0     189.5    1344.0     195.3    1342.4     232.8    1342.4     235.7    1342.3     248.3
GR  1342.3     249.7    1342.2     253.1    1342.0     258.2    1342.0     259.2    1342.0     268.7
GR  1341.7     274.7    1341.6     303.0    1341.5     303.8    1341.7     308.8    1341.6     310.2
GR  1341.2     320.8    1340.8     329.8    1340.7     331.7    1340.7     341.7    1340.4     350.8
GR  1340.3     364.1    1340.3     367.9    1340.3     373.7    1340.4     375.6    1340.8     384.6
GR  1341.0     386.5    1341.1     388.5    1341.5     392.1    1341.6     395.8    1341.5     399.3
GR  1341.2     401.6    1341.1     404.0    1340.8     405.7    1340.6     406.9    1340.0     413.8
GR  1340.0     414.6    1340.0     415.4    1339.9     417.6    1339.7     422.0    1339.7     430.1
GR  1339.8     432.9    1339.8     435.7    1339.8     450.8    1340.0     462.5    1340.0     466.8
GR  1340.0     467.7    1340.3     470.9    1340.3     472.1    1340.7     477.0    1340.8     487.8
GR  1341.5     501.8    1340.1     518.9    1340.1     519.1    1340.0     519.6    1339.9     519.8
GR  1338.0     523.6    1336.8     524.6    1336.0     525.3    1335.2     526.3    1334.0     528.0
GR  1333.0     529.3    1332.0     530.6    1332.0     557.8    1332.0     577.6    1332.0     586.3
GR  1332.0     600.0    1332.0     646.1    1332.0     648.7    1332.0     650.3    1332.4     650.4
GR  1333.3     650.8    1334.0     651.5    1334.2     651.8    1335.2     653.8    1336.0     655.3
GR  1336.9     657.0    1338.0     659.1    1338.3     665.4    1340.0     696.4    1340.0     697.0
GR  1340.0     699.2    1340.0     704.5    1338.5     718.7    1338.3     723.3    1338.2     725.5
GR  1338.2     725.8    1338.3     729.4    1338.3     742.4    1338.1     746.7    1338.1     748.6
GR  1338.0     784.2    1338.0     787.3    1338.0     789.3    1338.0     799.3    1338.0     814.3

NC    0.015     0.015     0.015       0.3       0.5
      1.25      1.56      2.63                95.7                574.2                1332.0     1332.0
        Beardsley Road (Proposed Outer Loop Highway)
        9 - 6'x10' Concrete Box Culvert & 1 - 8'x10' Access Tunnel
X1    83.70        42     574.9     684.1       440       440       440      0.87
X2                          1    1338.0    1344.0                                        0.87
X3       10
BT      -42     100.0    1348.0    1348.0     574.9    1344.0    1338.0     575.0    1344.0    1338.0
BT              585.0    1344.0    1338.0     585.1    1344.0    1338.0     585.9    1344.0    1338.0
BT              586.0    1344.0    1338.0     596.0    1344.0    1338.0     596.1    1344.0    1338.0
BT              596.9    1344.0    1338.0     597.0    1344.0    1338.0     607.0    1344.0    1338.0
BT              607.1    1344.0    1338.0     607.9    1344.0    1338.0     608.0    1344.0    1338.0
BT              618.0    1344.0    1338.0     618.1    1344.0    1338.0     618.9    1344.0    1338.0
BT              619.0    1344.0    1338.0     629.0    1344.0    1338.0     629.1    1344.0    1338.0
BT              629.9    1344.0    1338.0     630.0    1344.0    1338.0     640.0    1344.0    1338.0
BT              640.1    1344.0    1338.0     640.9    1344.0    1338.0     641.0    1344.0    1338.0
BT              651.0    1344.0    1338.0     651.1    1344.0    1338.0     651.9    1344.0    1338.0
BT              652.0    1344.0    1338.0     662.0    1344.0    1338.0     662.1    1344.0    1338.0
BT              662.9    1344.0    1338.0     663.0    1344.0    1338.0     673.0    1344.0    1338.0
BT              673.1    1344.0    1338.0     673.9    1344.0    1340.0     674.0    1344.0    1340.0
BT              684.0    1344.0    1340.0     684.1    1344.0    1340.0    1000.0    1342.0    1342.0
GR  1348.0      100.0    1338.0     574.9    1332.0     575.0    1332.0     585.0    1338.0     585.1
GR  1338.0      585.9    1332.0     586.0    1332.0     596.0    1338.0     596.1    1338.0     596.9
GR  1332.0      597.0    1332.0     607.0    1338.0     607.1    1338.0     607.9    1332.0     608.0
GR  1332.0      618.0    1338.0     618.1    1338.0     618.9    1332.0     619.0    1332.0     629.0
GR  1338.0      629.1    1338.0     629.9    1332.0     630.0    1332.0     640.0    1338.0     640.1
    1338.0      640.9    1332.0     641.0    1332.0     651.0    1338.0     651.1    1338.0     651.9
    1332.0      652.0    1332.0     662.0    1338.0     662.1    1338.0     662.9    1332.0     663.0
GR  1332.0      673.0    1338.0     673.1    1338.0     673.9    1340.0     674.0    1332.0     684.0
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	1340.0	684.1	1342.0	1000.0						
NC	0.045	0.045	0.030	0.6	0.8					
ET		9.1							271.0	681.8
X1	84.20	95	495.6	696.3	50.0	50.0	50.0	0.87		
X3	10									
GR	1342.0	0.0	1342.0	0.0	1342.0	50.5	1342.0	51.8	1342.0	52.3
GR	1342.0	82.0	1342.0	131.8	1342.0	132.7	1342.0	163.9	1342.0	169.0
GR	1340.3	180.6	1340.3	181.9	1340.3	182.4	1340.3	182.8	1340.3	183.2
GR	1340.3	195.5	1340.3	198.6	1340.3	198.7	1342.0	222.7	1342.0	225.8
GR	1342.0	252.2	1342.0	270.1	1342.0	271.0	1341.3	301.7	1341.2	304.4
GR	1341.2	333.1	1341.1	335.1	1341.0	348.7	1341.0	352.6	1340.9	367.1
GR	1341.0	379.4	1341.0	381.7	1340.0	401.9	1340.0	403.0	1340.0	404.5
GR	1340.0	495.6	1339.0	502.9	1338.9	510.3	1338.7	512.5	1338.7	514.6
GR	1338.3	516.8	1338.0	519.3	1337.9	520.5	1337.9	520.7	1337.6	524.3
GR	1337.5	524.7	1337.4	531.1	1336.9	534.9	1336.7	536.8	1336.0	538.8
GR	1335.8	540.6	1335.4	544.8	1334.8	598.3	1334.8	600.0	1334.0	653.9
GR	1334.0	655.9	1334.0	656.1	1334.0	659.1	1334.0	662.0	1334.0	662.5
GR	1334.3	664.5	1336.0	669.5	1337.9	675.3	1338.0	675.4	1338.2	675.7
GR	1340.0	679.6	1340.8	680.7	1342.0	681.8	1342.6	684.0	1344.0	696.3
GR	1344.0	701.4	1344.0	704.7	1343.8	708.9	1343.8	710.4	1342.9	725.4
GR	1342.4	733.0	1342.0	739.2	1342.0	739.8	1342.0	741.0	1340.4	778.7
GR	1340.0	780.2	1340.0	780.7	1340.0	784.8	1340.0	788.5	1340.0	797.8
GR	1340.0	800.5	1340.0	802.4	1340.0	804.3	1340.0	825.3	1340.0	826.0
GR	1340.0	828.3	1340.0	844.2	1340.0	854.4	1340.0	858.7	1340.0	860.0
	0.045	0.045	0.030	0.1	0.3					
X1	86.20	95	513.7	677.5	180.0	225.0	200.0			
X3	10									
GR	1348.4	99.1	1348.4	99.9	1348.0	105.6	1348.0	112.0	1347.2	118.0
GR	1346.5	122.4	1346.0	126.3	1344.8	134.8	1344.0	141.3	1343.3	146.2
GR	1342.0	158.8	1342.0	211.1	1342.0	212.5	1342.0	237.5	1342.0	247.7
GR	1341.1	254.1	1341.1	258.5	1341.1	260.3	1341.2	261.8	1341.2	263.1
GR	1341.2	269.0	1341.2	270.2	1341.2	270.9	1342.0	279.4	1342.0	280.4
GR	1342.0	287.1	1342.0	344.6	1342.0	348.9	1340.9	397.8	1340.9	403.5
GR	1340.8	406.4	1341.0	437.1	1341.1	443.6	1341.3	454.0	1341.3	456.3
GR	1341.5	471.1	1341.5	472.9	1342.0	493.4	1342.0	500.4	1342.0	513.7
GR	1341.2	517.4	1340.0	525.0	1338.3	531.1	1338.0	532.1	1337.4	535.9
GR	1336.0	547.7	1336.0	549.3	1336.0	551.5	1336.0	600.0	1336.0	607.7
GR	1336.0	633.7	1336.0	659.4	1337.4	662.3	1338.0	663.5	1338.6	664.9
GR	1340.0	667.8	1341.4	671.5	1342.0	672.9	1343.6	676.7	1344.0	677.5
GR	1344.0	682.3	1344.0	706.0	1343.0	710.5	1342.0	715.4	1342.0	729.3
GR	1342.0	769.9	1342.0	777.3	1342.0	802.2	1342.0	811.9	1342.0	816.8
GR	1340.3	865.4	1340.0	873.1	1340.0	878.9	1340.0	891.5	1340.7	894.8
GR	1340.6	895.3	1340.6	896.0	1340.6	900.1	1340.6	906.1	1341.4	924.4
GR	1341.5	933.0	1341.7	949.3	1341.7	951.1	1341.8	952.1	1341.8	955.2
GR	1341.9	956.9	1342.0	974.4	1342.0	1004.8	1342.0	1007.1	1342.0	1014.7
GR	1342.0	1018.6	1342.0	1026.7	1342.0	1027.4	1342.0	1030.7	1342.0	1040.5

X	92.70	95	379.1	795.4	550.0	750.0	650.0			
X3	10									
GR	1349.6	91.7	1348.0	98.4	1346.4	106.0	1346.0	107.5	1344.5	113.8
GR	1344.0	115.8	1343.1	119.8	1342.0	144.1	1342.0	149.7	1342.0	165.3
GR	1342.0	186.0	1342.0	197.6	1342.0	208.7	1342.0	212.0	1342.0	213.7
GR	1342.0	216.2	1342.0	217.0	1342.0	221.4	1342.0	223.5	1342.0	231.6
GR	1342.0	243.0	1342.0	261.5	1342.0	265.6	1342.0	267.1	1342.0	276.1
GR	1342.0	296.3	1343.7	333.1	1344.0	340.5	1344.0	372.0	1344.0	379.1
GR	1343.3	382.2	1342.0	388.0	1341.3	391.2	1340.5	394.7	1340.0	397.4
GR	1339.7	399.7	1339.6	400.8	1339.5	403.9	1339.6	407.2	1339.0	420.5
GR	1338.5	438.9	1338.6	460.6	1338.6	510.6	1338.6	521.7	1338.6	573.8
GR	1338.5	587.9	1338.5	599.2	1338.5	600.0	1338.5	624.5	1338.5	710.4
GR	1339.2	752.2	1339.2	756.5	1340.0	769.7	1340.0	769.7	1340.0	769.9
GR	1341.1	774.2	1342.0	777.9	1343.6	784.4	1344.0	786.4	1344.5	788.5
GR	1346.0	795.4	1346.0	806.2	1346.0	808.1	1346.0	809.1	1346.0	811.1
GR	1346.0	817.0	1346.0	819.5	1346.3	833.9	1346.3	839.3	1346.4	919.4
GR	1346.4	921.4	1346.3	937.8	1346.1	952.0	1346.1	953.4	1346.0	960.1
GR	1346.0	1010.1	1346.0	1016.5	1346.0	1022.9	1346.0	1029.4	1346.0	1035.8
GR	1346.0	1040.7	1346.0	1042.5	1346.0	1046.0	1346.0	1046.6	1346.0	1051.1
GR	1346.0	1051.9	1346.0	1052.8	1346.0	1061.5	1346.0	1062.4	1346.0	1070.0
GR	1346.0	1073.8	1346.0	1084.4	1346.0	1086.2	1346.0	1089.4	1346.0	1090.0
NC	0.045	0.045	0.030	0.6	0.8					
X1	93.20	95	349.2	821.1	50.0	50.0	50.0			
X3	10									
	1347.7	87.3	1346.0	96.2	1345.6	98.2	1345.3	99.5	1344.3	105.0
GR	1344.0	106.4	1344.0	112.3	1342.5	173.7	1342.4	178.5	1342.0	201.2
GR	1342.0	206.1	1342.0	207.4	1342.0	210.3	1342.0	218.9	1342.0	223.5
GR	1342.0	227.2	1342.0	237.5	1342.0	238.7	1342.0	239.5	1342.0	246.1
GR	1342.0	254.9	1342.0	258.5	1342.0	260.1	1342.0	269.1	1342.0	277.4
GR	1342.0	279.2	1342.0	285.6	1343.9	330.0	1344.0	332.2	1344.8	337.3
GR	1346.0	344.6	1346.0	347.8	1346.0	349.2	1345.4	359.5	1344.0	383.7
GR	1342.8	387.4	1342.0	389.6	1341.3	392.0	1341.3	396.2	1341.3	400.7
GR	1341.3	428.1	1341.3	437.8	1341.3	555.4	1341.3	560.4	1341.3	584.3
GR	1341.3	590.8	1341.3	596.0	1341.3	600.0	1341.3	663.5	1341.3	704.4
GR	1341.3	744.5	1341.3	787.6	1341.8	790.7	1342.0	791.0	1342.2	791.5
GR	1342.7	793.1	1344.0	798.1	1344.7	803.1	1346.0	811.8	1346.0	813.9
GR	1346.0	814.2	1346.0	815.7	1346.4	821.1	1346.4	827.1	1347.1	864.4
GR	1347.2	867.1	1347.2	907.2	1347.2	912.9	1347.1	921.2	1347.0	928.5
GR	1347.0	944.6	1346.9	952.2	1346.8	959.9	1346.6	968.0	1346.6	973.0
GR	1346.6	976.5	1346.5	979.8	1346.5	984.6	1346.4	1001.1	1346.4	1006.7
GR	1346.4	1010.5	1346.4	1023.6	1346.4	1025.8	1346.4	1033.4	1346.0	1089.4
GR	1346.0	1090.9	1346.0	1091.3	1346.0	1091.5	1346.0	1092.6	1346.0	1092.9
GR	1346.0	1095.0	1346.0	1098.2	1346.0	1101.9	1346.0	1111.0	1346.0	1115.6
X1	98.30	89	273.7	867.5	680.0	380.0	510.0			
GR	1348.8	0.0	1348.8	2.3	1348.7	18.9	1348.7	25.6	1348.6	32.3
GR	1348.4	60.8	1348.0	98.0	1348.0	102.8	1348.0	138.3	1348.0	150.1
GR	1348.0	165.4	1348.0	172.2	1348.0	196.6	1348.0	199.6	1348.0	208.1
GR	1348.0	238.0	1348.0	238.1	1350.0	251.6	1350.0	252.4	1350.0	252.4
	1350.0	263.0	1350.0	263.9	1350.0	273.4	1350.0	273.5	1350.0	273.7
	1349.7	275.3	1348.0	285.4	1347.6	287.8	1346.0	296.6	1344.6	304.6
GR	1344.0	308.0	1343.3	337.3	1343.4	338.7	1343.4	339.9	1343.1	356.6

	1344.0	381.3	1342.6	538.0	1342.4	555.9	1342.6	600.0	1342.6	602.5
	1342.6	613.0	1342.7	632.5	1342.5	649.8	1342.3	665.1	1342.2	666.9
GR	1342.2	671.0	1342.3	680.8	1342.4	703.2	1342.5	715.7	1342.7	732.1
GR	1342.7	735.2	1342.8	779.8	1342.9	794.5	1342.8	800.0	1344.0	817.8
GR	1344.0	818.8	1344.3	820.3	1345.0	824.4	1346.0	829.5	1346.4	832.1
GR	1348.0	842.4	1348.6	848.2	1350.0	867.5	1350.0	868.6	1350.0	869.7
GR	1350.0	870.4	1350.0	871.1	1350.0	871.6	1349.6	897.1	1349.6	901.6
GR	1349.5	905.6	1349.5	908.6	1349.4	913.5	1349.4	917.4	1349.4	920.4
GR	1348.7	994.6	1348.0	1032.4	1348.0	1039.3	1348.0	1054.6	1348.0	1063.1
GR	1348.0	1063.3	1348.0	1064.1	1348.0	1084.3	1348.0	1089.2	1348.0	1096.0
GR	1348.0	1115.2	1348.0	1130.3	1348.0	1143.9	1348.0	1200.0		
NC	0.045	0.045	0.030	0.6	0.8					
X1	99.40	95	202.8	901.0	100.0	90.0	110.0			
GR	1350.0	22.6	1350.0	35.6	1350.0	42.8	1350.0	43.4	1350.0	43.7
GR	1350.0	48.9	1350.0	78.2	1350.0	91.5	1350.0	92.6	1349.5	145.9
GR	1349.7	164.1	1349.8	176.3	1350.0	183.5	1350.0	191.5	1350.0	197.4
GR	1350.0	199.0	1350.0	202.5	1350.0	202.8	1349.5	212.1	1349.5	213.5
GR	1349.4	218.3	1349.0	226.8	1348.8	231.0	1348.6	236.0	1348.0	242.5
GR	1348.0	243.3	1348.0	244.5	1348.0	244.8	1347.1	269.8	1347.0	300.1
GR	1347.0	302.8	1347.0	309.5	1347.0	320.9	1347.0	329.1	1347.0	336.6
GR	1347.0	382.7	1347.0	401.2	1347.0	402.7	1347.0	403.6	1347.0	406.7
GR	1347.0	407.4	1347.0	411.9	1347.0	432.6	1347.0	433.3	1347.0	451.3
GR	1347.0	475.8	1347.0	479.7	1347.0	600.0	1347.0	668.7	1347.0	670.4
GR	1347.0	673.8	1347.0	677.1	1347.0	680.3	1347.0	680.7	1347.0	681.6
GR	1347.0	683.9	1347.0	790.6	1347.0	792.6	1347.0	795.7	1347.0	796.3
	1347.0	807.5	1347.0	836.8	1347.0	838.5	1347.0	844.7	1347.0	856.0
GR	1347.0	858.6	1347.0	866.1	1347.0	872.8	1348.0	879.0	1348.8	884.8
GR	1348.8	886.3	1349.4	892.4	1350.0	901.0	1350.0	903.2	1350.0	905.1
GR	1350.0	905.5	1350.0	906.7	1350.0	907.1	1349.6	939.1	1349.5	943.4
GR	1349.5	946.4	1349.5	948.7	1349.4	952.8	1349.4	955.7	1349.4	958.0
GR	1349.1	996.7	1348.0	1043.6	1348.0	1057.2	1348.0	1098.0	1348.0	1105.2
GR	1348.0	1131.1	1348.0	1132.7	1348.0	1132.8	1348.0	1150.5	1348.0	1156.3
NC	0.015	0.015	0.015	0.1	0.3					
	35th Avenue Dip Roadway Crossing									
X1	103.90	6	350.0	810.0	210.0	680.0	450.0			
GR	1350.3	0.0	1350.0	350.0	1348.0	600.0	1349.3	810.0	1350.0	900.0
GR	1352.0	1070.0								
NC	0.045	0.045	0.045	0.1	0.3					
X1	104.40	98	355.6	766.4	50.0	50.0	50.0			
GR	1350.9	0.0	1350.9	2.3	1350.9	3.1	1350.9	6.0	1350.9	7.3
GR	1350.9	8.6	1351.3	48.0	1351.4	52.7	1352.0	70.5	1352.0	76.6
GR	1352.0	78.1	1352.0	79.4	1352.0	82.6	1352.0	86.5	1352.0	92.5
GR	1352.0	111.7	1350.9	138.4	1350.8	147.9	1350.7	151.2	1350.5	159.1
GR	1350.0	184.4	1350.0	184.9	1350.0	196.2	1350.0	203.3	1350.0	208.0
GR	1350.0	216.0	1350.0	232.8	1350.0	243.4	1350.0	247.5	1350.0	258.1
GR	1350.0	258.8	1350.0	270.2	1350.0	271.0	1350.0	300.5	1350.0	312.4
GR	1350.0	320.1	1350.0	324.7	1350.0	332.3	1350.0	346.4	1350.0	355.6
GR	1348.1	397.2	1348.1	398.2	1348.1	398.6	1348.1	399.5	1348.0	405.3
	1348.0	405.6	1348.0	408.8	1348.0	409.2	1348.0	415.5	1348.0	416.9
	1348.0	419.2	1348.0	422.1	1348.0	425.5	1348.0	427.5	1348.0	435.2
GR	1348.0	462.4	1348.0	470.1	1348.0	472.3	1348.0	475.2	1348.5	488.6

	1348.1	495.4	1348.1	495.9	1348.0	497.5	1348.0	501.7	1348.0	506.1
GR	1348.0	507.4	1348.0	510.5	1348.0	532.8	1348.0	541.3	1348.0	553.6
GR	1348.0	556.4	1348.0	559.1	1348.0	559.1	1348.1	561.4	1348.1	562.4
GR	1349.1	598.4	1349.1	603.5	1349.2	615.7	1348.0	752.9	1348.0	754.2
GR	1348.0	754.4	1348.0	756.1	1348.6	759.0	1350.0	766.4	1350.0	770.2
GR	1350.4	802.3	1350.6	945.9	1350.6	949.1	1350.8	1000.7	1350.9	1003.7
GR	1350.7	1032.0	1350.7	1033.5	1350.7	1035.1	1350.7	1037.1	1350.8	1054.5
GR	1350.8	1058.5	1350.8	1061.5	1350.9	1070.1				
X1	109.40	91	433.8	839.2	700.0	350.0	500.0			
GR	1354.6	0.0	1354.6	0.6	1354.6	1.7	1354.5	4.2	1354.5	8.0
GR	1354.5	10.6	1354.0	40.4	1354.0	50.7	1354.0	55.0	1354.0	59.9
GR	1354.0	153.7	1354.0	173.7	1354.0	207.0	1354.0	208.7	1354.0	213.6
GR	1354.1	216.1	1354.2	226.2	1354.0	302.8	1354.0	342.5	1354.0	380.4
GR	1353.9	381.4	1353.2	387.7	1352.1	396.8	1352.0	398.1	1352.0	398.4
GR	1352.0	398.9	1352.0	399.8	1352.0	407.1	1352.0	412.6	1352.0	414.6
GR	1352.0	415.0	1352.0	416.0	1352.0	426.8	1352.0	433.8	1350.4	437.5
GR	1350.0	438.4	1348.0	442.7	1348.0	443.2	1348.0	446.3	1349.7	451.5
GR	1350.0	696.5	1350.0	769.0	1350.0	770.9	1350.0	801.2	1349.2	819.0
GR	1350.0	828.5	1350.2	829.5	1350.5	831.4	1350.9	833.9	1351.4	836.5
GR	1352.0	839.2	1352.4	840.9	1352.6	842.0	1353.6	849.6	1354.0	852.5
GR	1354.0	853.1	1354.0	857.2	1354.3	864.5	1354.3	865.0	1354.5	869.6
GR	1354.6	871.6	1354.7	873.6	1356.0	895.1	1356.0	900.3	1356.0	907.8
GR	1356.0	929.1	1356.0	931.5	1356.0	932.8	1356.0	937.4	1356.0	939.1
GR	1356.0	941.9	1356.0	942.5	1356.0	945.0	1356.0	954.7	1356.0	957.2
GR	1356.0	977.8	1356.0	983.8	1356.0	995.0	1356.0	1000.9	1356.0	1028.0
	1355.9	1030.4	1355.8	1031.6	1354.7	1058.8	1354.0	1073.5	1354.0	1083.6
GR	1354.0	1086.2	1354.0	1092.1	1354.0	1097.8	1354.0	1100.3	1354.0	1123.4
GR	1354.0	1152.8								
X1	114.40	88	421.1	847.8	500	500	500			
GR	1356.6	0.0	1356.4	18.4	1356.4	28.2	1356.3	33.6	1356.2	54.3
GR	1356.2	56.0	1356.2	59.5	1356.2	60.3	1356.2	63.4	1356.3	85.9
GR	1356.3	86.6	1356.3	87.8	1356.4	90.1	1358.0	215.0	1358.0	216.2
GR	1358.0	217.9	1358.0	285.5	1358.0	286.1	1358.0	287.3	1358.0	319.9
GR	1358.0	322.8	1358.0	324.4	1357.0	357.8	1356.9	366.5	1356.0	400.5
GR	1356.0	401.2	1355.1	408.7	1354.3	418.4	1354.0	421.1	1353.1	435.5
GR	1352.0	452.4	1350.4	456.8	1350.0	457.8	1350.0	462.4	1350.0	466.8
GR	1350.0	467.6	1350.2	468.2	1350.8	469.8	1351.5	472.3	1352.0	473.8
GR	1353.4	516.7	1353.1	539.6	1353.2	541.2	1352.7	544.9	1352.6	545.3
GR	1352.0	548.8	1352.0	560.4	1352.0	562.2	1352.0	580.3	1352.0	583.6
GR	1352.0	584.8	1352.0	600.0	1352.0	609.3	1352.0	609.7	1352.0	611.4
GR	1352.0	659.6	1352.0	667.2	1352.0	821.4	1352.0	825.9	1352.0	828.2
GR	1352.0	829.1	1352.0	841.9	1352.3	843.1	1354.0	847.8	1355.6	853.7
GR	1356.0	854.8	1356.3	856.0	1358.0	861.2	1358.0	898.6	1358.0	948.5
GR	1358.0	956.6	1358.0	1030.1	1358.3	1035.1	1358.4	1041.7	1358.7	1049.9
GR	1358.9	1057.8	1359.2	1100.3	1359.2	1101.6	1359.2	1103.6	1359.2	1106.2
GR	1359.1	1107.0	1359.1	1110.2	1359.1	1111.5	1358.9	1150.0	1358.9	1155.8
GR	1358.9	1158.1	1358.9	1160.1	1359.0	1200.0				

X1	119.40	96	396.3	794.0	500.0	500.0	500.0			
GR	1360.0	0.0	1360.0	5.0	1360.0	5.4	1360.0	11.5	1360.0	13.4
GR	1360.0	287.9	1360.0	289.9	1359.9	290.5	1359.9	291.0	1359.9	295.3
GR	1359.5	305.7	1359.3	315.8	1358.7	340.4	1358.6	342.6	1358.0	353.8
GR	1358.0	354.7	1358.0	355.0	1358.0	356.0	1358.0	357.5	1358.0	366.2
GR	1358.0	371.3	1358.0	375.4	1358.0	396.3	1356.7	416.8	1356.0	427.0
GR	1356.0	433.0	1356.0	437.4	1356.0	440.8	1356.0	441.8	1355.5	457.7
GR	1355.6	493.2	1355.7	494.8	1355.7	496.5	1354.0	503.3	1353.7	504.2
GR	1352.0	509.9	1352.0	513.0	1352.0	514.7	1353.7	519.7	1354.1	520.7
GR	1356.0	526.6	1356.0	535.5	1356.0	540.3	1356.0	556.0	1356.0	564.7
GR	1356.0	596.1	1356.0	615.1	1356.2	627.9	1356.6	673.2	1356.8	718.1
GR	1357.1	734.6	1357.4	754.4	1357.4	755.6	1358.0	794.0	1358.4	795.3
GR	1360.0	801.8	1361.1	806.0	1361.1	809.1	1361.0	816.5	1361.0	832.6
GR	1361.3	882.8	1361.7	913.8	1361.6	925.3	1361.6	930.6	1361.7	936.6
GR	1361.7	940.3	1362.0	972.7	1362.0	983.1	1362.0	984.1	1362.0	984.5
GR	1362.0	986.5	1362.0	993.0	1362.0	996.1	1362.0	997.8	1362.0	1002.5
GR	1362.0	1003.0	1360.6	1054.5	1360.6	1056.0	1360.6	1057.4	1360.6	1058.6
GR	1360.7	1068.5	1360.7	1069.6	1361.1	1091.6	1361.1	1092.3	1361.2	1096.6
GR	1361.5	1104.8	1361.5	1105.7	1361.7	1129.3	1361.8	1134.3	1362.0	1148.6
GR	1362.0	1149.3	1362.0	1156.3	1362.0	1158.3	1362.0	1190.4	1362.0	1192.0
GR	1362.0	1196.1								

Begin Split Flow at North and South Branch of Scatter Wash

X1	123.7	95	494.4	641.3	430.0	430.0	430.0			
GR	1362.0	63.6	1362.0	65.5	1362.0	70.8	1362.0	71.4	1362.0	101.1
GR	1362.0	107.3	1362.0	112.7	1362.0	139.0	1362.0	165.5	1362.0	171.3
GR	1362.0	171.4	1362.0	171.7	1362.0	173.4	1362.0	174.1	1362.0	204.5
GR	1362.0	269.6	1362.0	270.9	1362.0	272.0	1362.0	272.4	1362.0	273.7
GR	1362.0	280.6	1360.6	355.6	1360.0	388.3	1359.3	401.3	1359.2	404.1
GR	1358.0	448.2	1358.0	458.3	1358.0	460.7	1358.0	461.0	1358.0	476.1
GR	1358.0	494.4	1356.8	531.0	1356.7	532.4	1356.7	533.6	1356.7	534.3
GR	1356.7	535.6	1356.7	538.1	1356.0	572.6	1356.0	572.8	1356.0	574.1
GR	1355.9	574.3	1355.6	575.1	1354.0	579.6	1354.0	588.7	1354.0	593.4
GR	1354.6	596.9	1355.1	600.0	1356.0	605.0	1356.6	615.4	1358.0	641.3
GR	1358.0	644.7	1358.0	648.6	1358.0	661.6	1358.0	671.2	1358.6	697.0
GR	1359.0	703.4	1359.9	716.2	1359.9	716.5	1360.0	718.2	1360.0	718.5
GR	1360.0	718.8	1361.6	735.2	1361.7	737.3	1362.0	740.7	1362.0	740.9
GR	1362.0	741.6	1362.0	747.4	1362.0	749.0	1362.0	801.7	1362.0	862.2
GR	1362.0	862.3	1362.0	862.4	1362.0	888.3	1362.0	899.0	1362.0	951.9
GR	1362.0	952.3	1362.0	953.9	1362.0	954.2	1362.0	954.6	1362.0	957.0
GR	1362.0	960.7	1362.0	968.5	1362.0	972.5	1362.0	977.2	1362.0	999.2
GR	1362.0	1000.4	1362.0	1008.2	1362.1	1022.9	1362.1	1026.9	1362.1	1027.3
GR	1362.3	1065.7	1362.3	1066.5	1362.3	1067.1	1362.4	1076.7	1363.0	1106.2

QT	4	1425	2231	2642	4472

Begin North Branch of Scatter Wash

X1	130.40	87	531.0	663.7	670	670	670			
GR	1366.0	0.0	1366.0	15.2	1366.0	15.9	1366.0	22.4	1366.0	28.0
GR	1366.0	29.0	1366.0	33.4	1364.8	125.5	1364.5	185.7	1364.5	187.4
GR	1364.5	217.3	1364.5	218.2	1364.5	220.3	1364.5	222.0	1364.6	315.4
GR	1364.6	318.0	1364.6	319.0	1364.6	319.9	1364.5	325.5	1364.5	326.9
GR	1364.5	341.7	1364.5	350.8	1364.0	405.6	1364.0	410.4	1364.0	425.6
GR	1364.0	429.6	1364.0	453.5	1363.7	460.2	1363.1	472.8	1362.6	489.4

[illegible]	1362.0	504.6	1362.0	506.1	1362.0	506.8	1362.0	508.9	1362.0	511.9
GR	1362.0	518.0	1362.0	518.4	1362.0	526.9	1362.0	529.1	1362.0	529.4
GR	1362.0	531.0	1361.9	532.7	1361.7	540.5	1361.1	554.7	1361.0	559.5
GR	1360.0	585.8	1360.0	587.0	1359.5	590.9	1358.4	598.7	1358.2	599.5
GR	1358.2	600.0	1358.0	601.2	1358.0	602.8	1358.0	612.1	1358.6	616.2
GR	1360.0	624.0	1360.0	641.4	1360.0	641.8	1360.0	643.3	1360.0	645.0
GR	1360.0	646.5	1361.5	659.5	1362.0	663.7	1362.1	665.9	1362.6	675.4
GR	1362.6	677.1	1364.0	726.0	1364.0	728.1	1364.0	731.8	1364.0	736.5
GR	1364.0	814.7	1364.0	815.9	1364.0	820.9	1364.0	821.3	1364.0	821.9
GR	1365.4	950.3	1365.4	951.2	1365.7	960.0	1365.8	965.5	1365.9	969.4
GR	1366.0	974.6	1366.0	976.2	1366.0	977.3	1366.0	984.4	1366.0	988.9
GR	1366.0	1127.3	1367.4	1200.0						
X1	135.40	90	574.4	742.2	500.0	500.0	500.0			
X3	10									
GR	1366.1	0.0	1366.5	30.0	1366.5	35.9	1366.7	76.1	1366.8	89.3
GR	1366.8	89.9	1366.8	102.2	1366.8	103.0	1366.9	114.3	1366.9	137.1
GR	1367.0	152.3	1367.1	164.0	1367.3	191.2	1367.4	200.3	1367.6	225.6
GR	1368.0	256.4	1368.0	259.7	1368.0	264.8	1368.0	267.0	1368.0	274.4
GR	1368.0	281.8	1368.0	292.6	1368.0	305.5	1368.0	329.1	1368.0	330.3
GR	1368.0	339.5	1367.8	352.9	1367.7	362.5	1367.3	391.3	1366.0	443.8
GR	1366.0	444.2	1366.0	446.9	1365.6	463.0	1365.6	464.0	1364.0	569.1
GR	1364.0	574.4	1362.9	583.8	1362.0	590.6	1360.8	597.3	1360.3	600.0
GR	1360.2	600.5	1360.0	602.0	1360.0	602.5	1360.0	605.2	1360.0	611.6
GR	1360.0	616.2	1360.0	620.9	1360.4	628.8	1360.4	631.0	1362.0	669.2
GR	1362.0	673.5	1362.0	682.5	1362.0	687.2	1362.0	691.5	1363.3	725.3
[illegible]	1364.0	742.2	1365.1	801.9	1366.0	851.2	1366.0	851.9	1366.0	853.1
GR	1366.0	855.0	1366.0	865.1	1366.6	894.1	1366.6	896.4	1366.9	920.0
GR	1367.0	926.8	1367.1	937.4	1367.2	945.5	1367.2	951.6	1368.0	1044.1
GR	1368.0	1044.2	1368.0	1045.1	1368.0	1045.3	1368.0	1045.6	1368.0	1052.8
GR	1368.0	1066.5	1368.0	1078.8	1368.0	1092.3	1368.0	1094.2	1368.0	1095.5
GR	1368.0	1098.0	1368.0	1099.6	1368.0	1102.2	1368.0	1104.0	1368.0	1106.3
GR	1368.0	1109.1	1368.0	1154.7	1368.0	1164.4	1368.0	1173.0	1368.9	1200.0
X1	139.10	81	475.3	701.2	400.0	340.0	370.0			
GR	1372.0	0.0	1372.0	2.3	1372.0	3.7	1372.0	4.7	1372.0	38.0
GR	1372.0	40.0	1372.0	41.2	1372.0	64.4	1372.0	73.1	1372.0	78.5
GR	1372.0	79.0	1372.0	87.1	1372.0	88.2	1372.0	118.6	1372.0	133.6
GR	1372.0	136.6	1372.0	164.7	1372.0	167.6	1372.0	192.8	1371.3	203.7
GR	1371.2	204.3	1371.2	207.9	1371.2	210.5	1371.2	212.2	1371.2	213.2
GR	1371.2	213.6	1371.3	223.6	1371.3	229.0	1371.9	315.3	1372.0	318.4
GR	1372.0	319.1	1372.0	319.8	1372.2	320.4	1372.4	321.7	1372.4	322.4
GR	1372.4	324.9	1372.4	327.7	1372.0	329.3	1372.0	336.1	1372.0	340.9
GR	1372.0	352.4	1372.0	355.2	1372.0	359.6	1371.9	367.8	1372.0	373.3
GR	1373.2	378.9	1372.0	383.4	1372.0	385.7	1372.0	386.5	1371.8	391.6
GR	1371.8	395.4	1371.7	398.1	1370.0	435.4	1370.0	469.1	1370.0	470.7
GR	1370.0	475.3	1369.4	479.0	1368.0	488.8	1367.7	490.7	1366.0	502.4
GR	1364.2	561.3	1364.0	569.4	1364.0	573.3	1364.0	583.6	1365.3	592.6
GR	1366.0	600.0	1366.0	603.6	1366.0	605.3	1366.0	652.0	1366.0	658.9
GR	1366.0	684.4	1367.1	688.8	1368.0	692.4	1369.0	696.7	1370.0	701.2
GR	1370.1	1148.2	1370.2	1148.9	1370.3	1182.8	1370.2	1188.3	1370.2	1188.5
[illegible]	1370.1	1200.0								

	144.10	96	502.5	693.2	500.0	500.0	500.0			
X3	10									
GR	1372.0	56.1	1372.9	57.6	1374.0	58.9	1374.0	68.2	1374.0	69.0
GR	1374.0	125.6	1374.0	136.3	1374.0	138.0	1374.0	141.9	1372.5	168.3
GR	1372.5	168.9	1372.5	174.8	1372.5	176.0	1372.0	194.6	1372.0	197.5
GR	1372.0	199.1	1372.0	199.8	1371.7	200.9	1371.2	204.8	1371.3	209.4
GR	1370.4	216.3	1370.0	217.9	1369.3	220.4	1368.0	225.2	1368.0	226.0
GR	1368.0	231.2	1369.9	237.7	1370.0	238.1	1370.7	264.5	1370.8	265.5
GR	1371.0	272.8	1371.2	279.4	1371.4	285.3	1371.7	294.4	1371.9	300.3
GR	1371.9	309.9	1371.9	310.4	1371.9	312.7	1371.8	315.4	1371.4	370.8
GR	1371.5	377.6	1371.6	385.2	1371.6	385.9	1371.6	386.3	1371.7	392.2
GR	1371.7	399.3	1371.7	403.2	1371.6	404.6	1371.6	406.9	1371.6	410.7
GR	1371.5	446.1	1371.5	447.1	1371.5	451.4	1371.2	479.4	1371.2	484.0
GR	1371.2	492.4	1372.0	502.5	1370.7	533.7	1370.0	545.3	1369.6	548.3
GR	1368.0	558.1	1367.5	567.5	1366.6	590.3	1366.2	600.0	1366.0	603.8
GR	1366.0	613.6	1366.0	620.2	1368.0	671.7	1368.0	673.0	1369.5	680.7
GR	1369.7	681.4	1370.0	683.0	1370.2	684.2	1372.0	693.2	1372.0	706.9
GR	1372.0	960.8	1372.0	974.1	1372.0	994.2	1372.5	1003.2	1372.4	1023.4
GR	1372.4	1024.6	1372.4	1027.0	1372.3	1070.3	1372.3	1072.4	1372.8	1093.0
GR	1373.0	1094.9	1372.8	1110.7	1372.9	1114.1	1372.8	1129.2	1372.8	1134.3
GR	1372.7	1145.2	1372.7	1149.4	1372.6	1159.2	1372.5	1169.2	1372.6	1174.0
GR	1372.8	1200.0								
X1	148.60	95	535.7	698.4	420.0	480.0	450.0			
X3	10									
	1374.0	112.4	1374.0	121.5	1374.0	124.5	1374.0	129.8	1374.6	154.9
GR	1374.6	156.1	1374.5	163.0	1374.0	181.2	1374.0	181.3	1374.0	181.4
GR	1374.0	182.6	1374.0	201.8	1374.0	203.4	1374.0	226.6	1374.0	227.8
GR	1374.0	228.9	1374.0	230.9	1374.0	231.8	1374.0	237.3	1374.0	241.1
GR	1374.0	241.1	1374.0	242.2	1373.9	243.7	1373.9	243.9	1373.8	246.0
GR	1373.8	246.2	1373.8	246.5	1373.7	248.1	1373.1	254.9	1373.1	256.3
GR	1374.0	313.2	1374.0	346.5	1374.0	368.5	1374.0	379.0	1374.0	382.2
GR	1374.0	383.8	1374.0	390.3	1374.0	395.8	1374.0	396.4	1374.0	400.0
GR	1374.0	401.5	1374.0	402.8	1374.0	404.3	1373.0	531.1	1373.0	531.7
GR	1373.0	535.7	1368.0	556.0	1368.0	557.0	1368.0	558.0	1368.0	580.8
GR	1368.0	600.0	1368.0	603.1	1368.0	608.8	1368.0	617.1	1368.0	620.7
GR	1368.0	623.5	1368.0	628.3	1368.0	629.6	1368.0	634.1	1368.0	646.6
GR	1368.0	675.0	1368.0	676.0	1368.0	677.0	1368.0	678.0	1368.0	679.0
GR	1368.0	685.2	1373.0	698.4	1373.0	699.3	1373.0	700.6	1373.0	707.3
GR	1373.0	749.6	1373.0	766.1	1374.0	818.2	1374.0	823.7	1374.0	836.5
GR	1374.0	851.1	1374.0	851.6	1374.0	860.1	1374.0	860.9	1374.0	872.9
GR	1374.0	886.9	1374.0	894.8	1374.0	910.6	1374.0	920.3	1374.0	920.7
GR	1374.0	921.1	1374.0	922.4	1374.0	941.9	1374.0	948.7	1374.0	1050.1
GR	1374.0	1051.2	1374.0	1052.9	1374.0	1055.1	1374.0	1063.9	1374.0	1064.6
X1	152.10	95	517.0	805.6	380.0	330.0	350.0	0.94		
X3	10									
GR	1375.4	318.3	1374.0	357.3	1374.0	357.9	1374.0	363.7	1374.0	365.4
GR	1374.0	416.7	1374.0	418.4	1374.0	424.5	1374.0	447.6	1374.0	453.6
GR	1374.0	455.3	1374.0	456.0	1374.0	456.9	1374.0	460.3	1374.0	512.8
	1374.0	513.7	1374.0	517.0	1374.0	518.7	1374.0	519.5	1374.0	520.7
	1374.0	521.6	1374.0	526.9	1374.0	530.3	1374.0	536.3	1368.3	577.7
GR	1368.0	585.8	1368.0	589.2	1368.0	595.8	1368.1	596.7	1368.1	596.9

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    1368.3    600.0   1368.0    621.5   1368.0    636.0   1368.0    643.5   1372.0    651.7
    1372.0    655.1   1374.0    672.7   1374.0    684.5   1374.0    686.6   1374.0    687.3
GR  1374.0    719.6   1374.0    719.7   1374.4    735.7   1374.6    739.4   1374.7    742.2
GR  1374.9    748.7   1374.1    752.9   1374.2    755.3   1374.4    759.4   1374.4    761.0
GR  1374.6    766.3   1374.7    778.2   1374.8    782.1   1374.0    805.6   1374.0    806.2
GR  1374.0    806.6   1374.0    807.9   1374.0    828.7   1374.0    838.9   1374.0    840.7
GR  1374.0    841.9   1374.0    842.9   1374.0    849.5   1374.0    853.4   1374.0    869.7
GR  1374.0    870.3   1374.0    870.4   1374.0    870.7   1374.0    870.8   1374.0    873.7
GR  1374.0    874.2   1374.0    875.6   1374.0    882.4   1374.0    886.1   1374.0    906.8
GR  1374.0    920.7   1374.0    922.2   1374.0    922.5   1374.0    953.8   1374.0    954.1
GR  1374.4    982.0   1374.7   1029.3   1374.7   1030.5   1374.7   1114.8   1374.7   1115.9
GR  1374.7   1116.6   1374.7   1118.2   1374.7   1121.0   1374.8   1123.3   1374.8   1126.1
GR  1374.8   1128.7   1374.8   1130.6   1376.0   1159.9   1376.0   1161.0   1376.0   1161.8

NC    0.015    0.015    0.015      0.3      0.5
SB     1.25     1.56     2.63               45              270           1368.0   1368.0
        Deer Valley Road
        4 - 6'x12' Concrete Box Culverts
X1   152.80       22      585      636       70       70       70     0.94
X2                             1   1374.0   1376.0                             0.94
X3       10
BT      -22     70.0   1380.0   1380.0    280.0   1378.0   1378.0    480.0   1376.0   1376.0
BT            584.8   1376.0   1376.0    584.9   1376.0   1374.0    585.0   1376.0   1374.0
BT            597.0   1376.0   1374.0    597.1   1376.0   1374.0    597.9   1376.0   1374.0
BT            598.0   1376.0   1374.0    610.0   1376.0   1374.0    610.1   1376.0   1374.0
BT            610.9   1376.0   1374.0    611.0   1376.0   1374.0    623.0   1376.0   1374.0
    [illegible]623.1   1376.0   1374.0    623.9   1376.0   1374.0    624.0   1376.0   1374.0
BT            636.0   1376.0   1374.0    636.1   1376.0   1374.0    636.2   1376.0   1376.0
BT            800.0   1374.0   1374.0
GR  1380.0     70.0   1378.0    280.0   1376.0    480.0   1376.0    584.8   1374.0    584.9
GR  1368.0    585.0   1368.0    597.0   1374.0    597.1   1374.0    597.9   1368.0    598.0
GR  1368.0    610.0   1374.0    610.1   1374.0    610.9   1368.0    611.0   1368.0    623.0
GR  1374.0    623.1   1374.0    623.9   1368.0    624.0   1368.0    636.0   1374.0    636.1
GR  1376.0    636.2   1374.0    800.0

NC    0.045    0.045    0.045      0.1      0.3
ET             9.1      9.1      9.1      9.1                             530.0    687.5
X1   153.10       95    530.0    687.5     30.0     30.0     30.0     0.94
X3       10
GR  1376.0    237.1   1375.1    241.2   1374.3    245.0   1374.0    246.5   1374.0    247.1
GR  1374.0    247.3   1374.0    247.5   1374.1    247.8   1375.2    253.2   1376.0    255.5
GR  1376.0    268.7   1376.0    270.5   1375.8    276.6   1375.5    286.5   1375.6    317.3
GR  1375.4    327.2   1375.4    327.3   1375.2    333.7   1375.1    335.4   1375.1    336.1
GR  1374.8    349.7   1374.0    372.1   1374.0    372.7   1374.0    373.6   1374.0    379.5
GR  1374.0    385.1   1374.0    385.9   1374.0    388.5   1373.7    394.4   1373.7    395.4
GR  1373.6    398.8   1373.6    402.1   1373.4    410.3   1372.5    447.5   1372.3    458.8
GR  1372.3    461.4   1372.2    468.4   1372.2    469.4   1372.2    472.7   1372.3    481.8
GR  1372.4    490.2   1372.5    492.2   1372.9    501.1   1373.1    511.3   1373.2    512.3
GR  1373.3    512.9   1374.0    526.8   1374.0    528.0   1374.0    528.1   1374.0    529.8
GR  1374.0    530.0   1373.9    531.0   1373.5    532.8   1372.0    539.2   1371.6    543.8
GR  1370.0    562.6   1370.0    564.7   1370.0    574.5   1370.0    581.3   1370.0    583.5
    1370.0    588.3   1370.0    592.0   1370.0    592.9   1370.0    600.0   1370.0    623.9
    1370.0    635.2   1370.0    636.4   1370.0    638.0   1370.0    663.7   1371.3    670.6
GR  1372.0    675.0   1372.9    679.8   1373.9    687.1   1374.0    687.5   1374.9    698.4
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    1375.0    705.4   1375.0    706.0   1374.8    709.1   1374.0    712.0   1374.0    717.2
    1374.0    718.8   1374.0    719.0   1374.0    719.7   1374.0    719.9   1374.0    721.2
GR  1374.0    725.5   1374.0    726.1   1374.0    726.5   1374.0    747.8   1374.0    759.3
GR  1374.0    764.2   1374.0    768.9   1374.0    773.6   1374.0    778.5   1374.0    783.1

X1  154.90        9    565.0    670.0    150.0    240.0    180.0
X3      10
GR  1378.0    375.0   1380.0    460.0   1380.0    545.0   1378.0    565.0   1370.0    590.0
GR  1370.0    640.0   1376.0    670.0   1377.0    800.0   1377.0   1200.0

NC  0.015     0.015    0.015      0.3     0.5
SB   1.25      1.56     2.63             43.1              259              1370.0    1370.0
        31st Avenue
        7 - 6'X8' Concrete Box Culverts
X1  156.80       35    579.8    643.2    90.0    260.0    190.0     0.77
X2                        1   1376.0   1377.0                               0.77
X3      10
BT     -35    300.0   1377.5   1377.5   360.0   1378.0   1378.0    480.0   1378.0   1378.0
BT            579.8   1377.0   1377.0   579.9   1377.0   1376.0    580.0   1377.0   1376.0
BT            588.0   1377.0   1376.0   588.1   1377.0   1376.0    588.9   1377.0   1376.0
BT            590.0   1377.0   1376.0   598.0   1377.0   1376.0    598.1   1377.0   1376.0
BT            598.9   1377.0   1376.0   599.0   1377.0   1376.0    607.0   1377.0   1376.0
BT            607.1   1377.0   1376.0   607.9   1377.0   1376.0    608.0   1377.0   1376.0
BT            616.0   1377.0   1376.0   616.1   1377.0   1376.0    616.9   1377.0   1376.0
BT            617.0   1377.0   1376.0   625.0   1377.0   1376.0    625.1   1377.0   1376.0
BT            625.9   1377.0   1376.0   626.0   1377.0   1376.0    634.0   1377.0   1376.0
    634.1   1377.0   1376.0   634.9   1377.0   1376.0    635.0   1377.0   1376.0
BT            643.0   1377.0   1376.0   643.1   1377.0   1376.0    643.2   1377.0   1377.0
BT            700.0   1378.0   1378.0  1200.0   1380.0   1380.0
GR  1377.5    300.0   1378.0    360.0   1378.0    480.0   1377.0    579.8   1376.0    579.9
GR  1370.0    580.0   1370.0    588.0   1376.0    588.1   1376.0    588.9   1370.0    590.0
GR  1370.0    598.0   1376.0    598.1   1376.0    598.9   1370.0    599.0   1370.0    607.0
GR  1376.0    607.1   1376.0    607.9   1370.0    608.0   1370.0    616.0   1376.0    616.1
GR  1376.0    616.9   1370.0    617.0   1370.0    625.0   1376.0    625.1   1376.0    625.9
GR  1370.0    626.0   1370.0    634.0   1376.0    634.1   1376.0    634.9   1370.0    635.0
GR  1370.0    643.0   1376.0    643.1   1377.0    643.2   1378.0    700.0   1380.0   1200.0

NC  0.045     0.045    0.045      0.1     0.3
X1  162.70       75    510.2    659.7    650.0    550.0    590.0
GR  1384.3      0.0   1384.3     19.5   1384.4     62.9   1384.4     63.6   1384.3    118.9
GR  1384.0    151.2   1384.0    157.8   1384.0    180.5   1384.0    188.0   1384.0    191.7
GR  1384.0    200.0   1384.0    207.8   1384.0    214.9   1384.0    221.1   1384.0    240.8
GR  1384.0    258.1   1384.0    268.8   1384.0    275.3   1384.0    278.1   1384.0    285.9
GR  1383.9    294.1   1383.4    301.4   1382.0    318.1   1382.0    328.7   1382.0    330.2
GR  1382.0    330.9   1382.0    341.0   1382.0    341.8   1381.0    378.5   1380.0    425.7
GR  1380.0    429.6   1379.1    464.2   1378.0    510.2   1376.6    525.0   1376.0    531.6
GR  1375.2    538.8   1374.0    550.3   1374.0    555.3   1374.0    559.3   1374.0    559.9
GR  1374.0    560.6   1374.0    561.4   1374.1    562.4   1374.2    562.9   1376.0    582.2
GR  1376.0    582.6   1376.3    595.7   1376.4    600.0   1376.5    606.0   1378.0    659.7
GR  1379.2    685.4   1379.8    701.7   1379.9    703.9   1380.0    708.4   1380.6    749.5
GR  1381.3    782.6   1381.5    794.1   1382.0    823.7   1382.0    829.2   1382.0    879.6
    1382.0    953.6   1382.0    954.3   1382.2    975.5   1382.2    976.5   1382.2    977.3
    1382.2    978.6   1382.2    984.3   1382.2    985.8   1382.2    986.4   1382.4   1046.2
GR  1382.5   1063.8   1382.5   1074.6   1382.6   1096.5   1382.7   1118.2   1382.9   1176.0
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X	167.70	85	574.8	632.9	500.0	500.0	500.0			
GR	1386.0	0.0	1386.0	7.9	1386.0	13.4	1386.0	24.8	1386.0	37.2
GR	1386.0	46.6	1386.0	52.2	1386.0	101.4	1386.0	108.7	1386.0	115.3
GR	1386.0	128.5	1386.0	142.1	1386.0	151.6	1386.0	162.5	1386.0	180.7
GR	1384.6	259.6	1384.5	282.4	1384.1	319.6	1384.1	325.0	1384.0	340.0
GR	1384.0	342.8	1383.9	349.4	1383.6	388.1	1383.5	389.3	1383.5	391.1
GR	1383.3	412.1	1383.2	417.1	1383.1	425.4	1382.4	464.6	1382.4	467.6
GR	1382.0	489.8	1381.6	506.3	1380.4	550.7	1380.1	562.1	1380.0	565.6
GR	1380.0	566.0	1380.0	566.6	1380.0	574.8	1379.0	583.6	1378.0	598.2
GR	1377.6	600.0	1376.7	604.4	1376.0	607.7	1376.0	611.7	1376.0	615.6
GR	1376.5	617.8	1378.0	624.6	1378.8	627.8	1380.0	632.9	1381.7	658.4
GR	1382.0	664.0	1383.3	693.0	1384.0	706.9	1384.0	707.1	1384.0	710.4
GR	1384.0	728.9	1384.0	730.3	1384.0	731.1	1384.0	733.9	1384.0	751.7
GR	1384.1	758.6	1384.6	850.6	1384.6	853.4	1384.6	875.7	1384.7	879.3
GR	1384.7	884.3	1384.7	886.7	1384.8	892.7	1384.8	895.7	1384.9	902.7
GR	1385.0	912.9	1385.1	929.4	1385.2	936.0	1385.3	956.0	1385.5	974.4
GR	1385.6	979.6	1385.6	1051.8	1385.7	1067.1	1386.0	1138.9	1386.0	1139.2
GR	1386.0	1140.0	1386.0	1141.7	1386.1	1161.1	1386.3	1197.4	1386.3	1200.0
X1	172.70	95	536.0	687.3	460.0	510.0	500.0			
GR	1388.0	0.0	1388.0	4.2	1388.0	8.1	1388.0	9.7	1388.0	12.1
GR	1388.0	13.8	1388.0	16.4	1388.1	25.5	1388.3	55.8	1388.3	79.7
GR	1388.3	81.1	1388.3	85.9	1388.3	103.8	1388.4	117.4	1388.3	131.1
GR	1388.4	137.1	1388.4	144.1	1388.4	208.8	1388.4	211.2	1388.4	219.1
GR	1388.4	220.8	1388.0	242.4	1388.0	251.4	1388.0	262.5	1388.0	279.9
	1388.0	328.8	1386.1	415.6	1386.1	420.7	1386.0	425.6	1386.0	427.1
GR	1386.0	465.4	1385.2	477.4	1385.1	479.3	1385.0	481.1	1384.9	482.7
GR	1384.8	483.8	1384.4	495.9	1384.1	523.6	1384.0	533.5	1384.0	536.0
GR	1384.0	538.7	1383.7	546.7	1383.6	549.8	1382.6	576.5	1382.6	581.3
GR	1382.7	583.9	1382.4	588.1	1382.0	592.2	1381.0	600.0	1380.4	604.0
GR	1380.0	607.0	1380.0	622.8	1380.3	625.0	1382.0	635.9	1382.0	636.3
GR	1382.0	638.7	1382.0	655.4	1383.8	685.1	1384.0	687.3	1384.0	688.7
GR	1385.3	704.4	1385.5	706.4	1386.0	711.6	1387.0	722.4	1388.0	734.1
GR	1388.0	737.2	1388.7	765.0	1388.9	775.4	1390.0	826.9	1390.0	827.9
GR	1390.0	830.5	1390.0	833.1	1390.8	917.7	1390.8	918.7	1390.8	973.2
GR	1390.8	974.5	1390.3	1000.9	1390.3	1002.1	1390.0	1011.6	1390.0	1056.2
GR	1390.0	1081.0	1390.0	1100.1	1390.0	1101.1	1390.7	1135.0	1390.7	1141.3
GR	1390.6	1151.1	1390.0	1156.8	1390.0	1157.2	1390.0	1157.7	1390.0	1158.4
GR	1390.0	1161.4	1390.0	1180.8	1390.0	1182.9	1390.0	1194.8	1390.4	1200.0
X1	177.70	97	562.6	671.6	470.0	520.0	500.0			
GR	1390.0	0.0	1390.0	11.4	1390.0	12.1	1390.0	14.0	1390.0	15.2
GR	1390.0	17.3	1391.2	82.9	1391.3	86.0	1391.4	96.7	1391.4	101.4
GR	1391.5	103.1	1392.0	137.1	1392.0	150.9	1392.0	158.4	1392.0	159.0
GR	1392.0	279.0	1392.0	302.6	1390.7	325.2	1390.7	327.3	1390.7	328.7
GR	1390.7	331.0	1390.7	334.4	1390.8	338.0	1390.0	405.8	1390.0	416.9
GR	1390.0	427.1	1390.0	440.6	1390.0	468.9	1390.0	473.9	1390.0	476.9
GR	1390.0	477.6	1389.6	480.1	1388.0	495.4	1387.9	498.1	1387.9	499.5
GR	1387.6	510.2	1386.6	544.2	1386.5	547.8	1386.0	562.6	1384.9	569.3
GR	1384.0	575.5	1384.0	580.3	1384.0	600.0	1384.0	609.5	1384.0	611.8
	1384.0	614.3	1384.0	616.6	1384.6	635.0	1385.1	648.0	1386.0	671.6
	1386.0	676.7	1387.3	690.5	1388.0	697.2	1388.0	713.7	1388.0	715.2
GR	1388.0	725.8	1388.0	728.6	1388.3	738.5	1390.0	777.9	1390.0	778.6

[illegible]	1390.4	791.1	1390.7	801.0	1392.0	839.3	1392.0	841.2	1392.2	855.5
GR	1392.3	858.0	1392.3	861.6	1392.4	863.8	1393.0	895.2	1393.0	902.9
GR	1393.1	907.8	1393.3	937.4	1393.7	987.1	1394.0	1008.3	1394.0	1009.4
GR	1394.0	1012.7	1394.0	1024.5	1394.0	1027.1	1394.0	1039.8	1394.0	1053.8
GR	1394.0	1054.3	1394.0	1058.6	1394.0	1067.0	1394.0	1083.5	1394.0	1109.2
GR	1394.1	1154.9	1394.1	1156.4	1394.0	1174.7	1394.0	1176.7	1394.0	1179.6
GR	1394.0	1180.7	1394.0	1182.2	1394.0	1184.3	1394.0	1187.3	1394.1	1190.5
GR	1394.1	1193.5	1394.2	1196.9						
X1	181.20	97	635.1	726.9	350.0	350.0	350.0			
GR	1392.0	143.3	1392.0	156.3	1392.0	175.4	1392.0	190.9	1392.0	195.1
GR	1392.2	211.8	1392.3	222.3	1392.7	373.0	1392.6	381.8	1392.6	383.7
GR	1392.6	384.9	1392.6	395.4	1392.4	425.3	1392.3	431.9	1392.3	440.1
GR	1392.3	467.5	1392.3	474.0	1392.5	483.7	1392.5	488.7	1392.6	491.2
GR	1392.7	493.9	1392.7	509.9	1393.2	524.8	1393.2	526.7	1393.3	529.0
GR	1393.8	545.7	1394.0	551.5	1394.0	553.8	1394.0	556.3	1394.0	558.2
GR	1394.0	587.5	1394.0	588.6	1394.0	591.5	1394.0	600.0	1394.0	601.2
GR	1394.0	602.3	1394.0	603.2	1394.0	606.4	1393.2	615.1	1393.0	618.8
GR	1392.8	627.7	1392.0	635.1	1390.0	643.6	1388.6	650.5	1388.0	653.5
GR	1386.0	663.8	1386.0	664.7	1388.0	695.1	1388.0	696.2	1389.8	710.5
GR	1390.0	711.9	1390.8	718.9	1392.0	726.9	1394.0	743.2	1394.0	744.2
GR	1394.0	783.8	1394.0	784.0	1394.0	785.6	1394.0	794.2	1394.0	796.6
GR	1394.0	804.4	1394.0	806.3	1394.0	810.1	1394.0	812.2	1394.0	812.6
GR	1394.0	812.9	1394.0	813.9	1394.0	814.5	1394.0	820.1	1394.0	840.5
GR	1394.0	847.5	1394.0	848.8	1394.0	849.3	1394.0	850.3	1394.0	853.1
GR	1394.0	859.4	1394.3	882.3	1394.3	883.8	1394.4	898.1	1394.8	941.1
[illegible]	1394.8	949.5	1395.6	991.6	1395.9	1005.7	1396.0	1008.9	1396.0	1010.0
GR	1396.0	1010.9	1396.0	1018.8	1396.0	1056.6	1396.0	1060.9	1396.0	1089.3
GR	1396.0	1107.9	1396.0	1138.5	1396.0	1147.0	1396.1	1194.3	1396.1	1196.3
GR	1396.1	1198.7	1396.1	1200.0						
X1	184.00	94	630.3	967.3	320.0	240.0	280.0			
X3	10									
GR	1394.0	0.0	1394.0	2.9	1394.0	4.9	1394.0	14.5	1394.0	18.1
GR	1394.0	21.8	1394.0	31.2	1394.0	35.4	1394.3	59.7	1395.8	167.5
GR	1395.9	178.6	1395.9	179.2	1396.0	182.5	1396.0	183.8	1395.9	191.6
GR	1395.9	192.9	1395.6	249.5	1395.5	263.5	1395.5	274.6	1395.6	303.5
GR	1395.6	310.3	1395.6	312.0	1394.9	345.5	1394.9	347.2	1394.8	349.8
GR	1394.8	351.5	1394.7	355.1	1394.4	368.2	1394.3	370.8	1394.3	372.1
GR	1394.3	375.2	1394.3	376.6	1394.3	377.9	1394.3	379.6	1396.0	433.1
GR	1396.0	440.0	1396.0	448.4	1396.0	461.0	1396.0	464.2	1396.0	468.8
GR	1395.9	473.8	1395.9	490.7	1396.0	498.7	1396.0	500.7	1396.0	501.3
GR	1396.0	600.0	1396.0	614.2	1396.0	617.6	1396.0	630.3	1394.7	637.2
GR	1394.0	640.0	1393.2	642.5	1392.0	647.9	1390.2	653.8	1390.0	654.2
GR	1389.8	654.8	1388.6	658.8	1388.1	660.5	1388.0	660.9	1388.0	662.3
GR	1388.0	663.1	1387.0	670.3	1388.0	673.7	1388.9	677.7	1390.0	685.1
GR	1390.1	685.5	1390.1	686.0	1391.4	698.5	1392.0	703.9	1392.1	704.9
GR	1392.4	711.3	1394.0	741.3	1394.0	742.1	1394.0	766.1	1394.0	774.0
GR	1394.0	829.6	1394.0	830.1	1396.0	967.3	1396.0	968.6	1396.0	987.1
GR	1396.0	993.7	1396.0	997.2	1396.0	998.6	1396.0	1000.7	1396.0	1025.3
GR	1396.4	1074.4	1396.4	1075.4	1396.5	1096.4	1396.3	1177.5	1396.3	1179.0
[illegible]	1396.3	1184.2	1396.3	1189.3	1396.3	1194.6	1396.3	1200.0		

X	189.00	95	552.6	704.5	500.0	500.0	500.0			
X3	10									
GR	1402.0	346.1	1402.0	349.7	1402.0	360.4	1402.0	360.9	1401.5	379.0
GR	1397.5	498.9	1397.2	509.5	1396.8	523.6	1396.0	551.1	1396.0	552.6
GR	1394.6	588.0	1394.5	592.8	1394.3	600.0	1394.0	611.1	1394.0	612.7
GR	1394.0	613.5	1394.0	615.2	1394.0	616.3	1393.8	619.0	1393.5	620.3
GR	1392.0	627.4	1391.2	631.3	1390.0	636.8	1390.0	637.6	1390.7	639.6
GR	1392.0	643.3	1393.0	646.4	1394.0	649.6	1394.0	655.9	1394.0	656.7
GR	1394.0	657.3	1394.0	658.0	1394.0	658.9	1394.0	667.0	1394.0	673.4
GR	1394.9	685.4	1395.2	690.9	1395.8	702.1	1396.0	704.5	1396.0	706.6
GR	1396.0	708.6	1396.2	712.6	1396.3	720.0	1396.3	720.4	1396.5	729.8
GR	1396.5	730.2	1396.6	743.2	1396.0	748.9	1396.0	749.8	1396.0	751.4
GR	1396.0	757.6	1396.0	763.8	1396.0	776.8	1396.0	778.7	1395.9	780.0
GR	1395.9	780.5	1395.3	807.8	1395.1	813.4	1395.2	815.6	1394.5	831.4
GR	1394.4	835.3	1394.4	839.2	1394.5	840.5	1394.9	844.1	1395.4	851.7
GR	1395.4	859.4	1395.4	860.3	1395.7	876.6	1396.0	879.4	1396.0	880.8
GR	1396.4	904.7	1397.1	913.8	1397.4	917.8	1398.0	926.4	1398.2	930.9
GR	1398.2	931.9	1399.7	984.2	1399.7	1001.9	1399.8	1007.2	1399.9	1055.8
GR	1400.0	1072.9	1400.2	1086.1	1400.3	1093.3	1400.3	1094.0	1400.4	1101.6
GR	1400.6	1122.1	1400.7	1126.1	1400.8	1133.3	1400.9	1135.5	1401.0	1142.6
GR	1401.5	1176.3	1401.5	1177.5	1400.9	1189.0	1401.0	1190.6	1400.8	1200.0
X1	194.00	86	589.6	931.4	500.0	500.0	500.0			
GR	1403.2	0.0	1402.8	20.1	1402.8	25.5	1402.9	35.5	1403.1	68.7
GR	1402.9	123.6	1403.0	134.6	1403.3	147.8	1403.0	159.7	1403.3	165.6
	1403.5	170.9	1403.7	178.4	1403.9	183.1	1403.9	187.7	1404.0	191.3
GR	1404.0	220.0	1404.0	236.1	1404.7	315.7	1404.6	321.2	1404.7	322.9
GR	1404.0	359.9	1404.0	363.1	1404.0	364.9	1404.0	374.7	1404.0	375.2
GR	1404.0	380.3	1404.1	392.6	1404.8	449.8	1404.6	508.1	1404.6	508.7
GR	1404.0	533.0	1402.7	570.8	1402.4	578.1	1402.0	589.6	1401.2	600.0
GR	1401.1	601.5	1400.8	605.6	1400.0	612.2	1399.2	613.6	1398.0	617.0
GR	1396.6	620.5	1396.0	621.5	1394.6	624.7	1394.0	625.9	1394.0	628.7
GR	1394.0	655.1	1394.0	660.4	1394.2	665.1	1394.2	665.7	1394.4	671.1
GR	1396.0	872.0	1396.0	872.9	1396.4	875.1	1398.0	882.8	1399.4	890.2
GR	1399.8	923.0	1399.9	924.3	1400.0	926.6	1400.2	927.0	1402.0	931.4
GR	1402.0	942.8	1402.0	962.2	1402.0	973.2	1402.0	975.4	1402.0	979.5
GR	1402.0	981.6	1402.0	982.7	1402.0	1014.7	1402.0	1018.4	1402.0	1022.6
GR	1402.0	1023.3	1402.1	1030.8	1404.0	1115.4	1404.0	1124.6	1404.0	1131.4
GR	1404.0	1137.9	1404.0	1141.1	1404.6	1142.5	1406.0	1145.7	1407.5	1149.4
GR	1408.0	1150.6	1410.0	1155.5	1412.0	1160.3	1416.2	1170.3	1420.0	1179.2
GR	1429.0	1200.0								
X1	199.00	95	620.5	669.8	510.0	310.0	510.0			
GR	1410.8	39.2	1410.5	41.5	1410.0	45.2	1409.7	50.0	1409.7	50.5
GR	1408.2	238.7	1408.2	240.9	1408.2	242.3	1408.2	243.3	1408.3	270.1
GR	1408.3	294.0	1408.0	316.4	1408.0	324.8	1408.0	361.5	1408.0	362.6
GR	1408.0	430.3	1408.0	431.1	1408.0	432.2	1408.0	436.4	1408.0	443.8
GR	1408.0	451.3	1408.0	452.5	1408.0	453.5	1406.8	507.4	1406.0	546.4
GR	1406.0	547.0	1404.3	570.8	1404.0	573.9	1404.0	574.3	1404.0	574.7
GR	1402.0	599.8	1402.0	600.0	1401.1	609.9	1400.0	620.5	1398.0	635.2
	1396.2	639.5	1396.0	640.1	1395.8	640.5	1394.0	645.1	1392.7	648.1
	1392.0	649.9	1392.0	650.2	1392.0	650.5	1392.8	652.3	1394.0	655.3
GR	1396.1	660.0	1398.0	664.7	1399.8	669.4	1400.0	669.8	1399.9	670.2

[illegible]	1398.0	678.1	1401.1	682.6	1402.0	683.4	1402.0	683.9	1401.1	684.1
[illegible]	1398.0	684.8	1398.3	686.3	1398.8	690.5	1399.8	697.1	1400.0	699.7
GR	1399.8	706.1	1399.6	715.6	1399.5	717.2	1399.5	744.5	1399.4	756.6
GR	1399.3	762.4	1398.8	776.0	1398.7	779.3	1398.3	796.3	1398.0	808.1
GR	1398.0	811.4	1398.0	827.6	1398.0	828.7	1398.0	829.0	1398.0	829.9
GR	1399.3	885.4	1400.0	907.8	1400.0	908.3	1400.0	908.9	1400.0	909.4
GR	1401.3	946.3	1401.3	950.5	1401.0	959.2	1401.3	961.6	1401.3	961.8
GR	1402.0	967.3	1403.5	975.0	1403.7	976.4	1403.9	977.6	1404.0	978.0
GR	1404.1	978.3	1406.0	986.3	1407.7	992.1	1408.0	993.2	1408.7	995.9
X1	204.50	95	566.6	630.2	550.0	580.0	550.0			
GR	1412.0	223.0	1411.7	224.9	1412.0	231.6	1411.6	241.9	1410.0	326.8
GR	1410.0	328.3	1410.0	328.7	1411.3	335.7	1412.0	339.8	1412.0	346.8
GR	1412.0	374.4	1410.2	384.0	1410.0	385.2	1409.7	386.8	1408.0	395.4
GR	1407.9	396.3	1406.9	403.7	1406.0	410.3	1405.9	410.9	1405.9	411.5
GR	1405.7	431.8	1405.9	434.1	1405.9	437.0	1405.9	444.1	1405.8	447.1
GR	1405.6	467.1	1405.7	477.5	1405.7	479.0	1405.6	481.2	1405.3	488.7
GR	1405.5	494.1	1405.8	501.7	1406.0	507.2	1407.2	537.5	1407.8	554.1
GR	1407.8	554.5	1408.0	558.4	1408.0	558.7	1407.4	562.2	1406.7	564.4
GR	1406.5	565.1	1406.0	566.6	1404.8	569.9	1404.0	572.2	1403.4	573.9
GR	1402.3	577.2	1402.0	578.2	1400.6	582.5	1400.0	584.2	1398.2	589.3
GR	1398.0	589.9	1397.8	590.6	1396.0	595.9	1396.0	598.2	1396.0	600.0
GR	1396.0	602.0	1397.3	605.5	1398.0	607.4	1398.4	608.4	1400.0	612.1
GR	1401.1	615.5	1402.0	617.5	1403.6	621.5	1404.0	622.8	1404.5	624.5
GR	1404.9	625.8	1406.0	630.2	1406.6	632.7	1406.6	633.6	1407.0	636.4
GR	1407.0	637.4	1407.0	639.3	1406.9	640.9	1406.6	645.2	1406.0	652.3
[illegible]	1405.9	653.4	1405.9	656.7	1406.0	660.1	1406.2	669.3	1406.2	670.6
GR	1406.2	683.9	1406.3	684.8	1406.6	689.5	1406.9	693.3	1407.2	696.9
GR	1407.4	699.0	1407.6	701.9	1407.7	703.2	1407.6	705.4	1407.7	706.2
GR	1407.8	707.8	1407.6	710.6	1407.6	741.5	1408.0	749.8	1408.0	750.2
X1	205.10	90	588.5	719.8	60.0	60.0	60.0			
GR	1412.0	0.0	1412.0	48.4	1412.0	62.7	1412.0	64.8	1412.0	69.1
GR	1412.0	122.3	1411.0	131.1	1410.9	133.5	1410.6	149.2	1410.5	151.5
GR	1410.5	153.0	1410.2	224.5	1410.1	228.7	1410.0	235.0	1410.0	239.9
GR	1410.0	240.7	1411.1	249.0	1412.0	256.3	1412.0	271.8	1412.0	276.4
GR	1412.0	276.9	1411.9	277.6	1410.9	296.2	1410.0	310.6	1409.2	325.9
GR	1409.0	330.9	1409.0	332.7	1408.6	342.3	1408.6	346.4	1408.6	355.3
GR	1409.2	385.8	1409.3	389.2	1409.3	390.1	1410.0	398.1	1410.0	400.3
GR	1410.0	403.4	1410.0	410.1	1409.7	411.5	1409.2	412.9	1408.1	416.3
GR	1408.0	416.6	1408.0	420.3	1408.0	432.2	1408.0	434.7	1408.0	435.4
GR	1407.6	453.3	1407.3	461.9	1407.1	473.1	1406.6	481.4	1406.5	484.2
GR	1406.0	494.5	1406.0	495.8	1404.3	532.4	1404.2	534.0	1404.0	538.8
GR	1404.0	539.9	1402.5	564.3	1402.1	570.6	1402.0	572.7	1401.0	580.7
GR	1400.3	586.3	1400.2	587.4	1400.0	588.5	1399.8	592.1	1399.7	593.4
GR	1399.4	600.0	1399.0	607.4	1398.4	621.2	1398.3	623.3	1398.0	630.2
GR	1397.5	636.2	1396.0	645.5	1396.0	648.3	1396.0	648.4	1396.4	649.8
GR	1398.0	656.0	1398.0	657.2	1398.0	660.6	1398.0	666.5	1398.0	668.4
GR	1398.6	682.9	1399.2	699.4	1400.0	719.8	1400.0	725.7	1400.0	726.6
GR	1400.0	744.2	1400.0	750.0	1400.6	752.3	1410.0	782.0	1412.1	786.7

X1	208.00	95	487.3	618.5	320.0	320.0	320.0			
GR	1412.0	163.9	1411.0	169.0	1410.0	174.6	1410.0	182.3	1411.0	188.3
GR	1412.0	194.2	1412.6	196.4	1414.0	201.2	1414.0	213.9	1414.0	216.2
GR	1414.0	218.5	1414.0	221.8	1414.0	230.9	1413.4	233.7	1413.0	236.6
GR	1412.4	238.9	1412.0	240.5	1412.0	241.1	1412.0	241.4	1412.0	242.7
GR	1412.0	243.5	1412.9	248.9	1414.0	255.9	1414.0	289.0	1414.0	300.9
GR	1413.8	302.3	1412.0	312.4	1411.5	315.1	1410.0	324.6	1410.0	336.1
GR	1410.0	350.9	1411.3	364.5	1411.7	375.3	1411.8	379.8	1411.8	382.3
GR	1411.9	386.3	1410.0	410.0	1410.0	414.1	1410.0	415.3	1411.8	424.2
GR	1412.0	425.1	1412.4	426.9	1412.6	428.6	1412.9	430.4	1413.1	432.8
GR	1413.5	437.4	1414.0	442.6	1414.0	443.0	1414.0	448.9	1413.3	455.1
GR	1412.0	464.5	1410.8	467.8	1410.0	470.5	1408.8	473.7	1408.0	475.8
GR	1407.4	477.3	1407.0	478.9	1406.0	481.6	1404.9	485.0	1404.0	487.3
GR	1402.1	492.7	1402.0	493.1	1402.0	493.7	1402.0	499.1	1400.7	500.7
GR	1401.2	501.7	1401.8	503.0	1402.0	503.6	1402.0	503.9	1402.0	505.4
GR	1402.0	512.3	1400.8	515.7	1400.0	517.5	1400.0	519.8	1400.4	523.4
GR	1402.0	540.0	1402.0	566.1	1402.0	570.7	1402.0	574.9	1402.0	581.1
GR	1402.0	600.0	1402.0	601.9	1402.0	605.6	1402.0	607.6	1403.1	613.3
GR	1404.0	618.5	1404.0	621.1	1404.0	631.1	1404.0	633.4	1404.5	635.0
GR	1406.0	639.6	1407.7	644.5	1408.0	645.6	1409.3	649.5	1410.0	651.8

Return to Scatter Wash Split Flow

X1	-123.7	95	494.4	641.3	430.0	430.0	430.0			
GR	1362.0	63.6	1362.0	65.5	1362.0	70.8	1362.0	71.4	1362.0	101.1
GR	1362.0	107.3	1362.0	112.7	1362.0	139.0	1362.0	165.5	1362.0	171.3
[illegible]	1362.0	171.4	1362.0	171.7	1362.0	173.4	1362.0	174.1	1362.0	204.5
GR	1362.0	269.6	1362.0	270.9	1362.0	272.0	1362.0	272.4	1362.0	273.7
GR	1362.0	280.6	1360.6	355.6	1360.0	388.3	1359.3	401.3	1359.2	404.1
GR	1358.0	448.2	1358.0	458.3	1358.0	460.7	1358.0	461.0	1358.0	476.1
GR	1358.0	494.4	1356.8	531.0	1356.7	532.4	1356.7	533.6	1356.7	534.3
GR	1356.7	535.6	1356.7	538.1	1356.0	572.6	1356.0	572.8	1356.0	574.1
GR	1355.9	574.3	1355.6	575.1	1354.0	579.6	1354.0	588.7	1354.0	593.4
GR	1354.6	596.9	1355.1	600.0	1356.0	605.0	1356.6	615.4	1358.0	641.3
GR	1358.0	644.7	1358.0	648.6	1358.0	661.6	1358.0	671.2	1358.6	697.0
GR	1359.0	703.4	1359.9	716.2	1359.9	716.5	1360.0	718.2	1360.0	718.5
GR	1360.0	718.8	1361.6	735.2	1361.7	737.3	1362.0	740.7	1362.0	740.9
GR	1362.0	741.6	1362.0	747.4	1362.0	749.0	1362.0	801.7	1362.0	862.2
GR	1362.0	862.3	1362.0	862.4	1362.0	888.3	1362.0	899.0	1362.0	951.9
GR	1362.0	952.3	1362.0	953.9	1362.0	954.2	1362.0	954.6	1362.0	957.0
GR	1362.0	960.7	1362.0	968.5	1362.0	972.5	1362.0	977.2	1362.0	999.2
GR	1362.0	1000.4	1362.0	1008.2	1362.1	1022.9	1362.1	1026.9	1362.1	1027.3
GR	1362.3	1065.7	1362.3	1066.5	1362.3	1067.1	1362.4	1076.7	1363.0	1106.2

NC	0.045	0.045	0.045	0.1	0.3
QT	4	1	1	311	2441

Begin South Branch of Scatter Wash

X1	305.00	60	448.1	879.9	430.0	600.0	550.0			
GR	1364.0	422.4	1364.0	434.0	1364.0	435.7	1364.0	448.1	1363.2	464.4
GR	1362.0	489.5	1362.0	495.7	1362.0	497.6	1362.0	505.6	1363.2	515.8
GR	1362.5	520.9	1362.0	522.3	1362.0	522.4	1362.0	522.5	1362.0	526.2
[illegible]	1362.0	537.1	1362.0	537.6	1362.0	540.9	1362.0	543.1	1362.0	554.4
GR	1362.0	558.1	1362.0	563.1	1362.0	566.0	1362.0	570.5	1362.0	577.7
GR	1362.0	580.0	1362.0	585.1	1362.0	589.4	1362.0	590.2	1362.0	596.9

	1362.0	600.0	1362.0	601.0	1362.0	602.0	1362.0	607.3	1362.0	612.4
GR	1362.0	613.7	1362.0	618.7	1362.0	626.5	1362.0	645.6	1362.0	648.2
GR	1362.0	655.5	1362.0	656.1	1362.0	661.9	1362.0	667.6	1362.0	669.0
GR	1362.1	672.0	1362.1	672.1	1362.5	708.9	1362.5	709.2	1362.9	736.8
GR	1362.9	737.4	1362.9	738.6	1362.9	739.1	1364.0	879.9	1364.0	891.1
GR	1364.0	891.7	1364.0	891.8	1364.0	892.0	1364.0	895.8	1364.0	897.3
X1	310.00	90	278.2	1095.2	520.0	600.0	500.0			
GR	1368.6	0.0	1368.6	1.8	1368.6	2.3	1368.5	30.1	1368.5	30.9
GR	1368.5	98.6	1368.5	99.5	1368.5	159.5	1368.3	178.0	1368.3	178.1
GR	1368.4	178.7	1368.4	179.9	1368.4	180.8	1368.0	198.1	1368.0	198.3
GR	1368.0	223.9	1368.0	240.8	1368.0	273.1	1368.0	278.2	1366.7	322.6
GR	1366.8	353.1	1366.8	354.1	1366.9	364.3	1367.0	371.4	1367.1	375.1
GR	1367.1	377.3	1367.1	377.8	1367.1	377.9	1367.2	383.2	1367.2	384.9
GR	1367.2	385.8	1367.4	392.5	1367.3	393.1	1367.4	441.3	1367.4	444.3
GR	1367.4	446.2	1367.3	455.8	1367.3	457.2	1367.2	464.7	1367.0	559.3
GR	1367.0	560.3	1366.8	573.5	1366.2	593.4	1366.0	595.6	1366.0	596.5
GR	1366.0	597.0	1366.0	598.3	1366.0	599.0	1366.0	600.0	1366.0	600.4
GR	1366.0	601.8	1366.0	657.2	1366.0	668.4	1366.0	669.6	1366.0	679.2
GR	1366.0	691.3	1366.0	700.8	1366.0	701.0	1366.0	701.4	1366.0	736.6
GR	1366.0	737.6	1366.0	738.6	1366.0	740.3	1366.0	740.9	1366.0	741.2
GR	1366.0	741.4	1366.0	765.4	1366.0	795.6	1366.0	806.5	1366.0	915.9
GR	1366.0	924.2	1366.0	935.1	1366.0	951.5	1366.0	966.6	1366.9	1024.5
GR	1368.0	1095.2	1368.0	1096.8	1368.0	1103.2	1368.0	1103.9	1368.0	1108.7
GR	1368.0	1115.5	1368.0	1117.8	1368.0	1125.8	1368.0	1128.5	1368.0	1131.1
GR	1368.0	1133.8	1368.0	1135.5	1368.0	1180.7	1368.0	1195.3	1368.0	1200.0
ET		9.1	9.1	9.1	9.1				167.7	1197.6
X1	315.00	92	202.8	1018.2	500.0	500.0	500.0			
GR	1371.1	0.0	1371.2	27.2	1371.3	35.9	1370.2	133.7	1370.2	134.4
GR	1372.0	160.9	1372.0	161.1	1372.0	161.3	1372.0	163.2	1372.0	167.7
GR	1371.8	168.3	1371.5	169.0	1371.2	177.4	1370.9	183.7	1370.0	202.8
GR	1370.0	369.1	1370.0	373.4	1370.0	374.4	1370.0	377.2	1370.0	377.8
GR	1370.0	558.8	1370.0	560.1	1370.0	567.0	1370.0	572.2	1370.0	572.8
GR	1370.0	574.1	1370.0	574.5	1370.0	587.1	1370.0	588.8	1370.0	590.2
GR	1370.0	595.1	1370.0	596.6	1370.0	597.6	1370.0	605.3	1370.0	609.1
GR	1370.0	613.1	1370.0	621.8	1370.0	623.1	1370.0	624.8	1370.0	634.8
GR	1370.0	660.8	1370.0	669.1	1370.0	672.6	1370.0	683.7	1370.0	706.8
GR	1370.0	727.3	1370.0	745.2	1370.0	750.6	1370.0	761.6	1370.0	761.9
GR	1370.0	798.6	1370.0	835.6	1370.0	836.4	1370.0	840.8	1370.0	843.2
GR	1370.0	847.5	1370.0	848.8	1370.0	850.2	1370.0	888.8	1370.0	890.5
GR	1369.6	915.3	1369.6	916.1	1369.6	917.2	1369.6	918.5	1369.6	918.9
GR	1369.6	922.3	1369.6	923.2	1369.6	923.7	1369.6	923.9	1369.6	924.0
GR	1369.6	924.2	1369.6	925.0	1369.6	938.4	1369.6	939.9	1369.6	940.2
GR	1369.5	956.4	1369.5	956.6	1370.0	1018.2	1370.0	1019.3	1370.0	1021.4
GR	1370.0	1022.9	1370.0	1023.2	1370.0	1023.4	1370.0	1023.6	1370.0	1023.8
GR	1370.0	1149.5	1370.0	1156.3	1370.0	1163.9	1370.0	1164.9	1370.0	1165.8
GR	1370.0	1178.9	1370.4	1197.6						

X1	320.00	95	203.6	1010.5	500.0	500.0	500.0			
GR	1375.6	0.0	1375.4	7.6	1375.4	7.7	1375.4	8.1	1375.4	8.7
GR	1375.3	23.2	1375.2	30.1	1374.9	108.2	1374.9	114.4	1374.8	117.1
GR	1374.8	120.9	1374.8	122.4	1374.7	127.1	1374.7	130.9	1374.7	134.4
GR	1374.6	141.6	1374.3	174.7	1374.3	175.5	1374.0	200.2	1374.0	203.4
GR	1374.0	203.6	1373.9	211.2	1373.7	230.3	1373.6	235.3	1373.3	267.5
GR	1373.2	285.6	1373.2	286.0	1373.1	289.4	1372.8	369.2	1372.9	373.9
GR	1372.9	374.5	1372.9	378.3	1372.9	380.0	1372.9	381.0	1372.9	382.0
GR	1373.0	430.7	1373.0	431.0	1372.9	459.4	1372.9	486.1	1373.5	573.9
GR	1373.5	574.3	1373.5	594.4	1373.5	599.9	1373.5	600.6	1373.5	612.9
GR	1373.5	614.8	1373.5	617.3	1373.5	619.0	1373.5	621.5	1373.5	624.8
GR	1373.5	626.4	1373.5	628.1	1374.0	726.8	1374.0	727.1	1374.0	727.9
GR	1374.0	762.6	1373.3	809.6	1373.3	810.5	1373.3	818.5	1373.3	819.3
GR	1373.3	829.2	1373.3	832.3	1373.3	834.3	1373.3	843.8	1373.3	847.9
GR	1373.3	859.7	1373.3	860.6	1373.4	861.8	1373.4	867.2	1373.4	921.0
GR	1373.4	925.8	1373.4	934.2	1373.3	934.4	1373.3	935.6	1373.3	936.4
GR	1373.3	939.9	1373.3	945.4	1373.3	948.1	1373.3	976.0	1373.3	988.6
GR	1373.3	988.9	1373.3	991.7	1373.3	992.0	1373.3	993.1	1373.3	1001.4
GR	1373.4	1010.5	1373.4	1010.8	1373.4	1015.3	1373.4	1016.1	1373.4	1019.0
GR	1373.4	1032.0	1373.4	1035.8	1373.4	1039.6	1373.5	1055.7	1373.5	1057.7
X1	325.00	97	351.8	1021.6	500.0	500.0	500.0			
GR	1378.0	0.2	1377.5	8.8	1377.2	12.4	1377.0	14.8	1376.9	16.5
GR	1376.1	25.7	1376.1	26.2	1376.1	26.2	1376.1	26.4	1376.0	27.5
GR	1375.5	34.8	1375.4	36.6	1375.3	38.2	1375.2	41.5	1375.1	42.6
GR	1374.8	45.8	1374.8	46.7	1374.0	56.6	1374.0	59.9	1374.0	60.5
GR	1374.0	60.9	1374.0	61.9	1374.0	62.6	1374.2	65.3	1374.2	68.1
GR	1374.1	72.7	1374.1	73.4	1374.0	74.7	1374.0	75.0	1374.0	75.5
GR	1374.0	242.4	1374.0	244.7	1374.0	247.3	1374.0	247.7	1374.0	271.3
GR	1374.0	287.0	1374.0	306.3	1374.0	325.0	1374.0	351.8	1372.6	495.1
GR	1372.6	513.3	1372.4	570.2	1372.5	618.7	1372.5	618.9	1372.5	619.1
GR	1372.5	621.2	1372.5	621.4	1372.5	622.9	1372.5	623.2	1372.5	623.7
GR	1372.5	624.5	1374.0	704.1	1374.0	706.2	1374.0	707.8	1374.0	708.2
GR	1374.0	752.5	1374.7	776.1	1374.7	776.4	1374.7	776.9	1374.7	777.7
GR	1374.8	778.8	1374.8	780.0	1374.8	781.4	1374.9	782.9	1375.0	787.2
GR	1375.2	793.8	1375.9	815.8	1375.9	818.1	1376.0	819.9	1376.0	829.6
GR	1376.0	829.8	1376.0	840.4	1376.0	843.4	1376.0	856.7	1376.0	857.1
GR	1376.0	860.5	1376.0	863.6	1376.0	866.1	1376.0	869.1	1376.0	869.9
GR	1376.0	874.2	1376.0	877.5	1376.0	919.1	1376.0	936.1	1377.2	1021.6
GR	1377.1	1039.4	1376.6	1077.4	1376.6	1078.4	1376.6	1078.9	1376.6	1079.6
GR	1376.6	1080.8	1376.6	1082.3	1376.6	1083.6	1376.6	1084.4	1376.6	1084.8
GR	1376.6	1085.2	1376.3	1113.3						
NC	0.015	0.015	0.015	0.1	0.3					
ET		9.1	9.1	9.1	9.1				543.2	1073.9
X1	330.00	97	543.2	1070.0	490.0	560.0	500.0			
X3	10									
GR	1384.6	0.0	1384.0	23.0	1384.0	23.5	1384.0	23.9	1384.0	26.6
GR	1384.0	536.5	1384.0	538.8	1384.0	540.8	1384.0	543.2	1383.7	569.9
GR	1383.7	572.9	1383.7	574.2	1383.7	575.5	1383.7	579.2	1383.7	579.5
GR	1383.6	581.6	1383.6	582.0	1383.6	584.0	1383.6	584.2	1383.6	586.1
GR	1383.5	600.0	1383.5	604.1	1383.5	606.5	1383.5	608.4	1383.1	636.6
GR	1383.1	647.7	1383.0	648.7	1383.0	652.5	1383.0	659.8	1383.0	660.6

	1382.9	675.8	1382.8	677.3	1382.6	710.1	1382.5	727.9	1382.4	749.9
GR	1382.4	751.0	1382.0	793.5	1382.0	794.0	1382.0	799.2	1382.0	803.1
GR	1382.0	804.7	1382.0	820.3	1382.0	920.2	1382.0	920.2	1382.0	920.7
GR	1382.0	922.1	1382.0	922.2	1382.0	938.0	1382.0	950.3	1382.0	950.4
GR	1382.0	955.1	1382.0	956.5	1382.0	958.7	1382.0	963.6	1382.0	963.7
GR	1382.0	964.4	1382.0	981.7	1382.0	987.8	1382.0	990.4	1382.0	992.0
GR	1382.0	994.5	1382.0	996.9	1382.0	997.2	1382.0	997.4	1382.0	997.7
GR	1382.0	998.3	1382.0	999.9	1382.0	1050.1	1382.0	1050.6	1382.0	1051.1
GR	1382.0	1053.7	1382.0	1054.2	1382.0	1058.9	1382.0	1059.6	1382.0	1061.8
GR	1382.0	1065.4	1382.2	1066.2	1382.3	1066.5	1382.9	1069.0	1383.1	1070.0
GR	1383.2	1070.4	1383.2	1070.6	1383.4	1071.7	1383.4	1072.2	1383.4	1073.9
GR	1383.3	1074.2	1383.1	1078.5	1382.7	1081.0	1382.7	1081.8	1382.0	1084.4
GR	1382.0	1174.6	1382.0	1178.4	1382.0	1179.6	1382.0	1180.4	1382.0	1181.2
GR	1382.0	1182.4	1381.8	1200.0						
ET		9.1	9.1	9.1	9.1				450.0	750.0
X1	335.00	95	454.3	704.0	500.0	600.0	500.0			
GR	1390.0	0.0	1390.0	24.1	1390.0	27.7	1390.0	28.8	1390.0	30.7
GR	1390.0	104.3	1390.0	104.7	1390.0	104.8	1390.0	105.8	1390.0	105.9
GR	1390.0	113.0	1390.0	114.4	1390.0	118.3	1390.0	121.6	1390.0	128.8
GR	1390.0	171.5	1390.0	190.3	1390.0	215.5	1390.0	230.1	1390.0	416.8
GR	1390.0	419.2	1390.0	421.7	1390.0	424.8	1390.0	426.7	1390.0	450.2
GR	1390.0	450.9	1390.0	454.3	1389.0	460.9	1388.0	466.7	1386.8	475.4
GR	1386.0	481.3	1385.7	488.8	1384.6	526.7	1384.3	540.0	1384.2	540.4
GR	1384.0	548.2	1384.0	548.5	1384.0	549.1	1384.0	553.5	1384.0	559.8
GR	1384.0	566.4	1384.0	572.2	1384.0	573.2	1384.0	574.1	1384.0	600.0
	1384.0	611.7	1384.0	614.3	1384.0	620.2	1384.0	621.3	1384.0	655.0
GR	1384.0	694.6	1384.0	696.0	1384.0	699.6	1384.0	701.5	1384.0	703.6
GR	1384.0	704.0	1384.0	798.4	1384.0	802.5	1384.0	822.3	1384.0	838.1
GR	1384.0	839.2	1384.0	842.7	1384.0	849.6	1384.0	865.8	1384.0	882.1
GR	1384.0	901.8	1384.0	902.2	1384.0	902.9	1384.0	903.6	1384.0	916.2
GR	1384.0	916.5	1384.0	979.4	1384.0	980.7	1384.0	981.3	1384.0	982.5
GR	1384.0	983.6	1384.0	1039.8	1384.0	1046.5	1384.0	1048.5	1384.0	1098.1
GR	1384.0	1100.9	1384.0	1103.5	1384.0	1105.5	1384.0	1106.0	1384.0	1107.6
GR	1384.0	1111.7	1384.0	1113.7	1384.0	1115.8	1384.0	1139.9	1384.0	1140.5
GR	1384.0	1141.3	1384.0	1142.5	1384.0	1149.2	1384.0	1151.8	1384.0	1200.0
X1	340.00	94	425.3	689.3	500.0	500.0	500.0			
GR	1388.0	0.0	1388.0	8.4	1388.0	9.1	1388.0	10.5	1388.0	12.6
GR	1388.0	74.3	1388.0	78.3	1388.0	87.8	1388.0	100.9	1388.0	107.5
GR	1388.0	108.3	1388.0	110.5	1388.0	111.8	1388.0	113.4	1388.0	152.1
GR	1388.0	155.6	1388.0	156.8	1388.0	157.6	1388.0	158.0	1388.0	158.3
GR	1388.0	161.9	1388.0	164.6	1388.0	174.8	1388.0	178.3	1388.0	179.4
GR	1388.0	199.1	1388.0	199.8	1388.0	212.3	1388.0	214.5	1388.0	235.4
GR	1388.0	235.6	1388.0	240.8	1388.0	241.5	1388.0	241.9	1388.0	242.6
GR	1388.0	245.0	1388.0	246.4	1388.0	247.0	1388.0	248.2	1388.0	248.5
GR	1386.4	364.3	1386.4	371.7	1386.4	372.3	1386.3	376.4	1386.3	380.8
GR	1386.1	408.3	1386.0	422.5	1386.0	425.3	1385.7	446.8	1385.7	449.4
GR	1385.7	455.4	1385.7	455.5	1385.7	458.0	1385.7	458.7	1385.7	459.5
GR	1385.7	461.4	1385.4	490.3	1385.4	490.7	1385.4	494.3	1385.3	497.5
GR	1385.3	498.8	1385.3	499.0	1385.3	502.4	1385.3	502.8	1385.5	600.0
	1385.6	651.2	1385.7	663.5	1385.8	668.9	1386.0	689.3	1386.3	726.6
GR	1386.6	780.2	1387.4	909.7	1387.5	916.7	1387.6	930.2	1387.6	931.6
GR	1387.6	936.3	1388.0	973.9	1388.0	974.0	1388.0	999.2	1388.0	1020.2

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GR  1388.0   1041.1   1388.0   1139.9   1388.0   1149.9   1388.0   1154.6   1388.0   1162.8
GR  1388.0   1165.8   1388.0   1168.3   1388.0   1176.9   1388.0   1182.8   1388.0   1192.7
GR  1388.0   1194.2   1388.0   1197.0   1388.0   1197.5   1388.0   1200.0

NC  0.015    0.015    0.015    0.1      0.3
        27th Avenue Dip Roadway Crossing
X1  342.00   5        450.0    950.0    150.0    400.0    200.0
GR  1388.0   0.0      1388.0   450.0    1387.0   750.0    1388.0   950.0    1390.0   1150.0

NC  0.045    0.045    0.045    0.1      0.3
X1  345.00   96       388.9    975.4    350.0    150.0    300.0
GR  1392.1   0.0      1392.0   8.4      1392.0   8.4      1392.0   8.4      1392.0   9.7
GR  1392.0   82.7     1392.0   93.1     1392.0   95.0     1392.0   96.1     1390.3   271.6
GR  1390.0   303.5    1390.0   308.6    1390.0   318.6    1390.0   320.0    1390.0   321.3
GR  1390.0   386.8    1390.0   388.2    1390.0   388.9    1389.7   441.8    1389.7   442.9
GR  1389.6   444.2    1389.6   447.2    1389.6   458.2    1389.5   466.2    1389.5   467.7
GR  1389.5   469.3    1389.5   470.2    1389.5   471.6    1389.5   473.0    1389.4   479.1
GR  1389.4   480.5    1389.4   482.6    1389.4   483.9    1389.3   497.6    1389.2   508.4
GR  1389.1   514.2    1389.1   516.5    1389.1   518.7    1388.7   565.5    1388.7   566.9
GR  1388.7   569.7    1388.4   600.0    1388.0   643.9    1388.0   644.9    1388.0   645.7
GR  1388.0   800.9    1388.0   858.7    1388.0   859.6    1388.0   865.9    1388.0   866.5
GR  1388.0   873.0    1388.0   873.4    1388.4   896.7    1388.5   898.8    1388.5   901.0
GR  1389.1   939.3    1389.2   941.1    1389.4   951.8    1389.4   952.7    1390.0   975.4
GR  1390.0   983.0    1390.0   986.9    1390.0   987.8    1390.0   988.5    1390.0   992.4
GR  1390.0   1018.2   1390.0   1038.8   1390.0   1041.1   1390.0   1044.9   1390.0   1057.1
GR  1390.0   1059.1   1390.0   1060.6   1390.0   1075.2   1390.0   1079.1   1390.0   1085.8
GR  1390.0   1093.3   1390.0   1097.8   1390.0   1102.7   1390.0   1104.6   1390.0   1105.5
GR  1390.0   1106.9   1390.0   1122.9   1390.2   1133.0   1390.2   1133.1   1390.2   1133.7
GR  1390.2   1143.1   1390.2   1143.3   1390.1   1162.0   1390.1   1162.3   1390.1   1162.6
GR  1390.1   1162.8   1390.0   1181.0   1390.0   1181.0   1390.0   1186.2   1390.0   1197.5
GR  1390.0   1200.0

X1  350.00   96       284.7    920.1    550.0    450.0    500.0
X3  10
GR  1394.0   66.4     1394.0   68.6     1394.0   68.7     1393.9   79.4     1393.9   79.9
GR  1393.7   105.7    1393.7   107.3    1393.7   113.4    1393.7   115.7    1393.6   120.8
GR  1393.6   122.8    1393.6   126.8    1393.5   129.4    1393.5   137.7    1393.4   150.0
GR  1393.2   165.3    1393.1   177.3    1393.1   182.0    1393.0   188.3    1393.0   192.7
GR  1392.8   211.2    1392.8   211.6    1392.7   220.3    1392.7   221.1    1392.6   233.6
GR  1392.5   244.6    1392.1   277.1    1392.0   282.2    1392.0   282.3    1392.0   282.7
GR  1392.0   284.4    1392.0   284.5    1392.0   284.7    1391.7   323.4    1391.7   325.2
GR  1391.5   353.3    1391.5   355.7    1391.5   361.2    1391.4   365.8    1391.4   370.0
GR  1391.4   370.6    1391.3   378.6    1391.3   379.2    1391.3   386.8    1391.3   387.4
GR  1391.3   387.9    1391.3   388.4    1391.3   389.0    1391.3   389.5    1391.3   391.1
GR  1391.2   408.4    1391.0   429.8    1391.0   431.2    1391.0   436.1    1391.8   513.7
GR  1392.0   533.0    1392.0   535.0    1392.0   540.2    1392.0   540.7    1392.0   541.0
GR  1392.0   558.4    1390.4   572.3    1390.4   574.3    1390.4   579.8    1390.5   584.0
GR  1390.5   585.4    1390.7   599.6    1390.8   609.8    1390.9   614.2    1391.1   634.0
GR  1391.2   641.8    1391.3   649.2    1391.3   653.8    1391.5   676.3    1391.5   700.1
GR  1391.8   808.0    1391.8   809.2    1391.8   810.7    1391.8   811.2    1391.8   812.3
GR  1391.8   812.8    1391.9   830.0    1391.9   833.9    1391.9   834.7    1391.9   835.4
GR  1391.9   847.6    1391.9   872.1    1391.9   872.4    1391.9   872.5    1391.9   884.0
GR  1392.0   920.1    1392.0   925.6    1392.0   929.8    1392.0   930.5    1392.0   932.8
GR  1392.0   1113.7
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I-17/Deer Valley Road TI

X1	355.40	8	300.0	800.0	450.0	600.0	540.0			
GR	1400.0	100.0	1398.0	200.0	1396.7	300.0	1395.63	400.0	1395.81	500.0
GR	1396.3	600.0	1396.43	700.0	1396.77	800.0				
QT	4	263	560	674	2468					
ET		9.1	9.1	9.1	9.1				300.0	632.9
X1	372.00	97	518.2	632.9	1660.0	1660.0	1660.0			
X3	10									
GR	1410.0	0.0	1410.0	0.9	1410.0	6.0	1410.0	18.5	1409.9	27.7
GR	1408.0	237.5	1408.0	239.7	1408.0	241.0	1408.0	242.1	1408.0	243.7
GR	1408.0	261.1	1408.0	262.6	1408.0	262.7	1408.0	263.6	1408.0	264.7
GR	1407.5	290.1	1407.4	292.6	1407.4	293.1	1407.4	295.3	1407.3	299.8
GR	1407.3	302.0	1406.4	365.0	1406.2	401.7	1406.2	403.0	1406.0	433.6
GR	1406.0	518.2	1404.7	535.9	1405.0	576.7	1406.0	583.0	1406.0	592.3
GR	1406.0	600.0	1406.0	610.1	1406.0	632.9	1406.0	730.0	1406.0	762.5
GR	1406.0	767.8	1406.0	774.3	1406.0	785.8	1406.0	792.1	1406.0	798.2
GR	1406.0	800.4	1406.0	813.3	1405.5	815.9	1405.4	816.7	1404.0	826.2
GR	1404.0	842.9	1404.0	878.7	1404.0	889.1	1404.0	889.4	1403.8	899.1
GR	1403.6	907.4	1403.6	910.7	1403.5	913.4	1403.3	926.8	1403.3	930.3
GR	1403.2	933.4	1402.5	973.5	1402.4	1006.7	1402.2	1015.7	1402.2	1016.2
GR	1402.1	1017.8	1402.1	1018.1	1402.1	1018.2	1402.0	1022.8	1402.0	1027.5
GR	1402.0	1038.2	1402.5	1045.4	1404.0	1062.3	1404.0	1074.3	1404.0	1082.8
GR	1404.0	1093.7	1404.0	1113.3	1402.8	1122.5	1402.7	1125.1	1402.5	1127.1
GR	1402.5	1127.9	1402.1	1132.0	1402.0	1133.8	1401.9	1134.5	1401.6	1137.3
GR	1401.0	1143.9	1400.4	1153.3	1400.2	1155.3	1400.0	1158.2	1398.9	1158.6
GR	1398.0	1158.8	1398.0	1164.3	1398.0	1166.0	1398.0	1168.4	1398.0	1170.2
GR	1398.0	1172.0	1398.0	1176.6	1398.0	1179.1	1398.0	1182.2	1399.4	1182.8
GR	1400.0	1183.0	1400.2	1200.0						
ET		9.1	9.1	9.1	9.1				200.0	700.4
X1	377.00	98	296.8	700.4	500.0	500.0	500.0			
X3	10									
GR	1410.0	0.0	1410.0	0.1	1410.0	0.2	1410.0	0.4	1410.0	5.2
GR	1410.0	67.1	1410.0	78.7	1410.0	79.1	1410.0	102.3	1409.1	154.3
GR	1408.2	255.5	1408.2	259.1	1408.1	265.6	1408.0	274.3	1408.0	276.4
GR	1408.0	276.6	1408.0	277.1	1408.0	278.6	1408.0	279.5	1408.0	280.0
GR	1408.0	280.1	1408.0	286.1	1408.0	286.5	1408.0	287.7	1408.0	296.8
GR	1406.1	559.0	1406.1	562.3	1406.0	572.0	1406.0	572.1	1406.0	573.5
GR	1406.0	573.5	1406.0	575.0	1406.0	577.3	1406.0	577.3	1406.0	578.0
GR	1406.0	579.5	1406.0	579.5	1406.0	583.8	1406.0	583.8	1406.0	583.9
GR	1406.1	586.8	1406.1	589.8	1406.1	590.3	1406.1	594.4	1406.1	597.4
GR	1406.1	597.9	1406.1	598.2	1406.1	603.1	1406.1	603.3	1406.1	603.3
GR	1406.2	608.3	1406.2	615.1	1406.2	615.3	1406.2	616.8	1406.4	650.3
GR	1406.3	652.9	1406.5	657.4	1406.5	659.2	1406.5	660.1	1406.6	661.5
GR	1406.6	666.1	1406.6	667.4	1406.8	670.7	1406.8	671.8	1406.9	673.3
GR	1406.9	674.5	1407.0	675.9	1407.0	677.1	1407.1	678.3	1407.1	680.2
GR	1408.0	700.4	1408.0	700.4	1408.0	701.2	1408.0	714.3	1408.0	747.8
GR	1408.0	769.3	1407.1	778.1	1406.0	787.7	1404.6	867.4	1404.4	878.8
GR	1404.0	899.2	1402.3	1000.1	1402.1	1018.5	1402.0	1021.8	1402.0	1022.2
GR	1402.0	1022.7	1402.0	1027.4	1402.0	1032.3	1402.0	1034.3	1402.0	1040.7
GR	1402.0	1042.2	1402.0	1045.7	1402.0	1047.8	1402.0	1048.1	1402.0	1048.3
GR	1401.4	1117.3	1401.3	1119.2	1400.3	1194.4				

ET		9.1	9.1	9.1	9.1				150.0	700.0
X1	382.00	94	375.9	616.1	500.0	500.0	500.0			
X3	10									
GR	1410.0	0.0	1410.0	0.4	1410.0	0.6	1410.0	1.3	1410.0	2.3
GR	1410.0	165.7	1410.0	173.0	1410.0	174.4	1410.0	178.5	1410.0	179.1
GR	1409.7	192.3	1408.6	230.7	1408.0	255.6	1408.0	275.6	1408.0	282.6
GR	1408.0	375.9	1407.7	397.8	1407.4	420.5	1407.4	424.4	1407.3	431.2
GR	1407.2	439.3	1407.2	441.8	1407.2	442.6	1407.1	444.1	1406.6	515.6
GR	1407.1	569.3	1407.2	578.6	1407.8	605.1	1407.8	605.1	1408.0	616.1
GR	1408.9	623.2	1410.0	630.3	1410.0	634.1	1410.0	640.6	1410.0	644.9
GR	1410.0	670.4	1410.0	675.2	1410.0	687.4	1410.0	713.9	1409.3	721.2
GR	1408.7	726.7	1408.5	729.1	1408.4	730.1	1408.3	730.5	1408.0	732.5
GR	1407.6	735.4	1406.9	739.2	1406.3	743.4	1406.0	746.0	1406.0	760.7
GR	1406.0	779.0	1406.0	790.3	1406.0	814.5	1406.0	819.6	1406.0	847.2
GR	1406.0	858.1	1406.0	859.8	1406.0	874.9	1404.3	889.7	1404.0	895.7
GR	1404.0	896.4	1404.0	896.6	1404.0	897.1	1404.0	897.3	1404.0	897.7
GR	1404.0	909.6	1404.0	912.6	1403.2	1010.7	1403.2	1016.4	1403.2	1017.0
GR	1403.2	1019.8	1403.3	1026.2	1403.3	1029.4	1403.3	1031.6	1403.3	1032.3
GR	1403.3	1040.7	1403.3	1042.4	1403.5	1069.2	1403.5	1076.4	1403.5	1077.3
GR	1403.6	1090.5	1403.6	1090.9	1403.6	1110.6	1403.6	1116.7	1403.6	1120.9
GR	1403.6	1130.8	1403.6	1133.1	1403.6	1133.4	1403.6	1136.9	1403.6	1139.5
GR	1403.5	1156.9	1403.5	1161.0	1403.5	1163.7	1403.4	1169.3		
ET		9.1	9.1	9.1	9.1				100.0	620.0
X1	387.00	95	405.1	614.6	500.0	500.0	500.0			
	10									
GR	1411.6	0.0	1411.6	0.8	1411.6	1.6	1411.6	2.3	1412.0	83.3
GR	1412.0	149.0	1412.0	149.1	1412.0	150.2	1412.0	150.2	1411.6	168.2
GR	1411.6	169.9	1410.0	253.9	1410.0	254.1	1410.0	254.6	1410.0	256.2
GR	1410.0	261.9	1410.0	262.1	1410.0	279.2	1410.0	302.4	1410.0	302.9
GR	1410.0	367.5	1410.0	374.1	1410.0	374.5	1410.0	379.4	1410.0	381.2
GR	1410.0	381.7	1410.0	383.2	1410.0	383.6	1410.0	385.9	1410.0	386.9
GR	1410.0	387.6	1410.0	402.4	1410.0	402.9	1410.0	403.5	1410.0	403.9
GR	1410.0	404.5	1410.0	405.1	1408.5	552.7	1408.5	553.2	1408.4	554.5
GR	1408.4	555.2	1408.4	575.2	1408.4	575.6	1408.2	585.1	1408.0	599.7
GR	1408.0	600.2	1408.0	600.2	1409.4	604.6	1409.3	605.4	1409.4	605.8
GR	1409.3	606.1	1409.4	606.6	1409.4	606.9	1409.4	607.2	1409.4	607.4
GR	1409.5	607.7	1409.5	608.0	1409.5	608.2	1409.6	609.1	1409.6	609.2
GR	1410.0	614.6	1410.0	614.6	1410.0	614.9	1411.2	632.7	1411.3	634.1
GR	1411.4	635.4	1411.4	636.3	1411.5	637.0	1411.7	645.7	1410.0	665.0
GR	1410.0	668.4	1410.0	669.8	1410.7	674.3	1411.1	677.4	1412.0	683.9
GR	1412.0	685.3	1412.0	700.7	1410.1	730.2	1410.0	731.5	1409.9	731.8
GR	1408.0	742.4	1408.0	743.4	1408.0	745.5	1408.0	760.2	1408.0	764.9
GR	1408.0	887.6	1407.7	903.8	1407.7	904.2	1407.4	923.4	1407.1	940.2
GR	1406.7	990.2	1406.7	991.7	1406.0	1129.2	1406.0	1132.2	1406.0	1185.1
ET		9.1	9.1	9.1	9.1				100.0	643.5
X1	392.00	94	414.6	643.5	500.0	500.0	500.0			
X3	10									
GR	1414.0	0.0	1414.0	13.3	1414.0	26.1	1414.0	38.9	1414.0	66.2
	1414.0	123.5	1414.0	125.7	1413.7	141.9	1413.6	150.4	1413.1	183.7
GR	1413.1	191.2	1412.0	317.2	1412.0	322.2	1412.0	327.9	1412.0	331.8
GR	1412.0	345.2	1412.0	353.7	1412.0	362.0	1412.0	371.9	1412.0	387.9

	1412.0	414.6	1412.0	431.3	1412.0	470.2	1412.0	471.5	1412.0	473.7
GR	1412.0	539.5	1412.0	539.8	1412.0	540.0	1412.0	545.5	1412.0	554.5
GR	1412.0	555.0	1412.0	564.7	1412.0	566.0	1412.0	573.8	1412.0	577.8
GR	1412.0	592.5	1412.0	600.0	1412.0	606.6	1412.0	611.1	1412.0	621.6
GR	1412.0	643.5	1412.0	674.9	1412.0	686.8	1412.0	690.0	1412.0	702.2
GR	1412.0	742.8	1410.8	752.3	1410.7	755.2	1410.0	775.3	1410.0	780.4
GR	1410.0	782.5	1410.0	788.3	1410.0	848.3	1410.0	851.1	1410.0	852.1
GR	1410.0	853.1	1410.9	860.0	1411.3	862.3	1412.0	867.4	1412.0	868.7
GR	1412.0	869.1	1410.7	892.7	1410.3	901.3	1410.0	904.7	1409.9	908.3
GR	1409.9	909.5	1409.3	927.9	1409.2	935.3	1408.7	954.3	1408.6	977.3
GR	1408.2	1010.7	1408.0	1031.1	1408.0	1034.0	1408.0	1034.5	1408.0	1034.5
GR	1407.6	1068.2	1407.8	1083.7	1407.6	1085.7	1407.7	1089.5	1407.7	1091.1
GR	1407.7	1091.5	1407.7	1092.6	1407.6	1093.5	1407.3	1106.9	1407.3	1108.0
GR	1407.2	1109.3	1406.0	1134.7	1405.2	1152.6	1405.0	1157.1	1404.0	1176.5
GR	1403.7	1182.5	1403.6	1185.1	1403.4	1189.1	1402.8	1200.0		
QT	4	333	779	1071	2103					
X1	397.00	70	556.9	634.4	500.0	500.0	500.0			
GR	1412.0	0.0	1412.0	0.3	1412.0	17.4	1412.0	41.8	1412.0	90.7
GR	1412.0	111.4	1412.0	118.8	1412.0	158.1	1412.0	179.3	1412.0	191.0
GR	1412.0	191.7	1412.0	192.4	1412.0	193.4	1412.0	198.0	1412.0	225.1
GR	1412.0	241.2	1412.0	288.7	1412.0	291.4	1412.0	291.8	1412.0	326.3
GR	1412.0	332.8	1412.0	392.3	1412.0	402.7	1412.0	412.0	1412.0	424.4
GR	1412.0	440.3	1412.0	454.2	1412.0	465.2	1412.0	469.9	1412.0	474.5
GR	1412.0	476.8	1412.0	491.2	1412.0	498.0	1412.0	556.9	1411.4	559.3
GR	1410.0	565.4	1408.4	572.3	1408.0	573.8	1406.6	579.4	1406.0	581.6
	1405.1	585.3	1404.0	590.0	1404.0	599.1	1404.0	600.0	1404.0	601.2
GR	1404.7	603.5	1406.0	609.2	1406.5	611.4	1407.4	615.1	1408.0	617.9
GR	1408.4	619.6	1410.0	626.0	1410.2	626.7	1412.0	634.4	1412.0	656.3
GR	1412.0	850.6	1412.0	871.3	1412.0	881.1	1412.0	888.4	1412.0	903.3
GR	1412.0	903.6	1412.1	915.4	1412.7	1083.8	1412.8	1112.1	1412.8	1123.2
GR	1412.8	1137.0	1412.9	1159.3	1413.0	1188.0	1413.0	1197.2	1413.0	1200.0
X1	402.00	81	438.4	677.0	500.0	500.0	500.0			
GR	1412.9	0.0	1412.9	1.9	1412.9	5.4	1412.9	6.9	1413.0	23.2
GR	1413.0	24.8	1413.0	27.6	1412.9	35.2	1412.9	56.8	1414.0	182.1
GR	1414.0	183.8	1414.0	184.8	1414.0	187.8	1414.0	193.7	1414.0	197.3
GR	1414.0	199.9	1414.0	216.7	1414.0	228.1	1414.0	235.6	1414.0	243.1
GR	1414.0	277.9	1414.0	282.0	1414.0	285.6	1414.0	292.6	1414.0	300.5
GR	1414.0	305.0	1414.0	306.8	1414.0	369.4	1414.0	375.3	1414.0	416.3
GR	1414.0	416.5	1414.0	422.6	1414.0	424.2	1414.0	438.4	1412.8	521.6
GR	1412.6	531.6	1412.4	548.9	1412.4	553.6	1412.0	571.7	1412.0	577.3
GR	1410.6	582.8	1410.0	585.0	1409.9	585.6	1408.0	591.7	1407.7	592.9
GR	1406.0	596.6	1406.0	598.4	1406.0	600.0	1406.0	605.4	1407.6	611.2
GR	1408.0	612.4	1408.4	613.9	1410.0	618.9	1411.4	623.8	1412.0	625.7
GR	1412.5	629.1	1413.3	656.0	1413.8	668.3	1414.0	677.0	1414.0	678.6
GR	1414.0	679.6	1414.0	728.5	1414.0	884.6	1414.0	885.3	1414.3	960.5
GR	1414.3	966.3	1414.4	976.8	1414.4	990.0	1414.5	1009.9	1414.5	1038.0
GR	1414.6	1054.2	1414.6	1074.5	1414.7	1088.1	1414.7	1094.5	1414.7	1107.4
GR	1414.8	1153.5	1414.8	1156.7	1414.8	1158.6	1414.8	1161.7	1414.8	1173.1
GR	1414.9	1200.0								

X1	407.00	94	413.8	755.3	500.0	500.0	500.0			
GR	1416.0	0.0	1416.0	23.6	1416.0	24.7	1416.0	52.3	1416.0	54.2
GR	1416.0	55.8	1416.0	60.6	1416.0	65.0	1416.0	66.8	1416.0	80.5
GR	1416.0	101.3	1416.0	114.6	1416.0	115.2	1416.0	116.8	1416.0	127.9
GR	1416.0	145.3	1416.0	150.1	1416.0	150.6	1416.0	154.0	1416.0	154.8
GR	1416.0	182.2	1416.0	205.9	1416.0	206.1	1416.0	206.5	1416.0	208.6
GR	1416.0	209.1	1416.0	223.8	1416.0	225.3	1416.0	238.2	1416.0	240.8
GR	1416.0	251.5	1416.0	265.3	1416.0	274.0	1416.4	290.9	1416.4	317.6
GR	1416.4	335.9	1416.4	340.7	1416.5	378.2	1416.0	392.8	1416.0	411.9
GR	1416.0	413.0	1416.0	413.8	1415.3	456.0	1414.7	495.0	1414.0	542.4
GR	1413.2	556.9	1413.1	559.6	1412.7	566.6	1412.0	574.6	1411.2	580.2
GR	1410.0	589.4	1410.0	589.5	1410.0	589.5	1410.0	599.5	1410.1	600.0
GR	1411.0	606.1	1412.0	613.3	1413.7	639.0	1414.0	642.9	1414.4	661.7
GR	1414.4	664.2	1414.8	687.1	1416.0	755.3	1416.0	756.9	1416.0	765.9
GR	1416.0	769.2	1416.0	772.1	1416.0	776.1	1416.0	806.1	1416.0	819.1
GR	1416.0	821.5	1416.0	840.8	1416.0	847.5	1416.0	852.1	1416.0	859.6
GR	1416.5	903.3	1416.5	904.8	1416.5	912.6	1416.5	914.3	1416.5	919.4
GR	1416.6	923.3	1416.6	926.0	1416.8	947.4	1417.0	990.4	1417.0	996.9
GR	1417.0	1015.3	1417.0	1029.6	1417.0	1050.6	1417.0	1055.2	1417.3	1150.1
GR	1417.4	1163.4	1417.4	1167.6	1417.5	1190.5	1417.5	1200.0		
X1	412.00	76	503.3	619.5	500.0	500.0	500.0			
GR	1420.0	0.0	1420.0	1.8	1419.5	39.4	1419.6	46.9	1419.7	51.3
GR	1419.9	68.8	1419.9	75.9	1419.9	78.0	1419.9	78.1	1419.9	82.0
GR	1419.9	88.5	1419.8	91.3	1418.0	151.1	1418.0	153.8	1418.0	161.1
GR	1418.0	165.3	1418.0	176.0	1418.0	184.5	1418.0	196.0	1418.0	210.9
GR	1418.0	212.9	1418.0	396.8	1418.0	397.6	1418.0	399.6	1418.0	399.6
GR	1418.0	399.7	1418.0	402.9	1418.0	407.0	1418.0	410.1	1418.0	421.9
GR	1418.0	473.0	1418.0	479.4	1418.0	484.1	1418.0	486.5	1418.0	495.4
GR	1418.0	503.3	1417.2	513.6	1416.0	529.7	1414.3	543.3	1414.0	545.1
GR	1414.0	552.5	1414.0	567.9	1414.0	595.1	1414.8	600.0	1416.0	607.0
GR	1416.0	607.0	1417.9	619.0	1418.0	619.5	1418.0	662.8	1418.0	687.1
GR	1418.4	718.2	1418.4	719.2	1418.4	741.9	1418.4	754.9	1418.4	756.4
GR	1418.4	762.0	1418.4	772.7	1418.5	784.1	1418.6	809.0	1418.7	818.8
GR	1418.8	829.5	1418.9	851.8	1419.0	866.6	1419.2	885.5	1419.3	897.3
GR	1420.0	1060.3	1420.0	1069.7	1420.0	1070.4	1420.0	1070.9	1420.0	1071.1
GR	1420.0	1071.9	1420.1	1072.7	1420.4	1144.7	1420.4	1148.9	1420.5	1181.9
GR	1420.5	1200.0								
X1	417.00	74	546.4	643.5	500.0	500.0	500.0			
GR	1422.2	0.0	1422.1	48.7	1422.0	60.4	1421.6	122.5	1421.6	136.9
GR	1421.4	155.1	1421.4	166.8	1421.3	191.4	1421.3	199.0	1421.1	241.6
GR	1421.1	260.4	1421.1	271.7	1421.1	281.5	1421.1	282.0	1421.1	293.0
GR	1421.1	303.4	1421.2	426.1	1421.2	428.3	1421.2	435.2	1421.2	438.0
GR	1421.2	441.8	1420.3	535.5	1420.0	546.2	1420.0	546.2	1420.0	546.3
GR	1420.0	546.4	1418.0	554.0	1416.9	558.0	1416.0	561.4	1415.3	564.2
GR	1414.0	569.3	1414.0	576.8	1414.0	577.2	1414.5	589.7	1414.7	593.1
GR	1415.0	600.0	1415.4	610.1	1416.0	622.7	1416.2	623.7	1417.1	630.2
GR	1417.3	632.2	1418.0	634.8	1418.5	637.0	1420.0	643.5	1421.0	653.2
GR	1422.0	665.3	1422.0	667.4	1422.0	667.8	1422.3	691.0	1422.4	695.6
GR	1422.4	702.1	1422.7	730.2	1422.8	736.4	1422.9	760.7	1423.0	766.3
GR	1423.0	769.8	1423.1	775.0	1423.3	794.4	1423.5	841.7	1423.5	843.6
GR	1423.5	845.5	1423.5	925.3	1423.5	926.9	1423.6	973.6	1423.7	996.7

1423.7	997.9	1423.8	1015.6	1423.8	1016.0	1423.8	1021.1	1423.8	1022.0
1423.8	1027.2	1423.8	1047.9	1423.8	1048.6	1423.6	1100.4		

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

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO 10.000

3470 ENCROACHMENT STATIONS= 437.2 743.4 TYPE= 1 TARGET= 306.200

10.000	5.39	1305.39	1301.81	1305.39	1305.43	.04	.00	.00	1308.00
2040.0	.0	2040.0	.0	.0	1264.8	.0	.0	.0	100000.00
.00	.00	1.61	.00	.000	.045	.000	.000	1300.00	448.24
.000329	0.	0.	0.	0	16	0	.00	285.73	733.97

FLOW DISTRIBUTION FOR SECNO= 10.00 CWSEL= 1305.39

STA= 448. 867.
PER Q= 100.0
AREA= 1264.8
VEL= 1.6
DEPTH= 4.4

*SECNO 15.600

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .38

15.600	3.64	1305.64	1303.49	1305.64	1305.75	.11	.30	.02	1310.40
1540.0	.0	1540.0	.0	.0	568.0	.0	11.8	2.9	1308.00
.06	.00	2.71	.00	.000	.045	.000	.000	1302.00	526.44
.001313	530.	560.	600.	2	14	0	.00	164.83	691.26

FLOW DISTRIBUTION FOR SECNO= 15.60 CWSEL= 1305.64

STA= 526. 701.
PER Q= 100.0
AREA= 568.0
VEL= 2.7
DEPTH= 3.4

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


CCHV=     .600 CEHV=     .800
*SECNO 16.000

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   16.000      1.81   1306.31   1306.31   1306.31   1307.06       .75       .08       .51   1312.00
   1540.0        .0    1540.0       .0        .0     221.0        .0      12.1       3.0   1312.00
      .06       .00      6.97       .00      .000      .015      .000      .000   1304.50    525.51
  .002930       40.       40.       40.         0         8         0       .00    149.04    674.56


FLOW DISTRIBUTION FOR SECNO=     16.00          CWSEL=   1306.31

STA=     526.     705.
  PER Q=    100.0
   AREA=    221.0
    VEL=      7.0
  DEPTH=      1.5

CCHV=     .100 CEHV=     .300
*SECNO 20.500
   20.500      2.61   1308.61   1307.69   1308.61   1308.91       .30      1.80       .05   1314.00
   1540.0        .0    1540.0       .0        .0     351.7        .0      15.1       4.6   1314.00
      .09       .00      4.38       .00      .000      .045      .000      .000   1306.00    513.97
  .005786      450.      450.      450.         2        11         0       .00    152.34    666.31


FLOW DISTRIBUTION FOR SECNO=     20.50          CWSEL=   1308.61

STA=     514.     716.
  PER Q=    100.0
   AREA=    351.7
    VEL=      4.4
  DEPTH=      2.3

*SECNO 24.200

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.63
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1316.00 ELREA= 1316.00

24.200	3.96	1309.96	1307.94	1309.96	1310.16	.20	1.24	.01	1316.00
1540.0	.0	1540.0	.0	.0	431.5	.0	18.4	5.8	1316.00
.12	.00	3.57	.00	.000	.045	.000	.000	1306.00	548.71
.002182	370.	370.	370.	3	15	0	.00	121.34	670.05

FLOW DISTRIBUTION FOR SECNO= 24.20 CWSEL= 1309.96

STA= 549. 700.
PER Q= 100.0
AREA= 431.5
VEL= 3.6
DEPTH= 3.6

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	110.00	.00	600.00	.00	1306.00	1306.00

*SECNO 25.000

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1310.186 ELLC= 1312.000 PCWSE= 1309.958 ELTRD= 1316.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.11

3370 NORMAL BRIDGE, NRD= 42 MIN ELTRD= 1316.00 MAX ELLC= 1312.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1312.00 ELREA= 1312.00

25.000	4.02	1310.02	1307.94	1310.02	1310.24	.22	.07	.01	1312.00
1540.0	.0	1540.0	.0	.0	408.6	.0	19.2	6.0	1312.00
.12	.00	3.77	.00	.000	.015	.000	.000	1306.00	559.93
.000488	80.	80.	80.	2	19	0	.00	103.35	672.07

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

FLOW DISTRIBUTION FOR SECNO= 25.00 CWSEL= 1310.02

STA= 560. 672.
PER Q= 100.0
AREA= 408.6
VEL= 3.8
DEPTH= 4.0

CCHV= .100 CEHV= .300
*SECNO 25.300

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

25.300	1.74	1311.74	1311.74	1311.74	1312.57	.83	.05	.18	1316.00
1540.0	.0	1540.0	.0	.0	210.7	.0	19.4	6.0	1316.00
.12	.00	7.31	.00	.000	.045	.000	.000	1310.00	541.98
.025332	30.	30.	30.	0	14	0	.00	128.06	670.04

FLOW DISTRIBUTION FOR SECNO= 25.30 CWSEL= 1311.74

STA= 542. 685.
PER Q= 100.0
AREA= 210.7
VEL= 7.3
DEPTH= 1.6

*SECNO 28.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.74

28.700	3.35	1313.35	1311.26	1313.35	1313.40	.05	.76	.08	1320.00
1540.0	.0	1540.0	.0	.0	826.5	.0	23.5	7.7	1318.00
.17	.00	1.86	.00	.000	.045	.000	.000	1310.00	381.66
.000768	390.	340.	340.	5	15	0	.00	284.19	665.85

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

FLOW DISTRIBUTION FOR SECNO= 28.70 CWSEL= 1313.35

STA= 382. 686.
PER Q= 100.0
AREA= 826.5
VEL= 1.9
DEPTH= 2.9

*SECNO 32.500

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .19

32.500	1.93	1313.93	1313.81	1313.92	1314.34	.41	.83	.11	1320.00
1540.0	.0	1540.0	.0	.0	300.4	.0	28.4	10.1	1320.00
.19	.00	5.13	.00	.000	.045	.000	.000	1312.00	378.26
.022064	380.	380.	380.	4	11	0	.00	281.07	659.33

FLOW DISTRIBUTION FOR SECNO= 32.50 CWSEL= 1313.93

378. 690.
PER Q= 100.0
AREA= 300.4
VEL= 5.1
DEPTH= 1.1

*SECNO 36.200

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.83

36.200	2.70	1316.50	1315.43	1316.50	1316.60	.10	2.23	.03	1320.00
1540.0	.0	1540.0	.0	.0	601.8	.0	32.2	12.7	1324.00
.23	.00	2.56	.00	.000	.045	.000	.000	1313.80	405.63
.002759	430.	370.	330.	4	15	0	.00	335.73	741.36

FLOW DISTRIBUTION FOR SECNO= 36.20 CWSEL= 1316.50

STA= 406. 803.
PER Q= 100.0
AREA= 601.8
VEL= 2.6
DEPTH= 1.8

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


CCHV=     .600 CEHV=     .800
*SECNO 36.900
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   36.900      1.03   1317.03   1317.03   1317.03   1317.46       .43       .22       .26   1320.00
   1540.0       .0    1540.0       .0        .0     292.2        .0      32.9      13.3   1324.00
      .24      .00      5.27       .00      .000      .015      .000      .000   1316.00    402.31
  .003541      70.       70.       70.         0        18         0       .00    345.58    747.89


FLOW DISTRIBUTION FOR SECNO=     36.90          CWSEL=   1317.03

STA=     402.     803.
  PER Q=    100.0
   AREA=    292.2
    VEL=      5.3
  DEPTH=       .8

CCHV=     .100 CEHV=     .300
*SECNO 38.100
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   38.100      1.22   1319.22   1319.22   1319.22   1319.72       .50       .41       .02   1320.00
   1540.0       .0    1540.0       .0        .0     271.3        .0      33.7      14.1   1320.00
      .24      .00      5.68       .00      .000      .015      .000      .000   1318.00    495.00
  .003327      60.      120.      180.         0        11         0       .00    273.88    768.89


FLOW DISTRIBUTION FOR SECNO=     38.10          CWSEL=   1319.22

STA=     495.     800.
  PER Q=    100.0
   AREA=    271.3
    VEL=      5.7
  DEPTH=      1.0

CCHV=     .100 CEHV=     .300
*SECNO 43.300
3280 CROSS SECTION     43.30 EXTENDED       .28 FEET
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=     1326.00 ELREA=     1326.00

   43.300      2.98   1320.98   1319.41   1320.98   1321.12       .13      1.36       .04   1326.00
   1540.0       .0    1540.0       .0        .0     522.6        .0      38.4      16.9   1326.00
      .29       .00      2.95      .00      .000      .045      .000      .000   1318.00    534.03
  .002101     520.      520.      520.         4         8         0       .00    191.91    725.94


FLOW DISTRIBUTION FOR SECNO=     43.30          CWSEL=   1320.98

STA=     534.     747.
  PER Q=    100.0
   AREA=    522.6
    VEL=      2.9
  DEPTH=      2.7

CCHV=     .600 CEHV=     .800
*SECNO 43.800
3280 CROSS SECTION     43.80 EXTENDED      2.50 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=     1328.00 ELREA=     1328.00

   43.800      2.20   1322.70   1322.70   1322.70   1323.39       .69       .26       .44   1328.00
   1540.0       .0    1540.0       .0        .0      231.3        .0      38.9      17.1   1328.00
      .30       .00      6.66      .00      .000      .045      .000      .000   1320.50    543.29
  .027336      50.       50.       50.         0        19         0       .00    171.72    715.01


FLOW DISTRIBUTION FOR SECNO=     43.80          CWSEL=   1322.70

STA=     543.     745.
  PER Q=    100.0
   AREA=    231.3
    VEL=      6.7
  DEPTH=      1.3
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO 49.000
3280 CROSS SECTION 49.00 EXTENDED .06 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.58

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1330.00 ELREA= 1330.00

49.000	4.05	1326.05	1324.81	1326.06	1326.15	.10	2.70	.06	1330.00
1540.0	.0	1540.0	.0	.0	603.3	.0	43.9	19.8	1330.00
.35	.00	2.55	.00	.000	.045	.000	.000	1322.00	457.51
.002127	650.	520.	480.	4	11	0	.00	277.52	735.03

FLOW DISTRIBUTION FOR SECNO= 49.00 CWSEL= 1326.05

STA= 458. 757.
PER Q= 100.0
AREA= 603.3
VEL= 2.6
DEPTH= 2.2

*SECNO 54.000
3280 CROSS SECTION 54.00 EXTENDED 3.16 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1332.00 ELREA= 1332.00

54.000	3.16	1327.16	1325.85	1327.16	1327.26	.10	1.11	.00	1332.00
1540.0	.0	1540.0	.0	.0	609.5	.0	50.8	23.1	1332.00
.41	.00	2.53	.00	.000	.045	.000	.000	1324.00	443.27
.002312	500.	500.	530.	3	15	0	.00	303.27	746.54

FLOW DISTRIBUTION FOR SECNO= 54.00 CWSEL= 1327.16

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


STA=     443.     761.
  PER Q=    100.0
   AREA=    609.5
    VEL=      2.5
  DEPTH=      2.0

*SECNO 59.400
   59.400      2.49   1328.49   1327.26   1328.49   1328.64       .14      1.36       .01   1336.00
   1540.0        .0    1540.0        .0        .0     509.5        .0      57.8      26.4   1332.00
      .46       .00      3.02       .00      .000      .045      .000      .000   1326.00    518.02
  .002756      380.      540.      640.         3        18         0       .00    220.67    738.69


FLOW DISTRIBUTION FOR SECNO=     59.40          CWSEL=   1328.49

STA=     518.     747.
  PER Q=    100.0
   AREA=    509.5
    VEL=      3.0
  DEPTH=      2.3

CCHV=     .600 CEHV=     .800
*SECNO 60.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   60.000      1.12   1329.12   1329.12   1329.12   1329.68       .55       .39       .33   1331.20
   1540.0        .0    1540.0        .0        .0     257.7        .0      58.3      26.7   1332.00
      .46       .00      5.98       .00      .000      .045      .000      .000   1328.00    505.60
  .028947       60.       60.       60.         0        14         0       .00    234.61    740.21


FLOW DISTRIBUTION FOR SECNO=     60.00          CWSEL=   1329.12

STA=     506.     747.
  PER Q=    100.0
   AREA=    257.7
    VEL=      6.0
  DEPTH=      1.1
```

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

CCHV= .100 CEHV= .300
*SECNO 64.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.62

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1334.00 ELREA= 1334.00

64.000	3.02	1331.02	1329.65	1331.02	1331.18	.16	1.47	.04	1334.00
1540.0	.0	1540.0	.0	.0	475.7	.0	61.6	28.7	1334.00
.49	.00	3.24	.00	.000	.030	.000	.000	1328.00	460.62
.001359	400.	400.	400.	5	11	0	.00	201.05	661.67

FLOW DISTRIBUTION FOR SECNO= 64.00 CWSEL= 1331.02

STA= 461. 726.
PER Q= 100.0
AREA= 475.7
VEL= 3.2
DEPTH= 2.4

*SECNO 69.500

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .68

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1335.20 ELREA= 1336.00

69.500	2.00	1332.00	1331.31	1332.00	1332.27	.27	1.06	.03	1335.20
1540.0	.0	1540.0	.0	.0	370.1	.0	67.0	31.2	1336.00
.53	.00	4.16	.00	.000	.030	.000	.000	1330.00	501.69
.002920	490.	550.	580.	3	14	0	.00	190.22	691.91

FLOW DISTRIBUTION FOR SECNO= 69.50 CWSEL= 1332.00

STA= 502. 703.
PER Q= 100.0
AREA= 370.1
VEL= 4.2
DEPTH= 1.9

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

*SECNO 75.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1338.00 ELREA= 1338.00

75.500	2.87	1333.47	1332.41	1333.47	1333.73	.27	1.46	.00	1338.00
1540.0	.0	1540.0	.0	.0	371.3	.0	72.1	33.5	1338.00
.57	.00	4.15	.00	.000	.030	.000	.000	1330.60	521.97
.002062	630.	600.	530.	3	11	0	.00	147.25	669.22

FLOW DISTRIBUTION FOR SECNO= 75.50 CWSEL= 1333.47

STA= 522. 680.
PER Q= 100.0
AREA= 371.3
VEL= 4.1
DEPTH= 2.5

*SECNO 79.300

WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .65

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1340.00 ELREA= 1340.00

79.300	2.41	1334.41	1333.88	1334.41	1334.97	.56	1.15	.09	1340.00
1540.0	.0	1540.0	.0	.0	255.4	.0	74.8	34.6	1340.00
.59	.00	6.03	.00	.000	.030	.000	.000	1332.00	483.49
.004872	430.	380.	340.	2	14	0	.00	108.57	592.06

FLOW DISTRIBUTION FOR SECNO= 79.30 CWSEL= 1334.41

STA= 483. 631.
PER Q= 100.0
AREA= 255.4
VEL= 6.0
DEPTH= 2.4

CCHV= .300 CEHV= .500

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

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	95.70	.00	574.20	.00	1332.00	1332.00

*SECNO 83.700

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1335.402 ELLC= 1338.000 PCWSE= 1334.408 ELTRD= 1344.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.96

3370 NORMAL BRIDGE, NRD= 42 MIN ELTRD= 1344.00 MAX ELLC= 1338.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1338.00 ELREA= 1340.00

83.700	3.53	1335.53	1334.27	1335.53	1335.99	.45	.98	.03	1338.00
1540.0	.0	1540.0	.0	.0	285.1	.0	77.6	35.6	1340.00
.61	.00	5.40	.00	.000	.015	.000	.000	1332.00	513.20
.001271	440.	440.	440.	3	15	0	.00	83.10	608.12

FLOW DISTRIBUTION FOR SECNO= 83.70 CWSEL= 1335.53

STA= 513. 608.
PER Q= 100.0
AREA= 285.1
VEL= 5.4
DEPTH= 3.4

CCHV= .600 CEHV= .800
*SECNO 84.200
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 271.0 681.8 TYPE= 1 TARGET= 410.800

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1340.00 ELREA= 1344.00

84.200	2.53	1336.53	1336.53	1336.53	1337.42	.89	.14	.35	1340.00
1540.0	.0	1540.0	.0	.0	203.1	.0	77.8	35.7	1344.00
.61	.00	7.58	.00	.000	.030	.000	.000	1334.00	467.44
.011235	50.	50.	50.	0	19	0	.00	116.43	583.87

FLOW DISTRIBUTION FOR SECNO= 84.20 CWSEL= 1336.53

STA= 467. 606.
PER Q= 100.0
AREA= 203.1
VEL= 7.6
DEPTH= 1.7

CCHV= .100 CEHV= .300
*SECNO 86.200

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1342.00 ELREA= 1344.00

86.200	2.32	1338.32	1337.75	1338.32	1338.77	.45	1.31	.04	1342.00
1540.0	.0	1540.0	.0	.0	286.7	.0	79.0	36.3	1344.00
.62	.00	5.37	.00	.000	.030	.000	.000	1336.00	531.02
.004264	180.	200.	225.	2	19	0	.00	133.23	664.25

FLOW DISTRIBUTION FOR SECNO= 86.20 CWSEL= 1338.32

STA= 531. 678.
PER Q= 100.0
AREA= 286.7
VEL= 5.4
DEPTH= 2.2

*SECNO 92.700

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.66

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1344.00 ELREA= 1346.00

92.700	1.77	1340.27	1339.47	1340.27	1340.37	.11	1.57	.03	1344.00
1540.0	.0	1540.0	.0	.0	587.0	.0	85.5	40.1	1346.00
.69	.00	2.62	.00	.000	.030	.000	.000	1338.50	395.95
.001545	550.	650.	750.	3	18	0	.00	374.99	770.95

FLOW DISTRIBUTION FOR SECNO= 92.70 CWSEL= 1340.27

STA= 396. 795.
PER Q= 100.0
AREA= 587.0
VEL= 2.6
DEPTH= 1.6

= .600 CEHV= .800
*SECNO 93.200
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1346.00 ELREA= 1346.40

93.200	.77	1342.07	1342.07	1342.07	1342.46	.39	.18	.22	1346.00
1540.0	.0	1540.0	.0	.0	308.5	.0	86.0	40.5	1346.40
.69	.00	4.99	.00	.000	.030	.000	.000	1341.30	389.40
.014459	50.	50.	50.	0	14	0	.00	401.78	791.18

FLOW DISTRIBUTION FOR SECNO= 93.20 CWSEL= 1342.07

STA= 389. 821.
PER Q= 100.0
AREA= 308.5
VEL= 5.0
DEPTH= .8

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


*SECNO 98.300

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.13

   98.300      2.09   1344.29   1343.53   1344.29   1344.37       .08      1.73       .18   1350.00
   1540.0        .0    1540.0        .0       .0     675.5        .0      91.8      45.9   1350.00
      .76       .00      2.28       .00      .000      .030      .000      .000   1342.20    306.41
  .001471      680.      510.      380.         3        14         0       .00    513.79    820.20


FLOW DISTRIBUTION FOR SECNO=     98.30          CWSEL=   1344.29

STA=     306.     868.
  PER Q=    100.0
   AREA=    675.5
    VEL=      2.3
  DEPTH=      1.3

CCHV=     .600 CEHV=     .800
*SECNO 99.400
 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   99.400       .59   1347.59   1347.59   1347.59   1347.88       .29       .38       .17   1350.00
   1540.0        .0    1540.0        .0       .0     356.7        .0      93.1      47.3   1350.00
      .76       .00      4.32       .00      .000      .030      .000      .000   1347.00    256.28
  .015888      100.      110.       90.         0        14         0       .00    620.16    876.44


FLOW DISTRIBUTION FOR SECNO=     99.40          CWSEL=   1347.59

STA=     256.     901.
  PER Q=    100.0
   AREA=    356.7
    VEL=      4.3
  DEPTH=       .6

CCHV=     .100 CEHV=     .300
*SECNO 103.900

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.78
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


 103.900     1.61   1349.61   1349.47   1349.62   1349.88       .27      2.00       .00   1350.00
  1540.0       .0    1531.2       8.8        .0     368.0       6.6      96.8      53.0   1349.30
     .79      .00      4.16      1.33      .000      .015      .015      .000   1348.00    397.41
 .002054     210.      450.      680.         4        20         0       .00    453.82    851.23


FLOW DISTRIBUTION FOR SECNO=    103.90          CWSEL=   1349.61

STA=     397.     810.     851.
  PER Q=     99.4       .6
   AREA=    368.0      6.6
    VEL=      4.2      1.3
  DEPTH=       .9       .2

CCHV=     .100 CEHV=     .300
*SECNO 104.400
 104.400     1.93   1349.93   1349.16   1349.93   1350.03       .10       .13       .02   1350.00
  1540.0       .0    1540.0        .0        .0     612.9        .0      97.4      53.5   1350.00
     .80      .00      2.51       .00      .000      .045      .000      .000   1348.00    356.92
 .003380      50.       50.       50.         2        19         0       .00    409.16    766.08


FLOW DISTRIBUTION FOR SECNO=    104.40          CWSEL=   1349.93

STA=     357.     766.
  PER Q=    100.0
   AREA=    612.9
    VEL=      2.5
  DEPTH=      1.5

*SECNO 109.400
 109.400     3.47   1351.47   1350.61   1351.47   1351.55       .09      1.52       .00   1352.00
  1540.0       .0    1540.0        .0        .0     646.9        .0     104.6      58.1   1352.00
     .86      .00      2.38       .00      .000      .045      .000      .000   1348.00    435.03
 .002765     700.      500.      350.         4        14         0       .00    401.78    836.81


FLOW DISTRIBUTION FOR SECNO=    109.40          CWSEL=   1351.47

STA=     435.     839.
  PER Q=    100.0
   AREA=    646.9
    VEL=      2.4
  DEPTH=      1.6
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 114.400

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .68

114.400	3.38	1353.38	1352.80	1353.37	1353.52	.14	1.95	.01	1354.00
1540.0	.0	1540.0	.0	.0	520.7	.0	111.3	62.8	1354.00
.90	.00	2.96	.00	.000	.045	.000	.000	1350.00	431.03
.005907	500.	500.	500.	2	14	0	.00	412.86	846.08

FLOW DISTRIBUTION FOR SECNO= 114.40 CWSEL= 1353.38

STA= 431. 848.
PER Q= 100.0
AREA= 520.7
VEL= 3.0
DEPTH= 1.3

*SECNO 119.400

119.400	5.18	1357.18	1356.74	1357.18	1357.41	.23	3.87	.03	1358.00
1540.0	.0	1540.0	.0	.0	400.8	.0	116.6	67.1	1358.00
.94	.00	3.84	.00	.000	.045	.000	.000	1352.00	409.11
.010553	500.	500.	500.	4	12	0	.00	331.25	740.37

FLOW DISTRIBUTION FOR SECNO= 119.40 CWSEL= 1357.18

STA= 409. 794.
PER Q= 100.0
AREA= 400.8
VEL= 3.8
DEPTH= 1.2

*SECNO 123.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.09

123.700	5.18	1359.18	1357.86	1359.19	1359.33	.14	1.91	.01	1358.00
1540.0	130.0	1308.4	101.5	80.9	408.3	61.2	121.3	70.2	1358.00
.98	1.61	3.20	1.66	.045	.045	.045	.000	1354.00	404.51
.002424	430.	430.	430.	1	15	0	.00	301.58	706.09

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

FLOW DISTRIBUTION FOR SECNO= 123.70 CWSEL= 1359.18

STA=	405.	458.	494.	641.	671.	706.
PER Q=	3.4	5.1	85.0	4.2	2.4	
AREA=	38.0	42.9	408.3	35.5	25.7	
VEL=	1.4	1.8	3.2	1.8	1.4	
DEPTH=	.7	1.2	2.8	1.2	.7	

*SECNO 130.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .39

130.400	4.03	1362.03	1361.64	1362.03	1362.56	.52	3.12	.11	1362.00
1425.0	.3	1424.7	.0	.9	245.4	.0	127.5	73.7	1362.00
1.01	.28	5.81	.04	.045	.045	.045	.000	1358.00	503.72
.013683	670.	670.	670.	2	20	0	.00	160.74	664.46

FLOW DISTRIBUTION FOR SECNO= 130.40 CWSEL= 1362.03

	504.	531.	664.
PER Q=	.0	100.0	
AREA=	.9	245.4	
VEL=	.3	5.8	
DEPTH=	.0	1.8	

*SECNO 135.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.56

135.400	4.61	1364.61	1362.88	1364.61	1364.75	.14	2.16	.04	1364.00
1425.0	12.1	1405.8	7.1	15.7	470.1	10.3	131.7	76.1	1364.00
1.06	.77	2.99	.69	.045	.045	.045	.000	1360.00	528.66
.002083	500.	500.	500.	4	19	0	.00	246.95	775.61

FLOW DISTRIBUTION FOR SECNO= 135.40 CWSEL= 1364.61

STA=	529.	569.	574.	742.	776.
PER Q=	.6	.2	98.7	.5	
AREA=	12.4	3.3	470.1	10.3	
VEL=	.7	1.1	3.0	.7	
DEPTH=	.3	.6	2.8	.3	

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

*SECNO 139.100
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

139.100	2.63	1366.63	1366.63	1366.63	1367.23	.60	1.90	.14	1370.00
1425.0	.0	1425.0	.0	.0	228.5	.0	134.8	77.9	1370.00
1.08	.00	6.24	.00	.000	.045	.000	.000	1364.00	498.06
.027737	400.	370.	340.	0	11	0	.00	188.86	686.92

FLOW DISTRIBUTION FOR SECNO= 139.10 CWSEL= 1366.63

STA= 498. 701.
PER Q= 100.0
AREA= 228.5
VEL= 6.2
DEPTH= 1.2

*SECNO 144.100

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.22

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1372.00 ELREA= 1372.00

144.100	4.20	1370.20	1368.56	1370.21	1370.39	.19	3.11	.04	1372.00
1425.0	.0	1425.0	.0	.0	411.8	.0	138.5	79.8	1372.00
1.12	.00	3.46	.00	.000	.045	.000	.000	1366.00	541.93
.002674	500.	500.	500.	4	8	0	.00	142.28	684.22

FLOW DISTRIBUTION FOR SECNO= 144.10 CWSEL= 1370.20

STA= 542. 693.
PER Q= 100.0
AREA= 411.8
VEL= 3.5
DEPTH= 2.9

*SECNO 148.600

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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1373.00 ELREA=      1373.00

  148.600      3.28   1371.28   1369.53   1371.28   1371.43       .15      1.04       .00   1373.00
   1425.0        .0    1425.0        .0        .0     460.4        .0     143.0      81.3   1373.00
     1.16       .00      3.10       .00      .000      .045      .000      .000   1368.00    542.67
  .002009      420.      450.      480.         3        18         0       .00    151.20    693.87


FLOW DISTRIBUTION FOR SECNO=    148.60         CWSEL=   1371.28

STA=     543.     698.
  PER Q=    100.0
   AREA=    460.4
    VEL=      3.1
  DEPTH=      3.0

*SECNO 152.100

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1374.00 ELREA=      1374.00

  152.100      4.13   1372.13   1370.49   1372.13   1372.44       .31       .96       .05   1374.00
   1425.0        .0    1425.0        .0        .0     317.9        .0     146.1      82.4   1374.00
     1.18       .00      4.48       .00      .000      .045      .000      .000   1368.00    535.96
  .004009      380.      350.      330.         3        15         0       .00    100.03    635.99


FLOW DISTRIBUTION FOR SECNO=    152.10         CWSEL=   1372.13

STA=     536.     776.
  PER Q=    100.0
   AREA=    317.9
    VEL=      4.5
  DEPTH=      3.2

CCHV=     .300 CEHV=     .500
```

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

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	45.00	.00	270.00	.00	1368.00	1368.00

*SECNO 152.800

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1373.032 ELLC= 1374.000 PCWSE= 1372.133 ELTRD= 1376.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.51

3370 NORMAL BRIDGE, NRD= 22 MIN ELTRD= 1376.00 MAX ELLC= 1374.00

152.800	3.98	1371.98	1371.13	1371.98	1372.95	.97	.18	.33	1368.00
1425.0	.1	1424.9	.1	.1	180.5	.1	146.5	82.5	1368.00
1.18	.41	7.89	.41	.015	.015	.015	.000	1368.00	554.04
.001762	70.	70.	70.	2	12	0	.00	45.62	602.10

FLOW DISTRIBUTION FOR SECNO= 152.80 CWSEL= 1371.98

STA=	554.	554.	602.	602.
PER Q=	.0	100.0	.0	
AREA=	.1	180.5	.1	
VEL=	.4	7.9	.4	
DEPTH=	2.0	4.0	2.0	

CCHV= .100 CEHV= .300

*SECNO 153.100

3301 HV CHANGED MORE THAN HVINS

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

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

3470 ENCROACHMENT STATIONS= 530.0 687.5 TYPE= 1 TARGET= 157.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 100000.00 ELREA= 1374.00

153.100	2.78	1372.78	1371.79	1372.78	1373.10	.32	.09	.06	100000.00
1425.0	.0	1425.0	.0	.0	313.4	.0	146.7	82.5	1374.00
1.18	.00	4.55	.00	.000	.045	.000	.000	1370.00	530.00
.005542	30.	30.	30.	3	14	0	.00	122.66	652.66

FLOW DISTRIBUTION FOR SECNO= 153.10 CWSEL= 1372.78

STA= 530. 660.
PER Q= 100.0
AREA= 313.4
VEL= 4.5
DEPTH= 2.6

*SECNO 154.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1378.00 ELREA= 1376.00

154.900	3.76	1373.76	1372.71	1373.77	1374.29	.52	1.12	.06	1378.00
1425.0	.0	1425.0	.0	.0	245.7	.0	147.8	82.9	1376.00
1.19	.00	5.80	.00	.000	.045	.000	.000	1370.00	578.24
.007084	150.	180.	240.	3	8	0	.00	80.58	658.82

FLOW DISTRIBUTION FOR SECNO= 154.90 CWSEL= 1373.76

STA= 578. 670.
PER Q= 100.0
AREA= 245.7
VEL= 5.8
DEPTH= 3.0

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

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	43.10	.00	259.00	.00	1370.00	1370.00

*SECNO 156.800

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1374.929 ELLC= 1376.000 PCWSE= 1373.764 ELTRD= 1377.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.67

3370 NORMAL BRIDGE, NRD= 35 MIN ELTRD= 1377.00 MAX ELLC= 1376.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.00 ELREA= 1377.00

156.800	4.35	1374.35	1373.21	1374.35	1375.22	.87	.76	.17	1377.00
1425.0	.0	1425.0	.0	.0	190.4	.0	148.8	83.2	1377.00
1.20	.00	7.48	.00	.000	.015	.000	.000	1370.00	515.54
.002550	90.	190.	260.	2	15	0	.00	44.46	564.17

FLOW DISTRIBUTION FOR SECNO= 156.80 CWSEL= 1374.35

STA= 516. 564.
PER Q= 100.0
AREA= 190.4
VEL= 7.5
DEPTH= 4.3

CCHV= .100 CEHV= .300
*SECNO 162.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .39

162.700	3.79	1377.79	1377.50	1377.79	1378.36	.56	3.11	.03	1378.00
1425.0	.0	1425.0	.0	.0	236.3	.0	151.7	84.5	1378.00
1.23	.00	6.03	.00	.000	.045	.000	.000	1374.00	512.36
.016647	650.	590.	550.	2	15	0	.00	140.01	652.38

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

FLOW DISTRIBUTION FOR SECNO= 162.70 CWSEL= 1377.79

STA=	512.	660.
PER Q=	100.0	
AREA=	236.3	
VEL=	6.0	
DEPTH=	1.7	

*SECNO 167.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.97

167.700	5.78	1381.78	1380.74	1381.78	1382.16	.38	3.78	.02	1380.00
1425.0	184.8	1191.4	48.8	75.1	225.0	23.8	154.9	86.2	1380.00
1.25	2.46	5.30	2.05	.045	.045	.045	.000	1376.00	498.90
.004304	500.	500.	500.	5	11	0	.00	160.98	659.88

FLOW DISTRIBUTION FOR SECNO= 167.70 CWSEL= 1381.78

	499.	506.	551.	562.	566.	566.	567.	575.	633.	658.
PER Q=	.0	4.5	3.5	1.3	.2	.2	3.3	83.6	3.4	
AREA=	.7	34.6	17.4	6.1	.7	1.1	14.6	225.0	23.7	
VEL=	.4	1.8	2.9	3.1	3.2	3.2	3.2	5.3	2.1	
DEPTH=	.1	.8	1.5	1.7	1.8	1.8	1.8	3.9	.9	

*SECNO 172.700

172.700	4.39	1384.39	1383.49	1384.40	1384.68	.28	2.51	.01	1384.00
1425.0	8.9	1414.4	1.6	8.7	329.6	1.5	158.7	88.2	1384.00
1.29	1.02	4.29	1.07	.045	.045	.045	.000	1380.00	495.83
.006002	460.	500.	510.	2	14	0	.00	197.72	693.56

FLOW DISTRIBUTION FOR SECNO= 172.70 CWSEL= 1384.39

STA=	496.	524.	534.	536.	687.	689.	694.
PER Q=	.2	.3	.1	99.3	.1	.1	
AREA=	4.2	3.5	1.0	329.6	.6	1.0	
VEL=	.7	1.3	1.4	4.3	1.4	.9	
DEPTH=	.2	.4	.4	2.2	.4	.2	

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


*SECNO 177.700
 177.700     3.24   1387.24   1386.37   1387.24   1387.56       .32      2.87       .01   1386.00
  1425.0     48.4    1344.1      32.4      24.1     287.6      14.5     162.5      90.3   1386.00
    1.32     2.01      4.67      2.24      .045      .045      .045      .000   1384.00    522.42
 .005509     470.      500.      520.         3        11         0       .00    167.44    689.87


FLOW DISTRIBUTION FOR SECNO=    177.70          CWSEL=   1387.24

STA=     522.     544.     548.     563.     672.     677.     690.
  PER Q=      .6       .3      2.5     94.3      1.3      1.0
   AREA=     7.0      2.5     14.7    287.6      6.3      8.2
    VEL=     1.1      1.9      2.4      4.7      2.8      1.8
  DEPTH=      .3       .7      1.0      2.6      1.2       .6

*SECNO 181.200

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
     CRITICAL DEPTH ASSUMED
 181.200     4.13   1390.13   1390.13   1390.13   1391.32      1.19      3.48       .26   1392.00
  1425.0       .0    1425.0       .0        .0     162.9        .0     164.4      91.2   1392.00
    1.33      .00      8.75      .00      .000      .045      .000      .000   1386.00    643.03
 .023019     350.      350.      350.         0        11         0       .00     70.03    713.07


FLOW DISTRIBUTION FOR SECNO=    181.20          CWSEL=   1390.13

STA=     643.     727.
  PER Q=    100.0
   AREA=    162.9
    VEL=      8.7
  DEPTH=      2.3

*SECNO 184.000
3280 CROSS SECTION    184.00 EXTENDED       .38 FEET


3301 HV CHANGED MORE THAN HVINS
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ECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1396.00 ELREA= 1396.00

184.000	7.38	1394.38	1392.41	1394.38	1394.61	.23	3.19	.10	1396.00
1425.0	.0	1425.0	.0	.0	369.8	.0	166.2	92.2	1396.00
1.35	.00	3.85	.00	.000	.045	.000	.000	1387.00	638.48
.006776	320.	280.	240.	3	11	0	.00	217.60	856.08

FLOW DISTRIBUTION FOR SECNO= 184.00 CWSEL= 1394.38

STA=	638.	967.
PER Q=	100.0	
AREA=	369.8	
VEL=	3.9	
DEPTH=	1.7	

O 189.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.58

189.000	6.53	1396.53	1395.41	1396.53	1396.66	.13	2.04	.01	1396.00
1425.0	4.4	1115.1	305.5	5.7	363.6	161.5	171.3	95.5	1396.00
1.40	.77	3.07	1.89	.045	.045	.045	.000	1390.00	532.70
.002721	500.	500.	500.	3	13	0	.00	364.75	906.46

FLOW DISTRIBUTION FOR SECNO= 189.00 CWSEL= 1396.53

STA=	533.	553.	705.	808.	831.	839.	852.	877.	906.
PER Q=	.3	78.3	4.8	6.1	3.3	3.3	3.2	.7	
AREA=	5.7	363.6	51.4	37.2	16.5	19.8	25.8	10.8	
VEL=	.8	3.1	1.3	2.3	2.8	2.4	1.8	.9	
DEPTH=	.3	2.4	.5	1.6	2.1	1.6	1.0	.4	

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

*SECNO 194.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.41

194.000	3.52	1397.52	1395.98	1397.52	1397.59	.08	.93	.01	1402.00
1425.0	.0	1425.0	.0	.0	644.3	.0	178.1	99.1	1402.00
1.46	.00	2.21	.00	.000	.045	.000	.000	1394.00	618.19
.001360	500.	500.	500.	4	17	0	.00	262.31	880.50

FLOW DISTRIBUTION FOR SECNO= 194.00 CWSEL= 1397.52

STA=	618.	931.
PER Q=	100.0	
AREA=	644.3	
VEL=	2.2	
DEPTH=	2.5	

*SECNO 199.000

DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

199.000	7.39	1399.39	1399.39	1399.39	1400.03	.64	1.43	.17	1400.00
1425.0	.0	1022.1	402.9	.0	140.9	121.0	183.1	101.4	1400.00
1.48	.00	7.26	3.33	.000	.045	.045	.000	1392.00	624.95
.010904	510.	510.	310.	0	17	0	.00	192.63	888.42

FLOW DISTRIBUTION FOR SECNO= 199.00 CWSEL= 1399.39

STA=	625.	670.	779.	796.	808.	828.	885.	888.
PER Q=	71.7	3.4	3.4	4.1	8.2	9.2	.0	
AREA=	140.9	19.3	15.2	14.7	27.2	44.5	.1	
VEL=	7.3	2.5	3.2	4.0	4.3	2.9	.4	
DEPTH=	3.2	.2	.9	1.2	1.4	.8	.0	

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


*SECNO 204.500
  204.500      7.77   1403.77   1401.93   1403.77   1404.45       .68      4.41       .01   1406.00
   1425.0       .0    1425.0       .0       .0     215.1        .0     186.1     103.0   1406.00
     1.51       .00      6.62      .00      .000      .045      .000      .000   1396.00    572.84
  .006055     550.      550.     580.        2        15         0       .00     49.24    622.07


FLOW DISTRIBUTION FOR SECNO=    204.50          CWSEL=   1403.77

STA=     573.     630.
  PER Q=    100.0
   AREA=    215.1
    VEL=      6.6
  DEPTH=      4.4

*SECNO 205.100

3301 HV CHANGED MORE THAN HVINS


 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  5.85

  205.100      8.52   1404.52   1400.05   1404.52   1404.55       .03       .03       .07   1400.00
   1425.0      87.7    1146.6     190.8     108.9     790.6     170.3     187.0     103.2   1400.00
     1.52       .80      1.45      1.12      .045      .045      .045      .000   1396.00    527.73
  .000177      60.       60.       60.        2        11         0       .00    236.95    764.68


FLOW DISTRIBUTION FOR SECNO=    205.10          CWSEL=   1404.52

STA=     528.     581.     589.     720.     744.     765.
  PER Q=      3.7      2.4     80.5      9.3      4.1
   AREA=     77.7     31.2    790.6    110.2     60.1
    VEL=       .7      1.1      1.5      1.2      1.0
  DEPTH=      1.5      4.0      6.0      4.5      2.9

*SECNO 208.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .20

  208.000      4.51   1404.51   1403.40   1404.52   1404.77       .26       .16       .07   1404.00
   1425.0        .3    1413.5      11.2        .3     345.8       8.2     192.3     104.6   1404.00
     1.54       .84      4.09      1.37      .045      .045      .045      .000   1400.00    485.97
  .004283     320.      320.      320.        3        19         0       .00    149.09    635.06
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 208.00 CWSEL= 1404.51

STA=	486.	487.	619.	621.	631.	633.	635.
PER Q=	.0	99.2	.1	.5	.1	.0	
AREA=	.3	345.8	1.4	5.2	1.2	.4	
VEL=	.8	4.1	1.4	1.4	1.4	.9	
DEPTH=	.3	2.6	.5	.5	.5	.3	

*SECNO -123.700
START TRIB COMP

-123.700	123.700	1359.184							
-123.700	5.18	1359.18	.00	1359.19	1359.31	.12	1.25	-1.02	1358.00
1425.0	119.8	1211.6	93.6	80.5	407.6	60.9	196.7	106.8	1358.00
1.58	1.49	2.97	1.54	.045	.045	.045	.000	1354.00	404.68
.002090	430.	430.	430.	0	0	0	.00	301.33	706.02

FLOW DISTRIBUTION FOR SECNO= -123.70 CWSEL= 1359.18

	405.	458.	494.	641.	671.	706.
Q=	3.3	5.1	85.0	4.2	2.4	
AREA=	37.7	42.7	407.6	35.4	25.5	
VEL=	1.3	1.7	3.0	1.7	1.3	
DEPTH=	.7	1.2	2.8	1.2	.7	

CCHV= .100 CEHV= .300
*SECNO 305.000

3235 SLOPE TOO STEEP, EXCEEDS .10

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

305.000	.01	1362.01	1362.01	1362.01	1362.02	.00	1.14	.01	1364.00
1.0	.0	1.0	.0	.0	1.8	.0	200.1	109.7	1364.00
1.86	.00	.55	.00	.000	.045	.000	.000	1362.00	489.27
.112249	430.	550.	600.	0	31	0	.00	163.49	669.33

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


FLOW DISTRIBUTION FOR SECNO=    305.00         CWSEL=   1362.01

STA=     489.     880.
  PER Q=     99.7
   AREA=      1.8
    VEL=       .5
  DEPTH=       .0

*SECNO 310.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF
   310.000       .02   1366.02   1366.01   1366.02   1366.02       .00      3.99      1.39   1368.00
       1.0        .0       1.0        .0        .0       7.8        .0     200.2     112.8   1368.00
      2.94       .00       .13       .00      .000      .045      .000      .000   1366.00    595.37
   .002655      520.      500.      600.        20        20         0       .00    372.57    967.94


FLOW DISTRIBUTION FOR SECNO=    310.00         CWSEL=   1366.02

STA=     595.    1095.
  PER Q=     99.9
   AREA=      7.8
    VEL=       .1
  DEPTH=       .0

*SECNO 315.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .22


3470 ENCROACHMENT STATIONS=      167.7    1197.6  TYPE=      1  TARGET=     1029.900
   315.000       .08   1369.58   1369.58   1369.59   1369.59       .01      3.57       .00   1370.00
       1.0        .0       1.0        .0        .0       1.1        .0     200.2     115.0   1370.00
      3.09       .00       .95       .00      .000      .045      .000      .000   1369.50    942.59
   .054799      500.      500.      500.         2        23         0       .00     24.50    967.10


FLOW DISTRIBUTION FOR SECNO=    315.00         CWSEL=   1369.58

STA=     943.    1018.
  PER Q=     99.8
   AREA=      1.1
    VEL=       .9
  DEPTH=       .0
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 320.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.72

320.000	.14	1372.94	1372.88	1372.95	1372.94	.00	3.35	.00	1374.00
1.0	.0	1.0	.0	.0	4.9	.0	200.3	115.8	1373.40
3.77	.00	.20	.00	.000	.045	.000	.000	1372.80	332.60
.002457	500.	500.	500.	6	8	0	.00	110.60	491.60

FLOW DISTRIBUTION FOR SECNO= 320.00 CWSEL= 1372.94

STA= 333. 1011.
PER Q= 100.0
AREA= 4.9
VEL= .2
DEPTH= .0

*SECNO 325.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 57.72

325.000	.54	1372.94	1372.45	1372.95	1372.94	.00	.00	.00	1374.00
1.0	.0	1.0	.0	.0	68.8	.0	200.7	117.5	1377.20
13.33	.00	.01	.00	.000	.045	.000	.000	1372.40	460.17
.000001	500.	500.	500.	5	18	0	.00	187.75	647.92

FLOW DISTRIBUTION FOR SECNO= 325.00 CWSEL= 1372.94

STA= 460. 1022.
PER Q= 100.0
AREA= 68.8
VEL= .0
DEPTH= .4

CCHV= .100 CEHV= .300

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


*SECNO 330.000
3280 CROSS SECTION    330.00 EXTENDED       .21 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      543.2    1073.9  TYPE=      1  TARGET=      530.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1384.00 ELREA=      1383.10

  330.000       .01   1382.01   1382.01   1382.01   1382.01       .00       .00       .00   1384.00
      1.0        .0       1.0        .0        .0       2.2        .0     201.1     120.2   1383.10
    13.63       .00       .46       .00      .000      .015      .000      .000   1382.00    792.64
  .013106      490.      500.      560.         0        31         0       .00    272.79   1065.43


FLOW DISTRIBUTION FOR SECNO=    330.00          CWSEL=   1382.01

STA=     793.    1070.
 PER Q=     99.9
 AREA=       2.2
  VEL=        .5
 DEPTH=       .0

*SECNO 335.000

   1384.80 TRIALS NOT ENOUGH FOR CRITICAL DEPTH9999999.009999999.00 100050.00   1384.01 999999.00
3280 CROSS SECTION    335.00 EXTENDED       .02 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.66


3470 ENCROACHMENT STATIONS=      450.0     750.0  TYPE=      1  TARGET=      300.000
  335.000       .01   1384.01       .00   1384.03   1384.01       .00      2.00       .00   1390.00
      1.0        .0        .8        .2        .0       2.7        .8     201.1     123.0   1384.00
    14.13       .00       .29       .29      .000      .015      .015      .000   1384.00    547.52
  .001853      500.      500.      600.         5        80         0       .00    202.48    750.00


FLOW DISTRIBUTION FOR SECNO=    335.00          CWSEL=   1384.01
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


STA=     548.     704.     750.
  PER Q=     77.2     22.8
   AREA=      2.7       .8
    VEL=       .3       .3
  DEPTH=       .0       .0

*SECNO 340.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .65

   340.000       .06   1385.36   1385.35   1385.35   1385.37       .01      1.36       .00   1386.00
       1.0        .0       1.0        .0        .0       1.4        .0     201.2     124.3   1386.00
     14.32       .00       .72       .00      .000      .015      .000      .000   1385.30    495.46
   .004351      500.      500.      500.         4        23         0       .00     38.38    533.84


FLOW DISTRIBUTION FOR SECNO=    340.00         CWSEL=   1385.36

STA=     495.     689.
  PER Q=     99.9
   AREA=      1.4
    VEL=       .7
  DEPTH=       .0

CCHV=     .100 CEHV=     .300
*SECNO 342.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   342.000       .06   1387.06   1387.06   1387.06   1387.08       .02      1.29       .00   1388.00
       1.0        .0       1.0        .0        .0       1.0        .0     201.2     124.5   1388.00
     14.38       .00      1.01       .00      .000      .015      .000      .000   1387.00    731.14
   .010503      150.      200.      400.         0         8         0       .00     31.43    762.57


FLOW DISTRIBUTION FOR SECNO=    342.00         CWSEL=   1387.06

STA=     731.     950.
  PER Q=     99.9
   AREA=      1.0
    VEL=      1.0
  DEPTH=       .0
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .100 CEHV=     .300
*SECNO 345.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.63

  345.000      .04   1388.04   1388.01   1388.04   1388.04       .00       .96       .00   1390.00
      1.0       .0       1.0        .0        .0       7.6        .0     201.2     125.4   1390.00
    15.02      .00       .13       .00      .000      .045      .000      .000   1388.00    640.30
  .001522     350.      300.      150.         4        20         0       .00    235.02    875.31


FLOW DISTRIBUTION FOR SECNO=    345.00          CWSEL=   1388.04

STA=     640.     975.
  PER Q=    100.0
   AREA=      7.6
    VEL=       .1
  DEPTH=       .0

*SECNO 350.000
 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.00 ELREA=      1392.00

  350.000      .07   1390.47   1390.47   1390.47   1390.51       .03      2.35       .01   1392.00
      1.0       .0       1.0        .0        .0        .7        .0     201.2     126.8   1392.00
    15.11      .00      1.45       .00      .000      .045      .000      .000   1390.40    571.66
  .080242     550.      500.      450.         0        14         0       .00     11.22    582.88


FLOW DISTRIBUTION FOR SECNO=    350.00          CWSEL=   1390.47

STA=     572.     920.
  PER Q=     99.7
   AREA=       .7
    VEL=      1.5
  DEPTH=       .1

*SECNO 355.400
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
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  SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
  Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
  TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
  SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3710 WSEL ASSUMED BASED ON MIN DIFF
  355.400       .11   1395.74   1395.69   1395.74   1395.74       .00      5.22       .00   1396.70
      1.0        .0       1.0        .0        .0       3.6        .0     201.3     127.3   1396.77
    15.65       .00       .28       .00      .000      .045      .000      .000   1395.63    390.13
  .003535      450.      540.      600.        20        16         0       .00     68.51    458.64


FLOW DISTRIBUTION FOR SECNO=    355.40          CWSEL=   1395.74

STA=     390.     800.
  PER Q=     99.9
   AREA=      3.6
    VEL=       .3
  DEPTH=       .1

*SECNO 372.000
3280 CROSS SECTION    372.00 EXTENDED      6.15 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

3470 ENCROACHMENT STATIONS=      300.0     632.9  TYPE=      1  TARGET=      332.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1406.00 ELREA=    100000.00

  372.000      1.65   1406.35   1405.83   1408.74   1406.41       .06      8.41      1.30   1406.00
    263.0      42.7     220.3        .0      39.5     101.7        .0     204.0     133.6 100000.00
    15.89      1.08      2.17       .00      .045      .045      .000      .000   1404.70    374.18
  .005075     1660.     1660.     1660.        20        38         0       .00    258.72    632.90


FLOW DISTRIBUTION FOR SECNO=    372.00          CWSEL=   1406.35

STA=     374.     402.     403.     434.     518.     633.
  PER Q=       .3       .0      2.7     13.2     83.8
   AREA=      2.1       .2      7.7     29.6    101.7
    VEL=       .4       .7       .9      1.2      2.2
  DEPTH=       .1       .2       .3       .3       .9

*SECNO 377.000
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3280 CROSS SECTION 377.00 EXTENDED 7.14 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.13

3470 ENCROACHMENT STATIONS= 200.0 700.4 TYPE= 1 TARGET= 500.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1408.00 ELREA= 100000.00

377.000	1.44	1407.44	1406.68	1408.75	1407.45	.02	1.03	.00	1408.00
263.0	.0	263.0	.0	.0	266.3	.0	206.4	136.8	100000.00
16.03	.00	.99	.00	.000	.045	.000	.000	1406.00	373.41
.001116	500.	500.	500.	3	18	0	.00	314.53	687.94

FLOW DISTRIBUTION FOR SECNO= 377.00 CWSEL= 1407.44

STA=	373.	700.
PER Q=	100.0	
AREA=	266.3	
VEL=	1.0	
DEPTH=	.8	

*SECNO 382.000
3280 CROSS SECTION 382.00 EXTENDED 4.68 FEET

3470 ENCROACHMENT STATIONS= 150.0 700.0 TYPE= 1 TARGET= 550.000

382.000	1.48	1408.08	1407.37	1408.79	1408.10	.02	.65	.00	1408.00
263.0	2.5	260.5	.0	10.1	216.4	.0	209.2	140.7	1408.00
16.14	.24	1.20	.01	.045	.045	.045	.000	1406.60	252.16
.001527	500.	500.	500.	3	11	0	.00	364.60	616.75

FLOW DISTRIBUTION FOR SECNO= 382.00 CWSEL= 1408.08

STA=	252.	276.	283.	376.	616.	617.
PER Q=	.2	.1	.7	99.1	.0	
AREA=	1.8	.6	7.7	216.4	.0	
VEL=	.2	.2	.2	1.2	.0	
DEPTH=	.1	.1	.1	.9	.0	

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


*SECNO 387.000
3280 CROSS SECTION    387.00 EXTENDED      3.51 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .44


3470 ENCROACHMENT STATIONS=      100.0     620.0  TYPE=      1  TARGET=      520.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1410.00 ELREA=      1410.00

   387.000      1.51   1409.51   1409.13   1409.13   1409.59       .09      1.47       .02   1410.00
     263.0        .0     263.0        .0        .0     111.9        .0     211.1     143.7   1410.00
     16.20       .00      2.35       .00      .000      .045      .000      .000   1408.00    453.60
   .007825      500.      500.      500.         3        19         0       .00    154.66    608.26


FLOW DISTRIBUTION FOR SECNO=    387.00          CWSEL=   1409.51

STA=     454.     615.
   R Q=    100.0
  AREA=    111.9
   VEL=      2.4
 DEPTH=       .7

*SECNO 392.000
3280 CROSS SECTION    392.00 EXTENDED      9.60 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

3470 ENCROACHMENT STATIONS=      100.0     643.5  TYPE=      1  TARGET=      543.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1412.00 ELREA=    100000.00

   392.000       .40   1412.40   1412.27   1415.40   1412.46       .06      4.72     -4.71   1412.00
     263.0      86.4     176.6        .0      48.1      91.6        .0     212.6     146.7 100000.00
     16.28      1.79      1.93       .00      .045      .045      .000      .000   1412.00    271.38
   .011603      500.      500.      500.        20        25         0       .00    372.12    643.50
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

FLOW DISTRIBUTION FOR SECNO= 392.00 CWSEL= 1412.40

STA=	271.	317.	322.	328.	332.	345.	354.	362.	372.	388.	415.	644.
PER Q=	4.2	1.5	1.7	1.1	3.9	2.5	2.4	2.9	4.7	7.8	67.2	
AREA=	9.2	2.0	2.3	1.6	5.4	3.4	3.3	4.0	6.4	10.7	91.6	
VEL=	1.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	
DEPTH=	.2	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	

*SECNO 397.000
3280 CROSS SECTION 397.00 EXTENDED .53 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 19.52

397.000	8.53	1412.53	1406.29	1415.40	1412.53	.01	.07	.00	1412.00
333.0	44.6	263.9	24.5	295.1	393.6	174.3	218.3	154.8	1412.00
16.52	.15	.67	.14	.045	.045	.045	.000	1404.00	.00
.000049	500.	500.	500.	5	26	0	.00	1036.07	1036.07

FLOW DISTRIBUTION FOR SECNO= 397.00 CWSEL= 1412.53

STA=	0.	158.	289.	424.	557.	634.	851.	1036.
PER Q=	3.8	3.1	3.3	3.2	79.3	5.2	2.2	
AREA=	83.8	69.2	71.9	70.2	393.6	114.6	59.7	
VEL=	.2	.2	.2	.2	.7	.2	.1	
DEPTH=	.5	.5	.5	.5	5.1	.5	.3	

*SECNO 402.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .23

402.000	6.57	1412.57	1408.64	1415.40	1412.61	.04	.06	.01	1414.00
333.0	.0	333.0	.0	.0	206.4	.0	224.5	161.3	1414.00
16.61	.00	1.61	.00	.000	.045	.000	.000	1406.00	534.59
.000892	500.	500.	500.	3	17	0	.00	96.71	631.30

FLOW DISTRIBUTION FOR SECNO= 402.00 CWSEL= 1412.57

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


STA=     535.     677.
  PER Q=    100.0
   AREA=    206.4
    VEL=      1.6
  DEPTH=      2.1

*SECNO 407.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50

   407.000      3.31   1413.31   1412.08   1415.41   1413.42       .11       .80       .02   1416.00
     333.0        .0     333.0        .0        .0     124.0        .0     226.4     162.3   1416.00
     16.66       .00      2.69       .00      .000      .045      .000      .000   1410.00    554.80
   .003615      500.      500.      500.         3        17         0       .00     78.39    633.19


FLOW DISTRIBUTION FOR SECNO=    407.00         CWSEL=   1413.31

STA=     555.     755.
  PER Q=    100.0
   AREA=    124.0
    VEL=      2.7
  DEPTH=      1.6

*SECNO 412.000
   412.000      1.65   1415.65   1415.06   1415.66   1415.82       .17      2.38       .02   1418.00
     333.0        .0     333.0        .0        .0     100.5        .0     227.7     163.2   1418.00
     16.70       .00      3.31       .00      .000      .045      .000      .000   1414.00    532.52
   .006529      500.      500.      500.         3        17         0       .00     72.42    604.94


FLOW DISTRIBUTION FOR SECNO=    412.00         CWSEL=   1415.65

STA=     533.     620.
  PER Q=    100.0
   AREA=    100.5
    VEL=      3.3
  DEPTH=      1.4
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 417.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.97

417.000	3.23	1417.23	1415.78	1417.23	1417.31	.07	1.48	.01	1420.00
333.0	.0	333.0	.0	.0	153.1	.0	229.1	164.0	1420.00
16.77	.00	2.17	.00	.000	.045	.000	.000	1414.00	556.81
.001680	500.	500.	500.	4	8	0	.00	74.66	631.47

FLOW DISTRIBUTION FOR SECNO= 417.00 CWSEL= 1417.23

STA= 557. 644.
PER Q= 100.0
AREA= 153.1
VEL= 2.2
DEPTH= 2.1

T2
T3

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		3							1307.65	

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

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

*PROF 2

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS

CCHV= .100 CEHV= .300
*SECNO 10.000

3470 ENCROACHMENT STATIONS= 437.2 743.4 TYPE= 1 TARGET= 306.200

10.000	7.65	1307.65	1302.92	1307.65	1307.76	.11	.00	.00	1308.00
5100.0	.0	5100.0	.0	.0	1930.6	.0	.0	.0	100000.00
.00	.00	2.64	.00	.000	.045	.000	.000	1300.00	438.69
.000546	0.	0.	0.	0	17	0	.00	303.45	742.14

*SECNO 15.600

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .45

15.600	5.98	1307.98	1304.07	1307.98	1308.09	.11	.33	.00	1310.40
2545.0	.0	2545.0	.0	.0	967.9	.0	18.6	3.1	1308.00
.06	.00	2.63	.00	.000	.045	.000	.000	1302.00	523.82
.000671	530.	560.	600.	2	14	0	.00	176.71	700.53

CCHV= .600 CEHV= .800
*SECNO 16.000

16.000	3.44	1307.94	1306.92	1307.94	1308.38	.44	.03	.26	1312.00
2545.0	.0	2545.0	.0	.0	479.0	.0	19.3	3.2	1312.00
.06	.00	5.31	.00	.000	.015	.000	.000	1304.50	516.53
.000708	40.	40.	40.	3	18	0	.00	166.93	683.46

CCHV= .100 CEHV= .300
*SECNO 20.500

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .20

20.500	2.52	1308.52	1308.33	1308.52	1309.39	.88	.88	.13	1314.00
2545.0	.0	2545.0	.0	.0	338.9	.0	23.5	4.9	1314.00
.08	.00	7.51	.00	.000	.045	.000	.000	1306.00	514.33
.017698	450.	450.	450.	3	14	0	.00	151.20	665.53

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

*SECNO 24.200

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.66

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1316.00 ELREA= 1316.00

24.200	5.09	1311.09	1308.69	1311.09	1311.40	.31	1.95	.06	1316.00
2545.0	.0	2545.0	.0	.0	572.4	.0	27.4	6.1	1316.00
.10	.00	4.45	.00	.000	.045	.000	.000	1306.00	545.83
.002494	370.	370.	370.	4	8	0	.00	127.63	673.47

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
1.25	1.56	2.63	.00	110.00	.00	600.00	.00	1306.00	1306.00

*SECNO 25.000

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1311.466 ELLC= 1312.000 PCWSE= 1311.095 ELTRD= 1316.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.93

3370 NORMAL BRIDGE, NRD= 42 MIN ELTRD= 1316.00 MAX ELLC= 1312.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1312.00 ELREA= 1312.00

25.000	5.16	1311.16	1308.70	1311.16	1311.52	.36	.09	.03	1312.00
2545.0	.0	2545.0	.0	.0	527.1	.0	28.4	6.3	1312.00
.11	.00	4.83	.00	.000	.015	.000	.000	1306.00	559.91
.000669	80.	80.	80.	2	9	0	.00	104.30	672.09

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

CCHV= .100 CEHV= .300
*SECNO 25.300

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

25.300	2.40	1312.40	1312.40	1312.40	1313.54	1.14	.06	.23	1316.00
2545.0	.0	2545.0	.0	.0	297.0	.0	28.7	6.4	1316.00
.11	.00	8.57	.00	.000	.045	.000	.000	1310.00	540.08
.022944	30.	30.	30.	0	14	0	.00	131.72	671.79

*SECNO 28.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.32

28.700	4.35	1314.35	1311.70	1314.35	1314.43	.08	.78	.11	1320.00
2545.0	.0	2545.0	.0	.0	1115.1	.0	34.2	8.0	1318.00
.15	.00	2.28	.00	.000	.045	.000	.000	1310.00	375.84
.000812	390.	340.	340.	4	19	0	.00	294.61	670.45

*SECNO 32.500

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .34

32.500	2.89	1314.89	1314.22	1314.89	1315.18	.29	.69	.06	1320.00
2545.0	.0	2545.0	.0	.0	584.2	.0	41.6	10.6	1320.00
.17	.00	4.36	.00	.000	.045	.000	.000	1312.00	370.51
.007107	380.	380.	380.	2	11	0	.00	298.23	668.74

*SECNO 36.200

36.200	3.10	1316.90	1315.87	1316.92	1317.09	.18	1.89	.01	1320.00
2545.0	.0	2545.0	.0	.0	742.9	.0	47.2	13.3	1324.00
.20	.00	3.43	.00	.000	.045	.000	.000	1313.80	403.05
.003850	430.	370.	330.	2	19	0	.00	343.48	746.53

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


CCHV=     .600 CEHV=     .800
*SECNO 36.900
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   36.900      1.38   1317.38   1317.38   1317.38   1317.97       .59       .24       .33   1320.00
   2545.0       .0    2545.0       .0        .0     412.2        .0      48.2      13.9   1324.00
      .21       .00      6.17      .00      .000      .015      .000      .000   1316.00    400.17
  .003143      70.       70.       70.         0        14         0       .00    351.42    751.59


CCHV=     .100 CEHV=     .300
*SECNO 38.100
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   38.100      1.65   1319.65   1319.65   1319.64   1320.29       .65       .37       .02   1320.00
   2545.0       .0    2545.0       .0        .0     394.7        .0      49.3      14.8   1320.00
      .21       .00      6.45      .00      .000      .015      .000      .000   1318.00    475.97
  .003068      60.      120.      180.         0        11         0       .00    309.84    785.81


=     .100 CEHV=     .300
*SECNO 43.300
3280 CROSS SECTION     43.30 EXTENDED       .95 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=     1326.00 ELREA=     1326.00

   43.300      3.65   1321.65   1319.95   1321.65   1321.89       .23      1.56       .04   1326.00
   2545.0       .0    2545.0       .0        .0     654.3        .0      55.5      17.9   1326.00
      .25       .00      3.89      .00      .000      .045      .000      .000   1318.00    526.02
  .002920     520.      520.      520.         3        11         0       .00    202.71    728.73


CCHV=     .600 CEHV=     .800
*SECNO 43.800
3280 CROSS SECTION     43.80 EXTENDED      3.08 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1328.00 ELREA=      1328.00

   43.800      2.78   1323.28   1323.28   1323.28   1324.16       .88       .32       .52   1328.00
   2545.0       .0    2545.0       .0        .0     338.1        .0      56.1      18.1   1328.00
      .25       .00      7.53      .00      .000      .045      .000      .000   1320.50    526.36
  .025022      50.       50.       50.         0        15         0       .00    195.29    721.65


CCHV=     .100 CEHV=     .300
*SECNO 49.000
3280 CROSS SECTION     49.00 EXTENDED       .81 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.37


 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1330.00 ELREA=      1330.00

   49.000      4.81   1326.81   1325.19   1326.81   1326.96       .15      2.73       .07   1330.00
   2545.0       .0    2545.0       .0        .0     816.3        .0      63.0      21.0   1330.00
      .30       .00      3.12      .00      .000      .045      .000      .000   1322.00    453.56
  .002207     650.      520.      480.         3        11         0       .00    285.91    739.47


*SECNO 54.000
3280 CROSS SECTION     54.00 EXTENDED      3.95 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1332.00 ELREA=      1332.00

   54.000      3.95   1327.95   1326.36   1327.94   1328.08       .14      1.12       .00   1332.00
   2545.0       .0    2545.0       .0        .0     856.4        .0      72.6      24.5   1332.00
      .34       .00      2.97      .00      .000      .045      .000      .000   1324.00    419.93
  .002265     500.      500.      530.         3         8         0       .00    328.81    748.75


*SECNO 59.400
   59.400      3.27   1329.27   1327.75   1329.27   1329.49       .22      1.38       .02   1336.00
   2545.0       .0    2545.0       .0        .0     683.9        .0      82.2      27.9   1332.00
      .38       .00      3.72      .00      .000      .045      .000      .000   1326.00    514.25
  .002921     380.      540.      640.         3        14         0       .00    226.32    740.58
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .600 CEHV=     .800
*SECNO 60.000

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   60.000      1.57   1329.57   1329.57   1329.57   1330.33       .76       .39       .44   1331.20
   2545.0        .0    2545.0        .0        .0     363.4        .0      82.9      28.3   1332.00
      .39       .00      7.00       .00      .000      .045      .000      .000   1328.00    502.53
  .025760       60.       60.       60.         0        11         0       .00    238.75    741.27


CCHV=     .100 CEHV=     .300
*SECNO 64.000

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.00


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1334.00 ELREA=      1334.00

   64.000      3.78   1331.78   1330.25   1331.78   1332.03       .25      1.65       .05   1334.00
   2545.0        .0    2545.0        .0        .0     637.0        .0      87.5      30.4   1334.00
      .41       .00      4.00       .00      .000      .030      .000      .000   1328.00    457.22
  .001611      400.      400.      400.         4        11         0       .00    223.06    680.29


*SECNO 69.500
3280 CROSS SECTION     69.50 EXTENDED       .70 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1335.20 ELREA=      1336.00

   69.500      2.80   1332.80   1331.83   1332.80   1333.17       .37      1.11       .04   1335.20
   2545.0        .0    2545.0        .0        .0     523.8        .0      94.8      33.0   1336.00
      .44       .00      4.86       .00      .000      .030      .000      .000   1330.00    499.69
  .002576      490.      550.      580.         3        11         0       .00    193.94    693.63
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 75.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1338.00 ELREA= 1338.00

75.500	3.64	1334.24	1333.03	1334.24	1334.67	.42	1.48	.02	1338.00
2545.0	.0	2545.0	.0	.0	486.7	.0	101.8	35.4	1338.00
.48	.00	5.23	.00	.000	.030	.000	.000	1330.60	520.59
.002358	630.	600.	530.	3	11	0	.00	150.41	671.00

*SECNO 79.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .68

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1340.00 ELREA= 1340.00

79.300	3.21	1335.21	1334.63	1335.21	1336.06	.85	1.27	.13	1340.00
2545.0	.0	2545.0	.0	.0	344.1	.0	105.4	36.5	1340.00
.49	.00	7.40	.00	.000	.030	.000	.000	1332.00	482.50
.005094	430.	380.	340.	2	15	0	.00	110.97	593.47

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	95.70	.00	574.20	.00	1332.00	1332.00

*SECNO 83.700

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1336.717 ELLC= 1338.000 PCWSE= 1335.214 ELTRD= 1344.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.73

3370 NORMAL BRIDGE, NRD= 42 MIN ELTRD= 1344.00 MAX ELLC= 1338.00

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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1338.00 ELREA=      1340.00

 83.700      4.58   1336.58   1335.17   1336.58   1337.30       .72      1.20       .04   1338.00
 2545.0       .0    2545.0       .0       .0     372.6        .0     109.0      37.5   1340.00
    .51      .00      6.83      .00      .000      .015      .000      .000   1332.00    513.18
.001697     440.      440.     440.        4        12         0       .00     84.52    608.13


CCHV=     .600 CEHV=     .800
*SECNO 84.200
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1340.00 ELREA=      1344.00

 84.200      3.24   1337.24   1337.24   1337.24   1338.45      1.22       .17       .39   1340.00
 2545.0       .0    2545.0       .0       .0     287.5        .0     109.4      37.6   1344.00
    .51      .00      8.85      .00      .000      .030      .000      .000   1334.00    463.14
.010340      50.       50.      50.         0        19         0       .00    122.61    585.75


CCHV=     .100 CEHV=     .300
*SECNO 86.200

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.57


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1342.00 ELREA=      1344.00

 86.200      3.12   1339.12   1338.41   1339.12   1339.77       .65      1.25       .06   1342.00
 2545.0       .0    2545.0       .0       .0     394.7        .0     110.9      38.2   1344.00
    .52      .00      6.45      .00      .000      .030      .000      .000   1336.00    528.16
.004207     180.      200.     225.        2        15         0       .00    137.82    665.98


*SECNO 92.700

3301 HV CHANGED MORE THAN HVINS
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.88

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1344.00 ELREA= 1346.00

92.700	2.50	1341.00	1339.81	1341.00	1341.13	.13	1.32	.05	1344.00
2545.0	.0	2545.0	.0	.0	863.9	.0	120.3	42.1	1346.00
.58	.00	2.95	.00	.000	.030	.000	.000	1338.50	392.51
.001190	550.	650.	750.	3	18	0	.00	381.30	773.81

CCHV= .600 CEHV= .800
*SECNO 93.200
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1346.00 ELREA= 1346.40

93.200	1.08	1342.38	1342.38	1342.38	1342.92	.54	.14	.32	1346.00
2545.0	.0	2545.0	.0	.0	431.7	.0	121.1	42.6	1346.40
.58	.00	5.90	.00	.000	.030	.000	.000	1341.30	388.56
.012960	50.	50.	50.	0	14	0	.00	403.52	792.07

*SECNO 98.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.95

98.300	2.54	1344.74	1343.84	1344.74	1344.86	.12	1.69	.25	1350.00
2545.0	.0	2545.0	.0	.0	913.8	.0	129.0	48.0	1350.00
.63	.00	2.79	.00	.000	.030	.000	.000	1342.20	303.79
.001488	680.	510.	380.	3	14	0	.00	519.09	822.88

CCHV= .600 CEHV= .800
*SECNO 99.400
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

99.400	.82	1347.82	1347.82	1347.82	1348.22	.40	.37	.23	1350.00
2545.0	.0	2545.0	.0	.0	500.1	.0	130.7	49.4	1350.00
.64	.00	5.09	.00	.000	.030	.000	.000	1347.00	249.89
.014299	100.	110.	90.	0	17	0	.00	627.97	877.86

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

CCHV= .100 CEHV= .300
*SECNO 103.900

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.52

103.900	1.92	1349.92	1349.80	1349.92	1350.31	.38	2.09	.00	1350.00
2545.0	.0	2492.1	52.9	.0	496.7	24.6	136.1	55.6	1349.30
.66	.00	5.02	2.15	.000	.015	.015	.000	1348.00	360.12
.002248	210.	450.	680.	3	20	0	.00	529.48	889.59

CCHV= .100 CEHV= .300
*SECNO 104.400

104.400	2.32	1350.32	1349.48	1350.32	1350.48	.16	.15	.02	1350.00
2545.0	55.8	2485.4	3.8	57.1	768.5	5.3	136.9	56.3	1350.00
.67	.98	3.23	.71	.045	.045	.045	.000	1348.00	168.28
.004165	50.	50.	50.	3	15	0	.00	627.49	795.77

*SECNO 109.400

109.400	4.04	1352.04	1350.93	1352.03	1352.17	.13	1.69	.00	1352.00
2545.0	.2	2544.8	.0	1.4	877.1	.0	146.8	62.9	1352.00
.72	.17	2.90	.02	.045	.045	.000	.000	1348.00	397.59
.002771	700.	500.	350.	4	11	0	.00	441.78	839.37

*SECNO 114.400

114.400	3.88	1353.88	1353.11	1353.88	1354.07	.19	1.88	.02	1354.00
2545.0	.0	2545.0	.0	.0	731.1	.0	156.0	67.8	1354.00
.76	.00	3.48	.00	.000	.045	.000	.000	1350.00	423.01
.005401	500.	500.	500.	2	19	0	.00	424.46	847.47

*SECNO 119.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .68

119.400	5.61	1357.61	1357.12	1357.60	1357.94	.34	3.83	.04	1358.00
2545.0	.0	2545.0	.0	.0	546.7	.0	163.4	72.4	1358.00
.79	.00	4.66	.00	.000	.045	.000	.000	1352.00	402.52
.011700	500.	500.	500.	4	14	0	.00	366.25	768.76

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

*SECNO 123.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.10

123.700	5.85	1359.85	1358.69	1359.85	1360.05	.20	2.10	.01	1358.00
2545.0	333.9	1960.1	251.0	145.5	506.0	107.5	169.8	75.8	1358.00
.82	2.29	3.87	2.34	.045	.045	.045	.000	1354.00	391.00
.002659	430.	430.	430.	3	10	0	.00	324.55	715.55

*SECNO 130.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .42

130.400	4.67	1362.67	1362.29	1362.67	1363.32	.65	3.13	.14	1362.00
2231.0	58.6	2163.8	8.6	23.3	329.4	4.6	178.4	79.7	1362.00
.85	2.52	6.57	1.89	.045	.045	.045	.000	1358.00	487.17
.011834	670.	670.	670.	2	19	0	.00	192.28	679.45

*SECNO 135.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.32

135.400	5.32	1365.32	1363.47	1365.32	1365.51	.19	2.14	.05	1364.00
2231.0	79.4	2091.9	59.6	63.8	587.6	47.0	184.5	82.7	1364.00
.89	1.24	3.56	1.27	.045	.045	.045	.000	1360.00	482.67
.002192	500.	500.	500.	3	19	0	.00	331.05	813.72

*SECNO 139.100

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

139.100	3.06	1367.06	1367.06	1367.06	1367.86	.80	1.94	.18	1370.00
2231.0	.0	2231.0	.0	.0	310.7	.0	188.7	85.0	1370.00
.90	.00	7.18	.00	.000	.045	.000	.000	1364.00	495.10
.025228	400.	370.	340.	0	11	0	.00	193.54	688.64

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

*SECNO 144.100

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.84

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1372.00 ELREA= 1372.00

144.100	5.07	1371.07	1369.13	1371.07	1371.33	.26	3.42	.05	1372.00
2231.0	.0	2231.0	.0	.0	544.2	.0	193.6	87.0	1372.00
.94	.00	4.10	.00	.000	.045	.000	.000	1366.00	524.76
.003124	500.	500.	500.	4	8	0	.00	163.80	688.56

*SECNO 148.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1373.00 ELREA= 1373.00

148.600	4.25	1372.25	1370.05	1372.25	1372.46	.21	1.12	.01	1373.00
2231.0	.0	2231.0	.0	.0	610.4	.0	199.6	88.7	1373.00
.97	.00	3.66	.00	.000	.045	.000	.000	1368.00	538.73
.002038	420.	450.	480.	3	18	0	.00	157.71	696.43

*SECNO 152.100

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.00 ELREA= 1374.00

152.100	5.12	1373.12	1371.27	1373.12	1373.55	.43	1.02	.07	1374.00
2231.0	.0	2231.0	.0	.0	424.1	.0	203.8	89.8	1374.00
.99	.00	5.26	.00	.000	.045	.000	.000	1368.00	529.22
.004525	380.	350.	330.	3	15	0	.00	114.94	644.16

CCHV= .300 CEHV= .500

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

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	45.00	.00	270.00	.00	1368.00	1368.00

*SECNO 152.800

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.64

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1374.77	1374.55	.00	0.	2231.	270.	270.	1374.00	1376.00	0.

152.800	5.56	1373.56	.00	1373.56	1374.77	1.21	1.22	.00	1368.00
2231.0	.1	2230.8	.1	.2	252.5	.2	204.3	89.9	1368.00
.99	.50	8.83	.50	.015	.015	.015	.000	1368.00	554.01
.001675	70.	70.	70.	3	0	0	.00	45.82	602.13

CCHV= .100 CEHV= .300
*SECNO 153.100

3265 DIVIDED FLOW

3280 CROSS SECTION 153.10 EXTENDED .68 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 530.0 687.5 TYPE= 1 TARGET= 157.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 100000.00 ELREA= 1374.00

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
153.100	4.68	1374.68	1372.39	1374.68	1374.93	.25	.06	.10	100000.00
2231.0	.0	2225.5	5.5	.0	556.1	6.1	204.6	90.0	1374.00
1.00	.00	4.00	.90	.000	.045	.045	.000	1370.00	530.00
.002211	30.	30.	30.	3	14	0	.00	144.54	687.50

*SECNO 154.900

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1378.00 ELREA= 1376.00

154.900	5.04	1375.04	1373.56	1375.04	1375.65	.61	.62	.11	1378.00
2231.0	.0	2231.0	.0	.0	355.8	.0	206.5	90.5	1376.00
1.00	.00	6.27	.00	.000	.045	.000	.000	1370.00	574.23
.005963	150.	180.	240.	2	15	0	.00	91.01	665.23

CEHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	43.10	.00	259.00	.00	1370.00	1370.00

*SECNO 156.800

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1376.84	1376.62	.00	0.	2231.	259.	259.	1376.00	1377.00	0.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.00 ELREA= 1377.00

156.800	5.54	1375.54	.00	1375.54	1376.84	1.30	1.19	.00	1377.00
2231.0	.0	2231.0	.0	.0	244.1	.0	207.8	90.8	1377.00
1.01	.00	9.14	.00	.000	.015	.000	.000	1370.00	515.53
.003335	90.	190.	260.	3	0	0	.00	44.83	564.18

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

CCHV= .100 CEHV= .300
*SECNO 162.700

3301 HV CHANGED MORE THAN HVINS

162.700	5.09	1379.09	1378.10	1379.09	1379.48	.39	2.55	.09	1378.00
2231.0	41.3	2168.5	21.2	24.7	428.4	12.7	212.6	92.6	1378.00
1.04	1.67	5.06	1.67	.045	.045	.045	.000	1374.00	464.74
.005787	650.	590.	550.	2	19	0	.00	218.25	682.98

*SECNO 167.700

167.700	6.10	1382.10	1381.67	1382.10	1382.78	.68	3.22	.09	1380.00
2231.0	363.7	1761.8	105.5	101.9	243.7	33.5	217.5	94.9	1380.00
1.06	3.57	7.23	3.15	.045	.045	.045	.000	1376.00	484.10
.007203	500.	500.	500.	2	8	0	.00	182.20	666.29

*SECNO 172.700

172.700	5.25	1385.25	1384.10	1385.26	1385.56	.31	2.75	.04	1384.00
2231.0	113.2	2098.1	19.7	52.4	458.8	11.3	222.6	97.2	1384.00
1.09	2.16	4.57	1.75	.045	.045	.045	.000	1380.00	476.56
.004386	460.	500.	510.	3	19	0	.00	227.30	703.87

*SECNO 177.700

177.700	3.78	1387.78	1387.02	1387.78	1388.26	.48	2.65	.05	1386.00
2231.0	143.2	2005.4	82.4	51.0	346.9	25.9	228.0	99.5	1386.00
1.12	2.81	5.78	3.18	.045	.045	.045	.000	1384.00	503.62
.006564	470.	500.	520.	3	11	0	.00	191.52	695.14

*SECNO 181.200

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

181.200	5.04	1391.04	1391.04	1391.04	1392.48	1.44	3.81	.29	1392.00
2231.0	.0	2231.0	.0	.0	231.3	.0	230.6	100.6	1392.00
1.13	.00	9.64	.00	.000	.045	.000	.000	1386.00	639.20
.021410	350.	350.	350.	0	11	0	.00	81.27	720.47

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

*SECNO 184.000

3280 CROSS SECTION 184.00 EXTENDED 1.14 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.93

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1396.00 ELREA= 1396.00

184.000	8.14	1395.14	1393.40	1395.14	1395.39	.25	2.79	.12	1396.00
2231.0	.0	2231.0	.0	.0	557.6	.0	233.1	101.8	1396.00
1.15	.00	4.00	.00	.000	.045	.000	.000	1387.00	634.84
.005727	320.	280.	240.	3	13	0	.00	273.72	908.56

*SECNO 189.000

WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.48

189.000	7.11	1397.11	1396.04	1397.11	1397.26	.16	1.87	.01	1396.00
2231.0	30.0	1567.1	633.8	22.8	450.6	279.1	240.7	105.6	1396.00
1.19	1.32	3.48	2.27	.045	.045	.045	.000	1390.00	512.73
.002628	500.	500.	500.	3	22	0	.00	401.18	913.91

*SECNO 194.000

194.000	4.15	1398.15	1396.33	1398.15	1398.27	.12	1.00	.00	1402.00
2231.0	.0	2231.0	.0	.0	811.5	.0	249.6	109.5	1402.00
1.24	.00	2.75	.00	.000	.045	.000	.000	1394.00	616.56
.001584	500.	500.	500.	4	17	0	.00	267.06	883.62

*SECNO 199.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY

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


3720 CRITICAL DEPTH ASSUMED
  199.000     7.90   1399.90   1399.90   1399.90   1400.58       .68      1.60       .17   1400.00
   2231.0       .0    1300.1     930.9        .0     163.9     220.6     256.1     112.1   1400.00
     1.27      .00      7.93      4.22      .000      .045      .045      .000   1392.00    621.26
  .012234     510.      510.      310.         0        18         0       .00    274.44    904.49


*SECNO 204.500
  204.500     8.96   1404.96   1403.28   1404.96   1405.96      1.00      5.29       .09   1406.00
   2231.0       .0    2231.0        .0        .0     278.0        .0     260.4     114.3   1406.00
     1.28      .00      8.03       .00      .000      .045      .000      .000   1396.00    569.45
  .007600     550.      550.      580.         3        11         0       .00     56.61    626.05


*SECNO 205.100

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  6.52

  205.100    10.05   1406.05   1400.58   1406.05   1406.09       .04       .03       .10   1400.00
   2231.0    221.5    1683.7     325.8     227.7     992.3     243.0     261.6     114.5   1400.00
     1.30      .97      1.70      1.34      .045      .045      .045      .000   1396.00    493.40
  .000179      60.       60.       60.         2        11         0       .00    276.13    769.53


*SECNO 208.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .29

  208.000     6.06   1406.06   1403.94   1406.06   1406.29       .23       .14       .06   1404.00
   2231.0      9.5    2135.1      86.4       5.8     547.8      37.3     269.1     116.1   1404.00
     1.32     1.65      3.90      2.32      .045      .045      .045      .000   1400.00    481.44
  .002109     320.      320.      320.         3        18         0       .00    158.33    639.77


*SECNO -123.700
START TRIB COMP
 -123.700   123.700   1359.855
 -123.700     5.85   1359.85       .00   1359.85   1360.01       .15       .89      -.70   1358.00
   2231.0    292.7    1718.2     220.1     145.6     506.1     107.5     275.8     118.5   1358.00
     1.36     2.01      3.39      2.05      .045      .045      .045      .000   1354.00    391.00
  .002042     430.      430.      430.         0         0         0       .00    324.56    715.56
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


CCHV=     .100 CEHV=     .300
*SECNO 305.000

3235 SLOPE TOO STEEP, EXCEEDS        .10


3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  305.000      .01   1362.01   1362.01   1362.01   1362.02      .00      1.11      .01   1364.00
      1.0       .0       1.0       .0       .0       1.8       .0     280.5    121.5   1364.00
     1.64      .00       .54      .00      .000      .045     .000      .000  1362.00    489.27
  .108245     430.      550.     600.        0        32        0       .00    163.50    669.34


*SECNO 310.000
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF
  310.000      .02   1366.02   1366.01   1366.02   1366.02      .00      4.04     -.07   1368.00
      1.0       .0       1.0       .0       .0       7.7       .0     280.5    124.6   1368.00
     2.71      .00       .13      .00      .000      .045     .000      .000  1366.00    595.37
  .002707     520.      500.     600.       20        20        0       .00    372.56    967.93


*SECNO 315.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .23


3470 ENCROACHMENT STATIONS=      167.7    1197.6  TYPE=      1  TARGET=     1029.900
  315.000      .09   1369.59   1369.58   1369.60   1369.60      .01      3.57      .00   1370.00
      1.0       .0       1.0       .0       .0       1.1       .0     280.6    126.8   1370.00
     2.86      .00       .92      .00      .000      .045     .000      .000  1369.50    942.40
  .050835     500.      500.     500.        3        23        0       .00     24.85    967.25


*SECNO 320.000

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


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.51

  320.000      .14   1372.94   1372.88   1372.94   1372.94       .00      3.34       .00   1374.00
      1.0       .0       1.0       .0        .0       4.9        .0     280.6     127.6   1373.40
     3.54      .00       .21       .00      .000      .045      .000      .000   1372.80    332.66
  .002494     500.      500.      500.         5        11         0       .00    110.31    491.57


*SECNO 325.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO = 58.98

  325.000      .54   1372.94   1372.45   1372.94   1372.94       .00       .00       .00   1374.00
      1.0       .0       1.0       .0        .0      69.5        .0     281.0     129.3   1377.20
    13.19      .00       .01       .00      .000      .045      .000      .000   1372.40    459.80
  .000001     500.      500.      500.         5        17         0       .00    188.30    648.11


CCHV=     .100 CEHV=     .300
SECNO 330.000
3280 CROSS SECTION    330.00 EXTENDED       .21 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      543.2    1073.9  TYPE=      1  TARGET=      530.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1384.00 ELREA=      1383.10

  330.000      .01   1382.01   1382.01   1382.01   1382.01       .00       .00       .00   1384.00
      1.0       .0       1.0       .0        .0       2.1        .0     281.4     132.0   1383.10
    13.48      .00       .48       .00      .000      .015      .000      .000   1382.00    792.68
  .015303     490.      500.      560.         0        28         0       .00    272.75   1065.43


*SECNO 335.000

    1384.80 TRIALS NOT ENOUGH FOR CRITICAL DEPTH9999999.009999999.00 100050.00   1384.01 999999.00
3280 CROSS SECTION    335.00 EXTENDED       .02 FEET
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.94


3470 ENCROACHMENT STATIONS=      450.0     750.0  TYPE=      1  TARGET=      300.000
  335.000      .03   1384.03      .00   1384.01   1384.03      .00      2.02      .00   1390.00
      1.0       .0        .8       .2        .0       2.7       .8     281.5    134.8   1384.00
    13.99      .00       .28      .28      .000      .015     .015      .000   1384.00    547.51
  .001769     500.      500.     600.         5        80        0       .00    202.48    750.00


*SECNO 340.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .62

  340.000      .06   1385.36   1385.35   1385.36   1385.37      .01      1.34      .00   1386.00
      1.0       .0       1.0       .0        .0       1.4       .0     281.5    136.1   1386.00
    14.18      .00       .73      .00      .000      .015     .000      .000   1385.30    495.48
  .004553     500.      500.     500.         4        17        0       .00     38.06    533.54


CCHV=     .100 CEHV=     .300
*SECNO 342.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  342.000      .06   1387.06   1387.06   1387.06   1387.08      .02      1.36      .00   1388.00
      1.0       .0       1.0       .0        .0       1.0       .0     281.5    136.3   1388.00
    14.23      .00      1.04      .00      .000      .015     .000      .000   1387.00    731.36
  .011179     150.      200.     400.         0         5        0       .00     31.07    762.43


CCHV=     .100 CEHV=     .300
*SECNO 345.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.74

  345.000      .04   1388.04   1388.01   1388.04   1388.04      .00       .96      .00   1390.00
      1.0       .0       1.0       .0        .0       7.7       .0     281.5    137.2   1390.00
    14.87      .00       .13      .00      .000      .045     .000      .000   1388.00    640.27
  .001485     350.      300.     150.         4        20        0       .00    235.06    875.33
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 350.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1392.00 ELREA= 1392.00

350.000	.07	1390.47	1390.47	1390.47	1390.51	.03	2.29	.01	1392.00
1.0	.0	1.0	.0	.0	.7	.0	281.6	138.6	1392.00
14.97	.00	1.43	.00	.000	.045	.000	.000	1390.40	571.65
.076568	550.	500.	450.	0	14	0	.00	11.27	582.92

*SECNO 355.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.63

355.400	.10	1395.73	1395.69	1395.73	1395.74	.00	5.23	.00	1396.70
1.0	.0	1.0	.0	.0	3.6	.0	281.6	139.1	1396.77
15.51	.00	.28	.00	.000	.045	.000	.000	1395.63	390.15
.003579	450.	540.	600.	4	16	0	.00	68.35	458.51

*SECNO 372.000
3280 CROSS SECTION 372.00 EXTENDED 6.44 FEET

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

3470 ENCROACHMENT STATIONS= 300.0 632.9 TYPE= 1 TARGET= 332.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1406.00 ELREA= 100000.00

372.000	1.94	1406.64	1406.37	1408.16	1406.75	.11	10.98	.03	1406.00
560.0	156.7	403.3	.0	85.9	135.1	.0	285.9	145.9	100000.00
15.68	1.82	2.98	.00	.045	.045	.000	.000	1404.70	348.12
.006625	1660.	1660.	1660.	5	41	0	.00	284.78	632.90

*SECNO 377.000
3280 CROSS SECTION 377.00 EXTENDED 7.65 FEET

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.31

3470 ENCROACHMENT STATIONS= 200.0 700.4 TYPE= 1 TARGET= 500.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1408.00 ELREA= 100000.00

377.000	1.95	1407.95	1406.95	1408.31	1407.97	.02	1.21	.01	1408.00
560.0	.0	560.0	.0	.0	445.1	.0	289.7	149.8	100000.00
15.79	.00	1.26	.00	.000	.045	.000	.000	1406.00	303.91
.001240	500.	500.	500.	2	11	0	.00	395.33	699.24

*SECNO 382.000
3280 CROSS SECTION 382.00 EXTENDED 5.18 FEET

3470 ENCROACHMENT STATIONS= 150.0 700.0 TYPE= 1 TARGET= 550.000

382.000	1.97	1408.57	1407.67	1408.65	1408.61	.03	.63	.00	1408.00
560.0	61.1	498.2	.7	76.6	335.5	1.3	294.7	154.3	1408.00
15.89	.80	1.49	.52	.045	.045	.045	.000	1406.60	231.59
.001296	500.	500.	500.	1	11	0	.00	389.08	620.66

*SECNO 387.000
3280 CROSS SECTION 387.00 EXTENDED 3.90 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .36

3470 ENCROACHMENT STATIONS= 100.0 620.0 TYPE= 1 TARGET= 520.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1410.00 ELREA= 1410.00

387.000	1.90	1409.90	1409.52	1409.83	1410.04	.15	1.40	.04	1410.00
560.0	.0	560.0	.0	.0	180.2	.0	298.1	157.6	1410.00
15.94	.00	3.11	.00	.000	.045	.000	.000	1408.00	415.42
.010046	500.	500.	500.	2	19	0	.00	197.77	613.18

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

*SECNO 392.000
3280 CROSS SECTION 392.00 EXTENDED 10.06 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

3470 ENCROACHMENT STATIONS= 100.0 643.5 TYPE= 1 TARGET= 543.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1412.00 ELREA= 100000.00

392.000	.86	1412.86	1412.44	1412.88	1412.91	.05	2.85	.01	1412.00
560.0	201.7	358.3	.0	126.9	197.7	.0	301.0	161.2	100000.00
16.02	1.59	1.81	.00	.045	.045	.000	.000	1412.00	218.24
.003677	500.	500.	500.	8	17	0	.00	425.26	643.50

*SECNO 397.000
3280 CROSS SECTION 397.00 EXTENDED 1.03 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 8.21

397.000	9.03	1413.03	1407.55	1413.04	1413.04	.01	.12	.00	1412.00
779.0	197.4	453.6	127.9	571.8	432.1	413.4	311.0	170.5	1412.00
16.20	.35	1.05	.31	.045	.045	.045	.000	1404.00	.00
.000106	500.	500.	500.	5	23	0	.00	1200.00	1200.00

*SECNO 402.000

3265 DIVIDED FLOW

3280 CROSS SECTION 402.00 EXTENDED .20 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .18

402.000	7.10	1413.10	1410.07	1413.11	1413.22	.12	.15	.03	1414.00
779.0	7.0	772.0	.0	12.3	272.1	.0	320.7	178.7	1414.00
16.25	.57	2.84	.00	.045	.045	.000	.000	1406.00	.00
.003358	500.	500.	500.	3	14	0	.00	228.92	649.41

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

*SECNO 407.000

407.000	4.81	1414.81	1413.13	1414.81	1414.91	.10	1.68	.00	1416.00
779.0	.0	779.0	.0	.0	306.0	.0	324.1	181.2	1416.00
16.31	.00	2.55	.00	.000	.045	.000	.000	1410.00	487.92
.003375	500.	500.	500.	3	18	0	.00	199.68	687.60

*SECNO 412.000

412.000	2.81	1416.81	1415.80	1416.81	1417.06	.24	2.10	.04	1418.00
779.0	.0	779.0	.0	.0	196.3	.0	327.0	182.9	1418.00
16.34	.00	3.97	.00	.000	.045	.000	.000	1414.00	518.79
.005389	500.	500.	500.	3	18	0	.00	93.35	612.14

*SECNO 417.000

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

417.000	4.49	1418.49	1416.58	1418.49	1418.63	.15	1.57	.01	1420.00
779.0	.0	779.0	.0	.0	253.1	.0	329.6	183.9	1420.00
16.39	.00	3.08	.00	.000	.045	.000	.000	1414.00	552.17
.002047	500.	500.	500.	3	11	0	.00	84.74	636.91

T2
T3

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		4							1308.41	
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3		-1				-1			

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


*PROF 3

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS



CCHV=     .100 CEHV=     .300
*SECNO 10.000
3280 CROSS SECTION     10.00 EXTENDED       .31 FEET


3470 ENCROACHMENT STATIONS=      437.2     743.4  TYPE=      1  TARGET=      306.200
   10.000      8.41   1308.41   1303.87   1308.41   1308.65       .24       .00       .00   1308.00
   8450.0        .0    8450.0       .0       .0    2162.8        .0       .0        .0 100000.00
      .00       .00      3.91       .00      .000      .045      .000      .000   1300.00    437.20
  .001043        0.        0.        0.         0        13         0       .00    306.20    743.40


*SECNO 15.600
3280 CROSS SECTION     15.60 EXTENDED      1.03 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50

   15.600      7.03   1309.03   1304.18   1309.03   1309.12       .09       .46       .01   1310.40
   2760.0        .0    2755.1       4.9       .0    1153.4       8.1      21.4       3.2   1308.00
      .07       .00      2.39       .61      .000      .045      .045      .000   1302.00    523.01
  .000443      530.      560.      600.         2        14         0       .00    186.89    709.90


CCHV=     .600 CEHV=     .800
*SECNO 16.000
   16.000      4.51   1309.01   1307.03   1309.01   1309.28       .27       .01       .14   1312.00
   2760.0        .0    2760.0       .0       .0     664.6        .0      22.2       3.3   1312.00
      .07       .00      4.15       .00      .000      .015      .000      .000   1304.50    510.26
  .000307       40.       40.       40.         2        22         0       .00    178.92    689.18


CCHV=     .100 CEHV=     .300
*SECNO 20.500

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .18

   20.500      3.16   1309.16   1308.45   1309.16   1309.78       .61       .40       .10   1314.00
   2760.0        .0    2760.0       .0       .0     438.6        .0      27.9       5.1   1314.00
      .09       .00      6.29       .00      .000      .045      .000      .000   1306.00    511.53
  .009497      450.      450.      450.         3        11         0       .00    159.91    671.44
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 24.200

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.85

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1316.00 ELREA= 1316.00

24.200	5.18	1311.18	1308.83	1311.18	1311.53	.35	1.73	.03	1316.00
2760.0	.0	2760.0	.0	.0	583.5	.0	32.3	6.3	1316.00
.11	.00	4.73	.00	.000	.045	.000	.000	1306.00	545.61
.002765	370.	370.	370.	3	11	0	.00	128.12	673.73

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	110.00	.00	600.00	.00	1306.00	1306.00

*SECNO 25.000

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= .000 EGLWC= 1311.605 ELLC= 1312.000 PCWSE= 1311.183 ELTRD= 1316.000

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.92

3370 NORMAL BRIDGE, NRD= 42 MIN ELTRD= 1316.00 MAX ELLC= 1312.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1312.00 ELREA= 1312.00

25.000	5.26	1311.26	1308.85	1311.25	1311.67	.41	.10	.03	1312.00
2760.0	.0	2760.0	.0	.0	537.0	.0	33.3	6.5	1312.00
.11	.00	5.14	.00	.000	.015	.000	.000	1306.00	559.91
.000749	80.	80.	80.	2	12	0	.00	104.38	672.09

CCHV= .100 CEHV= .300

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

*SECNO 25.300

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

25.300	2.54	1312.54	1312.54	1312.54	1313.73	1.19	.06	.23	1316.00
2760.0	.0	2760.0	.0	.0	315.0	.0	33.6	6.6	1316.00
.11	.00	8.76	.00	.000	.045	.000	.000	1310.00	539.76
.022357	30.	30.	30.	0	11	0	.00	132.50	672.27

*SECNO 28.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.23

28.700	4.54	1314.54	1311.78	1314.54	1314.63	.09	.78	.11	1320.00
2760.0	.0	2760.0	.0	.0	1171.3	.0	39.4	8.3	1318.00
.15	.00	2.36	.00	.000	.045	.000	.000	1310.00	374.72
.000818	390.	340.	340.	4	19	0	.00	296.57	671.29

*SECNO 32.500

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .36

32.500	3.07	1315.07	1314.31	1315.07	1315.36	.29	.67	.06	1320.00
2760.0	.0	2760.0	.0	.0	636.8	.0	47.3	10.9	1320.00
.18	.00	4.33	.00	.000	.045	.000	.000	1312.00	369.63
.006316	380.	380.	380.	2	8	0	.00	299.85	669.48

*SECNO 36.200

36.200	3.20	1317.00	1315.94	1317.01	1317.20	.20	1.83	.01	1320.00
2760.0	.0	2760.0	.0	.0	773.7	.0	53.3	13.6	1324.00
.21	.00	3.57	.00	.000	.045	.000	.000	1313.80	402.50
.003979	430.	370.	330.	2	19	0	.00	345.05	747.55

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

CCHV= .600 CEHV= .800
*SECNO 36.900
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

36.900	1.44	1317.44	1317.44	1317.44	1318.07	.63	.25	.34	1320.00
2760.0	.0	2760.0	.0	.0	434.5	.0	54.2	14.2	1324.00
.21	.00	6.35	.00	.000	.015	.000	.000	1316.00	399.78
.003113	70.	70.	70.	0	14	0	.00	352.46	752.23

CCHV= .100 CEHV= .300
*SECNO 38.100
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

38.100	1.73	1319.73	1319.73	1319.72	1320.40	.67	.37	.01	1320.00
2760.0	.0	2760.0	.0	.0	420.0	.0	55.4	15.1	1320.00
.22	.00	6.57	.00	.000	.015	.000	.000	1318.00	472.34
.003021	60.	120.	180.	0	11	0	.00	316.70	789.03

= .100 CEHV= .300
*SECNO 43.300
3280 CROSS SECTION 43.30 EXTENDED 1.07 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1326.00 ELREA= 1326.00

43.300	3.77	1321.77	1320.05	1321.77	1322.03	.26	1.59	.04	1326.00
2760.0	.0	2760.0	.0	.0	678.2	.0	62.0	18.2	1326.00
.25	.00	4.07	.00	.000	.045	.000	.000	1318.00	524.62
.003086	520.	520.	520.	3	11	0	.00	204.60	729.22

CCHV= .600 CEHV= .800
*SECNO 43.800
3280 CROSS SECTION 43.80 EXTENDED 3.19 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1328.00 ELREA=      1328.00

   43.800      2.89   1323.39   1323.39   1323.39   1324.31       .92       .34       .53   1328.00
   2760.0        .0    2760.0        .0        .0     358.7        .0      62.5      18.5   1328.00
      .25       .00      7.69       .00      .000      .045      .000      .000   1320.50    523.23
  .024751       50.       50.       50.         0        15         0       .00    198.85    722.08


CCHV=     .100 CEHV=     .300
*SECNO 49.000
3280 CROSS SECTION     49.00 EXTENDED       .95 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.34


 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1330.00 ELREA=      1330.00

   49.000      4.96   1326.96   1325.31   1326.95   1327.12       .16      2.74       .08   1330.00
   2760.0        .0    2760.0        .0        .0     857.2        .0      69.8      21.4   1330.00
      .30       .00      3.22       .00      .000      .045      .000      .000   1322.00    452.81
  .002222      650.      520.      480.         3         8         0       .00    287.48    740.29


*SECNO 54.000
3280 CROSS SECTION     54.00 EXTENDED      4.09 FEET


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1332.00 ELREA=      1332.00

   54.000      4.09   1328.09   1326.44   1328.09   1328.23       .14      1.12       .00   1332.00
   2760.0        .0    2760.0        .0        .0     904.6        .0      79.9      24.9   1332.00
      .34       .00      3.05       .00      .000      .045      .000      .000   1324.00    417.80
  .002243      500.      500.      530.         3         8         0       .00    331.38    749.18


*SECNO 59.400
   59.400      3.42   1329.42   1327.85   1329.41   1329.65       .23      1.39       .03   1336.00
   2760.0        .0    2760.0        .0        .0     716.1        .0      90.0      28.4   1332.00
      .38       .00      3.85       .00      .000      .045      .000      .000   1326.00    513.57
  .002966      380.      540.      640.         3        14         0       .00    227.34    740.91
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ECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .600 CEHV= .800
*SECNO 60.000

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .36

60.000	1.70	1329.70	1329.65	1329.69	1330.46	.76	.39	.42	1331.20
2760.0	.0	2760.0	.0	.0	394.1	.0	90.7	28.7	1332.00
.39	.00	7.00	.00	.000	.045	.000	.000	1328.00	501.61
.023274	60.	60.	60.	3	11	0	.00	239.97	741.58

CCHV= .100 CEHV= .300
*SECNO 64.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.73

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1334.00 ELREA= 1334.00

64.000	3.91	1331.91	1330.36	1331.90	1332.17	.27	1.67	.05	1334.00
2760.0	.0	2760.0	.0	.0	665.2	.0	95.6	30.8	1334.00
.41	.00	4.15	.00	.000	.030	.000	.000	1328.00	456.66
.001676	400.	400.	400.	4	11	0	.00	226.69	683.35

*SECNO 69.500
3280 CROSS SECTION 69.50 EXTENDED .85 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1335.20 ELREA= 1336.00

69.500	2.95	1332.95	1331.91	1332.94	1333.34	.39	1.13	.04	1335.20
2760.0	.0	2760.0	.0	.0	551.9	.0	103.3	33.5	1336.00
.44	.00	5.00	.00	.000	.030	.000	.000	1330.00	499.33
.002560	490.	550.	580.	3	8	0	.00	194.74	694.07

*SECNO 75.500

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


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1338.00 ELREA=      1338.00

   75.500      3.79   1334.39   1333.15   1334.39   1334.85       .46      1.49       .02   1338.00
   2760.0       .0    2760.0       .0       .0     509.0        .0     110.6      35.9   1338.00
      .47       .00      5.42      .00      .000      .030      .000      .000   1330.60    520.27
  .002405     630.      600.     530.        3        11         0       .00    151.08    671.35


*SECNO 79.300

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .68


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1340.00 ELREA=      1340.00

   79.300      3.36   1335.36   1334.77   1335.36   1336.27       .91      1.29       .14   1340.00
   2760.0       .0    2760.0       .0       .0     360.7        .0     114.4      37.0   1340.00
      .49       .00      7.65      .00      .000      .030      .000      .000   1332.00    482.34
  .005152     430.      380.     340.        2        15         0       .00    111.38    593.71


CCHV=     .300 CEHV=     .500

SPECIAL BRIDGE

SB  XK        XKOR      COFQ      RDLEN     BWC       BWP       BAREA     SS        ELCHU     ELCHD
     1.25      1.56      2.63       .00     95.70       .00    574.20       .00   1332.00   1332.00

*SECNO 83.700

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS=       .000  EGLWC=   1336.974  ELLC=   1338.000  PCWSE=   1335.363  ELTRD=   1344.000

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.70


3370 NORMAL BRIDGE, NRD=  42 MIN ELTRD=  1344.00 MAX ELLC=  1338.00
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1338.00 ELREA= 1340.00

83.700	4.77	1336.77	1335.33	1336.79	1337.55	.78	1.24	.04	1338.00
2760.0	.0	2760.0	.0	.0	389.1	.0	118.2	38.0	1340.00
.50	.00	7.09	.00	.000	.015	.000	.000	1332.00	513.18
.001780	440.	440.	440.	4	15	0	.00	84.79	608.13

CCHV= .600 CEHV= .800
*SECNO 84.200
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1340.00 ELREA= 1344.00

84.200	3.42	1337.42	1337.42	1337.42	1338.65	1.23	.17	.36	1340.00
2760.0	.0	2760.0	.0	.0	310.1	.0	118.6	38.1	1344.00
.51	.00	8.90	.00	.000	.030	.000	.000	1334.00	460.94
.009725	50.	50.	50.	0	19	0	.00	125.30	586.24

CCHV= .100 CEHV= .300
*SECNO 86.200

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1342.00 ELREA= 1344.00

86.200	3.25	1339.25	1338.54	1339.25	1339.94	.69	1.24	.05	1342.00
2760.0	.0	2760.0	.0	.0	412.6	.0	120.2	38.7	1344.00
.51	.00	6.69	.00	.000	.030	.000	.000	1336.00	527.70
.004299	180.	200.	225.	2	15	0	.00	138.55	666.24

*SECNO 92.700

3301 HV CHANGED MORE THAN HVINS

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.95

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1344.00 ELREA= 1346.00

92.700	2.65	1341.15	1339.88	1341.15	1341.29	.14	1.29	.06	1344.00
2760.0	.0	2760.0	.0	.0	920.9	.0	130.2	42.6	1346.00
.57	.00	3.00	.00	.000	.030	.000	.000	1338.50	391.86
.001136	550.	650.	750.	3	14	0	.00	382.54	774.40

CCHV= .600 CEHV= .800
*SECNO 93.200
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1346.00 ELREA= 1346.40

93.200	1.14	1342.44	1342.44	1342.44	1343.01	.57	.13	.34	1346.00
2760.0	.0	2760.0	.0	.0	456.3	.0	131.0	43.1	1346.40
.58	.00	6.05	.00	.000	.030	.000	.000	1341.30	388.39
.012688	50.	50.	50.	0	14	0	.00	403.88	792.27

*SECNO 98.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.92

98.300	2.63	1344.83	1343.91	1344.83	1344.96	.13	1.69	.26	1350.00
2760.0	.0	2760.0	.0	.0	959.5	.0	139.2	48.5	1350.00
.63	.00	2.88	.00	.000	.030	.000	.000	1342.20	303.29
.001492	680.	510.	380.	3	14	0	.00	520.11	823.40

CCHV= .600 CEHV= .800
*SECNO 99.400
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

99.400	.86	1347.86	1347.86	1347.86	1348.29	.42	.37	.24	1350.00
2760.0	.0	2760.0	.0	.0	528.0	.0	141.1	49.9	1350.00
.63	.00	5.23	.00	.000	.030	.000	.000	1347.00	248.66
.014082	100.	110.	90.	0	17	0	.00	629.48	878.14

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

CCHV= .100 CEHV= .300
*SECNO 103.900

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.49

103.900	1.97	1349.97	1349.88	1349.97	1350.38	.41	2.09	.00	1350.00
2760.0	.0	2693.0	67.0	.0	522.1	29.3	146.8	56.2	1349.30
.66	.00	5.16	2.29	.000	.015	.015	.000	1348.00	353.11
.002269	210.	450.	680.	3	17	0	.00	543.69	896.80

CCHV= .100 CEHV= .300
*SECNO 104.400

104.400	2.38	1350.38	1349.54	1350.38	1350.56	.17	.15	.02	1350.00
2760.0	77.8	2676.3	5.9	69.3	795.1	7.4	147.6	56.9	1350.00
.66	1.12	3.37	.80	.045	.045	.045	.000	1348.00	165.00
.004312	50.	50.	50.	3	15	0	.00	635.95	800.96

*SECNO 109.400

109.400	4.14	1352.14	1350.98	1352.14	1352.28	.14	1.72	.00	1352.00
2760.0	2.4	2757.6	.0	5.2	918.8	.0	158.1	63.6	1352.00
.71	.46	3.00	.02	.045	.045	.045	.000	1348.00	396.45
.002787	700.	500.	350.	4	11	0	.00	443.35	839.80

*SECNO 114.400

114.400	3.98	1353.98	1353.21	1353.98	1354.18	.20	1.88	.02	1354.00
2760.0	.0	2760.0	.0	.0	772.3	.0	167.8	68.6	1354.00
.75	.00	3.57	.00	.000	.045	.000	.000	1350.00	421.46
.005323	500.	500.	500.	2	16	0	.00	426.28	847.74

*SECNO 119.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

119.400	5.69	1357.69	1357.20	1357.69	1358.05	.36	3.82	.05	1358.00
2760.0	.0	2760.0	.0	.0	574.9	.0	175.5	73.1	1358.00
.77	.00	4.80	.00	.000	.045	.000	.000	1352.00	401.31
.011893	500.	500.	500.	3	14	0	.00	372.34	773.66

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

*SECNO 123.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.10

123.700	5.98	1359.98	1358.78	1359.98	1360.19	.21	2.13	.01	1358.00
2760.0	381.9	2091.9	286.3	158.4	524.1	116.7	182.3	76.6	1358.00
.81	2.41	3.99	2.45	.045	.045	.045	.000	1354.00	388.72
.002695	430.	430.	430.	3	10	0	.00	329.09	717.81

*SECNO 130.400

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .45

130.400	4.89	1362.89	1362.57	1362.89	1363.62	.74	3.28	.16	1362.00
2642.0	102.7	2518.9	20.4	33.8	358.7	8.9	191.5	80.7	1362.00
.84	3.04	7.02	2.30	.045	.045	.045	.000	1358.00	479.84
.012071	670.	670.	670.	2	19	0	.00	207.33	687.16

*SECNO 135.400

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.35

135.400	5.63	1365.63	1363.73	1365.62	1365.83	.20	2.15	.05	1364.00
2642.0	134.6	2399.8	107.6	94.6	638.4	71.2	198.5	84.0	1364.00
.87	1.42	3.76	1.51	.045	.045	.045	.000	1360.00	462.25
.002188	500.	500.	500.	3	19	0	.00	368.06	830.31

*SECNO 139.100

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

139.100	3.24	1367.24	1367.24	1367.24	1368.15	.91	1.93	.21	1370.00
2642.0	.0	2642.0	.0	.0	344.8	.0	203.3	86.4	1370.00
.89	.00	7.66	.00	.000	.045	.000	.000	1364.00	493.89
.025321	400.	370.	340.	0	14	0	.00	195.45	689.34

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

*SECNO 144.100

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.78

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1372.00 ELREA= 1372.00

144.100	5.46	1371.46	1369.40	1371.46	1371.75	.29	3.54	.06	1372.00
2642.0	.0	2642.0	.0	.0	609.8	.0	208.8	88.6	1372.00
.92	.00	4.33	.00	.000	.045	.000	.000	1366.00	515.45
.003274	500.	500.	500.	4	8	0	.00	175.05	690.50

*SECNO 148.600

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1373.00 ELREA= 1373.00

148.600	4.68	1372.68	1370.30	1372.68	1372.91	.24	1.16	.01	1373.00
2642.0	.0	2642.0	.0	.0	677.2	.0	215.5	90.3	1373.00
.95	.00	3.90	.00	.000	.045	.000	.000	1368.00	537.02
.002072	420.	450.	480.	2	14	0	.00	160.52	697.54

*SECNO 152.100

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1374.00 ELREA= 1374.00

152.100	5.55	1373.55	1371.62	1373.55	1374.03	.48	1.05	.07	1374.00
2642.0	.0	2642.0	.0	.0	475.1	.0	220.1	91.4	1374.00
.97	.00	5.56	.00	.000	.045	.000	.000	1368.00	526.28
.004675	380.	350.	330.	3	15	0	.00	121.46	647.73

CCHV= .300 CEHV= .500

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

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	45.00	.00	270.00	.00	1368.00	1368.00

*SECNO 152.800

3265 DIVIDED FLOW

3280 CROSS SECTION 152.80 EXTENDED .82 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.96

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1375.87	1375.26	.00	0.	2642.	270.	270.	1374.00	1376.00	0.
152.800	6.82	1374.82	.00	1374.81	1375.87	1.06	1.84	.00	1368.00
2642.0	.2	2593.0	48.8	.4	311.6	26.1	220.8	91.6	1368.00
.97	.47	8.32	1.87	.015	.015	.015	.000	1368.00	553.97
.001216	70.	70.	70.	3	0	0	.00	111.18	756.20

CCHV= .100 CEHV= .300
*SECNO 153.100
3280 CROSS SECTION 153.10 EXTENDED 1.80 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 530.0 687.5 TYPE= 1 TARGET= 157.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 100000.00 ELREA= 1374.00

153.100	5.79	1375.79	1372.65	1375.78	1376.00	.21	.04	.08	100000.00
2642.0	.0	2595.7	46.3	.0	701.6	33.4	221.1	91.7	1374.00
.97	.00	3.70	1.39	.000	.045	.045	.000	1370.00	530.00
.001401	30.	30.	30.	2	18	0	.00	157.50	687.50

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

*SECNO 154.900

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

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1378.00 ELREA= 1376.00

154.900	5.96	1375.96	1373.94	1375.96	1376.52	.55	.42	.10	1378.00
2642.0	.0	2642.0	.0	.0	442.7	.0	223.6	92.2	1376.00
.98	.00	5.97	.00	.000	.045	.000	.000	1370.00	571.36
.004493	150.	180.	240.	2	14	0	.00	98.45	669.82

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	43.10	.00	259.00	.00	1370.00	1370.00

NO 156.800

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1378.48	1377.53	.00	262.	2381.	259.	259.	1376.00	1377.00	310.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1377.00 ELREA= 1377.00

156.800	6.85	1376.85	.00	1376.85	1378.01	1.16	1.49	.00	1377.00
2642.0	.0	2642.0	.0	.0	305.5	.0	225.2	92.6	1377.00
.99	.00	8.65	.00	.000	.015	.000	.000	1370.00	515.46
.002503	90.	190.	260.	3	0	4	.00	48.79	564.25

CCHV= .100 CEHV= .300
*SECNO 162.700

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

3301 HV CHANGED MORE THAN HVINS

162.700	5.63	1379.63	1378.36	1379.63	1379.97	.34	1.88	.08	1378.00
2642.0	116.7	2465.6	59.7	55.1	509.7	29.0	231.3	94.6	1378.00
1.02	2.12	4.84	2.06	.045	.045	.045	.000	1374.00	443.79
.004193	650.	590.	550.	3	14	0	.00	253.31	697.10

*SECNO 167.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

167.700	6.22	1382.22	1381.96	1382.21	1383.07	.86	2.94	.15	1380.00
2642.0	460.9	2044.2	136.9	112.6	250.3	37.4	237.0	97.2	1380.00
1.04	4.09	8.17	3.66	.045	.045	.045	.000	1376.00	477.79
.008871	500.	500.	500.	2	8	0	.00	191.04	668.83

*SECNO 172.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

172.700	5.63	1385.63	1384.40	1385.62	1385.95	.32	2.82	.05	1384.00
2642.0	186.9	2416.8	38.2	75.5	514.9	18.2	242.7	99.6	1384.00
1.07	2.48	4.69	2.10	.045	.045	.045	.000	1380.00	470.99
.003960	460.	500.	510.	3	19	0	.00	236.73	707.72

*SECNO 177.700

177.700	4.02	1388.02	1387.31	1388.02	1388.57	.55	2.56	.07	1386.00
2642.0	209.5	2319.5	113.0	66.2	372.9	32.5	248.9	102.3	1386.00
1.10	3.16	6.22	3.48	.045	.045	.045	.000	1384.00	495.18
.006899	470.	500.	520.	3	11	0	.00	234.19	729.37

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

*SECNO 181.200

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

181.200	5.42	1391.42	1391.42	1391.42	1392.98	1.56	3.89	.30	1392.00
2642.0	.0	2642.0	.0	.0	263.6	.0	251.9	103.5	1392.00
1.11	.00	10.02	.00	.000	.045	.000	.000	1386.00	637.56
.020805	350.	350.	350.	0	11	0	.00	85.49	723.05

*SECNO 184.000
3280 CROSS SECTION 184.00 EXTENDED 1.48 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.98

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1396.00 ELREA= 1396.00

184.000	8.48	1395.48	1394.22	1395.48	1395.73	.25	2.62	.13	1396.00
2642.0	.0	2642.0	.0	.0	654.6	.0	254.8	104.8	1396.00
1.13	.00	4.04	.00	.000	.045	.000	.000	1387.00	633.05
.005287	320.	280.	240.	3	14	0	.00	298.76	931.80

*SECNO 189.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.43

189.000	7.36	1397.36	1396.15	1397.36	1397.53	.17	1.79	.01	1396.00
2642.0	51.7	1777.0	813.3	34.0	488.8	332.2	263.5	108.9	1396.00
1.17	1.52	3.64	2.45	.045	.045	.045	.000	1390.00	503.86
.002577	500.	500.	500.	3	13	0	.00	413.41	917.26

*SECNO 194.000

194.000	4.42	1398.42	1396.49	1398.43	1398.56	.14	1.03	.00	1402.00
2642.0	.0	2642.0	.0	.0	883.4	.0	273.5	112.8	1402.00
1.22	.00	2.99	.00	.000	.045	.000	.000	1394.00	615.80
.001692	500.	500.	500.	4	22	0	.00	269.23	885.04

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

*SECNO 199.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

199.000	8.03	1400.03	1400.03	1400.01	1400.81	.79	1.73	.19	1400.00
2642.0	.0	1460.5	1181.5	.0	170.3	250.7	280.5	115.5	1400.00
1.23	.04	8.58	4.71	.045	.045	.045	.000	1392.00	620.24
.013956	510.	510.	310.	0	14	0	.00	286.61	910.15

*SECNO 204.500

3265 DIVIDED FLOW

204.500	9.54	1405.54	1403.88	1405.57	1406.65	1.11	5.74	.10	1406.00
2642.0	1.1	2640.9	.0	1.5	311.8	.0	285.2	117.8	1406.00
1.25	.75	8.47	.00	.045	.045	.000	.000	1396.00	482.69
.007934	550.	550.	580.	3	8	0	.00	72.93	628.36

*SECNO 205.100

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.71

205.100	10.75	1406.75	1400.85	1406.76	1406.79	.04	.03	.11	1400.00
2642.0	312.1	1935.2	394.8	299.1	1083.8	278.4	286.6	118.1	1400.00
1.26	1.04	1.79	1.42	.045	.045	.045	.000	1396.00	478.91
.000176	60.	60.	60.	2	8	0	.00	292.82	771.73

*SECNO 208.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .32

208.000	6.75	1406.75	1404.22	1406.76	1406.98	.23	.13	.06	1404.00
2642.0	19.6	2489.9	132.6	10.5	638.5	52.7	295.3	119.8	1404.00
1.29	1.87	3.90	2.52	.045	.045	.045	.000	1400.00	479.57
.001720	320.	320.	320.	3	18	0	.00	162.19	641.76

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


*SECNO -123.700
START TRIB COMP
  -123.700   123.700  1359.978
 -123.700     5.98   1359.98      .00   1359.98   1360.17      .19      .88     -.69   1358.00
  2642.0     365.6    2002.3    274.1     158.4     524.1    116.8    302.7    122.2   1358.00
    1.32      2.31      3.82     2.35      .045      .045     .045     .000  1354.00    388.71
 .002468      430.      430.     430.         0         0        0      .00   329.11    717.82


CCHV=     .100 CEHV=     .300
*SECNO 305.000

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  305.000      .46   1362.46   1362.46   1362.46   1362.67      .20     1.58      .00   1364.00
    311.0       .0     311.0       .0        .0      85.8       .0    308.1    125.5   1364.00
     1.36      .00      3.62      .00      .000      .045     .000     .000  1362.00    479.85
 .040744      430.      550.     600.         0        23        0      .00   214.02    705.35


*SECNO 310.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.55

  310.000      .60   1366.60   1366.28   1366.62   1366.63      .03     3.94      .02   1368.00
    311.0       .0     311.0       .0        .0     241.5       .0    310.0    129.2   1368.00
     1.47      .00      1.29      .00      .000      .045     .000     .000  1366.00    579.86
 .003240      520.      500.     600.         4        11        0      .00   425.88   1005.74


*SECNO 315.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .35


3470 ENCROACHMENT STATIONS=      167.7    1197.6  TYPE=      1  TARGET=     1029.900
  315.000      .64   1370.14   1370.11   1370.15   1370.19      .05     3.56      .01   1370.00
    311.0       .2     276.3      34.5        .2     155.4     23.7    312.4    137.3   1370.00
     1.55      .93      1.78      1.46      .045      .045     .045     .000  1369.50    199.74
 .026451      500.      500.     500.         4         5        0      .00   985.91   1185.64
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 320.000

3265 DIVIDED FLOW

3280 CROSS SECTION 320.00 EXTENDED .17 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.89

320.000	.87	1373.67	1373.36	1373.67	1373.68	.02	3.49	.00	1374.00
311.0	.0	302.5	8.5	.0	284.2	11.7	315.1	147.0	1373.40
1.68	.00	1.06	.73	.000	.045	.045	.000	1372.80	231.86
.003163	500.	500.	500.	5	12	0	.00	702.39	1057.70

*SECNO 325.000

3265 DIVIDED FLOW

WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.63

325.000	1.76	1374.16	1373.02	1374.16	1374.17	.01	.48	.00	1374.00
311.0	9.3	301.7	.0	45.4	418.6	.0	319.5	155.0	1377.20
1.88	.20	.72	.00	.045	.045	.000	.000	1372.40	54.64
.000458	500.	500.	500.	5	19	0	.00	697.92	757.84

CCHV= .100 CEHV= .300
*SECNO 330.000
3280 CROSS SECTION 330.00 EXTENDED .53 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 543.2 1073.9 TYPE= 1 TARGET= 530.700

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1384.00 ELREA= 1383.10

330.000	.33	1382.33	1382.33	1382.33	1382.49	.16	.54	.05	1384.00
311.0	.0	311.0	.0	.0	97.1	.0	322.7	160.8	1383.10
1.92	.00	3.20	.00	.000	.015	.000	.000	1382.00	757.98
.004893	490.	500.	560.	0	21	0	.00	308.67	1066.64

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


*SECNO 335.000
3280 CROSS SECTION    335.00 EXTENDED       .44 FEET


3470 ENCROACHMENT STATIONS=      450.0     750.0  TYPE=      1  TARGET=      300.000
  335.000      .44   1384.44   1384.41   1384.44   1384.62       .17      2.12       .00   1390.00
    311.0       .0     241.3      69.7       .0      72.3      20.4     323.8     163.8   1384.00
     1.96      .00      3.34      3.42      .000      .015      .015      .000   1384.00    533.64
  .003559     500.      500.      600.         4        11         0       .00    216.36    750.00


*SECNO 340.000
  340.000      .67   1385.97   1385.89   1385.97   1386.10       .12      1.47       .01   1386.00
    311.0       .0     311.0        .0        .0     111.1        .0     325.0     166.6   1386.00
     2.01      .00      2.80       .00      .000      .015      .000      .000   1385.30    427.15
  .002474     500.      500.      500.         4        11         0       .00    259.53    686.67


CCHV=     .100 CEHV=     .300
*SECNO 342.000
 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  342.000      .62   1387.62   1387.62   1387.62   1387.78       .16       .68       .01   1388.00
    311.0       .0     311.0        .0        .0      97.0        .0     325.5     167.9   1388.00
     2.03      .00      3.20       .00      .000      .015      .000      .000   1387.00    563.09
  .004955     150.      200.      400.         0        11         0       .00    311.52    874.61


CCHV=     .100 CEHV=     .300
*SECNO 345.000
  345.000      .83   1388.83   1388.37   1388.82   1388.85       .03      1.05       .01   1390.00
    311.0       .0     311.0        .0        .0     243.1        .0     326.7     170.2   1390.00
     2.10      .00      1.28       .00      .000      .045      .000      .000   1388.00    551.79
  .002624     350.      300.      150.         3        11         0       .00    369.45    921.24


*SECNO 350.000

3265 DIVIDED FLOW


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .36
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1392.00 ELREA= 1392.00

350.000	1.21	1391.61	1391.49	1391.61	1391.71	.09	2.84	.02	1392.00
311.0	.0	311.0	.0	.0	127.0	.0	328.8	174.3	1392.00
2.15	.00	2.45	.00	.000	.045	.000	.000	1390.40	337.43
.020204	550.	500.	450.	3	11	0	.00	337.06	740.71

*SECNO 355.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.98

355.400	.98	1396.61	1396.25	1396.60	1396.64	.03	4.93	.01	1396.70
311.0	.0	311.0	.0	.0	212.5	.0	330.9	179.1	1396.77
2.26	.00	1.46	.00	.000	.045	.000	.000	1395.63	309.71
.005172	450.	540.	600.	4	8	0	.00	439.12	748.83

*SECNO 372.000
3280 CROSS SECTION 372.00 EXTENDED 6.54 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.91

3470 ENCROACHMENT STATIONS= 300.0 632.9 TYPE= 1 TARGET= 332.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1406.00 ELREA= 100000.00

372.000	2.04	1406.74	1406.46	1406.50	1406.87	.13	10.20	.03	1406.00
674.0	209.0	465.0	.0	103.6	146.8	.0	339.7	193.0	100000.00
2.42	2.02	3.17	.00	.045	.045	.000	.000	1404.70	341.01
.006692	1660.	1660.	1660.	5	16	0	.00	291.89	632.90

*SECNO 377.000
3280 CROSS SECTION 377.00 EXTENDED 7.78 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.30

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

3470 ENCROACHMENT STATIONS= 200.0 700.4 TYPE= 1 TARGET= 500.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1408.00 ELREA= 100000.00

377.000	2.08	1408.08	1407.04	1408.14	1408.11	.03	1.23	.01	1408.00
674.0	.4	673.6	.0	2.1	498.3	.0	344.0	197.2	100000.00
2.52	.18	1.35	.00	.045	.045	.000	.000	1406.00	267.26
.001265	500.	500.	500.	3	8	0	.00	433.14	700.40

*SECNO 382.000
3280 CROSS SECTION 382.00 EXTENDED 5.32 FEET

3470 ENCROACHMENT STATIONS= 150.0 700.0 TYPE= 1 TARGET= 550.000

382.000	2.12	1408.72	1407.76	1408.72	1408.75	.04	.64	.00	1408.00
674.0	89.1	583.7	1.2	96.9	368.7	2.0	349.6	201.9	1408.00
2.62	.92	1.58	.60	.045	.045	.045	.000	1406.60	226.62
.001298	500.	500.	500.	2	11	0	.00	395.14	621.76

*SECNO 387.000
3280 CROSS SECTION 387.00 EXTENDED 4.02 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .36

3470 ENCROACHMENT STATIONS= 100.0 620.0 TYPE= 1 TARGET= 520.000

387.000	2.03	1410.03	1409.63	1410.02	1410.19	.16	1.40	.04	1410.00
674.0	1.0	673.0	.0	3.7	206.7	.0	353.5	206.3	1410.00
2.66	.25	3.26	.03	.045	.045	.045	.000	1408.00	252.61
.009915	500.	500.	500.	3	19	0	.00	362.66	615.27

*SECNO 392.000
3280 CROSS SECTION 392.00 EXTENDED 10.16 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

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

3470 ENCROACHMENT STATIONS= 100.0 643.5 TYPE= 1 TARGET= 543.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1412.00 ELREA= 100000.00

392.000	.97	1412.97	1412.49	1412.96	1413.02	.05	2.82	.01	1412.00
674.0	247.2	426.8	.0	147.1	220.6	.0	356.8	210.9	100000.00
2.73	1.68	1.93	.00	.045	.045	.000	.000	1412.00	206.79
.003625	500.	500.	500.	7	14	0	.00	436.71	643.50

*SECNO 397.000
3280 CROSS SECTION 397.00 EXTENDED 1.16 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 7.63

397.000	9.17	1413.17	1408.16	1413.16	1413.19	.02	.16	.00	1412.00
1071.0	295.5	575.7	199.9	646.5	442.5	489.3	367.9	220.3	1412.00
2.89	.46	1.30	.41	.045	.045	.045	.000	1404.00	.00
.000157	500.	500.	500.	4	23	0	.00	1200.00	1200.00

*SECNO 402.000

3265 DIVIDED FLOW

3280 CROSS SECTION 402.00 EXTENDED .39 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .18

402.000	7.28	1413.28	1410.75	1413.27	1413.46	.18	.23	.05	1414.00
1071.0	31.4	1039.6	.0	29.2	301.6	.0	378.9	228.7	1414.00
2.93	1.07	3.45	.00	.045	.045	.000	.000	1406.00	.00
.005070	500.	500.	500.	3	11	0	.00	269.32	655.67

*SECNO 407.000

407.000	5.32	1415.32	1413.57	1415.32	1415.42	.10	1.95	.01	1416.00
1071.0	.0	1071.0	.0	.0	423.9	.0	383.2	231.7	1416.00
2.98	.00	2.53	.00	.000	.045	.000	.000	1410.00	454.80
.003086	500.	500.	500.	3	11	0	.00	261.85	716.65

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

*SECNO 412.000

412.000	3.25	1417.25	1416.19	1417.25	1417.56	.31	2.08	.06	1418.00
1071.0	.0	1071.0	.0	.0	239.2	.0	387.0	233.8	1418.00
3.01	.00	4.48	.00	.000	.045	.000	.000	1414.00	512.92
.005930	500.	500.	500.	3	18	0	.00	101.99	614.91

*SECNO 417.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.64

417.000	5.09	1419.09	1416.99	1419.09	1419.28	.19	1.71	.01	1420.00
1071.0	.0	1071.0	.0	.0	306.2	.0	390.2	234.9	1420.00
3.05	.00	3.50	.00	.000	.045	.000	.000	1414.00	549.86
.002214	500.	500.	500.	3	11	0	.00	89.70	639.55

T2
T3

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
		5							1308.41	
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15		-1				-1			

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


*PROF 4

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS



CCHV=     .100 CEHV=     .300
*SECNO 10.000
3280 CROSS SECTION     10.00 EXTENDED       .31 FEET


3470 ENCROACHMENT STATIONS=      437.2     743.4  TYPE=      1  TARGET=      306.200
    10.000      8.41   1308.41   1303.87   1308.41   1308.65       .24       .00       .00   1308.00
    8450.0        .0    8450.0       .0       .0    2162.8        .0       .0        .0 100000.00
       .00       .00      3.91       .00      .000      .045      .000      .000   1300.00    437.20
   .001043        0.        0.        0.         0        13         0       .00    306.20    743.40


*SECNO 15.600
3280 CROSS SECTION     15.60 EXTENDED      1.03 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50

    15.600      7.03   1309.03   1305.29   1309.03   1309.34       .31       .67       .02   1310.40
    5148.0        .0    5138.7       9.3       .0    1154.1       8.2      21.4       3.2   1308.00
       .03       .00      4.45      1.13      .000      .045      .045      .000   1302.00    523.01
   .001538      530.      560.      600.         3        18         0       .00    186.89    709.90


CCHV=     .600 CEHV=     .800
*SECNO 16.000

3301 HV CHANGED MORE THAN HVINS

    16.000      4.45   1308.95   1308.16   1308.95   1309.92       .96       .05       .52   1312.00
    5148.0        .0    5148.0       .0       .0     653.9        .0      22.2       3.3   1312.00
       .04       .00      7.87       .00      .000      .015      .000      .000   1304.50    510.61
   .001121       40.       40.       40.         3        11         0       .00    178.25    688.87


CCHV=     .100 CEHV=     .300
*SECNO 20.500
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .28

20.500	3.99	1309.99	1309.63	1309.99	1311.24	1.24	1.24	.08	1314.00
5148.0	.0	5148.0	.0	.0	575.6	.0	28.6	5.1	1314.00
.05	.00	8.94	.00	.000	.045	.000	.000	1306.00	507.92
.014631	450.	450.	450.	3	15	0	.00	171.14	679.06

*SECNO 24.200

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.07

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1316.00 ELREA= 1316.00

24.200	6.99	1312.99	1310.22	1312.99	1313.60	.60	2.30	.06	1316.00
5148.0	.0	5148.0	.0	.0	826.9	.0	34.5	6.5	1316.00
.07	.00	6.23	.00	.000	.045	.000	.000	1306.00	540.07
.003410	370.	370.	370.	3	8	0	.00	140.32	680.39

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	110.00	.00	600.00	.00	1306.00	1306.00

*SECNO 25.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.81

PRESSURE FLOW

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1314.78	1313.66	.00	0.	5148.	600.	660.	1312.00	1316.00	0.

25.000	8.61	1314.61	.00	1314.61	1314.78	.17	1.18	.00	1312.00
5148.0	865.3	3466.9	815.8	476.7	907.8	449.5	37.0	7.4	1312.00
.07	1.82	3.82	1.82	.015	.015	.015	.000	1306.00	194.58
.000235	80.	80.	80.	2	0	0	.00	821.95	1016.54

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

CCHV= .100 CEHV= .300
*SECNO 25.300

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

25.300	3.79	1313.79	1313.79	1313.79	1315.54	1.75	.02	.47	1316.00
5148.0	.0	5148.0	.0	.0	485.0	.0	37.8	7.7	1316.00
.07	.00	10.61	.00	.000	.045	.000	.000	1310.00	536.50
.019939	30.	30.	30.	0	14	0	.00	140.07	676.56

*SECNO 28.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.86

28.700	6.35	1316.35	1312.57	1316.35	1316.49	.14	.79	.16	1320.00
5148.0	.0	5148.0	.0	.0	1724.9	.0	46.4	9.5	1318.00
.11	.00	2.98	.00	.000	.045	.000	.000	1310.00	365.20
.000845	390.	340.	340.	4	14	0	.00	313.65	678.86

*SECNO 32.500

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .52

32.500	4.79	1316.79	1315.03	1316.79	1317.09	.30	.56	.05	1320.00
5148.0	.0	5148.0	.0	.0	1166.3	.0	59.0	12.2	1320.00
.13	.00	4.41	.00	.000	.045	.000	.000	1312.00	361.03
.003135	380.	380.	380.	2	14	0	.00	315.62	676.65

*SECNO 36.200

36.200	4.28	1318.08	1316.64	1318.09	1318.39	.31	1.30	.00	1320.00
5148.0	.0	5148.0	.0	.0	1153.5	.0	68.8	15.1	1324.00
.15	.00	4.46	.00	.000	.045	.000	.000	1313.80	395.87
.003940	430.	370.	330.	2	14	0	.00	364.77	760.64

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


CCHV=     .600 CEHV=     .800
*SECNO 36.900

3301 HV CHANGED MORE THAN HVINS

   36.900      2.18   1318.18   1318.10   1318.19   1319.02       .84       .21       .42   1320.00
   5148.0        .0    5148.0        .0        .0     701.6        .0      70.3      15.7   1324.00
      .16       .00      7.34       .00      .000      .015      .000      .000   1316.00    395.24
  .002313       70.       70.       70.         3        11         0       .00    366.77    762.01


CCHV=     .100 CEHV=     .300
*SECNO 38.100
3280 CROSS SECTION     38.10 EXTENDED       .54 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
   38.100      2.54   1320.54   1320.54   1320.54   1321.20       .66       .24       .02   1320.00
   5148.0     448.6    4699.4        .0     160.9     692.3        .0      72.4      16.9   1320.00
      .16      2.79      6.79       .00      .015      .015      .000      .000   1318.00    160.00
  .001823       60.      120.      180.         0         8         0       .00    640.00    800.00


CCHV=     .100 CEHV=     .300
*SECNO 43.300
3280 CROSS SECTION     43.30 EXTENDED      1.50 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1326.00 ELREA=      1326.00

   43.300      4.20   1322.20   1321.07   1322.20   1322.90       .70      1.69       .01   1326.00
   5148.0        .0    5148.0        .0        .0     768.9        .0      82.1      21.9   1326.00
      .18       .00      6.70       .00      .000      .045      .000      .000   1318.00    520.05
  .007366      520.      520.      520.         3        11         0       .00    211.00    731.05


CCHV=     .600 CEHV=     .800
*SECNO 43.800
3280 CROSS SECTION     43.80 EXTENDED      4.14 FEET
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1328.00 ELREA= 1328.00

43.800	3.84	1324.34	1324.34	1324.34	1325.64	1.30	.59	.48	1328.00
5148.0	.0	5148.0	.0	.0	562.5	.0	82.8	22.2	1328.00
.18	.00	9.15	.00	.000	.045	.000	.000	1320.50	505.02
.022183	50.	50.	50.	0	11	0	.00	221.31	726.33

CCHV= .100 CEHV= .300
*SECNO 49.000
3280 CROSS SECTION 49.00 EXTENDED 2.28 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 3.06

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1330.00 ELREA= 1330.00

49.000	6.28	1328.28	1326.06	1328.28	1328.55	.26	2.80	.10	1330.00
5148.0	.0	5148.0	.0	.0	1247.1	.0	93.6	25.3	1330.00
.22	.00	4.13	.00	.000	.045	.000	.000	1322.00	445.81
.002369	650.	520.	480.	3	8	0	.00	302.06	747.87

*SECNO 54.000
3280 CROSS SECTION 54.00 EXTENDED 5.44 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1332.00 ELREA= 1332.00

54.000	5.44	1329.44	1327.22	1329.44	1329.66	.22	1.11	.00	1332.00
5148.0	.0	5148.0	.0	.0	1360.0	.0	108.6	29.0	1332.00
.26	.00	3.79	.00	.000	.045	.000	.000	1324.00	410.37
.002101	500.	500.	530.	3	11	0	.00	342.93	753.30

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

*SECNO 59.400

3265 DIVIDED FLOW

3280 CROSS SECTION 59.40 EXTENDED .01 FEET

59.400	4.71	1330.71	1328.75	1330.71	1331.03	.32	1.33	.03	1336.00
5148.0	.0	4762.4	385.6	.0	1015.2	269.2	125.3	35.4	1332.00
.29	.00	4.69	1.43	.000	.045	.045	.000	1326.00	508.31
.002902	380.	540.	640.	3	8	0	.00	621.92	1155.60

CCHV= .600 CEHV= .800
*SECNO 60.000

3265 DIVIDED FLOW

3280 CROSS SECTION 60.00 EXTENDED .25 FEET

2 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .60

60.000	2.95	1330.95	1330.65	1330.95	1331.40	.45	.27	.10	1331.20
5148.0	.0	4102.4	1045.6	.0	704.8	364.1	126.9	36.3	1332.00
.29	.00	5.82	2.87	.000	.045	.045	.000	1328.00	491.13
.007985	60.	60.	60.	4	11	0	.00	640.42	1155.60

CCHV= .100 CEHV= .300
*SECNO 64.000
3280 CROSS SECTION 64.00 EXTENDED .68 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.65

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1334.00 ELREA= 1334.00

64.000	4.68	1332.68	1331.42	1332.68	1333.25	.57	1.82	.04	1334.00
5148.0	.0	5148.0	.0	.0	849.8	.0	135.7	40.4	1334.00
.31	.00	6.06	.00	.000	.030	.000	.000	1328.00	453.19
.002923	400.	400.	400.	3	8	0	.00	249.15	702.34

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

*SECNO 69.500

3280 CROSS SECTION 69.50 EXTENDED 2.09 FEET

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1335.20 ELREA= 1336.00

69.500	4.19	1334.19	1332.89	1334.19	1334.83	.65	1.56	.02	1335.20
5148.0	.0	5148.0	.0	.0	797.2	.0	146.1	43.2	1336.00
.33	.00	6.46	.00	.000	.030	.000	.000	1330.00	496.02
.002749	490.	550.	580.	3	14	0	.00	201.82	697.84

*SECNO 75.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1338.00 ELREA= 1338.00

75.500	5.15	1335.75	1334.31	1335.75	1336.55	.80	1.67	.05	1338.00
5148.0	.0	5148.0	.0	.0	718.3	.0	156.5	45.7	1338.00
.36	.00	7.17	.00	.000	.030	.000	.000	1330.60	517.46
.002809	630.	600.	530.	2	11	0	.00	157.14	674.59

*SECNO 79.300

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .69

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1340.00 ELREA= 1340.00

79.300	4.70	1336.70	1336.18	1336.70	1338.27	1.57	1.49	.23	1340.00
5148.0	.0	5148.0	.0	.0	512.4	.0	161.9	46.9	1340.00
.37	.00	10.05	.00	.000	.030	.000	.000	1332.00	481.11
.005850	430.	380.	340.	2	15	0	.00	114.80	595.91

CCHV= .300 CEHV= .500

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

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	95.70	.00	574.20	.00	1332.00	1332.00

*SECNO 83.700

6070,LOW FLOW BY NORMAL BRIDGE

EGPRS= 1338.647 EGLWC= 1339.505 ELLC= 1338.000 PCWSE= 1336.699 ELTRD= 1344.000

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD= 42 MIN ELTRD= 1344.00 MAX ELLC= 1338.00

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1338.00 ELREA= 1340.00

83.700	7.06	1339.06	1337.03	1339.07	1340.69	1.63	2.39	.03	1338.00
5148.0	.0	5148.0	.0	.0	502.4	.0	167.0	48.2	1340.00
.38	.00	10.25	.00	.000	.015	.000	.000	1332.00	469.44
.005059	440.	440.	440.	5	12	0	-113.74	137.65	608.16

CCHV= .600 CEHV= .800
*SECNO 84.200

3265 DIVIDED FLOW

3280 CROSS SECTION 84.20 EXTENDED .91 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.72

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1340.00 ELREA= 1344.00

84.200	6.91	1340.91	1338.72	1340.92	1341.47	.56	.14	.64	1340.00
5148.0	112.4	5035.6	.0	94.3	829.2	.0	167.9	48.4	1344.00
.38	1.19	6.07	.00	.045	.030	.000	.000	1334.00	153.51
.001720	50.	50.	50.	2	14	0	.00	287.37	592.30

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

CCHV= .100 CEHV= .300
*SECNO 86.200

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1342.00 ELREA= 1344.00

86.200	5.14	1341.14	1339.78	1341.15	1342.01	.87	.45	.09	1342.00
5148.0	.0	5148.0	.0	.0	687.3	.0	171.5	49.4	1344.00
.39	.00	7.49	.00	.000	.030	.000	.000	1336.00	517.76
.003129	180.	200.	225.	3	11	0	.00	153.06	670.82

*SECNO 92.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.08

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1344.00 ELREA= 1346.00

92.700	4.27	1342.77	1340.50	1342.77	1342.94	.17	.86	.07	1344.00
5148.0	.0	5148.0	.0	.0	1553.9	.0	188.3	53.5	1346.00
.44	.00	3.31	.00	.000	.030	.000	.000	1338.50	384.55
.000726	550.	650.	750.	3	18	0	.00	396.50	781.05

CCHV= .600 CEHV= .800
*SECNO 93.200

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1346.00 ELREA= 1346.40

93.200	1.72	1343.02	1343.02	1343.02	1343.88	.86	.09	.55	1346.00
5148.0	.0	5148.0	.0	.0	692.2	.0	189.5	54.0	1346.40
.45	.00	7.44	.00	.000	.030	.000	.000	1341.30	386.72
.011146	50.	50.	50.	0	18	0	.00	407.62	794.34

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

*SECNO 98.300

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.74

98.300	3.49	1345.69	1344.42	1345.69	1345.89	.21	1.62	.39	1350.00
5148.0	.0	5148.0	.0	.0	1407.4	.0	201.8	59.4	1350.00
.49	.00	3.66	.00	.000	.030	.000	.000	1342.20	298.41
.001482	680.	510.	380.	3	11	0	.00	529.47	827.88

CCHV= .600 CEHV= .800
*SECNO 99.400

3265 DIVIDED FLOW

3280 CROSS SECTION 99.40 EXTENDED .32 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

99.400	1.32	1348.32	1348.32	1348.32	1348.91	.59	.35	.31	1350.00
5148.0	.0	5087.2	60.8	.0	818.9	37.9	204.7	61.1	1350.00
.49	.00	6.21	1.60	.000	.030	.045	.000	1347.00	239.06
.011378	100.	110.	90.	0	18	0	.00	768.49	1156.30

CCHV= .100 CEHV= .300
*SECNO 103.900
3280 CROSS SECTION 103.90 EXTENDED .17 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

103.900	2.47	1350.47	1350.47	1350.47	1351.01	.54	1.80	.01	1350.00
5148.0	233.1	4611.7	303.2	112.2	749.9	83.2	214.0	69.6	1349.30
.51	2.08	6.15	3.64	.015	.015	.015	.000	1348.00	.00
.002008	210.	450.	680.	0	17	0	.00	939.99	939.99

CCHV= .100 CEHV= .300
*SECNO 104.400

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

3265 DIVIDED FLOW

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .59

104.400	2.90	1350.90	1350.24	1350.89	1351.20	.30	.16	.02	1350.00
5148.0	393.5	4610.9	143.6	172.8	1005.3	100.9	215.3	70.7	1350.00
.52	2.28	4.59	1.42	.045	.045	.045	.000	1348.00	138.86
.005854	50.	50.	50.	4	11	0	.00	929.98	1069.68

*SECNO 109.400

109.400	5.05	1353.05	1351.56	1353.06	1353.29	.24	2.09	.01	1352.00
5148.0	77.5	5066.9	3.6	42.6	1287.9	2.8	230.6	78.7	1352.00
.55	1.82	3.93	1.27	.045	.045	.045	.000	1348.00	388.92
.003053	700.	500.	350.	4	11	0	.00	456.52	845.44

*SECNO 114.400

114.400	4.89	1354.89	1353.87	1354.89	1355.19	.30	1.88	.02	1354.00
5148.0	5.8	5140.3	1.9	4.1	1160.5	1.5	244.9	83.8	1354.00
.58	1.42	4.43	1.29	.045	.045	.045	.000	1350.00	411.28
.004757	500.	500.	500.	2	14	0	.00	439.79	851.07

*SECNO 119.400

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

119.400	6.36	1358.36	1357.95	1358.36	1358.93	.57	3.66	.08	1358.00
5148.0	29.6	5118.1	.2	16.3	838.9	.2	256.5	88.9	1358.00
.61	1.82	6.10	1.14	.045	.045	.045	.000	1352.00	347.16
.012671	500.	500.	500.	3	11	0	.00	448.00	795.16

*SECNO 123.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.02

123.700	7.02	1361.02	1359.65	1361.02	1361.35	.33	2.40	.02	1358.00
5148.0	986.1	3454.4	707.5	297.7	677.6	203.1	266.6	93.1	1358.00
.63	3.31	5.10	3.48	.045	.045	.045	.000	1354.00	332.97
.003120	430.	430.	430.	3	10	0	.00	396.31	729.28

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

*SECNO 130.400

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .50

130.400	5.93	1363.93	1363.46	1363.92	1364.77	.85	3.26	.16	1362.00
4472.0	440.4	3861.3	170.3	100.7	496.5	52.1	280.6	98.2	1362.00
.66	4.38	7.78	3.27	.045	.045	.045	.000	1358.00	455.14
.009595	670.	670.	670.	3	17	0	.00	268.30	723.44

*SECNO 135.400

3265 DIVIDED FLOW

3280 CROSS SECTION 135.40 EXTENDED .50 FEET

HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.08

135.400	6.60	1366.60	1364.74	1366.60	1366.86	.26	2.03	.06	1364.00
4472.0	511.3	3552.7	407.9	237.4	803.7	191.8	291.4	102.8	1364.00
.69	2.15	4.42	2.13	.045	.045	.045	.000	1360.00	.00
.002226	500.	500.	500.	3	15	0	.00	534.04	896.70

*SECNO 139.100

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

139.100	4.00	1368.00	1368.00	1368.00	1369.26	1.26	1.91	.30	1370.00
4472.0	.0	4472.0	.0	.0	497.1	.0	298.8	106.0	1370.00
.70	.00	9.00	.00	.000	.045	.000	.000	1364.00	488.80
.022648	400.	370.	340.	0	14	0	.00	203.59	692.40

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

*SECNO 144.100

3265 DIVIDED FLOW

3280 CROSS SECTION 144.10 EXTENDED .33 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.73

144.100	6.33	1372.33	1370.46	1372.33	1372.61	.28	3.25	.10	1372.00
4472.0	833.8	3552.2	86.0	345.4	771.1	100.0	308.6	111.9	1372.00
.74	2.41	4.61	.86	.045	.045	.045	.000	1366.00	56.10
.003035	500.	500.	500.	4	8	0	.00	833.68	1073.56

*SECNO 148.600

5 DIVIDED FLOW

148.600	5.58	1373.58	1371.24	1373.58	1374.01	.43	1.36	.05	1373.00
4472.0	26.6	4389.4	55.9	32.8	823.4	47.6	319.5	118.2	1373.00
.76	.81	5.33	1.17	.045	.045	.045	.000	1368.00	249.51
.003036	420.	450.	480.	2	8	0	.00	374.89	796.10

*SECNO 152.100

152.100	7.06	1375.06	1373.00	1375.06	1375.34	.28	1.32	.02	1374.00
4472.0	400.9	3600.2	470.9	174.3	782.5	228.4	327.9	122.7	1374.00
.79	2.30	4.60	2.06	.045	.045	.045	.000	1368.00	327.13
.004765	380.	350.	330.	5	12	0	.00	760.77	1087.89

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	45.00	.00	270.00	.00	1368.00	1368.00

*SECNO 152.800

3280 CROSS SECTION 152.80 EXTENDED 2.41 FEET

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

3301 HV CHANGED MORE THAN HVINS

PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1381.71	1377.74	.00	1959.	2534.	270.	270.	1374.00	1376.00	413.

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

152.800	8.41	1376.41	1376.41	1376.59	1377.46	1.05	.14	1.72	1368.00
4472.0	82.9	3508.6	880.4	49.5	388.1	218.4	329.4	123.6	1368.00
.79	1.68	9.04	4.03	.015	.015	.015	.000	1368.00	416.48
.001071	70.	70.	70.	20	8	4	.00	339.72	756.20

= .100 CEHV= .300
*SECNO 153.100
3280 CROSS SECTION 153.10 EXTENDED 3.22 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 530.0 687.5 TYPE= 1 TARGET= 157.500

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 100000.00 ELREA= 1374.00

153.100	7.22	1377.22	1373.71	1377.21	1377.57	.35	.04	.07	100000.00
4472.0	.0	4292.1	179.9	.0	887.1	71.8	329.9	123.8	1374.00
.79	.00	4.84	2.51	.000	.045	.045	.000	1370.00	530.00
.001777	30.	30.	30.	3	14	0	.00	157.50	687.50

*SECNO 154.900
3280 CROSS SECTION 154.90 EXTENDED .52 FEET

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .68

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1378.00 ELREA= 1376.00

154.900	7.52	1377.52	1375.38	1377.51	1378.11	.59	.47	.07	1378.00
4472.0	.0	3923.1	548.9	.0	599.8	339.8	334.1	125.8	1376.00
.80	.00	6.54	1.62	.000	.045	.045	.000	1370.00	566.50
.003854	150.	180.	240.	3	19	0	.00	633.50	1200.00

CCHV= .300 CEHV= .500

SPECIAL BRIDGE

SB	XK	XKOR	COFQ	RDLEN	BWC	BWP	BAREA	SS	ELCHU	ELCHD
	1.25	1.56	2.63	.00	43.10	.00	259.00	.00	1370.00	1370.00

*SECNO 156.800
0 CROSS SECTION 156.80 EXTENDED 1.30 FEET

PRESSURE AND WEIR FLOW, Weir Submergence Based on TRAPEZOIDAL Shape

EGPRS	EGLWC	H3	QWEIR	QPR	BAREA	TRAPEZOID AREA	ELLC	ELTRD	WEIRLN
1384.74	1378.11	.00	2256.	2249.	259.	259.	1376.00	1377.00	567.

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

156.800	8.80	1378.80	1378.80	1378.81	1379.57	.77	.42	.82	1377.00
4472.0	889.7	3193.6	388.7	223.2	401.1	119.3	337.9	128.5	1377.00
.81	3.99	7.96	3.26	.015	.015	.015	.000	1370.00	300.00
.001481	90.	190.	260.	20	9	4	.00	462.78	762.78

CCHV= .100 CEHV= .300
*SECNO 162.700

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .57

162.700	6.55	1380.55	1379.37	1380.54	1381.03	.49	1.43	.03	1378.00
4472.0	412.4	3829.3	230.3	135.7	646.9	81.7	349.0	134.1	1378.00
.84	3.04	5.92	2.82	.045	.045	.045	.000	1374.00	399.81
.004570	650.	590.	550.	3	14	0	.00	346.16	745.97

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

*SECNO 167.700

167.700	7.24	1383.24	1383.02	1383.24	1384.22	.98	3.04	.15	1380.00
4472.0	1217.0	2855.3	399.7	244.5	310.1	86.1	357.6	137.7	1380.00
.85	4.98	9.21	4.64	.045	.045	.045	.000	1376.00	414.89
.008483	500.	500.	500.	2	8	0	.00	276.86	691.75

*SECNO 172.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.44

172.700	6.63	1386.63	1385.31	1386.63	1387.07	.44	2.80	.05	1384.00
4472.0	567.7	3769.5	134.9	182.6	667.0	44.0	366.2	141.0	1384.00
.88	3.11	5.65	3.06	.045	.045	.045	.000	1380.00	391.29
.004067	460.	500.	510.	2	20	0	.00	327.13	718.43

*SECNO 177.700

177.700	5.01	1389.01	1388.34	1389.01	1389.71	.70	2.56	.08	1386.00
4472.0	594.5	3490.2	387.3	137.3	480.3	103.0	375.4	144.4	1386.00
.90	4.33	7.27	3.76	.045	.045	.045	.000	1384.00	485.75
.006718	470.	500.	520.	3	14	0	.00	269.17	754.93

*SECNO 181.200

3265 DIVIDED FLOW

3280 CROSS SECTION 181.20 EXTENDED 1.24 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

181.200	7.24	1393.24	1393.24	1393.24	1394.13	.89	2.61	.06	1392.00
4472.0	882.8	3575.6	13.6	323.9	428.5	6.2	381.4	147.5	1392.00
.91	2.73	8.35	2.17	.045	.045	.045	.000	1386.00	143.30
.008300	350.	350.	350.	0	15	0	.00	506.58	736.99

*SECNO 184.000

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

3280 CROSS SECTION 184.00 EXTENDED 2.00 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3710 WSEL ASSUMED BASED ON MIN DIFF

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1396.00 ELREA= 1396.00

184.000	9.00	1396.00	1395.12	1396.00	1396.46	.46	2.38	-.55	1396.00
4472.0	.0	4472.0	.0	.0	817.4	.0	386.6	150.4	1396.00
.93	.00	5.47	.00	.000	.045	.000	.000	1387.00	630.33
.008464	320.	280.	240.	20	8	0	.00	336.64	966.97

*SECNO 189.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.88

189.000	8.31	1398.31	1396.82	1398.31	1398.52	.21	2.04	.03	1396.00
4472.0	199.2	2626.7	1646.1	94.0	632.3	540.0	398.5	155.0	1396.00
.97	2.12	4.15	3.05	.045	.045	.045	.000	1390.00	474.79
002388	500.	500.	500.	2	13	0	.00	460.74	935.53

*SECNO 194.000

194.000	5.41	1399.41	1397.12	1399.40	1399.64	.23	1.11	.01	1402.00
4472.0	.0	4472.0	.0	.0	1154.0	.0	412.4	159.2	1402.00
1.00	.00	3.88	.00	.000	.045	.000	.000	1394.00	613.23
.002079	500.	500.	500.	3	22	0	.00	278.07	891.30

*SECNO 199.000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .42

199.000	8.86	1400.86	1400.74	1400.86	1401.67	.82	1.86	.17	1400.00
4472.0	7.1	1904.1	2560.8	3.5	211.2	457.8	422.1	162.1	1400.00
1.02	2.01	9.02	5.59	.045	.045	.045	.000	1392.00	612.25
.011571	510.	510.	310.	2	14	0	.00	319.55	933.71

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

*SECNO 204.500

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

204.500	10.90	1406.90	1406.90	1406.90	1408.29	1.39	5.52	.17	1406.00
4472.0	419.0	3967.7	85.3	128.9	397.4	35.3	430.0	165.8	1406.00
1.04	3.25	9.98	2.42	.045	.045	.045	.000	1396.00	403.72
.008520	550.	550.	580.	0	11	0	.00	250.41	693.27

*SECNO 205.100

3301 HV CHANGED MORE THAN HVINS

2 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.97

205.100	12.39	1408.39	1401.67	1408.39	1408.46	.07	.04	.13	1400.00
4472.0	731.7	3050.9	689.4	527.4	1299.5	368.0	431.9	166.2	1400.00
1.05	1.39	2.35	1.87	.045	.045	.045	.000	1396.00	415.39
.000239	60.	60.	60.	2	11	0	.00	361.53	776.92

*SECNO 208.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .37

208.000	8.37	1408.37	1405.19	1408.37	1408.71	.34	.16	.08	1404.00
4472.0	71.1	4081.1	319.8	27.0	850.6	94.2	443.6	168.2	1404.00
1.06	2.63	4.80	3.39	.045	.045	.045	.000	1400.00	474.84
.001777	320.	320.	320.	3	18	0	.00	171.87	646.70

*SECNO -123.700
START TRIB COMP

-123.700	123.700	1361.024							
-123.700	7.02	1361.02	.00	1361.02	1361.27	.25	.87	-.63	1358.00
4472.0	856.9	3000.4	614.7	297.9	677.8	203.2	454.2	171.0	1358.00
1.09	2.88	4.43	3.03	.045	.045	.045	.000	1354.00	332.90
.002352	430.	430.	430.	0	0	0	.00	396.40	729.29

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


CCHV=     .100 CEHV=     .300
*SECNO 305.000
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
  305.000     1.58  1363.58  1363.58  1363.58  1364.14       .56      2.28       .09  1364.00
   2441.0       .0   2441.0       .0       .0    407.1        .0     463.9     175.7  1364.00
     1.12      .00     6.00      .00     .000     .045      .000      .000   1362.00    456.62
  .029015     430.     550.     600.        0       17         0       .00    369.75    826.37


*SECNO 310.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.92

  310.000     1.87  1367.87  1367.09  1367.87  1367.96       .08      3.77       .05  1368.00
   2441.0       .0   2441.0       .0       .0   1057.5        .0     472.3     182.4  1368.00
     1.18      .00     2.31      .00     .000     .045      .000      .000   1366.00    282.41
  .003395     520.     500.     600.        5       14         0       .00    804.86   1087.28


SECNO 315.000
3280 CROSS SECTION    315.00 EXTENDED       .35 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .52


3470 ENCROACHMENT STATIONS=      167.7    1197.6  TYPE=      1  TARGET=     1029.900
  315.000     1.25  1370.75  1370.53  1370.75  1370.90       .15      2.92       .02  1370.00
   2441.0     11.3   2040.8    388.9      5.9    648.2     130.6     482.9     192.8  1370.00
     1.22     1.90     3.15     2.98     .045     .045      .045      .000   1369.50    186.91
  .012346     500.     500.     500.        4       11         0       .00   1010.69   1197.60


*SECNO 320.000
3280 CROSS SECTION    320.00 EXTENDED       .99 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.59

  320.000     1.69  1374.49  1373.98  1374.49  1374.58       .10      3.68       .01  1374.00
   2441.0     12.9   2307.0    121.1     12.3    917.9      50.6     493.0     203.8  1373.40
     1.28     1.05     2.51     2.39     .045     .045      .045      .000   1372.80    153.46
  .004878     500.     500.     500.        4       11         0       .00    904.24   1057.70
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SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*SECNO 325.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.17

  325.000      3.11   1375.51   1374.24   1375.52   1375.56       .05       .97       .01   1374.00
   2441.0     636.7    1804.3        .0     460.1    1000.1        .0     507.0     213.4   1377.20
     1.36      1.38      1.80       .00      .045      .045      .000      .000   1372.40     34.61
  .001035      500.      500.      500.         4         8         0       .00    769.02    803.64


CCHV=     .100 CEHV=     .300
*SECNO 330.000
3280 CROSS SECTION    330.00 EXTENDED      1.41 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      543.2    1073.9  TYPE=      1  TARGET=      530.700

3405 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1384.00 ELREA=      1383.10

  330.000      1.21   1383.21   1383.21   1383.21   1383.71       .50       .85       .14   1384.00
   2441.0        .0    2441.0        .0        .0     431.9        .0     517.8     220.3   1383.10
     1.39       .00      5.65       .06      .000      .015      .015      .000   1382.00    628.49
  .003353      490.      500.      560.         0        14         0       .00    442.19   1070.68


*SECNO 335.000
3280 CROSS SECTION    335.00 EXTENDED      1.57 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      450.0     750.0  TYPE=      1  TARGET=      300.000
  335.000      1.57   1385.57   1385.57   1385.57   1386.29       .71      1.61       .06   1390.00
   2441.0        .0    1923.0     518.0        .0     288.6      72.4     522.5     224.4   1384.00
     1.41       .00      6.66      7.15      .000      .015      .015      .000   1384.00    493.13
  .002978      500.      500.      600.         0        11         0       .00    256.87    750.00


*SECNO 340.000
  340.000      1.73   1387.03   1386.90   1387.03   1387.40       .37      1.08       .03   1386.00
   2441.0     205.2    2010.6     225.2      64.4     388.2      77.9     527.6     228.9   1386.00
     1.44      3.19      5.18      2.89      .015      .015      .015      .000   1385.30    319.14
  .001635      500.      500.      500.         1         5         0       .00    529.71    848.84
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

CCHV= .100 CEHV= .300
*SECNO 342.000
3280 CROSS SECTION 342.00 EXTENDED .36 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

342.000	1.36	1388.36	1388.36	1388.38	1388.66	.30	.42	.01	1388.00
2441.0	419.9	2010.6	10.5	160.5	428.3	6.4	530.2	232.5	1388.00
1.45	2.62	4.69	1.65	.015	.015	.015	.000	1387.00	.00
.002759	150.	200.	400.	0	19	0	.00	985.67	985.67

CCHV= .100 CEHV= .300
*SECNO 345.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .58

345.000	1.82	1389.82	1389.29	1389.75	1390.01	.19	1.34	.01	1390.00
2441.0	.0	2441.0	.0	.0	697.7	.0	534.8	238.0	1390.00
1.47	.00	3.50	.00	.000	.045	.000	.000	1388.00	421.74
.008107	350.	300.	150.	2	8	0	.00	546.61	968.35

*SECNO 350.000
3280 CROSS SECTION 350.00 EXTENDED .81 FEET

350.000	2.40	1392.80	1392.27	1392.82	1392.90	.10	2.89	.01	1392.00
2441.0	37.0	2110.6	293.4	27.6	818.3	156.0	544.4	246.2	1392.00
1.53	1.34	2.58	1.88	.045	.045	.045	.000	1390.40	210.69
.004355	550.	500.	450.	5	8	0	.00	903.01	1113.70

*SECNO 355.400
3280 CROSS SECTION 355.40 EXTENDED .40 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .44

355.400	1.54	1397.17	1397.08	1397.14	1397.54	.37	4.56	.08	1396.70
2441.0	16.0	2425.0	.0	8.5	494.1	.0	553.8	255.2	1396.77
1.56	1.88	4.91	.00	.045	.045	.000	.000	1395.63	263.90
.022461	450.	540.	600.	3	14	0	.00	536.10	800.00

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

*SECNO 372.000
3280 CROSS SECTION 372.00 EXTENDED 8.11 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.72

3470 ENCROACHMENT STATIONS= 300.0 632.9 TYPE= 1 TARGET= 332.900

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1406.00 ELREA= 100000.00

372.000	3.60	1408.30	1407.25	1408.34	1408.47	.17	10.91	.02	1406.00
2468.0	1280.5	1187.5	.0	432.6	326.0	.0	577.9	271.7	100000.00
1.70	2.96	3.64	.00	.045	.045	.000	.000	1404.70	300.00
.003107	1660.	1660.	1660.	8	17	0	.00	332.90	632.90

*SECNO 377.000
3280 CROSS SECTION 377.00 EXTENDED 9.08 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.50

3470 ENCROACHMENT STATIONS= 200.0 700.4 TYPE= 1 TARGET= 500.400

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1408.00 ELREA= 100000.00

377.000	3.39	1409.39	1407.87	1409.40	1409.47	.08	.99	.01	1408.00
2468.0	141.9	2326.1	.0	106.9	1023.4	.0	588.7	276.5	100000.00
1.76	1.33	2.27	.00	.045	.045	.000	.000	1406.00	200.00
.001376	500.	500.	500.	3	11	0	.00	500.40	700.40

*SECNO 382.000
3280 CROSS SECTION 382.00 EXTENDED 6.69 FEET

3470 ENCROACHMENT STATIONS= 150.0 700.0 TYPE= 1 TARGET= 550.000

382.000	3.49	1410.09	1408.63	1407.60	1410.18	.09	.71	.00	1408.00
2468.0	647.0	1795.0	26.1	337.7	698.3	22.4	601.3	282.6	1408.00
1.82	1.92	2.57	1.17	.045	.045	.045	.000	1406.60	150.00
.001460	500.	500.	500.	3	14	0	.00	550.00	700.00

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

*SECNO 387.000
3280 CROSS SECTION 387.00 EXTENDED 5.25 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .53

3470 ENCROACHMENT STATIONS= 100.0 620.0 TYPE= 1 TARGET= 520.000

387.000	3.25	1411.25	1410.63	1416.20	1411.46	.22	1.25	.04	1410.00
2468.0	590.4	1864.3	13.3	229.5	463.0	5.9	611.3	288.2	1410.00
1.86	2.57	4.03	2.27	.045	.045	.045	.000	1408.00	188.39
.005176	500.	500.	500.	3	19	0	.00	431.61	620.00

*SECNO 392.000
3280 CROSS SECTION 392.00 EXTENDED 11.01 FEET

3470 ENCROACHMENT STATIONS= 100.0 643.5 TYPE= 1 TARGET= 543.500

OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1412.00 ELREA= 100000.00

392.000	1.81	1413.81	1413.14	1416.23	1413.97	.16	2.50	.01	1412.00
2468.0	1060.2	1407.8	.0	357.7	414.5	.0	619.8	293.6	100000.00
1.90	2.96	3.40	.00	.045	.045	.000	.000	1412.00	135.90
.004841	500.	500.	500.	3	22	0	.00	507.60	643.50

*SECNO 397.000
3280 CROSS SECTION 397.00 EXTENDED 2.19 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 5.17

397.000	10.19	1414.19	1409.76	1416.28	1414.20	.01	.22	.01	1412.00
2103.0	778.0	693.7	631.3	1219.6	522.3	1071.4	640.4	303.4	1412.00
2.07	.64	1.33	.59	.045	.045	.045	.000	1404.00	.00
.000131	500.	500.	500.	4	20	0	.00	1200.00	1200.00

*SECNO 402.000
3280 CROSS SECTION 402.00 EXTENDED 1.40 FEET

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

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .20

402.000	8.29	1414.29	1413.27	1416.29	1414.42	.13	.18	.03	1414.00
2103.0	422.6	1622.7	57.8	259.7	515.7	72.7	661.4	315.8	1414.00
2.12	1.63	3.15	.79	.045	.045	.045	.000	1406.00	.00
.003283	500.	500.	500.	3	18	0	.00	959.58	959.58

*SECNO 407.000

3265 DIVIDED FLOW

3280 CROSS SECTION 407.00 EXTENDED .07 FEET

407.000	6.07	1416.07	1414.75	1416.36	1416.23	.16	1.80	.01	1416.00
2103.0	7.6	2092.6	2.8	21.5	653.8	7.8	670.2	325.6	1416.00
2.16	.35	3.20	.36	.045	.045	.045	.000	1410.00	.00
.003959	500.	500.	500.	4	11	0	.00	752.30	865.93

*SECNO 412.000

412.000	4.31	1418.31	1417.26	1418.03	1418.74	.43	2.43	.08	1418.00
2103.0	132.0	1943.0	28.0	111.7	357.1	24.9	676.9	333.2	1418.00
2.19	1.18	5.44	1.12	.045	.045	.045	.000	1414.00	140.72
.006112	500.	500.	500.	3	11	0	.00	570.68	711.40

*SECNO 417.000

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.44

417.000	6.44	1420.44	1418.13	1420.64	1420.80	.36	2.06	.01	1420.00
2103.0	2.8	2099.5	.6	4.3	434.4	1.0	682.3	337.2	1420.00
2.22	.66	4.83	.66	.045	.045	.045	.000	1414.00	520.46
.002954	500.	500.	500.	2	8	0	.00	127.35	647.81

THIS RUN EXECUTED 06OCT95 09:12:58

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HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

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

SUMMARY PRINTOUT

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
	10.000	2040.00	.00	45.00	.00	1305.39	1301.81	1.61	285.73	5.39
	10.000	5100.00	.00	45.00	.00	1307.65	1302.92	2.64	303.45	7.65
	10.000	8450.00	.00	45.00	.00	1308.41	1303.87	3.91	306.20	8.41
	10.000	8450.00	.00	45.00	.00	1308.41	1303.87	3.91	306.20	8.41
*	15.600	1540.00	.00	45.00	.00	1305.64	1303.49	2.71	164.83	3.64
	15.600	2545.00	.00	45.00	.00	1307.98	1304.07	2.63	176.71	5.98
*	15.600	2760.00	.00	45.00	45.00	1309.03	1304.18	2.39	186.89	7.03
*	15.600	5148.00	.00	45.00	45.00	1309.03	1305.29	4.45	186.89	7.03
*	16.000	1540.00	.00	15.00	.00	1306.31	1306.31	6.97	149.04	1.81
	16.000	2545.00	.00	15.00	.00	1307.94	1306.92	5.31	166.93	3.44
	16.000	2760.00	.00	15.00	.00	1309.01	1307.03	4.15	178.92	4.51
	16.000	5148.00	.00	15.00	.00	1308.95	1308.16	7.87	178.25	4.45
	20.500	1540.00	.00	45.00	.00	1308.61	1307.69	4.38	152.34	2.61
*	20.500	2545.00	.00	45.00	.00	1308.52	1308.33	7.51	151.20	2.52
*	20.500	2760.00	.00	45.00	.00	1309.16	1308.45	6.29	159.91	3.16
*	20.500	5148.00	.00	45.00	.00	1309.99	1309.63	8.94	171.14	3.99
*	24.200	1540.00	.00	45.00	.00	1309.96	1307.94	3.57	121.34	3.96
*	24.200	2545.00	.00	45.00	.00	1311.09	1308.69	4.45	127.63	5.09
*	24.200	2760.00	.00	45.00	.00	1311.18	1308.83	4.73	128.12	5.18
*	24.200	5148.00	.00	45.00	.00	1312.99	1310.22	6.23	140.32	6.99
*	25.000	1540.00	.00	15.00	.00	1310.02	1307.94	3.77	103.35	4.02
*	25.000	2545.00	.00	15.00	.00	1311.16	1308.70	4.83	104.30	5.16
*	25.000	2760.00	.00	15.00	.00	1311.26	1308.85	5.14	104.38	5.26
*	25.000	5148.00	15.00	15.00	15.00	1314.61	.00	3.82	821.95	8.61
*	25.300	1540.00	.00	45.00	.00	1311.74	1311.74	7.31	128.06	1.74
	25.300	2545.00	.00	45.00	.00	1312.40	1312.40	8.57	131.72	2.40
	25.300	2760.00	.00	45.00	.00	1312.54	1312.54	8.76	132.50	2.54
*	25.300	5148.00	.00	45.00	.00	1313.79	1313.79	10.61	140.07	3.79

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
*	28.700	1540.00	.00	45.00	.00	1313.35	1311.26	1.86	284.19	3.35
*	28.700	2545.00	.00	45.00	.00	1314.35	1311.70	2.28	294.61	4.35
*	28.700	2760.00	.00	45.00	.00	1314.54	1311.78	2.36	296.57	4.54
*	28.700	5148.00	.00	45.00	.00	1316.35	1312.57	2.98	313.65	6.35
*	32.500	1540.00	.00	45.00	.00	1313.93	1313.81	5.13	281.07	1.93
*	32.500	2545.00	.00	45.00	.00	1314.89	1314.22	4.36	298.23	2.89
*	32.500	2760.00	.00	45.00	.00	1315.07	1314.31	4.33	299.85	3.07
*	32.500	5148.00	.00	45.00	.00	1316.79	1315.03	4.41	315.62	4.79
*	36.200	1540.00	.00	45.00	.00	1316.50	1315.43	2.56	335.73	2.70
	36.200	2545.00	.00	45.00	.00	1316.90	1315.87	3.43	343.48	3.10
	36.200	2760.00	.00	45.00	.00	1317.00	1315.94	3.57	345.05	3.20
	36.200	5148.00	.00	45.00	.00	1318.08	1316.64	4.46	364.77	4.28
*	36.900	1540.00	.00	15.00	.00	1317.03	1317.03	5.27	345.58	1.03
*	36.900	2545.00	.00	15.00	.00	1317.38	1317.38	6.17	351.42	1.38
*	36.900	2760.00	.00	15.00	.00	1317.44	1317.44	6.35	352.46	1.44
	36.900	5148.00	.00	15.00	.00	1318.18	1318.10	7.34	366.77	2.18
*	38.100	1540.00	.00	15.00	.00	1319.22	1319.22	5.68	273.88	1.22
*	38.100	2545.00	.00	15.00	.00	1319.65	1319.65	6.45	309.84	1.65
*	38.100	2760.00	.00	15.00	.00	1319.73	1319.73	6.57	316.70	1.73
	38.100	5148.00	15.00	15.00	.00	1320.54	1320.54	6.79	640.00	2.54
	43.300	1540.00	.00	45.00	.00	1320.98	1319.41	2.95	191.91	2.98
	43.300	2545.00	.00	45.00	.00	1321.65	1319.95	3.89	202.71	3.65
	43.300	2760.00	.00	45.00	.00	1321.77	1320.05	4.07	204.60	3.77
*	43.300	5148.00	.00	45.00	.00	1322.20	1321.07	6.70	211.00	4.20
*	43.800	1540.00	.00	45.00	.00	1322.70	1322.70	6.66	171.72	2.20
*	43.800	2545.00	.00	45.00	.00	1323.28	1323.28	7.53	195.29	2.78
*	43.800	2760.00	.00	45.00	.00	1323.39	1323.39	7.69	198.85	2.89
*	43.800	5148.00	.00	45.00	.00	1324.34	1324.34	9.15	221.31	3.84
*	49.000	1540.00	.00	45.00	.00	1326.05	1324.81	2.55	277.52	4.05
*	49.000	2545.00	.00	45.00	.00	1326.81	1325.19	3.12	285.91	4.81
*	49.000	2760.00	.00	45.00	.00	1326.96	1325.31	3.22	287.48	4.96
*	49.000	5148.00	.00	45.00	.00	1328.28	1326.06	4.13	302.06	6.28
	54.000	1540.00	.00	45.00	.00	1327.16	1325.85	2.53	303.27	3.16
	54.000	2545.00	.00	45.00	.00	1327.95	1326.36	2.97	328.81	3.95
	54.000	2760.00	.00	45.00	.00	1328.09	1326.44	3.05	331.38	4.09
	54.000	5148.00	.00	45.00	.00	1329.44	1327.22	3.79	342.93	5.44
	59.400	1540.00	.00	45.00	.00	1328.49	1327.26	3.02	220.67	2.49
	59.400	2545.00	.00	45.00	.00	1329.27	1327.75	3.72	226.32	3.27
	59.400	2760.00	.00	45.00	.00	1329.42	1327.85	3.85	227.34	3.42
	59.400	5148.00	.00	45.00	45.00	1330.71	1328.75	4.69	621.92	4.71

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
*	60.000	1540.00	.00	45.00	.00	1329.12	1329.12	5.98	234.61	1.12
*	60.000	2545.00	.00	45.00	.00	1329.57	1329.57	7.00	238.75	1.57
*	60.000	2760.00	.00	45.00	.00	1329.70	1329.65	7.00	239.97	1.70
*	60.000	5148.00	.00	45.00	45.00	1330.95	1330.65	5.82	640.42	2.95
*	64.000	1540.00	.00	30.00	.00	1331.02	1329.65	3.24	201.05	3.02
*	64.000	2545.00	.00	30.00	.00	1331.78	1330.25	4.00	223.06	3.78
*	64.000	2760.00	.00	30.00	.00	1331.91	1330.36	4.15	226.69	3.91
*	64.000	5148.00	.00	30.00	.00	1332.68	1331.42	6.06	249.15	4.68
*	69.500	1540.00	.00	30.00	.00	1332.00	1331.31	4.16	190.22	2.00
	69.500	2545.00	.00	30.00	.00	1332.80	1331.83	4.86	193.94	2.80
	69.500	2760.00	.00	30.00	.00	1332.95	1331.91	5.00	194.74	2.95
	69.500	5148.00	.00	30.00	.00	1334.19	1332.89	6.46	201.82	4.19
	75.500	1540.00	.00	30.00	.00	1333.47	1332.41	4.15	147.25	2.87
	75.500	2545.00	.00	30.00	.00	1334.24	1333.03	5.23	150.41	3.64
	75.500	2760.00	.00	30.00	.00	1334.39	1333.15	5.42	151.08	3.79
	75.500	5148.00	.00	30.00	.00	1335.75	1334.31	7.17	157.14	5.15
*	79.300	1540.00	.00	30.00	.00	1334.41	1333.88	6.03	108.57	2.41
*	79.300	2545.00	.00	30.00	.00	1335.21	1334.63	7.40	110.97	3.21
*	79.300	2760.00	.00	30.00	.00	1335.36	1334.77	7.65	111.38	3.36
	79.300	5148.00	.00	30.00	.00	1336.70	1336.18	10.05	114.80	4.70
*	83.700	1540.00	.00	15.00	.00	1335.53	1334.27	5.40	83.10	3.53
*	83.700	2545.00	.00	15.00	.00	1336.58	1335.17	6.83	84.52	4.58
*	83.700	2760.00	.00	15.00	.00	1336.77	1335.33	7.09	84.79	4.77
	83.700	5148.00	.00	15.00	.00	1339.06	1337.03	10.25	137.65	7.06
*	84.200	1540.00	.00	30.00	.00	1336.53	1336.53	7.58	116.43	2.53
*	84.200	2545.00	.00	30.00	.00	1337.24	1337.24	8.85	122.61	3.24
*	84.200	2760.00	.00	30.00	.00	1337.42	1337.42	8.90	125.30	3.42
*	84.200	5148.00	45.00	30.00	.00	1340.91	1338.72	6.07	287.37	6.91
*	86.200	1540.00	.00	30.00	.00	1338.32	1337.75	5.37	133.23	2.32
*	86.200	2545.00	.00	30.00	.00	1339.12	1338.41	6.45	137.82	3.12
*	86.200	2760.00	.00	30.00	.00	1339.25	1338.54	6.69	138.55	3.25
	86.200	5148.00	.00	30.00	.00	1341.14	1339.78	7.49	153.06	5.14
*	92.700	1540.00	.00	30.00	.00	1340.27	1339.47	2.62	374.99	1.77
*	92.700	2545.00	.00	30.00	.00	1341.00	1339.81	2.95	381.30	2.50
*	92.700	2760.00	.00	30.00	.00	1341.15	1339.88	3.00	382.54	2.65
*	92.700	5148.00	.00	30.00	.00	1342.77	1340.50	3.31	396.50	4.27
*	93.200	1540.00	.00	30.00	.00	1342.07	1342.07	4.99	401.78	.77
*	93.200	2545.00	.00	30.00	.00	1342.38	1342.38	5.90	403.52	1.08
*	93.200	2760.00	.00	30.00	.00	1342.44	1342.44	6.05	403.88	1.14
	93.200	5148.00	.00	30.00	.00	1343.02	1343.02	7.44	407.62	1.72

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
*	98.300	1540.00	.00	30.00	.00	1344.29	1343.53	2.28	513.79	2.09
*	98.300	2545.00	.00	30.00	.00	1344.74	1343.84	2.79	519.09	2.54
*	98.300	2760.00	.00	30.00	.00	1344.83	1343.91	2.88	520.11	2.63
*	98.300	5148.00	.00	30.00	.00	1345.69	1344.42	3.66	529.47	3.49
*	99.400	1540.00	.00	30.00	.00	1347.59	1347.59	4.32	620.16	.59
*	99.400	2545.00	.00	30.00	.00	1347.82	1347.82	5.09	627.97	.82
*	99.400	2760.00	.00	30.00	.00	1347.86	1347.86	5.23	629.48	.86
*	99.400	5148.00	.00	30.00	45.00	1348.32	1348.32	6.21	768.49	1.32
*	103.900	1540.00	.00	15.00	15.00	1349.61	1349.47	4.16	453.82	1.61
*	103.900	2545.00	.00	15.00	15.00	1349.92	1349.80	5.02	529.48	1.92
*	103.900	2760.00	.00	15.00	15.00	1349.97	1349.88	5.16	543.69	1.97
*	103.900	5148.00	15.00	15.00	15.00	1350.47	1350.47	6.15	939.99	2.47
	104.400	1540.00	.00	45.00	.00	1349.93	1349.16	2.51	409.16	1.93
	104.400	2545.00	45.00	45.00	45.00	1350.32	1349.48	3.23	627.49	2.32
	104.400	2760.00	45.00	45.00	45.00	1350.38	1349.54	3.37	635.95	2.38
*	104.400	5148.00	45.00	45.00	45.00	1350.90	1350.24	4.59	929.98	2.90
	109.400	1540.00	.00	45.00	.00	1351.47	1350.61	2.38	401.78	3.47
	109.400	2545.00	45.00	45.00	.00	1352.04	1350.93	2.90	441.78	4.04
	109.400	2760.00	45.00	45.00	45.00	1352.14	1350.98	3.00	443.35	4.14
	109.400	5148.00	45.00	45.00	45.00	1353.05	1351.56	3.93	456.52	5.05
*	114.400	1540.00	.00	45.00	.00	1353.38	1352.80	2.96	412.86	3.38
	114.400	2545.00	.00	45.00	.00	1353.88	1353.11	3.48	424.46	3.88
	114.400	2760.00	.00	45.00	.00	1353.98	1353.21	3.57	426.28	3.98
	114.400	5148.00	45.00	45.00	45.00	1354.89	1353.87	4.43	439.79	4.89
	119.400	1540.00	.00	45.00	.00	1357.18	1356.74	3.84	331.25	5.18
*	119.400	2545.00	.00	45.00	.00	1357.61	1357.12	4.66	366.25	5.61
*	119.400	2760.00	.00	45.00	.00	1357.69	1357.20	4.80	372.34	5.69
*	119.400	5148.00	45.00	45.00	45.00	1358.36	1357.95	6.10	448.00	6.36
*	123.700	1540.00	45.00	45.00	45.00	1359.18	1357.86	3.20	301.58	5.18
*	123.700	2545.00	45.00	45.00	45.00	1359.85	1358.69	3.87	324.55	5.85
*	123.700	2760.00	45.00	45.00	45.00	1359.98	1358.78	3.99	329.09	5.98
*	123.700	5148.00	45.00	45.00	45.00	1361.02	1359.65	5.10	396.31	7.02
*	130.400	1425.00	45.00	45.00	45.00	1362.03	1361.64	5.81	160.74	4.03
*	130.400	2231.00	45.00	45.00	45.00	1362.67	1362.29	6.57	192.28	4.67
*	130.400	2642.00	45.00	45.00	45.00	1362.89	1362.57	7.02	207.33	4.89
*	130.400	4472.00	45.00	45.00	45.00	1363.93	1363.46	7.78	268.30	5.93
*	135.400	1425.00	45.00	45.00	45.00	1364.61	1362.88	2.99	246.95	4.61
*	135.400	2231.00	45.00	45.00	45.00	1365.32	1363.47	3.56	331.05	5.32
*	135.400	2642.00	45.00	45.00	45.00	1365.63	1363.73	3.76	368.06	5.63
	135.400	4472.00	45.00	45.00	45.00	1366.60	1364.74	4.42	534.04	6.60

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
*	139.100	1425.00	.00	45.00	.00	1366.63	1366.63	6.24	188.86	2.63
*	139.100	2231.00	.00	45.00	.00	1367.06	1367.06	7.18	193.54	3.06
*	139.100	2642.00	.00	45.00	.00	1367.24	1367.24	7.66	195.45	3.24
*	139.100	4472.00	.00	45.00	.00	1368.00	1368.00	9.00	203.59	4.00
*	144.100	1425.00	.00	45.00	.00	1370.20	1368.56	3.46	142.28	4.20
*	144.100	2231.00	.00	45.00	.00	1371.07	1369.13	4.10	163.80	5.07
*	144.100	2642.00	.00	45.00	.00	1371.46	1369.40	4.33	175.05	5.46
*	144.100	4472.00	45.00	45.00	45.00	1372.33	1370.46	4.61	833.68	6.33
	148.600	1425.00	.00	45.00	.00	1371.28	1369.53	3.10	151.20	3.28
	148.600	2231.00	.00	45.00	.00	1372.25	1370.05	3.66	157.71	4.25
	148.600	2642.00	.00	45.00	.00	1372.68	1370.30	3.90	160.52	4.68
	148.600	4472.00	45.00	45.00	45.00	1373.58	1371.24	5.33	374.89	5.58
	152.100	1425.00	.00	45.00	.00	1372.13	1370.49	4.48	100.03	4.13
*	152.100	2231.00	.00	45.00	.00	1373.12	1371.27	5.26	114.94	5.12
*	152.100	2642.00	.00	45.00	.00	1373.55	1371.62	5.56	121.46	5.55
	152.100	4472.00	45.00	45.00	45.00	1375.06	1373.00	4.60	760.77	7.06
*	152.800	1425.00	15.00	15.00	15.00	1371.98	1371.13	7.89	45.62	3.98
*	152.800	2231.00	15.00	15.00	15.00	1373.56	.00	8.83	45.82	5.56
*	152.800	2642.00	15.00	15.00	15.00	1374.82	.00	8.32	111.18	6.82
	152.800	4472.00	15.00	15.00	15.00	1376.41	1376.41	9.04	339.72	8.41
*	153.100	1425.00	.00	45.00	.00	1372.78	1371.79	4.55	122.66	2.78
	153.100	2231.00	.00	45.00	45.00	1374.68	1372.39	4.00	144.54	4.68
	153.100	2642.00	.00	45.00	45.00	1375.79	1372.65	3.70	157.50	5.79
	153.100	4472.00	.00	45.00	45.00	1377.22	1373.71	4.84	157.50	7.22
	154.900	1425.00	.00	45.00	.00	1373.76	1372.71	5.80	80.58	3.76
*	154.900	2231.00	.00	45.00	.00	1375.04	1373.56	6.27	91.01	5.04
*	154.900	2642.00	.00	45.00	.00	1375.96	1373.94	5.97	98.45	5.96
*	154.900	4472.00	.00	45.00	45.00	1377.52	1375.38	6.54	633.50	7.52
*	156.800	1425.00	.00	15.00	.00	1374.35	1373.21	7.48	44.46	4.35
	156.800	2231.00	.00	15.00	.00	1375.54	.00	9.14	44.83	5.54
	156.800	2642.00	.00	15.00	.00	1376.85	.00	8.65	48.79	6.85
*	156.800	4472.00	15.00	15.00	15.00	1378.80	1378.80	7.96	462.78	8.80
*	162.700	1425.00	.00	45.00	.00	1377.79	1377.50	6.03	140.01	3.79
	162.700	2231.00	45.00	45.00	45.00	1379.09	1378.10	5.06	218.25	5.09
	162.700	2642.00	45.00	45.00	45.00	1379.63	1378.36	4.84	253.31	5.63
*	162.700	4472.00	45.00	45.00	45.00	1380.55	1379.37	5.92	346.16	6.55
*	167.700	1425.00	45.00	45.00	45.00	1381.78	1380.74	5.30	160.98	5.78
	167.700	2231.00	45.00	45.00	45.00	1382.10	1381.67	7.23	182.20	6.10
*	167.700	2642.00	45.00	45.00	45.00	1382.22	1381.96	8.17	191.04	6.22
	167.700	4472.00	45.00	45.00	45.00	1383.24	1383.02	9.21	276.86	7.24

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
	172.700	1425.00	45.00	45.00	45.00	1384.39	1383.49	4.29	197.72	4.39
	172.700	2231.00	45.00	45.00	45.00	1385.25	1384.10	4.57	227.30	5.25
*	172.700	2642.00	45.00	45.00	45.00	1385.63	1384.40	4.69	236.73	5.63
*	172.700	4472.00	45.00	45.00	45.00	1386.63	1385.31	5.65	327.13	6.63
	177.700	1425.00	45.00	45.00	45.00	1387.24	1386.37	4.67	167.44	3.24
	177.700	2231.00	45.00	45.00	45.00	1387.78	1387.02	5.78	191.52	3.78
	177.700	2642.00	45.00	45.00	45.00	1388.02	1387.31	6.22	234.19	4.02
	177.700	4472.00	45.00	45.00	45.00	1389.01	1388.34	7.27	269.17	5.01
*	181.200	1425.00	.00	45.00	.00	1390.13	1390.13	8.75	70.03	4.13
*	181.200	2231.00	.00	45.00	.00	1391.04	1391.04	9.64	81.27	5.04
*	181.200	2642.00	.00	45.00	.00	1391.42	1391.42	10.02	85.49	5.42
*	181.200	4472.00	45.00	45.00	45.00	1393.24	1393.24	8.35	506.58	7.24
*	184.000	1425.00	.00	45.00	.00	1394.38	1392.41	3.85	217.60	7.38
*	184.000	2231.00	.00	45.00	.00	1395.14	1393.40	4.00	273.72	8.14
*	184.000	2642.00	.00	45.00	.00	1395.48	1394.22	4.04	298.76	8.48
*	184.000	4472.00	.00	45.00	.00	1396.00	1395.12	5.47	336.64	9.00
*	189.000	1425.00	45.00	45.00	45.00	1396.53	1395.41	3.07	364.75	6.53
*	189.000	2231.00	45.00	45.00	45.00	1397.11	1396.04	3.48	401.18	7.11
*	189.000	2642.00	45.00	45.00	45.00	1397.36	1396.15	3.64	413.41	7.36
	189.000	4472.00	45.00	45.00	45.00	1398.31	1396.82	4.15	460.74	8.31
*	194.000	1425.00	.00	45.00	.00	1397.52	1395.98	2.21	262.31	3.52
	194.000	2231.00	.00	45.00	.00	1398.15	1396.33	2.75	267.06	4.15
	194.000	2642.00	.00	45.00	.00	1398.42	1396.49	2.99	269.23	4.42
	194.000	4472.00	.00	45.00	.00	1399.41	1397.12	3.88	278.07	5.41
*	199.000	1425.00	.00	45.00	45.00	1399.39	1399.39	7.26	192.63	7.39
*	199.000	2231.00	.00	45.00	45.00	1399.90	1399.90	7.93	274.44	7.90
*	199.000	2642.00	45.00	45.00	45.00	1400.03	1400.03	8.58	286.61	8.03
*	199.000	4472.00	45.00	45.00	45.00	1400.86	1400.74	9.02	319.55	8.86
	204.500	1425.00	.00	45.00	.00	1403.77	1401.93	6.62	49.24	7.77
	204.500	2231.00	.00	45.00	.00	1404.96	1403.28	8.03	56.61	8.96
	204.500	2642.00	45.00	45.00	.00	1405.54	1403.88	8.47	72.93	9.54
*	204.500	4472.00	45.00	45.00	45.00	1406.90	1406.90	9.98	250.41	10.90
*	205.100	1425.00	45.00	45.00	45.00	1404.52	1400.05	1.45	236.95	8.52
*	205.100	2231.00	45.00	45.00	45.00	1406.05	1400.58	1.70	276.13	10.05
*	205.100	2642.00	45.00	45.00	45.00	1406.75	1400.85	1.79	292.82	10.75
*	205.100	4472.00	45.00	45.00	45.00	1408.39	1401.67	2.35	361.53	12.39
*	208.000	1425.00	45.00	45.00	45.00	1404.51	1403.40	4.09	149.09	4.51
*	208.000	2231.00	45.00	45.00	45.00	1406.06	1403.94	3.90	158.33	6.06
*	208.000	2642.00	45.00	45.00	45.00	1406.75	1404.22	3.90	162.19	6.75
	208.000	4472.00	45.00	45.00	45.00	1408.37	1405.19	4.80	171.87	8.37

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
	-123.700	1425.00	45.00	45.00	45.00	1359.18	.00	2.97	301.33	5.18
	-123.700	2231.00	45.00	45.00	45.00	1359.85	.00	3.39	324.56	5.85
	-123.700	2642.00	45.00	45.00	45.00	1359.98	.00	3.82	329.11	5.98
	-123.700	4472.00	45.00	45.00	45.00	1361.02	.00	4.43	396.40	7.02
*	305.000	1.00	.00	45.00	.00	1362.01	1362.01	.55	163.49	.01
*	305.000	1.00	.00	45.00	.00	1362.01	1362.01	.54	163.50	.01
*	305.000	311.00	.00	45.00	.00	1362.46	1362.46	3.62	214.02	.46
*	305.000	2441.00	.00	45.00	.00	1363.58	1363.58	6.00	369.75	1.58
*	310.000	1.00	.00	45.00	.00	1366.02	1366.01	.13	372.57	.02
*	310.000	1.00	.00	45.00	.00	1366.02	1366.01	.13	372.56	.02
*	310.000	311.00	.00	45.00	.00	1366.60	1366.28	1.29	425.88	.60
*	310.000	2441.00	.00	45.00	.00	1367.87	1367.09	2.31	804.86	1.87
*	315.000	1.00	.00	45.00	.00	1369.58	1369.58	.95	24.50	.08
*	315.000	1.00	.00	45.00	.00	1369.59	1369.58	.92	24.85	.09
*	315.000	311.00	45.00	45.00	45.00	1370.14	1370.11	1.78	985.91	.64
*	315.000	2441.00	45.00	45.00	45.00	1370.75	1370.53	3.15	1010.69	1.25
*	320.000	1.00	.00	45.00	.00	1372.94	1372.88	.20	110.60	.14
*	320.000	1.00	.00	45.00	.00	1372.94	1372.88	.21	110.31	.14
*	320.000	311.00	.00	45.00	45.00	1373.67	1373.36	1.06	702.39	.87
	320.000	2441.00	45.00	45.00	45.00	1374.49	1373.98	2.51	904.24	1.69
*	325.000	1.00	.00	45.00	.00	1372.94	1372.45	.01	187.75	.54
*	325.000	1.00	.00	45.00	.00	1372.94	1372.45	.01	188.30	.54
*	325.000	311.00	45.00	45.00	.00	1374.16	1373.02	.72	697.92	1.76
*	325.000	2441.00	45.00	45.00	.00	1375.51	1374.24	1.80	769.02	3.11
*	330.000	1.00	.00	15.00	.00	1382.01	1382.01	.46	272.79	.01
*	330.000	1.00	.00	15.00	.00	1382.01	1382.01	.48	272.75	.01
*	330.000	311.00	.00	15.00	.00	1382.33	1382.33	3.20	308.67	.33
*	330.000	2441.00	.00	15.00	15.00	1383.21	1383.21	5.65	442.19	1.21
*	335.000	1.00	.00	15.00	15.00	1384.01	.00	.29	202.48	.01
*	335.000	1.00	.00	15.00	15.00	1384.03	.00	.28	202.48	.03
	335.000	311.00	.00	15.00	15.00	1384.44	1384.41	3.34	216.36	.44
*	335.000	2441.00	.00	15.00	15.00	1385.57	1385.57	6.66	256.87	1.57
*	340.000	1.00	.00	15.00	.00	1385.36	1385.35	.72	38.38	.06
*	340.000	1.00	.00	15.00	.00	1385.36	1385.35	.73	38.06	.06
	340.000	311.00	.00	15.00	.00	1385.97	1385.89	2.80	259.53	.67
	340.000	2441.00	15.00	15.00	15.00	1387.03	1386.90	5.18	529.71	1.73
*	342.000	1.00	.00	15.00	.00	1387.06	1387.06	1.01	31.43	.06
*	342.000	1.00	.00	15.00	.00	1387.06	1387.06	1.04	31.07	.06
*	342.000	311.00	.00	15.00	.00	1387.62	1387.62	3.20	311.52	.62
	342.000	2441.00	15.00	15.00	15.00	1388.36	1388.36	4.69	985.67	1.36

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
*	345.000	1.00	.00	45.00	.00	1388.04	1388.01	.13	235.02	.04
*	345.000	1.00	.00	45.00	.00	1388.04	1388.01	.13	235.06	.04
	345.000	311.00	.00	45.00	.00	1388.83	1388.37	1.28	369.45	.83
*	345.000	2441.00	.00	45.00	.00	1389.82	1389.29	3.50	546.61	1.82
*	350.000	1.00	.00	45.00	.00	1390.47	1390.47	1.45	11.22	.07
*	350.000	1.00	.00	45.00	.00	1390.47	1390.47	1.43	11.27	.07
*	350.000	311.00	.00	45.00	.00	1391.61	1391.49	2.45	337.06	1.21
	350.000	2441.00	45.00	45.00	45.00	1392.80	1392.27	2.58	903.01	2.40
*	355.400	1.00	.00	45.00	.00	1395.74	1395.69	.28	68.51	.11
*	355.400	1.00	.00	45.00	.00	1395.73	1395.69	.28	68.35	.10
*	355.400	311.00	.00	45.00	.00	1396.61	1396.25	1.46	439.12	.98
*	355.400	2441.00	45.00	45.00	.00	1397.17	1397.08	4.91	536.10	1.54
*	372.000	263.00	45.00	45.00	.00	1406.35	1405.83	2.17	258.72	1.65
*	372.000	560.00	45.00	45.00	.00	1406.64	1406.37	2.98	284.78	1.94
*	372.000	674.00	45.00	45.00	.00	1406.74	1406.46	3.17	291.89	2.04
*	372.000	2468.00	45.00	45.00	.00	1408.30	1407.25	3.64	332.90	3.60
*	377.000	263.00	.00	45.00	.00	1407.44	1406.68	.99	314.53	1.44
*	377.000	560.00	.00	45.00	.00	1407.95	1406.95	1.26	395.33	1.95
*	377.000	674.00	45.00	45.00	.00	1408.08	1407.04	1.35	433.14	2.08
	377.000	2468.00	45.00	45.00	.00	1409.39	1407.87	2.27	500.40	3.39
	382.000	263.00	45.00	45.00	45.00	1408.08	1407.37	1.20	364.60	1.48
	382.000	560.00	45.00	45.00	45.00	1408.57	1407.67	1.49	389.08	1.97
	382.000	674.00	45.00	45.00	45.00	1408.72	1407.76	1.58	395.14	2.12
	382.000	2468.00	45.00	45.00	45.00	1410.09	1408.63	2.57	550.00	3.49
*	387.000	263.00	.00	45.00	.00	1409.51	1409.13	2.35	154.66	1.51
*	387.000	560.00	.00	45.00	.00	1409.90	1409.52	3.11	197.77	1.90
*	387.000	674.00	45.00	45.00	45.00	1410.03	1409.63	3.26	362.66	2.03
*	387.000	2468.00	45.00	45.00	45.00	1411.25	1410.63	4.03	431.61	3.25
*	392.000	263.00	45.00	45.00	.00	1412.40	1412.27	1.93	372.12	.40
*	392.000	560.00	45.00	45.00	.00	1412.86	1412.44	1.81	425.26	.86
*	392.000	674.00	45.00	45.00	.00	1412.97	1412.49	1.93	436.71	.97
	392.000	2468.00	45.00	45.00	.00	1413.81	1413.14	3.40	507.60	1.81
*	397.000	333.00	45.00	45.00	45.00	1412.53	1406.29	.67	1036.07	8.53
*	397.000	779.00	45.00	45.00	45.00	1413.03	1407.55	1.05	1200.00	9.03
*	397.000	1071.00	45.00	45.00	45.00	1413.17	1408.16	1.30	1200.00	9.17
*	397.000	2103.00	45.00	45.00	45.00	1414.19	1409.76	1.33	1200.00	10.19
*	402.000	333.00	.00	45.00	.00	1412.57	1408.64	1.61	96.71	6.57
*	402.000	779.00	45.00	45.00	.00	1413.10	1410.07	2.84	228.92	7.10
*	402.000	1071.00	45.00	45.00	.00	1413.28	1410.75	3.45	269.32	7.28
	402.000	2103.00	45.00	45.00	45.00	1414.29	1413.27	3.15	959.58	8.29

	SECNO	Q	K*XNL	K*XNCH	K*XNR	CWSEL	CRIWS	VCH	TOPWID	DEPTH
*	407.000	333.00	.00	45.00	.00	1413.31	1412.08	2.69	78.39	3.31
	407.000	779.00	.00	45.00	.00	1414.81	1413.13	2.55	199.68	4.81
	407.000	1071.00	.00	45.00	.00	1415.32	1413.57	2.53	261.85	5.32
	407.000	2103.00	45.00	45.00	45.00	1416.07	1414.75	3.20	752.30	6.07
	412.000	333.00	.00	45.00	.00	1415.65	1415.06	3.31	72.42	1.65
	412.000	779.00	.00	45.00	.00	1416.81	1415.80	3.97	93.35	2.81
	412.000	1071.00	.00	45.00	.00	1417.25	1416.19	4.48	101.99	3.25
	412.000	2103.00	45.00	45.00	45.00	1418.31	1417.26	5.44	570.68	4.31
*	417.000	333.00	.00	45.00	.00	1417.23	1415.78	2.17	74.66	3.23
*	417.000	779.00	.00	45.00	.00	1418.49	1416.58	3.08	84.74	4.49
*	417.000	1071.00	.00	45.00	.00	1419.09	1416.99	3.50	89.70	5.09
*	417.000	2103.00	45.00	45.00	45.00	1420.44	1418.13	4.83	127.35	6.44

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=     15.600  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     15.600  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     15.600  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     15.600  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     16.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     16.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     20.500  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     20.500  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     20.500  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     24.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     24.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     24.200  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     24.200  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     25.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     25.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     25.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     25.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     25.300  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     25.300  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     25.300  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     25.300  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     25.300  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     25.300  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     25.300  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     25.300  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     28.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     28.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     28.700  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     28.700  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     32.500  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     32.500  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     32.500  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     36.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     36.900  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     36.900  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     36.900  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     36.900  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     36.900  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     36.900  PROFILE=  3  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     38.100  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO=    38.100  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    38.100  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    38.100  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    38.100  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    38.100  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    38.100  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    38.100  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    43.300  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    43.800  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    43.800  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    43.800  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    43.800  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    43.800  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    43.800  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    43.800  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    43.800  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    49.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    49.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    49.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    49.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    60.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    60.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    60.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    60.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
WARNING SECNO=    60.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    60.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    64.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    64.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    64.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    64.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    69.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    79.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    79.300  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    79.300  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    79.300  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    83.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    83.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    83.700  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    84.200  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    84.200  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    84.200  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    84.200  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    84.200  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    84.200  PROFILE=  3  MINIMUM SPECIFIC ENERGY
WARNING SECNO=    84.200  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=     86.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     86.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     86.200  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     92.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     92.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     92.700  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     92.700  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     93.200  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     93.200  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     93.200  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     93.200  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     93.200  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     93.200  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     93.200  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     93.200  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     98.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     98.300  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     98.300  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     98.300  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     99.400  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     99.400  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     99.400  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     99.400  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     99.400  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     99.400  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     99.400  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     99.400  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    103.900  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    103.900  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    103.900  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=    103.900  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    103.900  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    104.400  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    114.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    119.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    119.400  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    119.400  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    123.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    123.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    123.700  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    123.700  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    130.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    130.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=    130.400  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    130.400  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    135.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    135.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    135.400  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    135.400  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    139.100  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    139.100  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    139.100  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    139.100  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    139.100  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    139.100  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    139.100  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    139.100  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    144.100  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    144.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    144.100  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    144.100  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    152.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    152.100  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    152.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    152.800  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    152.800  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=    152.800  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    152.800  PROFILE=  4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    152.800  PROFILE=  4  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    153.100  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    154.900  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    154.900  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    154.900  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    156.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=    156.800  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    156.800  PROFILE=  4  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    156.800  PROFILE=  4  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    162.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    162.700  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    167.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    167.700  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    172.700  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    172.700  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    181.200  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    181.200  PROFILE=  1  MINIMUM SPECIFIC ENERGY
```

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CAUTION SECNO=    181.200  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    181.200  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    181.200  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    181.200  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    181.200  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    181.200  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    184.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    184.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    184.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=    184.000  PROFILE=  4  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=    184.000  PROFILE=  4  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    189.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    189.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    189.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    189.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    194.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    199.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    199.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    199.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    199.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    199.000  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    199.000  PROFILE=  3  MINIMUM SPECIFIC ENERGY
WARNING SECNO=    199.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    204.500  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    204.500  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    205.100  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    205.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    205.100  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    205.100  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    208.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    208.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    208.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    208.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    305.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    305.000  PROFILE=  1  SLOPE TOO STEEP
CAUTION SECNO=    305.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    305.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    305.000  PROFILE=  2  SLOPE TOO STEEP
CAUTION SECNO=    305.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    305.000  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    305.000  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    305.000  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    305.000  PROFILE=  4  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=    310.000  PROFILE=  1  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=    310.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION SECNO=    310.000  PROFILE=  2  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=    310.000  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=    310.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    310.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    315.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    315.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    315.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    315.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    320.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    320.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    320.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    320.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    325.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    325.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    325.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    325.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    330.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    330.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    330.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    330.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    330.000  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    330.000  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    330.000  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    330.000  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    335.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    335.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO=    335.000  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    335.000  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    340.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    340.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    342.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    342.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    342.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    342.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    342.000  PROFILE=  3  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    342.000  PROFILE=  3  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    342.000  PROFILE=  4  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    342.000  PROFILE=  4  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    345.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    345.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    345.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    350.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    350.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    350.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    350.000  PROFILE=  2  MINIMUM SPECIFIC ENERGY
```

```
WARNING SECNO=    350.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    355.400  PROFILE=  1  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=    355.400  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=    355.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    355.400  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    355.400  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    372.000  PROFILE=  1  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=    372.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=    372.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    372.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    372.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    377.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    377.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    377.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    377.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    387.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    387.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    387.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    387.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    392.000  PROFILE=  1  WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO=    392.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=    392.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    392.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    397.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    397.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    397.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    397.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    402.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    402.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    402.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    402.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    407.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    417.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    417.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    417.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    417.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

FLOOD INSURANCE ZONE DATA FOR

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION UMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND 10	2	0.2
10.000	0.	-3.02	-.76	.00
15.600	560.	-3.39	-1.05	.00
16.000	600.	-2.70	-1.07	-.06
20.500	1050.	-.55	-.64	.83
24.200	1420.	-1.22	-.09	1.81
25.000	1500.	-1.24	-.09	3.35
25.300	1530.	-.80	-.14	1.25
28.700	1870.	-1.19	-.19	1.81
32.500	2250.	-1.14	-.18	1.72
36.200	2620.	-.50	-.10	1.08
36.900	2690.	-.41	-.06	.74
38.100	2810.	-.50	-.08	.81
43.300	3330.	-.79	-.12	.44
43.800	3380.	-.68	-.10	.96
49.000	3900.	-.90	-.14	1.32
54.000	4400.	-.93	-.15	1.35
59.400	4940.	-.92	-.14	1.29
60.000	5000.	-.58	-.13	1.26
64.000	5400.	-.89	-.12	.78
69.500	5950.	-.95	-.14	1.24
75.500	6550.	-.92	-.15	1.36
79.300	6930.	-.95	-.15	1.34
83.700	7370.	-1.24	-.20	2.29
84.200	7420.	-.89	-.18	3.49
86.200	7620.	-.92	-.13	1.89
92.700	8270.	-.88	-.15	1.62
93.200	8320.	-.37	-.06	.58
98.300	8830.	-.54	-.09	.86
99.400	8940.	-.27	-.04	.46
103.900	9390.	-.36	-.05	.50
104.400	9440.	-.45	-.07	.51
109.400	9940.	-.68	-.10	.91
114.400	10440.	-.59	-.10	.91
119.400	10940.	-.50	-.08	.67
123.700	11370.	-.79	-.12	1.05
130.400	12040.	-.85	-.22	1.04
135.400	12540.	-1.01	-.30	.98
139.100	12910.	-.61	-.18	.76
144.100	13410.	-1.26	-.39	.87
148.600	13860.	-1.40	-.42	.90
152.100	14210.	-1.42	-.43	1.51
152.800	14280.	-2.83	-1.25	1.60
153.100	14310.	-3.01	-1.11	1.43
154.900	14490.	-2.20	-.92	1.56

156.800	14680.	-2.50	-1.31	1.96
162.700	15270.	-1.84	-.54	.92
167.700	15770.	-.44	-.11	1.03
172.700	16270.	-1.23	-.37	1.00
177.700	16770.	-.79	-.24	.99
181.200	17120.	-1.29	-.39	1.82
184.000	17400.	-1.10	-.34	.52
189.000	17900.	-.83	-.25	.95
194.000	18400.	-.90	-.27	.98
199.000	18910.	-.63	-.13	.83
204.500	19460.	-1.77	-.58	1.36
205.100	19520.	-2.23	-.70	1.64
208.000	19840.	-2.24	-.69	1.62
-123.700	20270.	-.79	-.12	1.05
305.000	20820.	-.45	-.45	1.12
310.000	21320.	-.58	-.58	1.27
315.000	21820.	-.56	-.56	.61
320.000	22320.	-.73	-.72	.82
325.000	22820.	-1.22	-1.21	1.36
330.000	23320.	-.33	-.33	.88
335.000	23820.	-.43	-.42	1.13
340.000	24320.	-.61	-.61	1.06
342.000	24520.	-.56	-.56	.73
345.000	24820.	-.79	-.79	.99
350.000	25320.	-1.14	-1.14	1.19
355.400	25860.	-.87	-.87	.56
372.000	27520.	-.39	-.10	1.55
377.000	28020.	-.64	-.14	1.31
382.000	28520.	-.64	-.14	1.37
387.000	29020.	-.52	-.13	1.22
392.000	29520.	-.57	-.10	.84
397.000	30020.	-.64	-.14	1.02
402.000	30520.	-.72	-.18	1.01
407.000	31020.	-2.01	-.51	.75
412.000	31520.	-1.61	-.44	1.06
417.000	32020.	-1.86	-.61	1.35
WEIGHTED AVG FOR REACH		-.96	-.35	1.08

FHF FOR THE REACH = 010 WITH 82.7 PERCENT OF THE REACH WITHIN .5 FEET
ZONE FOR THE REACH = A 2

APPENDIX M

HEC-2 Floodway Output Data

```
*********************************************
*  HEC-2 WATER SURFACE PROFILES             *
*                                           *
*  Version   4.6.2;  May 1991               *
*                                           *
*  RUN DATE    09OCT95    TIME    08:55:16  *
*********************************************
```

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

```
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
```

THIS RUN EXECUTED 09OCT95 08:55:16

```
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
************************************


T3      100 YEAR FLOODPLAIN

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

    -10        2                                                    1308.41

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1                 -1


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

    110       115       200

    LPRNT     NUMSEC                 ********REQUESTED SECTION NUMBERS********

    -10       -10
```

```
T1      SCATTER WASH 100-YEAR AND FLOODWAY PROFILES
T2      Reach - Skunk Creek Confluence to I-17   **FILENAME:  344FLW.DAT**
T3      Floodway Profile

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

    -10         3                                                     1308.41

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

    15                 -1
```

THIS RUN EXECUTED 09OCT95 08:56:01

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

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

100 YEAR FLOODPLAIN

SUMMARY PRINTOUT TABLE 110

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	10.000	1308.41	.00	1308.64	306.20	.00	8450.00	.00	306.20	437.20	437.20	743.40	743.40
	10.000	1308.41	.00	1308.64	306.20	.00	8450.00	.00	.08	437.20	437.20	743.40	743.40
*	15.600	1309.02	.00	1309.11	186.89	.00	2755.13	4.87	.00	.00	520.40	700.60	.00
*	15.600	1309.02	.00	1309.11	177.59	.00	2760.00	.00	.00	520.40	520.40	700.60	700.60
	16.000	1309.00	.00	1309.27	178.76	.00	2760.00	.00	.00	.00	493.70	704.90	.00
	16.000	1309.00	.00	1309.27	178.78	.00	2760.00	.00	.00	493.70	493.70	704.90	704.90
*	20.500	1309.16	.00	1309.77	159.84	.00	2760.00	.00	.00	.00	441.70	715.50	.00
*	20.500	1309.16	.00	1309.78	159.78	.00	2760.00	.00	.00	441.70	441.70	715.50	715.50
*	24.200	1311.18	.00	1311.53	128.14	.00	2760.00	.00	.00	.00	516.80	699.70	.00
*	24.200	1311.18	.00	1311.53	128.19	.00	2760.00	.00	.00	516.80	516.80	699.70	699.70
*	25.000	1311.25	.00	1311.66	104.38	.00	2760.00	.00	.00	.00	559.90	672.10	.00
*	25.000	1311.25	.00	1311.66	104.38	.00	2760.00	.00	.00	516.80	559.90	672.10	699.70
*	25.300	1312.54	.00	1313.73	132.51	.00	2760.00	.00	.00	.00	527.90	684.60	.00
*	25.300	1312.54	.00	1313.73	132.51	.00	2760.00	.00	.00	527.90	527.90	684.60	684.60
*	28.700	1314.53	.00	1314.62	296.65	.00	2760.00	.00	.00	.00	347.90	685.70	.00
*	28.700	1314.54	.00	1314.62	296.59	.00	2760.00	.00	.00	347.90	347.90	685.70	685.70
*	32.500	1315.06	.00	1315.36	299.69	.00	2760.00	.00	.00	.00	345.00	690.00	.00
*	32.500	1315.07	.01	1315.36	299.78	.00	2760.00	.00	.00	345.00	345.00	690.00	690.00
	36.200	1317.01	.00	1317.21	345.18	.00	2760.00	.00	.00	.00	384.90	803.20	.00
	36.200	1317.01	.00	1317.20	345.12	.00	2760.00	.00	.00	384.90	384.90	803.20	803.20
	36.900	1317.44	.00	1318.07	352.49	.00	2760.00	.00	.00	.00	384.90	803.20	.00
	36.900	1317.44	.00	1318.07	352.46	.00	2760.00	.00	.00	384.90	384.90	803.20	803.20

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	38.100	1319.72	.00	1320.40	316.61	.00	2760.00	.00	.00	.00	460.00	800.00	.00
*	38.100	1319.73	.00	1320.40	316.70	.00	2760.00	.00	.12	460.00	460.00	800.00	800.00
	43.300	1321.77	.00	1322.03	204.61	.00	2760.00	.00	.00	.00	494.80	746.80	.00
	43.300	1321.77	.00	1322.02	204.63	.00	2760.00	.00	.00	494.80	494.80	746.80	746.80
*	43.800	1323.39	.00	1324.31	198.88	.00	2760.00	.00	.00	.00	491.10	744.50	.00
*	43.800	1323.39	.00	1324.31	198.87	.00	2760.00	.00	.00	491.10	491.10	744.50	744.50
*	49.000	1326.95	.00	1327.11	287.49	.00	2760.00	.00	.00	.00	436.90	757.40	.00
*	49.000	1326.96	.00	1327.12	287.48	.00	2760.00	.00	.00	436.90	436.90	757.40	757.40
	54.000	1328.09	.00	1328.23	331.38	.00	2760.00	.00	.00	.00	396.10	760.80	.00
	54.000	1328.09	.01	1328.24	331.36	.00	2760.00	.00	.00	396.10	396.10	760.80	760.80
	59.400	1329.41	.00	1329.64	227.32	.00	2760.00	.00	.00	.00	488.90	747.10	.00
	59.400	1329.42	.01	1329.65	227.34	.00	2760.00	.00	.04	488.90	488.90	747.10	747.10
*	60.000	1329.69	.00	1330.46	239.97	.00	2760.00	.00	.00	.00	488.90	747.10	.00
*	60.000	1329.70	.01	1330.46	240.02	.00	2760.00	.00	.15	488.90	488.90	747.10	747.10
*	64.000	1331.90	.00	1332.17	226.77	.00	2760.00	.00	.00	.00	447.30	726.00	.00
*	64.000	1331.90	.00	1332.17	226.69	.00	2760.00	.00	.00	447.30	447.30	726.00	726.00
	69.500	1332.94	.00	1333.33	194.72	.00	2760.00	.00	.00	.00	492.90	702.80	.00
	69.500	1332.95	.00	1333.34	194.72	.00	2760.00	.00	.00	492.90	492.90	702.80	702.80
	75.500	1334.39	.00	1334.85	151.08	.00	2760.00	.00	.00	.00	513.30	679.50	.00
	75.500	1334.39	.00	1334.85	151.08	.00	2760.00	.00	.00	513.30	513.30	679.50	679.50
*	79.300	1335.36	.00	1336.28	111.35	.00	2760.00	.00	.00	.00	476.69	630.50	.00
*	79.300	1335.37	.00	1336.27	111.38	.00	2760.00	.00	.00	476.69	476.69	630.50	630.51
*	83.700	1336.79	.00	1337.56	84.81	.00	2760.00	.00	.00	.00	513.16	608.17	.00
*	83.700	1336.79	.00	1337.56	84.81	.00	2760.00	.00	.00	513.16	513.16	608.17	608.17
*	84.200	1337.42	.00	1338.65	125.32	.00	2760.00	.00	410.80	271.00	431.17	605.78	681.80
*	84.200	1337.42	.00	1338.65	125.32	.00	2760.00	.00	.00	431.17	431.17	605.78	605.78
*	86.200	1339.25	.00	1339.94	138.55	.00	2760.00	.00	.00	.00	513.70	677.50	.00
*	86.200	1339.25	.00	1339.94	138.56	.00	2760.00	.00	.00	513.70	513.70	677.50	677.50
*	92.700	1341.15	.00	1341.29	382.54	.00	2760.00	.00	.00	.00	379.10	795.40	.00
*	92.700	1341.15	.00	1341.29	382.53	.00	2760.00	.00	.00	379.10	379.10	795.40	795.40
*	93.200	1342.44	.00	1343.01	403.88	.00	2760.00	.00	.00	.00	349.20	821.10	.00
*	93.200	1342.44	.00	1343.01	403.88	.00	2760.00	.00	.00	349.20	349.20	821.10	821.10
	98.300	1344.83	.00	1344.95	520.14	.00	2760.00	.00	.00	.00	273.70	867.50	.00
	98.300	1344.83	.00	1344.96	520.12	.00	2760.00	.00	.00	273.70	273.70	867.50	867.50

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
*	99.400	1347.86	.00	1348.29	629.49	.00	2760.00	.00	.00	.00	202.80	901.00	.00
*	99.400	1347.86	.00	1348.29	629.51	.00	2760.00	.00	.04	202.80	202.80	901.00	901.00
*	103.900	1349.97	.00	1350.38	543.65	.00	2693.00	67.00	.00	.00	350.00	810.00	.00
*	103.900	1349.99	.01	1350.41	457.76	.00	2760.00	.00	.21	350.00	350.00	810.00	810.00
	104.400	1350.38	.00	1350.56	635.86	77.56	2676.55	5.89	.00	.00	355.60	766.40	.00
	104.400	1350.41	.03	1350.60	410.80	.00	2760.00	.00	.19	355.60	355.60	766.40	766.40
	109.400	1352.14	.00	1352.28	443.35	2.37	2757.63	.00	.00	.00	433.80	839.20	.00
	109.400	1352.16	.02	1352.30	405.40	.00	2760.00	.00	.02	433.80	433.80	839.20	839.20
	114.400	1353.98	.00	1354.18	426.28	.00	2760.00	.00	.00	.00	421.10	847.80	.00
	114.400	1353.97	.00	1354.17	426.20	.00	2760.00	.00	.00	421.10	421.10	847.80	847.80
*	119.400	1357.69	.00	1358.05	372.33	.00	2760.00	.00	.00	.00	396.30	794.00	.00
*	119.400	1357.69	.00	1358.05	372.64	.00	2760.00	.00	.01	396.30	396.30	794.00	794.00
*	123.700	1359.98	.00	1360.19	329.13	382.06	2091.56	286.38	.00	.00	494.40	641.30	.00
*	123.700	1360.29	.32	1360.66	146.90	.00	2760.00	.00	.33	494.40	494.40	641.30	641.30
*	130.400	1362.89	.00	1363.62	207.19	102.41	2519.27	20.31	.00	.00	531.00	663.70	.00
*	130.400	1363.46	.58	1364.03	132.70	.00	2642.00	.00	.13	531.00	531.00	663.70	663.70
	135.400	1365.62	.00	1365.82	368.48	135.36	2398.47	108.17	.00	.00	574.40	742.20	.00
*	135.400	1365.76	.13	1366.01	167.80	.00	2642.00	.00	.21	574.40	574.40	742.20	742.20
*	139.100	1367.24	.00	1368.15	195.45	.00	2642.00	.00	.00	.00	475.30	701.20	.00
*	139.100	1367.37	.13	1368.16	196.86	.00	2642.00	.00	.00	475.30	475.30	701.20	701.20
*	144.100	1371.46	.00	1371.75	175.06	.00	2642.00	.00	.00	.00	502.50	693.20	.00
*	144.100	1371.37	-.08	1371.68	172.63	.00	2642.00	.00	.23	502.50	502.50	693.20	693.20
	148.600	1372.68	.00	1372.91	160.53	.00	2642.00	.00	.00	.00	535.70	698.40	.00
	148.600	1372.65	-.03	1372.89	160.34	.00	2642.00	.00	.02	535.70	535.70	698.40	698.40
*	152.100	1373.55	.00	1374.03	121.42	.00	2642.00	.00	.00	.00	505.08	776.36	.00
*	152.100	1373.54	-.01	1374.02	121.28	.00	2642.00	.00	.08	505.08	505.08	776.36	776.36
*	152.800	1374.81	.00	1375.87	110.78	.17	2593.78	48.05	.00	.00	554.10	602.04	.00
	152.800	1373.00	-1.81	1375.10	45.75	.13	2641.75	.13	.00	.00	554.10	602.04	.00
	153.100	1375.78	.00	1375.99	157.50	.00	2596.29	45.71	157.50	530.00	512.43	660.48	687.50
	153.100	1375.12	-.67	1375.37	148.05	.00	2642.00	.00	.41	512.43	512.43	660.48	660.48
*	154.900	1375.96	.00	1376.52	98.45	.00	2642.00	.00	.00	.00	565.00	670.00	.00
*	154.900	1375.39	-.57	1376.11	93.79	.00	2642.00	.00	.02	565.00	565.00	670.00	670.00
	156.800	1376.85	.00	1378.01	48.79	.00	2642.00	.00	.00	.00	515.45	564.26	.00
	156.800	1375.91	-.94	1377.51	44.94	.00	2642.00	.00	.00	.00	515.45	564.26	.00

	SECNO	CWSEL	DIFKWS	EG	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR	STENCR
	162.700	1379.63	.00	1379.97	253.41	116.92	2465.26	59.81	.00	.00	510.20	659.70	.00
	162.700	1379.73	.10	1380.13	149.50	.00	2642.00	.00	.15	510.20	510.20	659.70	659.70
*	167.700	1382.21	.00	1383.07	190.79	460.07	2045.37	136.56	.00	.00	574.80	632.90	.00
*	167.700	1382.53	.31	1384.03	58.10	.00	2642.00	.00	.36	574.80	574.80	632.90	632.90
*	172.700	1385.62	.00	1385.94	236.86	187.64	2415.93	38.43	.00	.00	536.00	687.30	.00
*	172.700	1386.35	.73	1386.63	151.30	.00	2642.00	.00	.16	536.00	536.00	687.30	687.30
	177.700	1388.02	.00	1388.57	233.80	207.92	2321.76	112.33	.00	.00	562.60	671.60	.00
*	177.700	1388.16	.14	1388.88	109.00	.00	2642.00	.00	.22	562.60	562.60	671.60	671.60
*	181.200	1391.42	.00	1392.98	85.50	.00	2642.00	.00	.00	.00	635.10	726.90	.00
	181.200	1391.69	.26	1393.00	88.42	.00	2642.00	.00	.02	635.10	635.10	726.90	726.90
*	184.000	1395.48	.00	1395.73	298.77	.00	2642.00	.00	.00	.00	630.30	967.30	.00
*	184.000	1395.40	-.08	1395.67	292.76	.00	2642.00	.00	.30	630.30	630.30	967.30	967.30
*	189.000	1397.36	.00	1397.53	413.23	51.42	1778.10	812.47	.00	.00	552.60	704.50	.00
	189.000	1397.74	.38	1398.10	151.90	.00	2642.00	.00	.42	552.60	552.60	704.50	704.50
	194.000	1398.43	.00	1398.56	269.27	.00	2642.00	.00	.00	.00	589.60	931.40	.00
*	194.000	1398.95	.52	1399.05	273.46	.00	2642.00	.00	.00	589.60	589.60	931.40	931.40
	199.000	1400.01	.00	1400.82	285.92	.00	1469.68	1172.32	.00	.00	620.50	669.80	.00
*	199.000	1400.94	.93	1402.47	91.74	.00	2257.95	384.05	.52	620.50	620.50	669.80	714.01
	204.500	1405.57	.00	1406.67	74.57	1.51	2640.49	.00	.00	.00	566.60	630.20	.00
*	204.500	1406.34	.78	1407.17	63.60	.00	2642.00	.00	.07	566.60	566.60	630.20	630.20
*	205.100	1406.76	.00	1406.81	293.10	313.10	1933.98	394.92	.00	.00	588.50	719.80	.00
*	205.100	1407.22	.46	1407.28	161.83	136.36	2343.97	161.67	.21	573.20	588.50	719.80	735.03
*	208.000	1406.76	.00	1406.99	162.27	19.71	2489.19	133.09	.00	.00	487.30	618.50	.00
*	208.000	1407.26	.49	1407.47	131.20	.00	2642.00	.00	.08	487.30	487.30	618.50	618.50

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=     15.600  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     15.600  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     20.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     20.500  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     24.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     24.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     25.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     25.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     25.300  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     25.300  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     25.300  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     25.300  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     25.300  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     25.300  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     28.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     28.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.500  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     32.500  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     36.900  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     36.900  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     36.900  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     36.900  PROFILE=  2  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     38.100  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     38.100  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     38.100  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     38.100  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     38.100  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     38.100  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=     43.800  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     43.800  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     43.800  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     43.800  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     43.800  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     43.800  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     49.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     49.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     60.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     60.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     64.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=     64.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     79.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     79.300  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     83.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     83.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     84.200  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     84.200  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     84.200  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     84.200  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     86.200  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     86.200  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     92.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     92.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     93.200  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     93.200  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     93.200  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     93.200  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     93.200  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     93.200  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     98.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     98.300  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     99.400  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     99.400  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     99.400  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     99.400  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     99.400  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     99.400  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    103.900  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    103.900  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    119.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    119.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    123.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    123.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    130.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    130.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    135.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    135.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    139.100  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    139.100  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=    139.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=    144.100  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    144.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    152.100  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    152.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    152.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    154.900  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    154.900  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    167.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    167.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    172.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    172.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    177.700  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    181.200  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    181.200  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    184.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    184.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    189.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    194.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    199.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    199.000  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    199.000  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=    199.000  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    199.000  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    199.000  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    204.500  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    205.100  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    205.100  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    208.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    208.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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odway width summary: 100 YEAR FLOODPLAIN
Profile No. 2

Section Number	Elevation Increase	Top Width	Left Encroach Station	Left Sta Distance From Center	Center Station	Right Sta Distance From Center	Right Encroach Station
10.000	.00	306.20	437.20	153.10	590.30	153.10	743.40
15.600	.00	180.20	520.40	90.10	610.50	90.10	700.60
16.000	.00	211.20	493.70	105.60	599.30	105.60	704.90
20.500	.00	273.80	441.70	136.90	578.60	136.90	715.50
24.200	.00	182.90	516.80	91.45	608.25	91.45	699.70
25.000	.00	182.90	516.80	99.20	616.00	83.70	699.70
25.300	.00	156.70	527.90	78.35	606.25	78.35	684.60
28.700	.00	337.80	347.90	168.90	516.80	168.90	685.70
32.500	.01	345.00	345.00	172.50	517.50	172.50	690.00
36.200	.00	418.30	384.90	209.15	594.05	209.15	803.20
36.900	.00	418.30	384.90	209.15	594.05	209.15	803.20
38.100	.00	340.00	460.00	170.00	630.00	170.00	800.00
43.300	.00	252.00	494.80	126.00	620.80	126.00	746.80
43.800	.00	253.40	491.10	126.70	617.80	126.70	744.50
49.000	.00	320.50	436.90	160.25	597.15	160.25	757.40
54.000	.01	364.70	396.10	182.35	578.45	182.35	760.80
59.400	.01	258.20	488.90	129.10	618.00	129.10	747.10
60.000	.01	258.20	488.90	129.10	618.00	129.10	747.10
64.000	.00	278.70	447.30	139.35	586.65	139.35	726.00
69.500	.00	209.90	492.90	104.95	597.85	104.95	702.80
75.500	.00	166.20	513.30	83.10	596.40	83.10	679.50
79.300	.00	153.82	476.69	76.91	553.60	76.91	630.51
83.700	.00	95.01	513.16	47.50	560.67	47.50	608.17
84.200	.00	174.61	431.17	87.30	518.48	87.31	605.78
86.200	.00	163.80	513.70	81.90	595.60	81.90	677.50
92.700	.00	416.30	379.10	208.15	587.25	208.15	795.40
93.200	.00	471.90	349.20	235.95	585.15	235.95	821.10
98.300	.00	593.80	273.70	296.90	570.60	296.90	867.50
99.400	.00	698.20	202.80	349.10	551.90	349.10	901.00
103.900	.01	460.00	350.00	230.00	580.00	230.00	810.00
104.400	.03	410.80	355.60	205.40	561.00	205.40	766.40
109.400	.02	405.40	433.80	202.70	636.50	202.70	839.20
114.400	.00	426.70	421.10	213.35	634.45	213.35	847.80
119.400	.00	397.70	396.30	198.85	595.15	198.85	794.00
123.700	.32	146.90	494.40	73.45	567.85	73.45	641.30
130.400	.58	132.70	531.00	66.35	597.35	66.35	663.70
135.400	.13	167.80	574.40	83.90	658.30	83.90	742.20
139.100	.13	225.90	475.30	112.95	588.25	112.95	701.20
144.100	-.08	190.70	502.50	95.35	597.85	95.35	693.20
148.600	-.03	162.70	535.70	81.35	617.05	81.35	698.40
152.100	-.01	271.29	505.08	135.64	640.72	135.64	776.36
152.800	*** Encroachments not set ***						
153.100	-.67	148.05	512.43	74.02	586.45	74.03	660.48
154.900	-.57	105.00	565.00	52.50	617.50	52.50	670.00
156.800	*** Encroachments not set ***						
162.700	.10	149.50	510.20	74.75	584.95	74.75	659.70
167.700	.31	58.10	574.80	29.05	603.85	29.05	632.90

172.700	.73	151.30	536.00	75.65	611.65	75.65	687.30
177.700	.14	109.00	562.60	54.50	617.10	54.50	671.60
181.200	.26	91.80	635.10	45.90	681.00	45.90	726.90
184.000	-.08	337.00	630.30	168.50	798.80	168.50	967.30
189.000	.38	151.90	552.60	75.95	628.55	75.95	704.50
194.000	.52	341.80	589.60	170.90	760.50	170.90	931.40
199.000	.93	93.51	620.50	24.65	645.15	68.86	714.01
204.500	.78	63.60	566.60	31.80	598.40	31.80	630.20
205.100	.46	161.83	573.20	80.95	654.15	80.88	735.03
208.000	.49	131.20	487.30	65.60	552.90	65.60	618.50

FLOODWAY DATA, 100 YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
10.000	306.	2180.	3.9	1308.4	1308.4	.0
15.600	178.	1152.	2.4	1309.0	1309.0	.0
16.000	179.	662.	4.2	1309.0	1309.0	.0
20.500	160.	437.	6.3	1309.2	1309.2	.0
24.200	128.	585.	4.7	1311.2	1311.2	.0
25.000	112.	537.	5.1	1311.3	1311.3	.0
25.300	133.	315.	8.8	1312.5	1312.5	.0
28.700	297.	1172.	2.4	1314.5	1314.5	.0
32.500	300.	634.	4.4	1315.1	1315.1	.0
36.200	345.	775.	3.6	1317.0	1317.0	.0
36.900	352.	435.	6.4	1317.4	1317.4	.0
38.100	317.	420.	6.6	1319.7	1319.7	.0
43.300	205.	679.	4.1	1321.8	1321.8	.0
43.800	199.	359.	7.7	1323.4	1323.4	.0
49.000	287.	857.	3.2	1327.0	1327.0	.0
54.000	331.	904.	3.1	1328.1	1328.1	.0
59.400	227.	716.	3.9	1329.4	1329.4	.0
60.000	240.	395.	7.0	1329.7	1329.7	.0
64.000	227.	665.	4.1	1331.9	1331.9	.0
69.500	195.	551.	5.0	1332.9	1332.9	.0
75.500	151.	509.	5.4	1334.4	1334.4	.0
79.300	111.	361.	7.7	1335.4	1335.4	.0
83.700	95.	390.	7.1	1336.8	1336.8	.0
84.200	125.	310.	8.9	1337.4	1337.4	.0
86.200	139.	413.	6.7	1339.2	1339.2	.0
92.700	383.	920.	3.0	1341.1	1341.1	.0
93.200	404.	456.	6.0	1342.4	1342.4	.0
98.300	520.	960.	2.9	1344.8	1344.8	.0
99.400	630.	529.	5.2	1347.9	1347.9	.0
103.900	458.	525.	5.3	1350.0	1350.0	.0
104.400	411.	807.	3.4	1350.4	1350.4	.0
109.400	405.	926.	3.0	1352.1	1352.1	.0
114.400	426.	770.	3.6	1354.0	1354.0	.0
119.400	373.	576.	4.8	1357.7	1357.7	.0
123.700	147.	571.	4.8	1360.3	1360.0	.3
130.400	133.	436.	6.1	1363.5	1362.9	.6
135.400	168.	660.	4.0	1365.7	1365.6	.1
139.100	197.	370.	7.1	1367.3	1367.2	.1
144.100	173.	595.	4.4	1371.4	1371.5	-.1
148.600	160.	673.	3.9	1372.7	1372.7	.0
152.100	121.	474.	5.6	1373.6	1373.6	.0
152.800	48.	227.	11.6	1373.0	1374.8	-1.8

FLOODWAY DATA, 100 YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
153.100	148.	662.	4.0	1375.1	1375.8	-.7
154.900	94.	388.	6.8	1375.4	1376.0	-.6
156.800	49.	260.	10.2	1375.9	1376.8	-.9
162.700	150.	526.	5.0	1379.7	1379.6	.1
167.700	58.	268.	9.8	1382.5	1382.2	.3
172.700	151.	625.	4.2	1386.3	1385.6	.7
177.700	109.	389.	6.8	1388.1	1388.0	.1
181.200	88.	287.	9.2	1391.7	1391.4	.3
184.000	293.	631.	4.2	1395.4	1395.5	-.1
189.000	152.	547.	4.8	1397.8	1397.4	.4
194.000	273.	1025.	2.6	1398.9	1398.4	.5
199.000	94.	283.	9.3	1400.9	1400.0	.9
204.500	64.	362.	7.3	1406.4	1405.6	.8
205.100	162.	1351.	2.0	1407.3	1406.8	.5
208.000	131.	705.	3.7	1407.3	1406.8	.5